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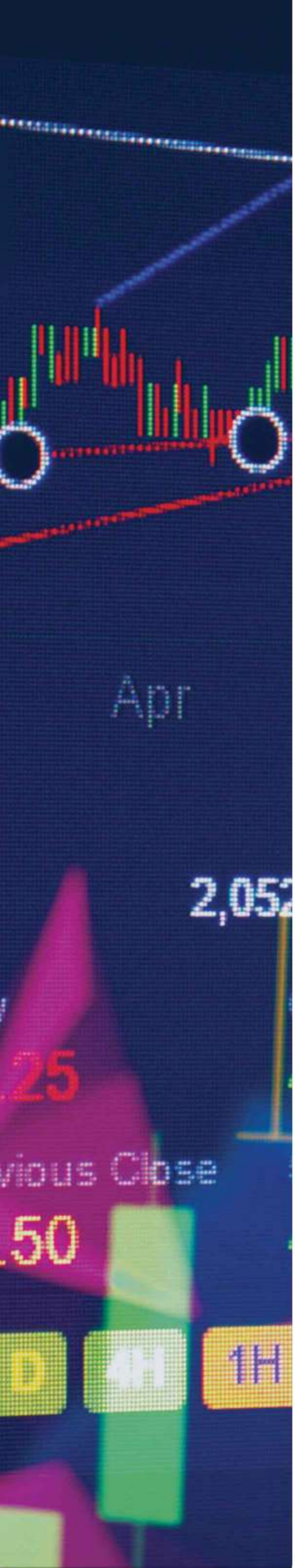

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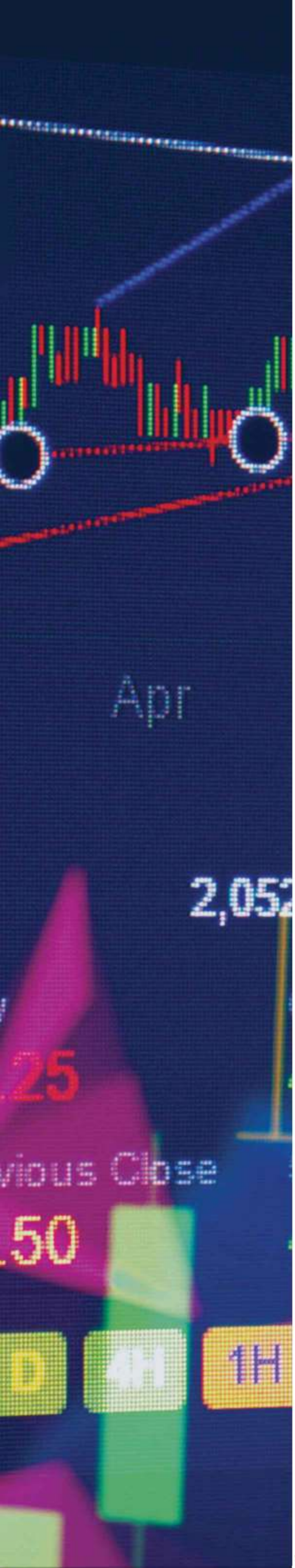
Indian Economic Development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SYLLABUS

CENTRAL BOARD OF SECONDARY EDUCATION

ECONOMICS
Class XII

Time Allowed: 3 Hours **Theory: 80 Marks** **Project: 20 Marks**

Units		Marks	Periods
Part–A	**Introductory Macroeconomics**		
	National Income and Related Aggregates	10	28
	Money and Banking	06	15
	Determination of Income and Employment	12	27
	Government Budget and the Economy	06	15
	Balance of Payments	06	15
	Total	**40**	**100**
Part–B	**Indian Economic Development**		
	Development Experience (1947-90) and Economic Reforms since 1991	12	28
	Current Challenges facing Indian Economy	22	60
	Development Experience of India– A Comparison with Neighbours	06	12
	Theory Paper (40 + 40 = 80 Marks)	**40**	**100**
Part–C	**Project Work**	**20**	**20**

PART–A: INTRODUCTORY MACROECONOMICS

Unit–1: National Income and Related Aggregates **28 Periods**

What is Macroeconomics?

Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income (two sector model); Methods of calculating National Income—Value Added or Product method, Expenditure method, Income method.

Aggregates related to National Income:

Gross National Product (GNP), Net National Product (NNP), Gross and Net Domestic Product (GDP and NDP)—at market price, at factor cost; Real and Nominal GDP.

GDP and Welfare.

Unit–2: Money and Banking — 15 Periods

Money—meaning and supply of money—Currency held by the public and net demand deposits held by commercial banks.

Money creation by the commercial banking system.

Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Government Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit–3: Determination of Income and Employment — 27 Periods

Aggregate demand and its components.

Propensity to consume and propensity to save (average and marginal).

Short-run equilibrium output; investment multiplier and its mechanism.

Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them—changes in government spending, taxes and money supply.

Unit–4: Government Budget and the Economy — 15 Periods

Government budget—meaning, objectives and components.

Classification of receipts—revenue receipts and capital receipts; classification of expenditure—revenue expenditure and capital expenditure.

Measures of government deficit—revenue deficit, fiscal deficit, primary deficit—their meaning.

Unit–5: Balance of Payments — 15 Periods

Balance of payments account—meaning and components; balance of payments deficit—meaning.

Foreign exchange rate—meaning of fixed and flexible rates and managed floating.

Determination of exchange rate in a free market.

PART–B: INDIAN ECONOMIC DEVELOPMENT

Unit–6: Development Experience (1947-90) and Economic Reforms since 1991 — 28 Periods

A brief introduction of the state of Indian economy on the eve of independence.

Common goals of Five Year Plans.

Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.

Economic Reforms since 1991:

Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST.

Unit–7: Current Challenges facing Indian Economy **60 Periods**

Poverty—absolute and relative; Main programmes for poverty alleviation: A critical assessment.

Rural development: Key issues—credit and marketing—role of cooperatives; agricultural diversification; alternative farming—organic farming.

Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India.

Employment: Formal and informal growth; problems and policies.

Infrastructure: Meaning and Types: Case Studies: Energy and Health: Problems and Policies—A critical assessment.

Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming.

Unit–8: Development Experience of India—A Comparison with Neighbours **12 Periods**

India and Pakistan

India and China

Issues: growth, population, sectoral development and other Human Development Indicators.

Design of Question Paper

Economics

Class XII (2019–20)

Duration: 3 Hours **Marks: 80**

S. No.	Typology of Questions	Objective Type/MCQ 1 Mark	Short Answer I 3 Marks	Short Answer II 4 Marks	Long Answer 6 Marks	Marks
1.	**Remembering:** Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	5	1	2	1	22
2.	**Understanding:** Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	5	1	2	1	22
3.	**Applying:** Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	1	1	1	18
4.	**Analysing and Evaluating:** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations. Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating:** Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	5	1	1	1	18
	Total	$20 \times 1 = 20$	$4 \times 3 = 12$	$6 \times 4 = 24$	$4 \times 6 = 24$	80 (34)

Note: There will be Internal Choices in questions of 1 mark, 3 marks, 4 marks and 6 marks in both sections (A & B). In all, total 8 internal choices.

PART–A

INTRODUCTORY MACROECONOMICS

- NATIONAL INCOME AND RELATED AGGREGATES
- MONEY AND BANKING
- DETERMINATION OF INCOME AND EMPLOYMENT
- GOVERNMENT BUDGET AND THE ECONOMY
- EXCHANGE RATE AND BALANCE OF PAYMENTS

NATIONAL INCOME AND RELATED AGGREGATES

1 UNIT

- Macroeconomics
- Some Basic Concepts
  —Consumption Goods
  —Capital Goods
  —Final Goods
  —Intermediate Goods
  —Gross Investment and Depreciation
  —Stocks and Flows
- Intersectoral Flows
- Circular Flow of Income
- Concepts Relating to National Income
- Methods of Calculating National Income
  —Value Added or Product Method
  —Income Method
  —Expenditure Method
- Real and Nominal GDP
- GDP and Welfare

POWER POINTS

1. Macroeconomics

Macroeconomics is the study of economic problems or economic issues (like unemployment and poverty) at the level of an economy as a whole.

2. Some Basic Concepts

Consumption Goods

These are those goods which are directly used for the satisfaction of human wants.

Example: Ice cream and milk used by the households.

Capital Goods

These are those goods which are used as fixed assets by the producers in the production of other goods and services.

Example: Tractors used by the farmers.

Final Goods

These are those goods which have crossed the boundary line of production and are ready for use by their final users.

Example: Car used by the households, machine used by the producers.

Intermediate Goods

These are those goods which are within the boundary line of production and not ready for use by their final users. These goods are purchased for further sale, or are to be used as raw material by the producers.

Example: Wood purchased by a carpenter to make chairs or wood purchased by a timber merchant for resale.

Gross Investment

It refers to the expenditure by the producers (during an accounting year) on the purchase of all such goods which add to their stock of capital, as well as expenditure on the replacement of existing fixed assets (owing to their depreciation).

It includes (*i*) net investment which is expenditure by the producers on the purchase of all such goods which add to their existing stock of capital, and (*ii*) depreciation which is expenditure by the producers on the replacement of existing fixed assets owing to their depreciation.

Gross Investment = Net investment + Depreciation

Depreciation

It refers to loss of value of fixed assets (capital goods) in use, on account of their normal wear and tear (as well as accidental damages and expected obsolescence).

Stock and Flow Concepts

All variables in economics (like income, consumption, capital and investment) are classified either as stock variables or flow variables.

Stock variables are those which are measured at a point of time.

Examples: Capital and wealth.

Flow variables are those which are measured per unit of time period.

Examples: Income per month, investment per year.

3. Intersectoral Flows

Intersectoral flows refer to the flow of goods and services as well as the flow of money among different sectors of the economy. The flows of goods and services are called 'real flows' while the flow of money is called 'money flows' across different sectors. These flows (both real as well as money flows) point to intersectoral interdependence or the dependence of one sector on the other. These intersectoral interdependences are satisfied through a system of mutual exchanges, and mutual exchanges lead to intersectoral flows of money as well as of goods and services. These flows are the essence of modern economic activity as the entire economic activity revolves around these intersectoral flows. To illustrate, factor services flow from households to the producers without which production activity is not possible. Likewise, factor incomes flow from producers to the households without which consumption activity is not possible.

4. Circular Flow of Income

Circular flow of income (also called circular flow of money) is a concept that brings out how income flows across different sectors of the economy. It shows how household (the owners of the factors of production) render their factor services to the producers (or the producing units) and in return receive payments in terms of factor incomes (rent for land, interest for capital, wages for labour and profit for entrepreneurship). It also shows how income (in the form of rent, interest, profit and wages) is spent on the purchase of goods and services from the producing units. In the entire process of production, income generation and expenditure, money flows continuously from one sector to the other. The process never stops; hence is called circular flow of money or circular flow of income.

5. Concepts Relating to National Income

Domestic Income and National Income

What is common in them?

Both domestic income and national income include factor incomes only (rent, interest, profit and wages).

What is the difference?

While domestic income is the sum total of factor incomes generated within the domestic territory of a country, national income is the sum total of factor incomes generated by normal residents of a country, within the domestic territory or in the rest of the world.

Gross and Net Concepts

Generally, gross variables in national income accounting are inclusive of depreciation, like gross investment which is the sum total of net investment and depreciation. Net variables are exclusive of depreciation.

Market Price and Factor Cost

Market price includes the impact of indirect taxes (taxes on goods and services) and subsidies. While indirect taxes raise the market price, subsidies tend to lower it. Factor cost refers to the cost of factors of production, independent of net indirect taxes (Indirect taxes – Subsidies).

Value Addition and Income Generation

In economics, 'value addition' is the synonym of production. If Mr. X buys wood for ₹ 500, converts it into a chair and sells it for ₹ 800, value added = ₹ 800 – ₹ 500 = ₹ 300 which is what production means.

Who adds value? Yes, value is added by the factors of production, *viz.*, land, labour, capital and entrepreneurship. Accordingly, all value added is distributed among the factors of production as factor incomes, *viz.*, rent, wages, interest and profit. It implies that income generated must be identical with value added during a period of time.

6. Methods of Calculating National Income

Circular flow of income model suggests three different methods of estimating national income: (*i*) Product Method, also called Value Addition Method, (*ii*) Income Method, and (*iii*) Expenditure Method. Detailed explanation of these methods is as under:

(i) Value Added Method or Product Method

According to this method, domestic income is calculated as domestic product. Domestic product (or Gross Value Added at market price) is estimated as the sum total of value added by all the producing units within the domestic territory of the country, during the year of accounting (= market value of final goods and services produced in the economy during the period of an accounting year). Gross value added at market price is converted into net value added at market price by deducting depreciation from 'gross value added'. Net value added at market price is converted into net value added at factor cost by deducting net indirect taxes. Finally, net factor income from abroad is added to net value added at factor cost to find national income.

(ii) Income Method

According to this method, domestic income is calculated as the sum total of factor incomes (rent + interest + profit + wages) generated within the domestic territory of a country during the period of an accounting year. Net factor income from abroad is added to domestic income to find national income.

(iii) Expenditure Method

According to this method, domestic product is estimated as the sum total of expenditure (consumption expenditure and investment expenditure) on the purchase of final goods and services produced within the domestic territory of the country, during the year of estimation.

Expenditure on Final Goods

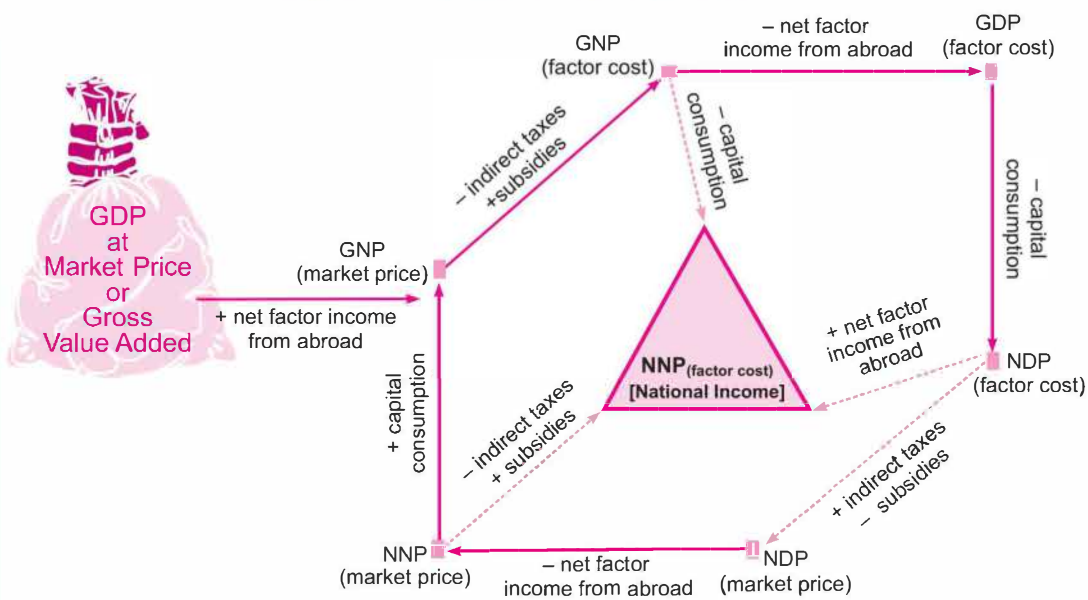
= Market value of the final goods and services produced in the economy during the period of an accounting year

= $GDP_{MP} = GVA_{MP}$

Gross value added at market price is converted into net value added at market price by deducting depreciation. Net value added at market price is converted into net value added at factor cost by deducting net indirect taxes. Finally, net factor income from abroad is added to net value added at factor cost to find national income.

FIGURE 1

National Income and Related Aggregates



7. Real and Nominal GDP

Nominal GDP refers to GDP calculated at the current prices (prices prevailing during the year of estimation).

Real GDP is estimated at the prices prevailing during the base year (which often is the year of comparison).

8. GDP and Welfare

Often, GDP is taken as an index of social welfare; higher GDP implying higher level of welfare.

However, there are certain demerits of GDP as an index of welfare.

Example: GDP as an index of welfare does not account for the distribution of income.

QUESTION-ANSWERS

MACROECONOMICS

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Study of macroeconomics is concerned with:**
   (*a*) theory of demand (*b*) determination of aggregate output
   (*c*) general price level (*d*) both (*b*) and (*c*)
2. **Which of the following is an example of macroeconomics?**
   (*a*) Saving of an individual (*b*) Consumption of a household
   (*c*) Price level of a firm (*d*) Aggregate demand of an economy
3. **Which of the following is not a macro variable?**
   (*a*) Wholesale price index (*b*) Output of the firm
   (*c*) Aggregate demand (*d*) Aggregate supply
4. **Partial equilibrium relates to:**
   (*a*) microeconomics (*b*) macroeconomics
   (*c*) both (*a*) and (*b*) (*d*) none of these

Ans. **1.** (*d*) **2.** (*d*) **3.** (*b*) **4.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ studies problems of scarcity and choice at the level of an economy as a whole. (Microeconomics/Macroeconomics)
2. ________________ equilibrium is the method of study in microeconomics. (Partial/General)
3. Theory of employment is studied under ________________ economics. (micro/macro)
4. Allocation of resources is the central issue in ________________. (microeconomics/macroeconomics)
5. In macroeconomics, micro variables ________________ assumed to be constant. (are/are not)

Ans. **1.** Macroeconomics **2.** Partial **3.** macro **4.** microeconomics **5.** are

C. True or False

State whether the following statements are True or False:

1. Microeconomics is concerned with the economy as a whole. (True/False)
2. Individual economic agents include consumers and producers. (True/False)
3. In macroeconomics, there is a limited degree of aggregation. (True/False)
4. In microeconomics, total employment in the economy is taken as constant. (True/False)
5. What is true of microeconomics is also true of macroeconomics. (True/False)

Ans. **1.** False **2.** True **3.** False **4.** True **5.** False

D. Very Short Answer Questions

1. **What is macroeconomics?**

Ans. Macroeconomics deals with economic issues (or economic problems) at the level of an economy as a whole. **Example:** Problem of unemployment in the economy.

2. **State the basic difference between microeconomics and macroeconomics.**

Ans. Microeconomics studies economic relationships or economic problems at the level of an individual–an individual firm, an individual household or an individual consumer. It is concerned with determination of output and price for an individual firm or industry.

Macroeconomics studies economic relationships or economic problems or economic issues at the level of the economy as a whole. It is concerned with determination of aggregate output and a general price level in the economy as a whole.

3. **Give two examples of macroeconomic studies.**

Ans. (*i*) Problem of inflation in India, and

(*ii*) Problem of unemployment in India.

4. **Define macroeconomic variables.**

Ans. Macroeconomic variables are those economic variables which are studied at the level of economy as a whole. **Example:** Aggregate demand.

5. **Define economic agents.**

Ans. Economic agents are the individuals or institutions who take economic decisions.

6. **What is meant by partial equilibrium?**

Ans. Partial equilibrium refers to equilibrium in one market (say, commodity market) on the assumption that there is no change in other markets (like labour market or capital market).

7. **What is meant by general equilibrium?**

Ans. General equilibrium refers to simultaneous equilibrium in all the markets in the economy.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Problem of unemployment in India is a macroeconomic study.**

Ans. True. Problem of unemployment in India is an economic issue related to the economy as a whole. Hence, it is a macroeconomic study.

2. **Aggregation is involved only in macroeconomics.**

Ans. False. Both micro and macro economics involve aggregation. The difference lies in the degree of aggregation. While in microeconomics, aggregation is at the level of an individual industry (which is the aggregate of all firms producing a particular commodity), in macroeconomics, aggregation is done at the level of an economy as a whole.

3. **Study of cotton textile industry is related to macroeconomics.**

Ans. False. Cotton textile industry is an individual industry. Its study is related to microeconomics.

▶ SOME BASIC CONCEPTS

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Goods that are ready for use by their final users are called:**

(*a*) intermediate goods (*b*) final goods

(*c*) capital goods (*d*) consumer goods

2. **Intermediate goods are those goods:**
   (*a*) which have yet not crossed the boundary line of production
   (*b*) which are purchased by one firm from the other firm for resale
   (*c*) which are not included in the estimation of national product
   (*d*) all of these
3. **Goods that are used-up in a single act of consumption are called:**
   (*a*) durable consumer goods (*b*) semi-durable consumer goods
   (*c*) non-durable consumer goods (*d*) non-material consumer goods
4. **Goods that are used by the producers for several years and are of high value are called:**
   (*a*) intermediate goods (*b*) final goods
   (*c*) capital goods (*d*) both (*b*) and (*c*)
5. **Goods which are not used in the production of other goods are called:**
   (*a*) capital goods (*b*) consumption goods
   (*c*) producer goods (*d*) intermediate goods
6. **Electric goods like tubelights and bulbs are examples of:**
   (*a*) durable consumer goods (*b*) semi-durable consumer goods
   (*c*) non-durable consumer goods (*d*) all of these
7. **Milk and ice cream used by the households are examples of:**
   (*a*) durable goods (*b*) intermediate goods
   (*c*) consumption goods (*d*) capital goods
8. **Expenditure of the producers on the purchase of capital goods causes:**
   (*a*) fixed investment (*b*) inventory investment
   (*c*) gross investment (*d*) net investment
9. **Gross investment is equal to:**
   (*a*) net investment – depreciation
   (*b*) expenditure on the purchase of intermediate as well as final goods
   (*c*) net investment + depreciation
   (*d*) none of these
10. **Depreciation is the:**
   (*a*) loss of value of fixed assets in use due to normal wear and tear
   (*b*) loss of value of fixed assets in use due to normal rate of accidental damages
   (*c*) loss of value of fixed assets in use due to foreseen obsolescence
   (*d*) all of these
11. **Which of the following is the cause of unexpected obsolescence?**
   (*a*) Natural calamities (*b*) Change in demand
   (*c*) Change in technology (*d*) Both (*b*) and (*c*)
12. **Stock of man-made goods which are used for further production is called:**
   (*a*) investment (*b*) capital stock
   (*c*) capital formation (*d*) both (*a*) and (*c*)
13. **Loss of value of fixed assets owing to unexpected obsolescence is called:**
   (*a*) capital formation (*b*) capital loss
   (*c*) unexpected loss (*d*) depreciation

14. **Expenditure on Final Goods =**
    (*a*) Consumption expenditure + Investment expenditure
    (*b*) Consumption expenditure – Investment expenditure
    (*c*) Consumption expenditure × Investment expenditure
    (*d*) Consumption expenditure ÷ Investment expenditure
15. **Which of the following are the final users of consumer goods?**
    (*a*) Households (*b*) Non-profit private institutions
    (*c*) Government (*d*) All of these

Ans. **1.** (*b*) **2.** (*d*) **3.** (*c*) **4.** (*d*) **5.** (*b*) **6.** (*b*)
7. (*c*) **8.** (*a*) **9.** (*c*) **10.** (*d*) **11.** (*a*) **12.** (*b*)
13. (*b*) **14.** (*a*) **15.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ goods are purchased by one firm from the other for use as a raw material. (Final/Intermediate)
2. Consumption goods are also called ________________ goods. (producer/consumer)
3. Change in inventory stock during the year is called ________________ investment of the producers. (fixed/inventory)
4. ________________ lead to unexpected obsolescence. (Natural calamities/Change in demand)
5. Expenditure on Final Goods = Consumption Expenditure + ________________ (Investment Expenditure/Net Exports)

Ans. **1.** Intermediate **2.** consumer **3.** inventory **4.** Natural calamities
5. Investment Expenditure

C. True or False

State whether the following statements are True or False:

1. Only consumers are the final users of final goods. (True/False)
2. Final producer goods are used by the consumers. (True/False)
3. Intermediate goods are included in the estimation of national income. (True/False)
4. All capital goods are producer goods. (True/False)
5. Services are tangible in nature. (True/False)
6. Capital goods are used in the production process only once. (True/False)
7. Capital stock increases as a result of investment. (True/False)
8. Gross Investment = Net Investment – Depreciation. (True/False)
9. TV is an example of durable consumer good. (True/False)
10. Like the households, the government is also the final user of consumer goods. (True/False)

Ans. **1.** False **2.** False **3.** False **4.** True **5.** False **6.** False
7. True **8.** False **9.** True **10.** True

D. Very Short Answer Questions

1. **What are final goods?**

Ans. Final goods are those goods which are out of the boundary line of production and are ready for use by their final users.

2. **What are intermediate goods?**

Ans. Intermediate goods are those goods which are used as raw material or are purchased by the firms for resale.

3. **What are consumption goods?**

Ans. Consumption goods (also known as consumer goods) are those goods which are used for the direct satisfaction of human wants. **Example:** Milk used by households.

4. **What are capital goods?**

Ans. Capital goods are fixed assets of the producers which are repeatedly used in the production of other goods and services and which are of high value.

5. **What are producer goods?**

Ans. Producer goods are those goods which are used for further production. These may be used either as raw material (like wood used in making chairs) or as fixed assets (like a tractor used in farming).

6. **Name the two types of final goods.**

Ans. (*i*) Final consumer goods, and (*ii*) Final producer goods.

7. **Define intermediate consumption.**

Ans. Intermediate consumption refers to expenditure by the producers on the purchase of intermediate goods during an accounting year.

8. **Define investment.**

Ans. Investment refers to expenditure by the producer (during the period of an accounting year) on the purchase of all such goods which add to his stock of capital. It is also called capital formation.

9. **What is fixed investment?**

Ans. Fixed investment refers to increase in the stock of fixed assets or capital goods (like plant and machinery) of the producers during an accounting year.

10. **What do you mean by inventory investment?**

Ans. Change in inventory stock during the year is called inventory investment of the producers.

11. **Define depreciation.**

Ans. Depreciation (or consumption of fixed capital) refers to loss of value of fixed assets (in use) on account of: (*i*) Normal wear and tear, and (*ii*) Expected obsolescence, (*iii*) Accidental damages.

12. **Define depreciation reserve fund.**

Ans. Depreciation reserve fund refers to that fund which the producers keep to cope with depreciation losses in the process of production.

13. **Why does an entrepreneur make a provision for consumption of fixed capital?**

Ans. An entrepreneur makes a provision for the consumption of fixed capital with a view to replace the worn-out fixed assets.

14. **Define capital loss.**

Ans. Capital loss is a loss of value of fixed assets while these are not in use. It occurs on account of: (*i*) natural calamities, and (*ii*) fall in market value of the assets during periods of economic recession.

15. **What is current replacement cost?**

Ans. Current replacement cost refers to the estimated value of depreciation for all the producing units in the economy, during the period of an accounting year.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Intermediate goods are included in the estimation of GDP.**

Ans. False. Because value of intermediate goods is only a part of the value of final goods and their inclusion leads to double counting. Therefore, only final goods are included in the estimation of GDP.

2. **LED TV is an example of semi-durable consumer goods.**

Ans. False. LED TV is an example of durable consumer goods. Because LED TV can be repeatedly used for several years and is of relatively high value.

3. **Value of intermediate goods is equal to the value of intermediate consumption.**

Ans. True. Value of intermediate goods is equal to the value of intermediate consumption. Because intermediate consumption refers to expenditure by the producers on the purchase of intermediate goods during an accounting year.

4. **All producer goods are capital goods.**

Ans. False. Producer goods are those goods which are used in the production of other goods. Capital goods only refer to fixed assets of the producers. Therefore, all producer goods are not capital goods.

5. **Private final consumption expenditure refers to consumption expenditure by the households.**

Ans. False. Private final consumption expenditure includes consumption expenditure by the households as well as non-profit private institutions.

6. **High fixed investment is a sign of growth and development.**

Ans. True. Because fixed investment indicates production capacity of a nation. Greater the addition to production capacity (fixed investment) higher the growth and development.

7. **Unexpected obsolescence is an element of depreciation.**

Ans. False. Only expected obsolescence is considered as an element of depreciation, not the unexpected obsolescence. Loss of value of fixed assets owing to unexpected obsolescence is called capital loss.

8. **A car purchased by a household is a final good.**

Ans. True. A car purchased by a household is a final good because the household is the final user of the car and no value is to be added to the car.

9. **Air conditioners purchased by a dealer are final goods.**

Ans. False. Air conditioners purchased by a dealer are intermediate goods because these are meant for resale.

10. **Chairs, fans, etc., purchased by a school are final goods.**

Ans. True. Chairs, fans, etc., purchased by a school are final goods because school is the final user of these goods and no value is to be added to these goods.

11. **Expenditure on maintenance of a machinery is an intermediate expenditure.**

Ans. True. Expenditure on maintenance of a machinery is an intermediate expenditure, as all expenditure on repair and maintenance (incurred by a firm) is treated as a part of intermediate consumption.

12. **Expenditure on improvement of a factory building is an intermediate expenditure.**

Ans. False. Expenditure on improvement of a factory building is a final investment expenditure. Improvement of factory building implies improvement of asset value (through investment expenditure).

▶ CIRCULAR FLOW OF INCOME

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Quantity measured at a particular point of time is called:**
   (*a*) flow variable (*b*) stock variable
   (*c*) fixed inventory (*d*) none of these
2. **The non-stop continuity of intersectoral flows is called:**
   (*a*) circularity of flows (*b*) real flows
   (*c*) money flows (*d*) none of these
3. **Money flows refer to the:**
   (*a*) flow of goods across different sectors of the economy
   (*b*) flow of services across different sectors of the economy
   (*c*) flow of money across different sectors of the economy
   (*d*) flow of income across different sectors of the economy
4. **Flow of goods and services across different sectors of the economy is called:**
   (*a*) real flow (*b*) circular flow
   (*c*) monetary flow (*d*) inventory flow
5. **The producer sector depends on the household sector for the supply of:**
   (*a*) goods and services (*b*) factors of production
   (*c*) both (*b*) and (*c*) (*d*) none of these
6. **Money flows are the reciprocal of:**
   (*a*) monetary flows (*b*) real flows
   (*c*) circular flows (*d*) inventory flows
7. **Which of the following is a stock variable?**
   (*a*) Interest on capital (*b*) Distance between Delhi and Goa
   (*c*) Expenditure of money (*d*) All of these
8. **Which of the following is not a flow variable?**
   (*a*) Income (*b*) Capital formation
   (*c*) Supply of money in a country (*d*) Leakage of water from the overhead tank
9. **A thousand rupee note is an example of:**
   (*a*) stock variable (*b*) flow variable
   (*c*) either stock or flow (*d*) neither stock nor flow
10. **Which of the following is an example of flow variable?**
    (*a*) Production of rice (*b*) Import of machinery
    (*c*) Change in capital stock (*d*) All of these

Ans. **1.** (*b*) **2.** (*a*) **3.** (*c*) **4.** (*a*) **5.** (*b*) **6.** (*b*)
7. (*b*) **8.** (*c*) **9.** (*a*) **10.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ is a example of stock variable. (Wealth/Income)
2. ________________ flows refer to the flow of money across different sectors of the economy. (Real/Money)

3. ______________ is a flow concept. (Investment/Capital)

4. Money flows are the reciprocal of ______________. (monetary flows/real flows)

5. A thousand rupee note is an example of ______________. (stock variable/flow variable)

Ans. **1.** Wealth **2.** Money **3.** Investment **4.** real flows **5.** stock variable

C. True or False

State whether the following statements are True or False:

1. Households are the owners of the factors of production. (True/False)
2. Production of cement is not a flow variable. (True/False)
3. A stock variable has no time dimension. (True/False)
4. Real flows and money flows both are same concepts. (True/False)
5. Capital formation is a stock variable. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** False **5.** False

D. Very Short Answer Questions

1. Define stock variables.

Ans. Stock variables are those variables which are measured at a particular point of time.

Example: Wealth and capital.

2. Define flow variables.

Ans. Flow variables are those variables which are measured per unit of time period.

Example: Income and investment.

3. What is meant by intersectoral flows?

Ans. Intersectoral flows refer to the flow of goods and services as well as the flow of money among different sectors of the economy.

4. What is meant by circular flow of income?

Ans. Circular flow of income refers to unbroken circularity of real flows and money flows across different sectors of the economy.

5. Define monetary flow.

Ans. Monetary flow (or money flow) refers to the flow of factor incomes, *viz*., rent, interest, profit and wages from the producing sector to the household sector as monetary rewards for their factor services. The households spend their incomes on the goods and services produced by the producing sector. Accordingly, money flows back to the producing sector as household expenditure.

6. Define real flow.

Ans. Real flow refers to the flow of factor services from the household sector to the producing sector and the corresponding flow of goods and services from the producing sector to the household sector.

7. What is the principle of circular flow of income and product?

Ans. The circular flow of income and product involves two basic principles:

(*i*) Real flows (in terms of goods and services) are opposite to the money flows.

(*ii*) Flow of income across different sectors always implies the identity between payments and receipts.

8. State whether the following are a stock or a flow?

(*i*) Income of a household.

(*ii*) Consumption expenditure of a household.

Ans. Both are flows, as these are measured per unit of time period.

9. **State which of the following is a stock and which is flow?**

   (*i*) Wealth. **(*ii*) Cement Production.**

Ans. (*i*) Stock, (*ii*) Flow.

10. **State whether the following is a stock or a flow?**

    (*i*) Money supply or quantity of money of the nation.

    (*ii*) Change in nation's money supply.

Ans. (*i*) Stock, (*ii*) Flow.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **A stock is a quantity measured at a specified period of time.**

Ans. False. A stock is a quantity measured at a particular point of time.

2. **Capital formation is a stock variable.**

Ans. False. Capital formation is a flow variable. It refers to addition to the stock of capital and is measured per unit of time period.

3. **Population of a country and number of births both are stock variables.**

Ans. False. Population of a country is a stock variable because it is measured at a point of time. Number of births is a flow variable because it is measured per unit of time period.

4. **Export is a flow variable.**

Ans. True. Export is a flow variable because it is measured per unit of time period.

5. **Producer sector supplies the factor services to the household sector.**

Ans. False. Producer sector supplies goods and services to the household sector.

6. **Flow of factor services rendered by the households to the producers are real flows.**

Ans. True. Flow of factor services rendered by the households to the producers are real flows because these flows involve the movement of goods and services from one sector to the other.

7. **Money flows are opposite to real flows.**

Ans. True. Money flows are opposite to real flows. Because money flows are in response to the real flows. Money flow from households to the producers is a reciprocal to the real flow of goods from the producers to the households. Likewise, money flow from producers to the households is a reciprocal of the real flow of factor services from the households to the producers.

8. **A car covering a distance of 300 km in 5 hours includes both stock as well as flow variable.**

Ans. True. Because (*i*) Distance is a stock variable.

(*ii*) Speed $\left(\frac{300 \text{ km}}{5 \text{ hours}}\right)$ is a flow variable.

▶ CONCEPTS RELATING TO NATIONAL INCOME

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Economic territory of a country in which economic activities of the country generates its domestic income is called:**

   (*a*) national territory (*b*) domestic territory

   (*c*) political territory (*d*) geographical territory

2. **Which of the following is an example of normal residents of India?**

(*a*) Foreign worker working in WHO located in India

(*b*) The German working as Director in IMF office located in India

(*c*) Ambassador in India from rest of the world

(*d*) Ambassador of India in rest of the world

3. **Domestic income:**

(*a*) is the sum total of factor incomes generated within the domestic territory of a country

(*b*) is generated by the normal residents as well as non-residents within the domestic territory of a nation

(*c*) is equal to national income when net factor income from abroad is zero

(*d*) all of these

4. **Factor payment received by the households for rendering their services as employees of the producing units is called:**

(*a*) compensation of employees (*b*) rent

(*c*) interest (*d*) profit

5. **Which of the following leads to market price?**

(*a*) Factor cost – Indirect taxes (*b*) Factor cost – Net indirect taxes

(*c*) Factor cost + Indirect taxes (*d*) Factor cost + Net indirect taxes

6. **Net Indirect Taxes =**

(*a*) Indirect taxes + Subsidies (*b*) Direct taxes + Subsidies

(*c*) Indirect taxes – Subsidies (*d*) Direct taxes – Subsidies

7. **NDP_{FC} =**

(*a*) Compensation of employees + Rent + Interest + Profit + Net factor income from abroad

(*b*) Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed

(*c*) NDP_{MP} – Net indirect taxes

(*d*) both (*b*) and (*c*)

8. **Which of the following is correct?**

(*a*) GDP_{FC} = Compensation of employees + Rent + Interest + Profit

(*b*) GDP_{FC} = Compensation of employees + Rent + Interest + Profit + Depreciation

(*c*) GDP_{FC} = Compensation of employees + Rent + Interest + Profit – Depreciation

(*d*) $GDP_{FC} = NDP_{FC}$ – Depreciation

9. **Which of the following is incorrect?**

(*a*) $GDP_{MP} = NDP_{MP}$ + Depreciation

(*b*) $GNP_{FC} = GNP_{MP}$ + Net indirect taxes

(*c*) $NNP_{MP} = NDP_{MP}$ + Net factor income from abroad

(*d*) $NDP_{FC} = GDP_{FC}$ – Depreciation

10. **Net Factor Income from Abroad =**

(*a*) National income – Net indirect taxes (*b*) National income – Indirect taxes

(*c*) National income – Domestic income (*d*) Domestic income – National income

11. **Which of the following is a factor income?**

(*a*) Interest (*b*) Scholarship

(*c*) National debt interest (*d*) Grants

12. **Factor incomes are:**
(*a*) earned incomes
(*b*) unearned incomes
(*c*) both earned as well as unearned incomes
(*d*) neither earned nor unearned incomes

13. **Which of the following is not a transfer payment?**
(*a*) Gifts from abroad (*b*) Retirement pensions
(*c*) Donations (*d*) Grants

14. **When NNP_{MP} = ₹ 5,330, indirect taxes = ₹ 1,770 and consumption of fixed capital = ₹ 1,550, then: GNP_{FC} =**
(*a*) ₹ 2,010 (*b*) ₹ 3,560
(*c*) ₹ 5,110 (*d*) ₹8,650

15. **If NDP_{FC} = ₹ 4,300, depreciation = ₹ 1,350, subsidies = ₹ 250, net factor income from abroad = ₹ 330, GDP_{MP} will be:**
(*a*) ₹ 2,370 (*b*) ₹ 2,700
(*c*) ₹ 5,400 (*d*) ₹ 6,230

Ans. **1.** (*b*) **2.** (*d*) **3.** (*d*) **4.** (*a*) **5.** (*d*) **6.** (*c*) **7.** (*d*) **8.** (*b*) **9.** (*b*) **10.** (*c*) **11.** (*a*) **12.** (*a*) **13.** (*b*) **14.** (*c*) **15.** (*c*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. By adding ________________ to domestic income, we estimate national income. (net exports/net factor income from abroad)
2. Those residents who ordinarily reside in a country and whose centre of interest lies in that country are called ________________. (normal residents of the country/citizens of the country)
3. ________________ income is an unearned income. (Factor/Transfer)
4. GDP at Market Price = NDP at Market Price + ________________. (Indirect Taxes/Depreciation)
5. ________________ lower the market price of the goods. (Subsidies/Indirect taxes)
6. ________________ includes income generated both by the residents as well as non-residents of a country. (Domestic income/National income)
7. ________________ includes factor incomes only. (Domestic income/Personal income)

Ans. **1.** net factor income from abroad **2.** normal residents of the country **3.** Transfer **4.** Depreciation **5.** Subsidies **6.** Domestic income **7.** Domestic income

C. True or False

State whether the following statements are True or False:

1. GDP at Factor Cost = NDP at Factor Cost – Depreciation. (True/False)
2. National income is the sum total of factor incomes. (True/False)
3. Difference between indirect taxes and subsidies is called net indirect taxes. (True/False)
4. Ambassador from India in Japan is a non-resident of India. (True/False)
5. GNP at Market Price = GDP at Market Price + Net Factor Income from Abroad. (True/False)
6. Depreciation is not included in the Gross Domestic Product at Factor Cost. (True/False)

7. Domestic income includes net factor income from abroad. (True/False)

Ans. **1.** False **2.** True **3.** True **4.** False **5.** True **6.** False **7.** False

D. Very Short Answer Questions

1. **What is meant by normal residents of a country?**

Ans. Normal residents are those residents who ordinarily reside in the country concerned and whose centre of economic interest lies in that country.

2. **What is meant by domestic territory of a country?**

Ans. Domestic territory of a country refers to economic territory of a country in which economic activities of the country generates its domestic income.

3. **What is factor income?**

Ans. Factor income is the income received by owners of the factors of production in the form of rent, wages, interest and profit for the services rendered in the production process.

4. **Define domestic factor income.**

Ans. Domestic factor income is income generated in the domestic territory of the country by all enterprises during one year.

5. **What are transfer payments or transfer expenditure?**

Ans. Transfer payments (or transfer expenditure) are all those unilateral payments corresponding to which there is no value-addition in the economy. **Examples:** Gifts and donations.

6. **Define voluntary transfers.**

Ans. Voluntary transfers are those transfers which flow on account of the free will of the payer and the recipient.

7. **Define forced transfers.**

Ans. Forced transfers are compulsory payments, like income tax.

8. **Define current transfers.**

Ans. Current transfers are those transfers which are paid from the current income of the payer and added to the current income of the recipient for consumption expenditure.

9. **What are capital transfers?**

Ans. Capital transfers are the transfers made out of wealth or saving of the payer and included in the wealth or saving of the recipient.

10. **What are capital transfers from abroad?**

Ans. Capital transfers from abroad are those transfers which are paid by rest of the world for purpose of gross capital formation or long-term expenditure.

11. **Define GDP at market price.**

Ans. GDP at market price refers to market value of final goods and services produced within the domestic territory of the country within one year, inclusive of depreciation.

12. **Define NDP at market price.**

Ans. NDP at market price refers to market value of final goods and services produced within the domestic territory of the country within one year, exclusive of depreciation.

13. **Define GDP at factor cost or gross domestic income.**

Ans. GDP at factor cost or gross domestic income is the sum total of (*i*) compensation of employees, (*ii*) operating surplus, (*iii*) mixed income and (*iv*) consumption of fixed capital, within the domestic territory of the country during the period of one year.

14. **Define NDP at factor cost or net domestic income.**

Ans. NDP at factor cost or net domestic income refers to the sum total of factor incomes (rent + interest + profit + wages) generated within the domestic territory of a country during a year.

15. Define GNP at market price.

Ans. GNP at market price refers to market value of final goods and services produced during the year along with net factor income from abroad and consumption of fixed capital.

16. Define NNP at market price.

Ans. NNP at market price refers to market value of final goods and services produced during the year, inclusive of net factor income from abroad but exclusive of depreciation.

17. Define GNP at factor cost.

Ans. GNP at factor cost refers to the sum total of factor incomes (rent + interest + profit + wages) earned by normal residents of a country during the year, along with consumption of fixed capital.

18. Define NNP at factor cost.

Ans. NNP at factor cost refers to the market value of final goods and services produced within the domestic territory of a country during the period of an accounting year, inclusive of net factor income from abroad but exclusive of depreciation and estimated at factor cost.

19. Define factor income from abroad.

Ans. Factor income from abroad is the factor income earned by our residents who are temporarily residing abroad. **Example:** Salaries of Indians working in Russian embassy in India.

20. Define factor income to abroad.

Ans. Factor income to abroad is the factor income earned by non-residents who are temporarily residing in our country. **Example:** Salaries of Americans working in Indian embassy in America.

21. What is national debt interest?

Ans. National debt interest refers to the interest payments accruing to residents of the country on account of borrowings by the government. The government borrows money from the people (by issuing bonds like National Saving Certificates in India).

22. Give the meaning of non-market activities.

Ans. Non-market activities refer to those activities which are not performed through exchange or which do not involve sale of goods and services, *e.g.*, a teacher teaching his own son, services of housewives, etc.

23. What must be added to domestic factor income to obtain national income?

Ans. Net factor income from abroad.

24. When is gross domestic product of an economy equal to gross national product?

Ans. Gross domestic product (GDP) of an economy is equal to gross national product (GNP) when net factor income from abroad is zero.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Transfer payments are included in the estimation of national income.

Ans. False. Transfer payments are not included in the estimation of national income because transfer payments are unilateral payments. These are not related to factor services rendered by the residents of a country.

2. National income is the sum total of factor incomes earned by normal residents and non-residents of a country during the period of an accounting year.

Ans. False. National income is the sum total of factor incomes earned by the normal residents of a country during the period of an accounting year.

3. The Indian people employed in World Health Organisation located in India are non-residents of India.

Ans. False. The Indian people employed in World Health Organisation located in India are normal residents of India.

4. Income earned by foreigners working in branch of a foreign bank in India is a part of the domestic factor income of India.

Ans. True. This is because the branch of a foreign bank is located within the domestic territory of India.

5. Money received from sale of shares is included in domestic factor income.

Ans. False. Money received from sale of shares is not included in domestic factor income because sale and purchase of shares only causes change of ownership of financial assets. There is no value addition in terms of flow of goods and services in the economy.

6. Depreciation is added to gross domestic income to obtain national income.

Ans. False. Depreciation is subtracted from gross domestic income to obtain national income.

7. Scholarship given by Government of India is included in national income of India.

Ans. False. Scholarship given by Government of India is not included in national income of India. Because, scholarship is a transfer payment.

8. Depreciation is the basis of difference between the domestic income and national income.

Ans. False. The basis of difference between the domestic income and national income is net factor income from abroad.

9. Domestic product can be more than national product.

Ans. True. When net factor income from abroad is negative, domestic product would be more than the national product.

10. Salaries to Indian residents working in German embassy in India is included in domestic income of India.

Ans. False. Salaries to Indian residents working in German embassy in India is not included in domestic income of India, because German embassy in India is not a part of domestic territory of India.

11. Profits earned by a company in India, which is owned by a non-resident is included in national income of India.

Ans. True. Profits earned by a company in India, which is owned by a non-resident is a part of domestic factor income of India, because the company is generating profit within the domestic territory of India. Therefore, as a component of domestic income, it is included in national income of India.

12. National debt interest is included in national income of India.

Ans. False. National debt interest is not included in national income of India. Because it is treated as a transfer payment.

13. The salaries received by Indians working in branches of foreign banks in India is included in the estimation of domestic income.

Ans. True. Salaries received by Indians working in branches of foreign banks in India is a part of domestic income because these branches of foreign banks are located within the domestic territory of the country.

14. Factor income from abroad is a part of domestic factor income of India.

Ans. False. Factor income from abroad is not a part of domestic factor income of India, because it is not generated within the domestic territory of India.

15. Interest paid by banks to Rohit on his deposits is included in national income.

Ans. True. Interest paid by banks to Rohit on his deposits is included in national income because banks are expected to have used Rohit's saving for productive purpose.

METHODS OF CALCULATING NATIONAL INCOME

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **The sum total of factor incomes earned by normal residents of a country during the period of an accounting year is called:**
   (*a*) national income (*b*) domestic income
   (*c*) national product (*d*) both (*a*) and (*c*)
2. **Market value of final goods and services produced in the economy during the period of one year is called:**
   (*a*) Gross value added at market price (*b*) Gross domestic product at market price
   (*c*) Gross national product at market price (*d*) both (*a*) and (*b*)
3. **Value Addition =**
   (*a*) Value of output + Intermediate consumption
   (*b*) Value of output – Intermediate consumption
   (*c*) Value of output × Intermediate consumption
   (*d*) Value of output ÷ Intermediate consumption
4. **If the entire output of the year is sold during the year, then:**
   (*a*) value of output = intermediate consumption
   (*b*) value of output = intermediate cost
   (*c*) value of output = sales
   (*d*) value of output = change in sales
5. **Value of Output = Sales +**
   (*a*) Change in stock (*b*) Intermediate cost
   (*c*) Closing stock – Opening stock (*d*) Both (*a*) and (*c*)
6. **Expenditure by the foreigners on the domestically produced final goods and services is called:**
   (*a*) exports (*b*) imports
   (*c*) net exports (*d*) none of these
7. **Operating Surplus =**
   (*a*) Compensation of employees + Rent + Interest + Profit
   (*b*) Rent + Interest + Profit
   (*c*) Compensation of employees + Mixed income of self-employed
   (*d*) Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed
8. **Which of the following is a component of profit?**
   (*a*) Undistributed profit (*b*) Dividends
   (*c*) Corporation profit tax (*d*) All of these
9. **Which of the following is not included in inventory investment?**
   (*a*) Stock of finished goods
   (*b*) Stock of semi-finished goods
   (*c*) Consumer goods sold to the households during the accounting year
   (*d*) Stock of raw materials

10. **Which of the following is included in the estimation of national income?**
(*a*) Expenses on electricity by a factory (*b*) Gifts from abroad
(*c*) Free services by the government (*d*) Financial help to earthquake victims

11. **Which of the following is not included in the estimation of national income?**
(*a*) Brokerage on the sale of bonds
(*b*) Imputed value of production for self-consumption
(*c*) Leisure-time activities
(*d*) Employer's contribution to provident fund

12. **Which of the following is included in the estimation of national income?**
(*a*) Unemployment allowances (*b*) Defence and security services
(*c*) Expenditure on second-hand goods (*d*) Income from illegal activities

13. **Retirement pension is:**
(*a*) a kind of transfer payment (*b*) a kind of corporate tax
(*c*) a kind of deferred wage (*d*) none of these

14. **If stock at the end of the year is ₹ 37,700 and change in stock during an accounting year is ₹ 12,300, them opening stock in this case will be:**
(*a*) ₹ 12,300 (*b*) ₹ 25,400
(*c*) ₹ 37,700 (*d*) ₹ 50,000

15. **If GDP$_{FC}$ = ₹ 24,760, operating surplus = ₹ 13,450, mixed income = ₹ 4,260 and consumption of fixed capital = ₹ 530, then compensation of employees will be:**
(*a*) ₹ 6,520 (*b*) ₹ 7,050
(*c*) ₹ 18,240 (*d*) ₹ 43,000

Ans. **1.** (*d*) **2.** (*d*) **3.** (*b*) **4.** (*c*) **5.** (*d*) **6.** (*a*)
7. (*b*) **8.** (*d*) **9.** (*c*) **10.** (*c*) **11.** (*c*) **12.** (*b*)
13. (*c*) **14.** (*b*) **15.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. is also called Consumption and Investment Method. (Income Method/Expenditure Method)
2. To avoid double counting in the estimation of national income, only the value of goods is taken into account. (final/intermediary)
3. Intermediate consumption refers to value of inputs. (factor/non-factor)
4. Windfall gains included in national income. (are/are not)
5. Sales + Change in Stock = . (Value of Output/Value Added)
6. is that part of the profit which is retained by the firms. (Distributed profit/Undistributed profit)
7. Mixed income refers to the incomes of the . (self-employed persons/employers)
8. refers to change in stock during the year. (Inventory investment/Fixed investment)
9. ________________ is a consumer durable good. (Milk/Washing machine)
10. Gifts from abroad are . (factor income/transfer income)

Ans. **1.** Expenditure Method **2.** final **3.** non-factor **4.** are not
5. Value of Output **6.** Undistributed profit **7.** self-employed persons
8. Inventory investment **9.** Washing machine **10.** transfer income

C. True or False

State whether the following statements are True or False:

1. Scholarships granted to the students are included in the estimation of GDP. (True/False)
2. Value Added = Value of Output – Intermediate Consumption. (True/False)
3. Aggregate of rent, interest and profit is called operating surplus. (True/False)
4. Factor incomes are only earned incomes. (True/False)
5. Capital gain is not included in national income. (True/False)
6. Old-age pension is an unilateral payment. (True/False)
7. Rent of self-occupied house is not included in national income. (True/False)
8. Exports are not included in GDP. (True/False)
9. Value of intermediate goods is reflected in the value of final goods, and therefore not included in the estimation of national income. (True/False)
10. Net exports refer to the summation of exports and imports of a country with rest of the world during an accounting year. (True/False)

Ans. **1.** False **2.** True **3.** True **4.** True **5.** True **6.** True
7. False **8.** False **9.** True **10.** False

D. Very Short Answer Questions

1. Name the three methods of measuring national income.

Ans. (*i*) Product method or value added method, (*ii*) Income method, and (*iii*) Expenditure method.

2. What is meant by primary sector?

Ans. Primary sector is that sector which produces goods by exploiting natural resources. It comprises agriculture, fishing, forestry and mining.

3. What is meant by secondary sector?

Ans. Secondary sector is that sector in which production is done by using output of primary sector as input.

4. What is meant by tertiary sector?

Ans. Tertiary sector is that sector in which entrepreneurs provide services such as of banking, insurance, etc.

5. Define the concept of value added.

Ans. Value added refers to addition of value to a thing with a view to generating income.

6. What is an alternative name of value added?

Ans. Production.

7. What is meant by double counting?

Ans. The counting of the value of a commodity more than once is called double counting. This leads to overestimation of the value of goods and services produced.

8. What is meant by value added method?

Ans. Value added method is that method which measures the contribution of each producing enterprise to production in the domestic territory of the country.

9. What is meant by income method?

Ans. Income method is that method which measures national income as the sum total of factor incomes (compensation of employees, rent, interest and profit) earned by normal residents of a country during an accounting year.

10. **What is meant by expenditure method?**

Ans. Expenditure method is that method which measures national income in terms of the expenditure (consumption expenditure + investment expenditure) on the purchase of final goods and services produced in the economy during the period of an accounting year.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Both value added and value of output are identical concepts.**

Ans. False. Value added and value of output both are different concepts. Value of output refers to the market value of the goods produced. While value added refers to the market value of the goods produced minus market value of the goods used as inputs/raw material in the process of production.

2. **Sum total of value added by all the producing units within the domestic territory of the country is equal to national product.**

Ans. False. Sum total of value added by all the producing units within the domestic territory of the country is equal to domestic product.

3. **Sum of value added is equal to sum of factor incomes.**

Ans. True. Sum of value added refers to the value of final goods and services produced in the economy during the period of one year. Net value added at factor cost implies cost of the factors of production in terms of rent, interest, profit and wages. This is equal to income generated. Hence, the fact that value added is identical with income generated.

4. **Exports are included in the estimation of national income.**

Ans. True. Because exports are a part of goods and services produced within the domestic territory of a country.

5. **For calculating gross domestic capital formation, we do not add change in stock to gross domestic fixed capital formation.**

Ans. False. We do add change in stock to gross domestic fixed capital formation for calculating gross domestic capital formation. Change in stock is treated as inventory investment.

6. **Retirement pensions are included in the estimation of national income.**

Ans. True. Because retirement pensions are a kind of deferred wage.

7. **Expenditure on second hand goods is not included in the estimation of national income.**

Ans. True. Expenditure on second hand goods is not included in the estimation of national income because value of second hand goods has already been accounted during the year of their production (when these were initially produced and purchased by the final users).

8. **Payment of income tax by a firm is not included in the estimation of national income.**

Ans. True. Because income tax by a firm implies corporate tax. It is a transfer payment by the firm to the government. It is paid out of income and therefore, not to be separately added in the estimation of national income.

9. **Festival gifts to employees are included in the estimation of national income.**

Ans. False. Festival gifts to employees are not included in the estimation of national income because gifts are transfer payments.

10. **Free medical treatment of the employees by the employer is included in the estimation of national income.**

Ans. True. Free medical treatment of the employees by the employer is included in the estimation of national income because it is a kind of wages in kind and therefore, a part of compensation of employees.

11. **Contribution to provident fund by the employers is included in the national income.**

Ans. True. Contribution to provident fund by the employers is included in national income, because it is paid by the employers on behalf of the employees. It is included in national income as a part of the compensation of employees.

12. **Contribution to provident fund by the employees is added in the estimation of national income.**

Ans. False. Contribution to provident fund by the employees is paid out of their income. It is, therefore, not separately added in the estimation of national income.

13. **Free dress provided to nurses by the hospital is included in the estimation of national income.**

Ans. False. Free dress provided to nurses by the hospital is not included in the estimation of national income if the dress is a uniform provided by the hospital at the time of work. It is to be treated as an intermediate consumption.

14. **Leisure is not included in GNP.**

Ans. True. Leisure is not included in GNP because it does not involve rendering of any factor service.

15. **Prize won in a lottery is included in the national income.**

Ans. False. Prize won in a lottery is not included in the national income because it is just a windfall gain, involving no value addition.

▶ REAL AND NOMINAL GDP

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Nominal GDP refers to:**
   (*a*) GDP at constant prices
   (*b*) GDP at base year prices
   (*c*) GDP estimated at current prices
   (*d*) none of these

2. **Increase in real GDP implies:**
   (*a*) increase in the price level in the economy
   (*b*) increase in the flow of goods and services in the economy
   (*c*) increase in the income level in the economy
   (*d*) none of these

3. **GDP deflator shows change in GDP due to change in the:**
   (*a*) real income
   (*b*) monetary income
   (*c*) price level
   (*d*) flow of goods and services

4. **Which of the following is the better index of economic growth?**
   (*a*) Real GDP
   (*b*) Nominal GDP
   (*c*) Both real as well as nominal GDP
   (*d*) Neither of the two

5. **When nominal GDP is 840 and price index is 120, real GDP will be:**
   (*a*) 7
   (*b*) 700
   (*c*) 720
   (*d*) 960

Ans. **1.** (*c*) **2.** (*b*) **3.** (*c*) **4.** (*a*) **5.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Real GDP refers to GDP at prices. (current/constant)
2. Nominal GDP refers to GDP at prices. (constant/current)
3. Current year prices are the prices prevailing during the (base year/year of estimation)
4. _______________ is an appropriate index of economic growth. (Real GDP/Nominal GDP)
5. Nominal GDP can be converted into real GDP by using (quantity index/price index)

Ans. **1.** constant **2.** current **3.** year of estimation **4.** Real GDP **5.** price index

C. True or False

State whether the following statements are True or False:

1. GDP Deflator = $\dfrac{\text{Nominal GDP}}{\text{Real GDP}} \times 100.$ (True/False)
2. Monetary GDP is estimated using the base year prices. (True/False)
3. If a country's nominal GDP increases, it means the country is producing more goods and services. (True/False)
4. Real GDP is a good measure of welfare of people. (True/False)
5. Nominal GDP = Real GDP $\times \dfrac{\text{Price Index}}{100}$. (True/False)

Ans. **1.** True **2.** False **3.** False **4.** True **5.** True

D. Very Short Answer Questions

1. Define nominal GDP.

Ans. Nominal GDP (also called GDP at current prices) refers to market value of the final goods and services produced within the domestic territory of a country during an accounting year, as estimated using the current year prices.

2. Define real GDP.

Ans. Real GDP (also called GDP at constant prices) refers to market value of the final goods and services produced within the domestic territory of a country during an accounting year, as estimated using the base year prices.

3. How is GDP at current prices converted into GDP at constant prices?

Ans. GDP at current prices is converted into GDP at constant prices by using the following formula:

$$\text{GDP at Constant Prices or Real GDP} = \frac{\text{GDP at Current Prices}}{\text{Current Price Index}} \times 100$$

4. What is a GNP deflator?

Ans. The GNP deflator measures the average level of the prices of all the goods and services that make up GNP. GNP deflator is measured as the ratio of nominal GNP to real GNP, multiplied by 100.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Nominal GDP is estimated at the base year prices.**

Ans. False. Nominal GDP is estimated at prices prevailing during the year of estimation.

2. **Real GDP increases with increase in the price level in the economy.**

Ans. False. Real GDP does not increase with increase in the price level in the economy because it is estimated at constant prices, or base year prices.

3. **Current year prices are the prices prevailing during the base year.**

Ans. False. Current year prices are the prices prevailing during the year of estimation.

4. **Nominal GDP can be converted into real GDP by using the quantity index.**

Ans. False. Nominal GDP can be converted into real GDP by using the price index, not the quantity index.

5. **GDP Deflator** $= \dfrac{\textbf{Real GDP}}{\textbf{Current Price Index}} \times 100.$

Ans. False. GDP Deflator $= \dfrac{\text{Nominal GDP}}{\text{Real GDP}} \times 100.$

▶ GDP AND WELFARE

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Real GDP is considered as an index of:**
   (*a*) price level in the economy (*b*) welfare of the people
   (*c*) profit maximisation (*d*) none of these
2. **Which of the following makes GDP an inappropriate index of welfare?**
   (*a*) Non-monetary transactions (*b*) Externalities
   (*c*) Composition and distribution of GDP (*d*) All of these
3. **Smoke emitted by a chemical factory and causing air pollution is an example of:**
   (*a*) positive externalities (*b*) negative externalities
   (*c*) either of the two (*d*) neither of the two

Ans. **1.** (*b*) **2.** (*d*) **3.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Industrial waste driven into rivers is an example of ________________ externality. (positive/negative)
2. ________________ the growth of GDP, greater is the flow of goods and services. (Higher/Lower)
3. ________________ are a limitation of GDP as an index of welfare. (Monetary exchanges /Non-monetary exchanges)

Ans. **1.** negative **2.** Higher **3.** Non-monetary exchanges

C. True or False

State whether the following statements are True or False:

1. GDP fails to account for the impact of externalities on social welfare. (True/False)
2. Environmental pollution causes a loss of social welfare. (True/False)
3. Externalities are only the good impact of an activity without paying the price for that. (True/False)

Ans. **1.** True **2.** True **3.** False

D. Very Short Answer Questions

1. **How are GDP and welfare related to each other?**

Ans. ●ther things remaining constant, higher GDP implies higher welfare. So that there is a positive relationship between GDP and welfare.

2. **Define externalities.**

Ans. Externalities refer to positive and negative impact of an economic activity on the others without involving any price or penalty.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Welfare of the people in an economy is measured in terms of the availability of average income per person.**

Ans. False. Welfare of the people is measured in terms of the availability of goods and services per person.

2. **With every increase in the level of GDP, social welfare definitely increases in the economy.**

Ans. False. If increase in the level of GDP is associated with higher level of income inequality, social welfare may not increase.

3. HOTS & Applications

1. **Should we treat subsidies to the producers as transfer payments?**

Ans. No, subsidies to the producers should not be treated as transfer payments. Transfer payments are those payments corresponding to which there is no value addition in the economy, like scholarships to the students or old-age pensions. In the case of subsidies, value addition has already occurred. In fact, subsidies tend to lower the market value of the goods produced. Accordingly, these are added to the market price (while indirect tax is deducted) to make it equal to the factor cost. Subsidies are a part of NNP_{FC} which is why these are deducted from factor cost to equate it with market price.

2. **Is net of exports (X – M) a part of net factor income from abroad?**

Ans. No, it is not. Income from exports is a part of domestic income. Because, what we export is a part of domestic product. Imports are just the opposite of exports. Thus, net of exports is a component of domestic product or expenditure on domestic product.'

3. **Rajiv purchases a generator for his office. Giving reasons, answer the following questions:**

(*i*) Purchase of a generator by Rajiv is an intermediate expenditure.

(*ii*) Expenditure on the maintenance of the generator is an intermediate expenditure.

Ans. (*i*) No, purchase of a generator by Rajiv is a final investment expenditure because generator is a fixed asset for the office/firm.

(*ii*) Yes, expenditure on the maintenance of the generator is an intermediate expenditure. Because, things purchased for repair and maintenance are used up during the period of one year and are therefore, treated as intermediate consumption.

4. Analysis & Evaluation

1. **Saving is both a virtue as well as a vice. Explain how.**

Ans. At the micro level, saving is a virtue. But it may be a vice at the macro level. If an individual saves more, he accumulates more wealth. It enhances his ability to earn more. But at the macro level, if everyone starts saving more, demand for goods and services may fall. It will adversely impact the inducement to invest. Consequently, the level of income and employment may shrink, pushing the economy into a state of depression.

2. **Explain the economic value of high component of net exports (X – M) in the total expenditure on final goods and services.**

Ans. High component of 'X – M' in the total expenditure on final goods and services is a sign of higher exports than imports of the domestic economy. It implies:

(*i*) that the inflow of foreign exchange (on account of exports) is greater than the outflow of foreign exchange (on account of imports). Accordingly, balance of trade is favourable.

(*ii*) that the domestically produced goods are able to find markets abroad. So that, deficiency of domestic demand no longer remains a hurdle in the growth process of the domestic economy.

(*iii*) that we are, by and large, self-sufficient. Our imports are so limited that we don't have to depend much on other countries.

Briefly, high component of X – M is a pointer to high rate of GDP growth.

CBSE QUESTIONS (2015–2019) & ANSWERS

1. **If Real GDP is ₹ 200 and Price Index (with base = 100) is 110, calculate Nominal GDP.**

[*CBSE Delhi 2015*]

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

Or,
$$\text{Nominal GDP} = \frac{\text{Real GDP} \times \text{Price Index}}{100}$$
$$= \frac{200 \times 110}{100} = 220$$

Nominal GDP = ₹ 220.

2. **If the Nominal GDP is ₹ 1,200 and Price Index (with base = 100) is 120, calculate Real GDP.**

[*CBSE Delhi 2015*]

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$
$$= \frac{1{,}200}{120} \times 100 = 1{,}000$$

Real GDP = ₹ 1,000.

3. **If the Real GDP is ₹ 300 and Nominal GDP is ₹ 330, calculate Price Index (base = 100).**

[*CBSE Delhi 2015*]

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

Or,
$$\text{Price Index} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$
$$= \frac{330}{300} \times 100 = 110$$

Price index = 110.

4. Giving reasons explain how should the following be treated in estimation of national income:

(*i*) Expenditure by a firm on payment of fees to a chartered accountant.

(*ii*) Payment of corporate tax by a firm.

(*iii*) Purchase of refrigerator by a firm for own use. [*CBSE Delhi 2015*]

Ans. (*i*) Expenditure by a firm on payment of fees to a chartered accountant is not included in the estimation of national income because fees to a chartered accountant is an intermediate expenditure for the firm and not a final expenditure.

(*ii*) Payment of corporate tax by a firm should not be included in the estimation of national income because it is a transfer payment by the firm. It is paid out of income and therefore, it is not to be separately added in the national income.

(*iii*) Purchase of refrigerator by a firm is included in the estimation of national income because it is investment expenditure or capital formation. A refrigerator is used by the firm for several years and the firm is a final user of it.

5. Calculate 'National Income':

Items	**(₹ in crore)**
(*i*) Personal tax	80
(*ii*) Private final consumption expenditure	600
(*iii*) Undistributed profits	30
(*iv*) Private income	650
(*v*) Government final consumption expenditure	100
(*vi*) Corporate tax	50
(*vii*) Net domestic fixed capital formation	70
(*viii*) Net indirect tax	60
(*ix*) Depreciation	14
(*x*) Change in stocks	(–) 10
(*xi*) Net imports	20
(*xii*) Net factor income to abroad	10

[*CBSE Delhi 2015*]

Ans. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Change in stocks – Net imports – Net indirect tax – Net factor income to abroad

= ₹ 600 crore + ₹ 100 crore + ₹ 70 crore + (–) ₹ 10 crore – ₹ 20 crore – ₹ 60 crore – ₹ 10 crore

= ₹ 600 crore + ₹ 100 crore + ₹ 70 crore – ₹ 10 crore – ₹ 20 crore – ₹ 60 crore – ₹ 10 crore

= ₹ 670 crore

National income = ₹ 670 crore.

6. Calculate 'Gross National Product at Market Price':

Items	**(₹ in crore)**
(*i*) Rent	100
(*ii*) Net current transfers to rest of the world	30
(*iii*) Social security contributions by employers	47
(*iv*) Mixed income	600
(*v*) Gross domestic capital formation	140
(*vi*) Royalty	20
(*vii*) Interest	110
(*viii*) Compensation of employees	500

(*ix*)	Net domestic capital formation	120
(*x*)	Net factor income from abroad	(–) 10
(*xi*)	Net indirect tax	150
(*xii*)	Profit	200

[*CBSE Delhi 2015*]

Ans. Gross National Product at Market Price

= Compensation of employees + Rent + Royalty + Interest + Profit + Mixed income + Consumption of fixed capital (Gross domestic capital formation – Net domestic capital formation) + Net indirect tax + Net factor income from abroad

= ₹ 500 crore + ₹ 100 crore + ₹ 20 crore + ₹ 110 crore + ₹ 200 crore + ₹ 600 crore + (₹ 140 crore – ₹ 120 crore) + ₹ 150 crore + (–) ₹ 10 crore

= ₹ 500 crore + ₹ 100 crore + ₹ 20 crore + ₹ 110 crore + ₹ 200 crore + ₹ 600 crore + ₹ 20 crore + ₹ 150 crore – ₹ 10 crore

= ₹ 1,690 crore

Gross national product at market price = ₹ 1,690 crore.

7. Calculate 'Net Domestic Product at Factor Cost':

	Items	**(₹ in crore)**
(*i*)	Net current transfers to abroad	15
(*ii*)	Private final consumption expenditure	800
(*iii*)	Net imports	(–) 20
(*iv*)	Net domestic capital formation	100
(*v*)	Net factor income to abroad	10
(*vi*)	Depreciation	50
(*vii*)	Change in stocks	17
(*viii*)	Net indirect tax	120
(*ix*)	Government final consumption expenditure	200
(*x*)	Exports	30

[*CBSE Delhi 2015*]

Ans. Net Domestic Product at Factor Cost

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation – Net imports – Net indirect tax

= ₹ 800 crore + ₹ 200 crore + ₹ 100 crore – (–) ₹ 20 crore – ₹ 120 crore

= ₹ 800 crore + ₹ 200 crore + ₹ 100 crore + ₹ 20 crore – ₹ 120 crore

= ₹ 1,000 crore

Net domestic product at factor cost = ₹ 1,000 crore.

8. If the Real GDP is ₹ 400 and Nominal GDP is ₹ 450, calculate the Price Index (base = 100).

[*CBSE (AI) 2015*]

Ans.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

$$400 = \frac{450}{\text{Price Index}} \times 100$$

$$\text{Price Index} = \frac{450}{400} \times 100 = 112.5$$

Price index = 112.5.

9. If the Real GDP is ₹ 500 and Price Index (base = 100) is 125, calculate the Nominal GDP.

[CBSE (AI) 2015]

Ans.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

$$500 = \frac{\text{Nominal GDP}}{125} \times 100$$

$$\text{Nominal GDP} = 500 \times \frac{125}{100} = 625$$

Nominal GDP = ₹ 625.

10. If the Nominal GDP is 600 and Price Index (base = 100) is 120, calculate the Real GDP.

[CBSE (AI) 2015]

Ans.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

$$\text{Real GDP} = \frac{600}{120} \times 100 = 500$$

Real GDP = 500.

11. Giving reasons explain how the following should be treated in estimation of national income:

(*i*) Payment of interest by a firm to a bank.

(*ii*) Payment of interest by a bank to an individual.

(*iii*) Payment of interest by an individual to a bank. *[CBSE (AI) 2015]*

Ans. (*i*) Payment of interest by a firm to a bank is included in national income because firm borrows money for production purpose and thus, it is a factor payment.

(*ii*) Payment of interest by a bank to an individual is included in national income because the bank is expected to have used individual's saving for productive purpose and thus, this is a factor payment.

(*iii*) Payment of interest by an individual to a bank is not included in national income because the individual uses the loan amount for consumption purpose and not for investment or productive purpose.

12. Calculate the 'National Income':

	Items	**(₹ in crore)**
(*i*)	Rent	200
(*ii*)	Net factor income to abroad	10
(*iii*)	National debt interest	15
(*iv*)	Wages and salaries	700
(*v*)	Current transfers from government	10
(*vi*)	Undistributed profits	20
(*vii*)	Corporation tax	30
(*viii*)	Interest	150
(*ix*)	Social security contributions by employers	100
(*x*)	Net domestic product accruing to government	250
(*xi*)	Net current transfers to rest of the world	5
(*xii*)	Dividend	50

[CBSE (AI) 2015]

Ans. National Income

= Wages and salaries + Social security contributions by employers + Rent + Interest + Undistributed profits + Corporation tax + Dividend – Net factor income to abroad

= ₹ 700 crore + ₹ 100 crore + ₹ 200 crore + ₹ 150 crore + ₹ 20 crore + ₹ 30 crore + ₹ 50 crore – ₹ 10 crore

= ₹ 1,240 crore

National income = ₹ 1,240 crore.

13. Calculate 'Net National Product at Market Price':

	Items	**(₹ in crore)**
(*i*)	Transfer payments by government	7
(*ii*)	Government final consumption expenditure	50
(*iii*)	Net imports	(–) 10
(*iv*)	Net domestic fixed capital formation	60
(*v*)	Private final consumption expenditure	300
(*vi*)	Private income	280
(*vii*)	Net factor income to abroad	(–) 5
(*viii*)	Closing stock	8
(*ix*)	Opening stock	8
(*x*)	Depreciation	12
(*xi*)	Corporate tax	60
(*xii*)	Retained earnings of corporations	20

[CBSE (AI) 2015]

Ans. Net National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Closing stock – Opening stock – Net imports – Net factor income to abroad

= ₹ 300 crore + ₹ 50 crore + ₹ 60 crore + ₹ 8 crore – ₹ 8 crore – (–) ₹ 10 crore – (–) ₹ 5 crore

= ₹ 300 crore + ₹ 50 crore + ₹ 60 crore + ₹ 8 crore – ₹ 8 crore + ₹ 10 crore + ₹ 5 crore

= ₹ 425 crore

Net national product at market price = ₹ 425 crore.

14. Calculate 'Net Domestic Product at Market Price':

	Items	**(₹ in crore)**
(*i*)	Private final consumption expenditure	400
(*ii*)	Opening stock	10
(*iii*)	Consumption of fixed capital	25
(*iv*)	Imports	15
(*v*)	Government final consumption expenditure	90
(*vi*)	Net current transfers to rest of the world	5
(*vii*)	Gross domestic fixed capital formation	80
(*viii*)	Closing stock	20
(*ix*)	Exports	10
(*x*)	Net factor income to abroad	(–) 5

[CBSE (AI) 2015]

Ans. Net Domestic Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed capital formation + Closing stock – Opening stock + Exports – Imports – Consumption of fixed capital

= ₹ 400 crore + ₹ 90 crore + ₹ 80 crore + ₹ 20 crore – ₹ 10 crore + ₹ 10 crore – ₹ 15 crore – ₹ 25 crore

= ₹ 550 crore

Net domestic product at market price = ₹ 550 crore.

15. If the Nominal Gross Domestic Product = ₹ 4,400 and the Price Index (base = 100) = 110, calculate the Real Gross Domestic Product. *[CBSE (F) 2015]*

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$
$$= \frac{4{,}400}{110} \times 100$$
$$= 4{,}000$$

Real gross domestic product = ₹ 4,000.

16. If the Real Gross Domestic Product is ₹200 and the Nominal Gross Domestic Product is ₹210, calculate the Price Index (base = 100). *[CBSE (F) 2015]*

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

Or,
$$\text{Price Index} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$
$$= \frac{210}{200} \times 100 = 105$$

Price index = 105.

17. If the Real Gross Domestic Product is ₹ 250 and the Price Index (base = 100) is 120, calculate the Nominal Gross Domestic Product. *[CBSE (F) 2015]*

Ans.
$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

Or,
$$\text{Nominal GDP} = \frac{\text{Real GDP} \times \text{Price Index}}{100}$$
$$= \frac{250 \times 120}{100} = 300$$

Nominal gross domestic product = ₹ 300.

18. Giving reasons explain how should the following be treated in estimation of national income:

(*i*) Payment of corporate tax by a firm.

(*ii*) Purchase of machinery by a factory for own use.

(*iii*) Purchase of uniforms for nurses by a hospital. *[CBSE (F) 2015]*

Ans. (*i*) Payment of corporate tax by a firm should not be included in the estimation of national income because it is a transfer payment by the firm. It is paid out of income and therefore, it is not to be separately added in the national income.

(*ii*) Purchase of machinery by a factory is included in the estimation of national income because it is investment expenditure or capital formation.

(*iii*) Purchase of uniforms for nurses by a hospital is not included in the estimation of national income, because uniform is provided by the hospital at the time of work. It is to be treated as an intermediate consumption.

19. Calculate the Gross National Product at Market Price:

Items	(₹ in crore)
(*i*) Wages and salaries	800
(*ii*) Personal tax	150
(*iii*) Operating surplus	200
(*iv*) Undistributed profits	10
(*v*) Social security contributions by employers	100
(*vi*) Corporate tax	50
(*vii*) Net factor income to abroad	(–) 20
(*viii*) Personal disposable income	1,200
(*ix*) Net indirect tax	70
(*x*) Consumption of fixed capital	30
(*xi*) Mixed income of self-employed	500
(*xii*) Royalty	9

[*CBSE (F) 2015*]

Ans. Gross National Product at Market Price

= Wages and salaries + Social security contributions by employers + Operating surplus + Mixed income of self-employed + Consumption of fixed capital + Net indirect tax – Net factor income to abroad

= ₹ 800 crore + ₹ 100 crore + ₹ 200 crore + ₹ 500 crore + ₹ 30 crore + ₹ 70 crore – (–) ₹ 20 crore

= ₹ 800 crore + ₹ 100 crore + ₹ 200 crore + ₹ 500 crore + ₹ 30 crore + ₹ 70 crore + 20 crore

= ₹ 1,720 crore

Gross national product at market price = ₹ 1,720 crore.

20. Calculate National Income:

Items	(₹ in crore)
(*i*) Net imports	5
(*ii*) Net domestic capital formation	15
(*iii*) Personal income	90
(*iv*) National debt interest	10
(*v*) Corporate tax	25
(*vi*) Government final consumption expenditure	20
(*vii*) Net factor income to abroad	(–) 5
(*viii*) Net indirect tax	10
(*ix*) Undistributed profits	0
(*x*) Private final consumption expenditure	100

[*CBSE (F) 2015*]

Ans. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation – Net imports – Net indirect tax – Net factor income to abroad

= ₹ 100 crore + ₹ 20 crore + ₹ 15 crore – ₹ 5 crore – ₹ 10 crore – (–) ₹ 5 crore

= ₹ 100 crore + ₹ 20 crore + ₹ 15 crore – ₹ 5 crore – ₹ 10 crore + ₹ 5 crore

= ₹ 125 crore

National income = ₹ 125 crore.

21. Calculate Net National Product at Market Price:

Items	(₹ in crore)
(*i*) Net factor income to abroad	(–) 10
(*ii*) Net current transfers to abroad	5
(*iii*) Consumption of fixed capital	40
(*iv*) Compensation of employees	700
(*v*) Corporate tax	30
(*vi*) Undistributed profits	10
(*vii*) Interest	90
(*viii*) Rent	100
(*ix*) Dividends	20
(*x*) Net indirect tax	110
(*xi*) Social security contributions by employees	11

[*CBSE (F) 2015*]

Ans. Net National Product at Market Price

= Compensation of employees + Rent + Interest + Corporate tax + Undistributed profits + Dividends + Net indirect tax – Net factor income to abroad

= ₹ 700 crore + ₹ 100 crore + ₹ 90 crore + ₹ 30 crore + ₹ 10 crore + ₹ 20 crore + ₹ 110 crore – (–) ₹ 10 crore

= ₹ 700 crore + ₹ 100 crore + ₹ 90 crore + ₹ 30 crore + ₹ 10 crore + ₹ 20 crore + ₹ 110 crore + ₹ 10 crore

= ₹ 1,070 crore

Net national product at market price = ₹ 1,070 crore.

22. Depreciation of fixed capital assets refers to: (choose the correct alternative) [*CBSE Delhi 2016*]

(*a*) normal wear and tear

(*b*) foreseen obsolescence

(*c*) normal wear and tear and foreseen obsolescence

(*d*) unforeseen obsolescence

Ans. (*c*)

23. Define stocks. [*CBSE Delhi 2016*]

Ans. Stock is the quantity which is measured at a point of time.

24. Find Net Value Added at Factor Cost:

Items	(₹ in lakh)
(*i*) Durable use producer goods with a life span of 10 years	10
(*ii*) Single use producer goods	5
(*iii*) Sales	20
(*iv*) Unsold output produced during the year	2
(*v*) Taxes on production	1

[*CBSE Delhi 2016*]

Ans. Net Value Added at Factor Cost

= Sales + Change in stock – Single use producer goods – Depreciation – Taxes on production

= ₹ 20 lakh + ₹ 2 lakh – ₹ 5 lakh – ₹ 1 lakh – ₹ 1 lakh

= ₹ 15 lakh

Net value added at factor cost = ₹ 15 lakh.

[**Note:** Annual Depreciation $= \dfrac{\text{Value of durable use producer goods}}{\text{Life span of producer goods}} = \dfrac{₹\ 10\ \text{lakh}}{10} = ₹\ 1\ \text{lakh.}$]

25. Find Net Value Added at Market Price:

Items	(₹ in lakh)
(*i*) Fixed capital good with a life span of 5 years	15
(*ii*) Raw materials	6
(*iii*) Sales	25
(*iv*) Net change in stock	(–) 2
(*v*) Taxes on production	1

[*CBSE Delhi 2016*]

Ans. Net Value Added at Market Price

= Sales + Net change in stock – Raw materials – Depreciation

= ₹ 25 lakh + (–) ₹ 2 lakh – ₹ 6 lakh – ₹ 3 lakh

= ₹ 25 lakh – ₹ 2 lakh – ₹ 6 lakh – ₹ 3 lakh

= ₹ 14 lakh

Net value added at market price = ₹ 14 lakh.

[**Note:** Annual Depreciation = $\frac{\text{Value of fixed capital good}}{\text{Life span of fixed capital good}} = \frac{\text{₹ 15 lakh}}{5}$ = ₹ 3 lakh.]

26. Find Gross Value Added at Market Price:

Items	(₹ in lakh)
(*i*) Depreciation	20
(*ii*) Domestic sales	200
(*iii*) Net change in stocks	(–) 10
(*iv*) Exports	10
(*v*) Single use producer goods	120

[*CBSE Delhi 2016*]

Ans. Gross Value Added at Market Price

= Domestic sales + Net change in stocks – Single use producer goods + Exports

= ₹ 200 lakh + (–) ₹ 10 lakh – ₹ 120 lakh + ₹ 10 lakh

= ₹ 200 lakh – ₹ 10 lakh – ₹ 120 lakh + ₹ 10 lakh

= ₹ 80 lakh

Gross value added at market price = ₹ 80 lakh.

27. Government incurs expenditure to popularize yoga among the masses. Analyse its impact on gross domestic product and welfare of the people. [*CBSE Delhi 2016*]

Ans. **(*a*) Impact on Gross Domestic Product (GDP):**

Government expenditure adds to aggregate demand in the economy. It has a multiplier effect on GDP. To illustrate:

If government expenditure is ₹ 100 and MPC is assumed to be 0.5, then increase in GDP would be equal to

$$= \frac{1}{1-\text{MPC}} \times 100$$

$$= \frac{1}{1-0.5} \times 100$$

$$= \frac{100}{0.5} = 200$$

(b) Impact on Welfare:

Expenditure on yoga is expected to improve physical and mental health of the people. Accordingly, skill formation as well as efficiency are expected to rise. This would improve welfare of the people.

28. Find National Income:

Items	**(₹ in crore)**
(i) Wages and salaries	1,000
(ii) Net current transfers to abroad	20
(iii) Net factor income paid to abroad	10
(iv) Profit	400
(v) National debt interest	120
(vi) Social security contributions by employers	100
(vii) Current transfers from government	60
(viii) National income accruing to government	150
(ix) Rent	200
(x) Interest	300
(xi) Royalty	50

[CBSE Delhi 2016]

Ans. National Income

= Wages and salaries + Social security contributions by employers + Rent + Royalty + Interest + Profit – Net factor income paid to abroad

= ₹ 1,000 crore + ₹ 100 crore + ₹ 200 crore + ₹ 50 crore + ₹ 300 crore + ₹ 400 crore – ₹ 10 crore

= ₹ 2,040 crore

National income = ₹ 2,040 crore.

29. Find Net Domestic Product at Factor Cost:

Items	**(₹ in crore)**
(i) Rent	200
(ii) Net current transfers to abroad	10
(iii) National debt interest	60
(iv) Corporate tax	100
(v) Compensation of employees	900
(vi) Current transfers by government	150
(vii) Interest	400
(viii) Undistributed profits	50
(ix) Dividend	250
(x) Net factor income to abroad	(–) 10
(xi) Income accruing to government	120

[CBSE Delhi 2016]

Ans. Net Domestic Product at Factor Cost

= Compensation of employees + Rent + Interest + Corporate tax + Undistributed profits + Dividend

= ₹ 900 crore + ₹ 200 crore + ₹ 400 crore + ₹ 100 crore + ₹ 50 crore + ₹ 250 crore

= ₹ 1,900 crore

Net domestic product at factor cost = ₹ 1,900 crore.

30. Find Net National Product at Market Price:

Items	**(₹ in crore)**
(*i*) Personal taxes	200
(*ii*) Wage and salaries	1,200
(*iii*) Undistributed profit	50
(*iv*) Rent	300
(*v*) Corporation tax	200
(*vi*) Private income	2,000
(*vii*) Interest	400
(*viii*) Net indirect tax	300
(*ix*) Net factor income to abroad	20
(*x*) Profit	500
(*ix*) Social security contributions by employers	250

[CBSE Delhi 2016]

Ans. Net National Product at Market Price

= Wages and salaries + Social security contributions by employers + Rent + Interest + Profit + Net indirect tax – Net factor income to abroad

= ₹ 1,200 crore + ₹ 250 crore + ₹ 300 crore + ₹ 400 crore + ₹ 500 crore + ₹ 300 crore – ₹ 20 crore

= ₹ 2,930 crore

Net national product at market price = ₹ 2,930 crore.

31. National income is the sum of factors incomes accruing to: (choose the correct alternative) *[CBSE (AI) 2016]*

(*a*) nationals
(*b*) economic territory
(*c*) residents
(*d*) both residents and non-residents

Ans. (*c*)

32. Define flows. *[CBSE (AI) 2016]*

Ans. Flow is the quantity which is measured per unit of time period.

33. Assuming real income to be ₹200 crore and price index to be 135, calculate nominal income. *[CBSE (AI) 2016]*

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$

Or,
$$\text{Nominal Income} = \frac{\text{Real Income} \times \text{Price Index}}{100}$$
$$= \frac{200 \times 135}{100} = 270$$

Nominal income = ₹ 270 crore.

34. If nominal income is ₹500 and price index is 125, calculate real income. *[CBSE (AI) 2016]*

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$
$$= \frac{500}{125} \times 100 = 400$$

Real income = ₹ 400.

35. If real income is ₹400 and price index is 105, calculate nominal income. *[CBSE (AI) 2016]*

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$

Or, $$\text{Nominal Income} = \frac{\text{Real Income} \times \text{Price Index}}{100}$$
$$= \frac{400 \times 105}{100} = 420$$

Nominal income = ₹ 420.

36. Sale of petrol and diesel cars is rising particularly in big cities. Analyse its impact on gross domestic product and welfare. *[CBSE (AI) 2016]*

Ans. **(*a*) Impact on Gross Domestic Product (GDP):**

GDP = Sales, in case there is no change in stocks during the year. Accordingly, increase in sale of cars during the year indicates increase in GDP.

(*b*) Impact on Welfare:

Rise in sale of cars leads to a rise in the consumption of petrol and diesel. Both these fuels (particularly diesel) cause emission of carbon dioxide. It increases environmental pollution. It adversely impacts welfare of the people. Because increase in environmental pollution causes increase in expenditure on the maintenance of health. It also reduces the level of sustainable development. Implying loss of welfare of future generations.

37. Find Gross National Product at Market Price:

	Items	**(₹ in crore)**
(*i*)	Private final consumption expenditure	800
(*ii*)	Net current transfers to abroad	20
(*iii*)	Net factor income to abroad	(–) 10
(*iv*)	Government final consumption expenditure	300
(*v*)	Net indirect tax	150
(*vi*)	Net domestic capital formation	200
(*vii*)	Current transfers from government	40
(*viii*)	Depreciation	100
(*ix*)	Net imports	30
(*x*)	Income accruing to government	90
(*xi*)	National debt interest	50

[CBSE (AI) 2016]

Ans. Gross National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Depreciation – Net imports – Net factor income to abroad

= ₹ 800 crore + ₹ 300 crore + ₹ 200 crore + ₹ 100 crore – ₹ 30 crore – (–) ₹ 10 crore

= ₹ 800 crore + ₹ 300 crore + ₹ 200 crore + ₹ 100 crore – ₹ 30 crore + ₹ 10 crore

= ₹ 1,380 crore

Gross national product at market = ₹ 1,380 crore.

38. Calculate Net National Product at Market Price:

	Items	**(₹ in crore)**
(*i*)	Net current transfers to abroad	10
(*ii*)	Private final consumption expenditure	500
(*iii*)	Current transfers from government	30
(*iv*)	Net factor income to abroad	20
(*v*)	Net exports	(–) 20
(*vi*)	Net indirect tax	120

(*vii*)	National debt interest	70
(*viii*)	Net domestic capital formation	80
(*ix*)	Income accruing to government	60
(*x*)	Government final consumption expenditure	100

[*CBSE (AI) 2016*]

Ans. Net National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net factor income to abroad

= ₹ 500 crore + ₹ 100 crore + ₹ 80 crore + (–) ₹ 20 crore – ₹ 20 crore

= ₹ 500 crore + ₹ 100 crore + ₹ 80 crore – ₹ 20 crore – ₹ 20 crore

= ₹ 640 crore

Net national product at market = ₹ 640 crore.

39. Calculate National Income:

	Items	**(₹ in crore)**
(*i*)	Corporation tax	100
(*ii*)	Private final consumption expenditure	900
(*iii*)	Personal income tax	120
(*iv*)	Government final consumption expenditure	200
(*v*)	Undistributed profits	50
(*vi*)	Change in stocks	(–) 20
(*vii*)	Net domestic fixed capital formation	120
(*viii*)	Net imports	10
(*ix*)	Net indirect tax	150
(*x*)	Net factor income from abroad	(–) 10
(*xi*)	Private income	1,000

[*CBSE (AI) 2016*]

Ans. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Change in stocks – Net imports – Net indirect tax + Net factor income from abroad

= ₹ 900 crore + ₹ 200 crore + ₹ 120 crore + (–) ₹ 20 crore – ₹ 10 crore – ₹ 150 crore + (–) ₹ 10 crore

= ₹ 900 crore + ₹ 200 crore + ₹ 120 crore – ₹ 20 crore – ₹ 10 crore – ₹ 150 crore – ₹ 10 crore

= ₹ 1,030 crore

National income = ₹ 1,030 crore.

40. Unforseen obsolescence of fixed capital assets during production is: (choose the correct alternative) [*CBSE (F) 2016*]

(*a*) consumption of fixed capital
(*b*) capital loss
(*c*) income loss
(*d*) none of the above

Ans. (*b*)

41. Define gross investment. [*CBSE (F) 2016*]

Ans. Gross investment is the sum total of expenditure on the purchase of new assets (Net Investment) and depreciation during the year.

Gross Investment = Net Investment + Depreciation

42. Given real income to be 400 and price index be 100, calculate nominal income. [*CBSE (F) 2016*]

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$

Or,
$$\text{Nominal Income} = \frac{\text{Real Income} \times \text{Price Index}}{100}$$
$$= \frac{400 \times 100}{100} = 400$$

Nominal income = 400.

43. Given nominal income to be ₹375 and price index 125, calculate real income. [*CBSE (F) 2016*]

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$
$$= \frac{375}{125} \times 100 = 300$$

Real income = ₹ 300.

44. If nominal income is ₹600 and price index is 100, find real income. [*CBSE (F) 2016*]

Ans.
$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index}} \times 100$$
$$= \frac{600}{100} \times 100 = 600$$

Real income = ₹ 600.

45. Governments spends on child immunization programme. Analyse its impact on Gross Domestic Product and welfare of the people. [*CBSE (F) 2016*]

Ans. (*a*) **Impact on Gross Domestic Product (GDP):**

Government expenditure adds to aggregate demand in the economy. It has a multiplier effect on GDP. To illustrate:

If government expenditure = ₹ 100 and MPC is assumed to be 0.5, then increase in GDP would be equal to

$$\frac{1}{1-\text{MPC}} \times 100 = \frac{1}{1-0.5} \times 100 = \frac{100}{0.5} = 200$$

(*b*) **Impact on Welfare:**

Expenditure on child immunization programme is expected to improve health of the children. Accordingly, younger generation becomes robust as well as efficient. This would improve welfare of the people.

46. Distinguish between final goods and intermediate goods. Give an example of each. [*CBSE Delhi 2017*]

Or

Distinguish between final goods and intermediate goods. Give suitable examples. [*CBSE 2019 (58/3/1)*]

Ans. Final goods are those goods which are used either for final consumption or for investment.

Example: Refrigerator purchased by a household is a final good.

Intermediate goods are those goods which are used as raw material for further production or are purchased for resale.

Example: Leather used by a shoe-making firm is an intermediate good.

47. Explain 'non-monetary exchanges' as a limitation of using gross domestic product as an index of welfare of a country. [*CBSE Delhi 2017*]

Ans. Non-monetary exchanges refer to such exchanges which do not involve the use of money as a medium of exchange. In such exchanges, goods are exchanged for goods.

In economies like of India, barter system of exchange is not totally non-existent.

Non-monetary transactions are quite evident in rural areas where payments for farm-labour are often made in kind rather than cash. But such transactions are not recorded, because they are outside the monetary system of exchange. To this extent, GDP remains underestimated. Thus, non-monetary exchanges make gross domestic product an inappropriate index of welfare.

However, in developed economies, non-monetary transactions are almost non-existent. Accordingly, their impact on GDP estimation is almost nil.

48. How will you treat the following while estimating domestic product of a country? Give reasons for your answer:

(*a*) Profits earned by branches of country's bank in other countries.

(*b*) Gifts given by an employer to his employees on independence day.

(*c*) Purchase of goods by foreign tourists. *[CBSE Delhi 2017]*

Ans. (*a*) Profits earned by branches of country's bank in other countries is not a part of domestic product of India because the branches are outside the domestic territory of India. Hence, it is not included in domestic product of India.

(*b*) Gifts given by an employer to his employees is not included in domestic product of India because these are transfer payments.

(*c*) Purchase of goods by foreign tourists is included in domestic product of India since these are like exports which is a component of gross domestic product.

49. Calculate Net Domestic Product at Factor Cost:

	Items	**(₹ in crore)**
(*i*)	Private final consumption expenditure	8,000
(*ii*)	Government final consumption expenditure	1,000
(*iii*)	Exports	70
(*iv*)	Imports	120
(*v*)	Consumption of fixed capital	60
(*vi*)	Gross domestic fixed capital formation	500
(*vii*)	Change in stock	100
(*viii*)	Factor income to abroad	40
(*ix*)	Factor income from abroad	90
(*x*)	Indirect taxes	700
(*xi*)	Subsidies	50
(*xii*)	Net current transfers to abroad	(–) 30

[CBSE Delhi 2017]

Ans. Net Domestic Product at Factor Cost

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed capital formation + Change in stock + Exports – Imports – Consumption of fixed capital – Indirect taxes + Subsidies

= ₹ 8,000 crore + ₹ 1,000 crore + ₹ 500 crore + ₹ 100 crore + ₹ 70 crore – ₹ 120 crore – ₹ 60 crore – ₹ 700 crore + ₹ 50 crore

= ₹ 8,840 crore

Net domestic product at factor cost = ₹ 8,840 crore.

50. Calculate National Income:

	Items	**(₹ in crore)**
(*i*)	Net factor income to abroad	(–) 50
(*ii*)	Net indirect taxes	800
(*iii*)	Net current transfers from rest of the world	100

(*iv*) Net imports	200
(*v*) Private final consumption expenditure	5,000
(*vi*) Government final consumption expenditure	3,000
(*vii*) Gross domestic capital formation	1,000
(*viii*) Consumption of fixed capital	150
(*ix*) Change in stock	(–) 50
(*x*) Mixed income	4,000
(*xi*) Scholarship to students	80

[*CBSE Delhi 2017*]

Ans. National Income

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation – Net imports – Consumption of fixed capital – Net indirect taxes – Net factor income to abroad

= ₹ 5,000 crore + ₹ 3,000 crore + ₹ 1,000 crore – ₹ 200 crore – ₹ 150 crore – ₹ 800 crore – (–) ₹ 50 crore

= ₹ 5,000 crore + ₹ 3,000 crore + ₹ 1,000 crore – ₹ 200 crore – ₹ 150 crore – ₹ 800 crore + ₹ 50 crore

= ₹ 7,900 crore

National income = ₹ 7,900 crore.

51. Calculate Net National Product at Market Price:

Items	**(₹ in crore)**
(*i*) Gross domestic fixed capital formation	400
(*ii*) Private final consumption expenditure	8,000
(*iii*) Government final consumption expenditure	3,000
(*iv*) Change in stock	50
(*v*) Consumption of fixed capital	40
(*vi*) Net indirect taxes	100
(*vii*) Net exports	(–) 60
(*viii*) Net factor income to abroad	(–) 80
(*ix*) Net current transfers from abroad	100
(*x*) Dividend	100

[*CBSE Delhi 2017*]

Ans. Net National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed capital formation + Change in stock + Net exports – Consumption of fixed capital – Net factor income to abroad

= ₹ 8,000 crore + ₹ 3,000 crore + ₹ 400 crore + ₹ 50 crore + (–) ₹ 60 crore – ₹ 40 crore – (–) ₹ 80 crore

= ₹ 8,000 crore + ₹ 3,000 crore + ₹ 400 crore + ₹ 50 crore – ₹ 60 crore – ₹ 40 crore + ₹ 80 crore

= ₹ 11,430 crore

Net national product at market price = ₹ 11,430 crore.

52. Explain with the help of an example, the basis of classifying goods into final goods and intermediate goods. [*CBSE (AI) 2017*]

Ans. Goods which are used by the producers in the process of production as raw material or are purchased for resale are known as intermediate goods. **Example:** Shirt purchased by a firm for resale is an intermediate good.

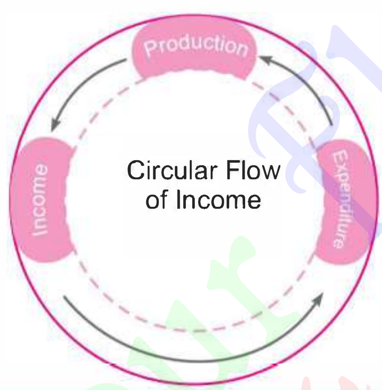
Goods which are used by their final users are known as final goods. These goods are not resold. **Example:** Shirt purchased by the household is a final good.

'End-use' of the goods is the basis of classifying the goods as 'final' and 'intermediate'. Goods are final if they have crossed the boundary line of production and are ready for use by their final users (consumers or producers). Goods are intermediate if they are within the boundary line of production and are not ready for use by their final users. Value is yet to be added to intermediate goods.

53. Explain the circular flow of income. [*CBSE (AI) 2017*]

Ans. The flow of production, income and expenditure is a circular flow. Production gives rise to income, income gives rise to demand for goods and services, and demand in turn gives rise to expenditure. Expenditure leads to further production. Thus, the flow of production, income and expenditure becomes circular with no beginning or no end. This flow is shown in **Fig. 2**.

FIGURE 2



54. Distinguish between stocks and flows. Give an example of each. [*CBSE (AI) 2017; (F) 2017*]

Or

Distinguish between stock and flow variables with suitable examples. [*CBSE 2018*]

Ans.

Stocks	Flows
(*i*) Stock is that quantity of an economic variable which is measured at a particular point of time.	(*i*) Flow is that quantity of an economic variable which is measured during the period of time.
(*ii*) Stock has no time dimension.	(*ii*) Flow has time dimension as per hour, per day, per month.
(*iii*) Stock is a static concept.	(*iii*) Flow is a dynamic concept.
(*iv*) **Examples:** Quantity of money, wealth.	(*iv*) **Examples:** Consumption, investment.

55. Explain the precautions that should be taken while estimating national income by expenditure method. [*CBSE (AI) 2017*]

Or

What precautions should be taken while estimating national income by expenditure method? Explain. [*CBSE (F) 2017*]

Ans. The following precautions are to be taken while estimating national income by expenditure method:

(*i*) Only final expenditure is to be taken into account to avoid error of double counting. Expenditure on intermediate goods (also called intermediate expenditure) is not to be considered.

(*ii*) Expenditure on second-hand goods is not to be included.

(*iii*) Expenditure on shares and bonds is not to be included.

(*iv*) Expenditure on transfer payments (called transfer expenditure) is not to be included.

(v) Expenditure on self-use of own produced goods (like the farmer using his production of wheat or the house-owner using his own house) should be included.

Briefly, expenditure on only final goods and services is to be taken account of. Expenditure on intermediate goods is to be considered only as intermediate consumption.

56. Explain the precautions that are taken while estimating national income by value added method. *[CBSE (AI) 2017]*

Or

What precautions should be taken while estimating national income by value added method? Explain. *[CBSE (F) 2017]*

Ans. The following precautions are to be taken while estimating national income by value added method:

(i) Avoid double counting, by considering only the final goods.

(ii) Sale of second-hand goods should not be considered.

(iii) Commission earned on second-hand goods is included in the estimation of 'value added'.

(iv) Own account production of goods of the producing units is taken into account while estimating value added.

(v) Production for self-consumption (like the farmer's family using their own farm output) must be considered.

(vi) Value addition should include imputed rent on owner-occupied houses, because imputed rent is taken as a part of factor income and factor income has got to be identical with value added.

57. Will the following be included in the domestic product of India? Give reasons for your answer.

(a) Profits earned by foreign companies in India.

(b) Salaries of Indians working in the Russian Embassy in India.

(c) Profits earned by a branch of State Bank of India in Japan. *[CBSE (AI) 2017]*

Ans. (a) Profits earned by foreign companies in India is a part of domestic product of India because the companies are within the domestic territory of India.

(b) Salary of Indians working in Russian Embassy in India is not included in the domestic product of India because Russian Embassy is not a part of domestic territory of India.

(c) Profits earned by a branch of State Bank of India in Japan is not a part of the domestic product of India because the branch of State Bank of India in Japan is not within the domestic territory of India.

58. Will the following be included in the national income of India? Give reasons for your answer.

(a) Financial assistance to flood victims.

(b) Profits earned by the branches of a foreign bank in India.

(c) Salaries of Indians working in the American Embassy in India. *[CBSE (AI) 2017]*

Ans. (a) Financial assistance to flood victims is not included in the national income of India. This is because financial assistance is a transfer income.

(b) Profits earned by the branches of a foreign bank in India is reflected in the national income of India as a negative component because it is a part of factor income to rest of the world.

(c) Salaries of Indians working in the American Embassy in India is included in national income of India because it is a part of factor income from rest of the world.

59. Calculate National Income:

Items	**(₹ in crore)**
(i) Compensation of employees	2,000
(ii) Rent	400
(iii) Profit	900

(*iv*) Dividend	100
(*v*) Interest	500
(*vi*) Mixed income of self-employed	7,000
(*vii*) Net factor income to abroad	50
(*viii*) Net exports	60
(*ix*) Net indirect taxes	300
(*x*) Depreciation	150
(*xi*) Net current transfers to abroad	30

[*CBSE (AI) 2017*]

Ans. National Income

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed – Net factor income to abroad

= ₹ 2,000 crore + ₹ 400 crore + ₹ 500 crore + ₹ 900 crore + ₹ 7,000 crore – ₹ 50 crore

= ₹ 10,750 crore

National income = ₹ 10,750 crore.

60. Calculate the Net National Product at Market Price:

Items	**(₹ in crore)**
(*i*) Mixed income of self-employed	8,000
(*ii*) Depreciation	200
(*iii*) Profit	1,000
(*iv*) Rent	600
(*v*) Interest	700
(*vi*) Compensation of employees	3,000
(*vii*) Net indirect taxes	500
(*viii*) Net factor income to abroad	60
(*ix*) Net exports	(–) 50
(*x*) Net current transfers to abroad	20

[*CBSE (AI) 2017*]

Ans. Net National Product at Market Price

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net indirect taxes – Net factor income to abroad

= ₹ 3,000 crore + ₹ 600 crore + ₹ 700 crore + ₹ 1,000 crore + ₹ 8,000 crore + ₹ 500 crore – ₹ 60 crore

= ₹ 13,740 crore

Net national product at market price = ₹ 13,740 crore.

61. Calculate the Gross National Product at Market Price:

Items	**(₹ in crore)**
(*i*) Compensation of employees	2,500
(*ii*) Profit	700
(*iii*) Mixed income of self-employed	7,500
(*iv*) Government final consumption expenditure	3,000
(*v*) Rent	400
(*vi*) Interest	350
(*vii*) Net factor income from abroad	50

(*viii*)	Net current transfers to abroad	100
(*ix*)	Net indirect taxes	150
(*x*)	Depreciation	70
(*xi*)	Net exports	40

[*CBSE (AI) 2017*]

Ans. Gross National Product at Market Price

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Depreciation + Net indirect taxes + Net factor income from abroad

= ₹ 2,500 crore + ₹ 400 crore + ₹ 350 crore + ₹ 700 crore + ₹ 7,500 crore + ₹ 70 crore + ₹ 150 crore + ₹ 50 crore

= ₹ 11,720 crore

Gross national product at market price = ₹ 11,720 crore.

62. Distinguish between domestic product and national product. [*CBSE (F) 2017*]

Ans.

Domestic Product (NDP_{FC})	National Product (NNP_{FC})
(*i*) Domestic product/income is the sum total of factor incomes generated within the domestic territory of a country.	(*i*) National product/income is the sum total of factor incomes generated by normal residents of a country, no matter where this income is generated (within the domestic territory or in rest of the world).
(*ii*) It includes income generated both by the residents as well as non-residents of a country.	(*ii*) It includes income generated only by the normal residents of a country.
(*iii*) It does not include net factor income from abroad.	(*iii*) It includes net factor income from abroad.

National Product = Domestic product + Net factor income from abroad

63. Explain 'mixed income of self-employed' and give an example. [*CBSE (F) 2017*]

Ans. Mixed income is the total income of the self-employed persons using their own labour, land, capital and entrepreneurship to produce goods and services. These incomes are a mixture of wages, rent, interest and profit. That is why it is called mixed income. Separate estimation of wages, rent, interest and profit is not possible owing to the fact that factors of production are not hired/purchased from the market. Only self-owned factors are used in household enterprises (or small enterprises run by the households).

64. Calculate National Income:

	Items	**(₹ in crore)**
(*i*)	Profit	1,000
(*ii*)	Mixed income of self-employed	15,000
(*iii*)	Dividends	200
(*iv*)	Interest	400
(*v*)	Compensation of employees	7,000
(*vi*)	Net factor income to abroad	100
(*vii*)	Consumption of fixed capital	400
(*viii*)	Net exports	(–) 200
(*ix*)	Net indirect taxes	800
(*x*)	Net current transfers to rest of the world	40
(*xi*)	Rent	500

[*CBSE (F) 2017*]

Ans. National Income

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed – Net factor income to abroad

= ₹ 7,000 crore + ₹ 500 crore + ₹ 400 crore + ₹ 1,000 crore + ₹ 15,000 crore – ₹ 100 crore

= ₹ 23,800 crore

National income = ₹ 23,800 crore.

65. Calculate Net National Product at Market Price:

Items	(₹ in thousand crore)
(*i*) Compensation of employees	250
(*ii*) Mixed income of self-employed	600
(*iii*) Profit	80
(*iv*) Rent	30
(*v*) Interest	40
(*vi*) Net factor income to abroad	(–) 10
(*vii*) Net exports	15
(*viii*) Consumption of fixed capital	20
(*ix*) Net indirect taxes	10
(*x*) Net current transfers to abroad	8

[*CBSE (F) 2017*]

Ans. Net National Product at Market Price

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed – Net factor income to abroad + Net indirect taxes

= ₹ 250 thousand crore + ₹ 30 thousand crore + ₹ 40 thousand crore + ₹ 80 thousand crore + ₹ 600 thousand crore – (–) ₹ 10 thousand crore + ₹ 10 thousand crore

= ₹ 250 thousand crore + ₹ 30 thousand crore + ₹ 40 thousand crore + ₹ 80 thousand crore + ₹ 600 thousand crore + ₹ 10 thousand crore + ₹ 10 thousand crore

= ₹ 1,020 thousand crore

Net national product at market price = ₹ 1,020 thousand crore.

66. Calculate National Income:

Items	(₹ in crore)
(*i*) Compensation of employees	2,000
(*ii*) Profit	800
(*iii*) Rent	300
(*iv*) Interest	250
(*v*) Mixed income of self-employed	7,000
(*vi*) Net current transfers to abroad	200
(*vii*) Net exports	(–) 100
(*viii*) Net indirect taxes	1,500
(*ix*) Net factor income to abroad	60
(*x*) Consumption of fixed capital	120

[*CBSE (F) 2017*]

Ans. National Income

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed – Net factor income to abroad

= ₹ 2,000 crore + ₹ 300 crore + ₹ 250 crore + ₹ 800 crore + ₹ 7,000 crore – ₹ 60 crore

= ₹ 10,290 crore

National income = ₹ 10,290 crore.

67. Give one example of negative externalities. *[CBSE 2018]*

Ans. Negative externalities occur when smoke omitted by factories causes air pollution, or the industrial waste is driven into rivers causing water pollution.

68. What are capital goods? How are they different from consumption goods? *[CBSE 2018]*

Ans. Capital goods are those goods which are used as fixed assets by the producers in the production of other goods and services. These goods are repeatedly used in the production of other goods and services. **Example:** Plant & machinery.

Consumption goods, on the other hand, are those goods which satisfy the consumer's wants directly. These goods are used as final goods by their final users. **Example:** Pen, bread, butter, vegetables, etc.

Capital goods, as fixed assets of the producers, are to be treated as final goods whereas in case of consumption goods, it depends on their 'end-use'. **Example:** Kerosene oil used by households is a final good but when used by the firms to clean their machinery is to be treated as an intermediate good.

69. Calculate (*a*) Operating Surplus, and (*b*) Domestic Income:

Items	**(₹ in crore)**
(*i*) Compensation of employees	2,000
(*ii*) Rent and interest	800
(*iii*) Indirect taxes	120
(*iv*) Corporation tax	460
(*v*) Consumption of fixed capital	100
(*vi*) Subsidies	20
(*vii*) Dividend	940
(*viii*) Undistributed profits	300
(*ix*) Net factor income to abroad	150
(*x*) Mixed income	200

[CBSE (F) 2018]

Ans. (*a*) Operating Surplus

= Rent and Interest + Undistributed profits + Corporation tax + Dividend

= ₹ 800 crore + ₹ 300 crore + ₹ 460 crore + ₹ 940 crore

= ₹ 2,500 crore

Operating surplus = ₹ 2,500 crore.

(*b*) Domestic Income

= Compensation of employees + Operating surplus + Mixed income

= ₹ 2,000 crore + ₹ 2,500 crore + ₹ 200 crore

= ₹ 4,700 crore

Domestic income = ₹ 4,700 crore.

70. Give any two examples of flow concept. *[CBSE 2019 (58/1/1)]*

Ans. (*i*) Income, and (*ii*) Investment.

71. Define the problem of double counting in the computation of national income. State any two approaches to correct the problem of double counting. *[CBSE 2019 (58/1/1)]*

Ans. The counting of the value of commodity more than once is called double counting. This leads to overestimation of the value of goods and services produced. Thus, the importance of avoiding double counting lies in avoiding overestimating the value of domestic product.

To avoid the problem of double counting, following two methods are used:

(i) **Final Output Method:** According to this method, the value of intermediate goods is not considered. Only the value of final goods and services is considered.

(ii) **Value Added Method:** Another method to avoid the problem of double counting is to estimate the total value added at each stage of production.

72. "Gross Domestic Product (GDP) does not give us a clear indication of economic welfare of a country." Defend or refute the given statement with valid reason. *[CBSE 2019 (58/1/1)]*

Ans. Often gross domestic product (GDP) is considered as an index of welfare of the people, but there are strong exceptions to this generalisation. Following are the reasons:

(*i*) If with every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise. Only fewer people tend to benefit from an unequal distribution. Hence, the gulf between haves and have-nots may increase which results in lesser welfare of the society.

(*ii*) Composition of GDP may not be welfare-oriented even when the level of GDP tends to rise. There is no direct increase in the welfare of the masses if GDP has risen owing largely to the increase in the production of defence goods.

73. Given the following data, find the missing value of 'Government Final Consumption Expenditure' and 'Mixed Income of Self-employed'.

Items	**(₹ in crore)**
(*i*) National income	71,000
(*ii*) Gross domestic capital formation	10,000
(*iii*) Government final consumption expenditure	?
(*iv*) Mixed income of self-employed	?
(*v*) Net factor income from abroad	1,000
(*vi*) Net indirect taxes	2,000
(*vii*) Profits	1,200
(*viii*) Wages and Salaries	15,000
(*ix*) Net exports	5,000
(*x*) Private final consumption expenditure	40,000
(*xi*) Consumption of fixed capital	3,000
(*xii*) Operating surplus	30,000

[CBSE 2019 (58/1/1)]

Ans. Government Final Consumption Expenditure

= National income – Private final consumption expenditure – Gross domestic capital formation – Net exports + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 71,000 crore – ₹ 40,000 crore – ₹ 10,000 crore – ₹ 5,000 crore + ₹ 3,000 crore + ₹ 2,000 crore – ₹ 1,000 crore

= ₹ 20,000 crore

Mixed Income of Self-employed

= National income – Wages and Salaries – Operating surplus – Net factor income from abroad

= ₹ 71,000 crore – ₹ 15,000 crore – ₹ 30,000 crore – ₹ 1,000 crore

= ₹ 25,000 crore

Government final consumption expenditure = ₹ 20,000 crore.

Mixed income of self-employed = ₹ 25,000 crore.

74. Given the following data, find the missing values of 'Private Final Consumption Expenditure' and 'Operating Surplus'.

	Items	**(₹ in crore)**
(*i*)	National income	50,000
(*ii*)	Net indirect taxes	1,000
(*iii*)	Private final consumption expenditure	?
(*iv*)	Gross domestic capital formation	17,000
(*v*)	Profits	1,000
(*vi*)	Government final consumption expenditure	12,500
(*vii*)	Wages and Salaries	20,000
(*viii*)	Consumption of fixed capital	700
(*ix*)	Mixed income of self-employed	13,000
(*x*)	Operating surplus	?
(*xi*)	Net factor income from abroad	500
(*xii*)	Net exports	2,000

[*CBSE 2019 (58/1/2)*]

Ans. Private Final Consumption Expenditure

= National income – Government final consumption expenditure – Gross domestic capital formation – Net exports + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 50,000 crore – ₹ 12,500 crore – ₹ 17,000 crore – ₹ 2,000 crore + ₹ 700 crore + ₹ 1,000 crore – ₹ 500 crore

= ₹ 19,700 crore

Operating Surplus

= National income – Wages and Salaries – Mixed income of self-employed – Net factor income from abroad

= ₹ 50,000 crore – ₹ 20,000 crore – ₹ 13,000 crore – ₹ 500 crore

= ₹ 16,500 crore

Private final consumption expenditure = ₹ 19,700 crore.

Operating surplus = ₹ 16,500 crore.

75. Given the following data, find the missing values of 'Gross Domestic Capital Formation' and 'Wages and Salaries'.

	Items	**(₹ in crore)**
(*i*)	Mixed income of self-employed	3,500
(*ii*)	Net indirect taxes	300
(*iii*)	Wages and Salaries	?
(*iv*)	Government final consumption expenditure	14,000
(*v*)	Net exports	3,000
(*vi*)	Consumption of fixed capital	300
(*vii*)	Net factor income from abroad	700
(*viii*)	Operating surplus	12,000
(*ix*)	National income	30,000
(*x*)	Profits	500
(*xi*)	Gross domestic capital formation	?
(*xii*)	Private final consumption expenditure	11,000

[*CBSE 2019 (58/1/3)*]

Ans. Gross Domestic Capital Formation

= National income – Private final consumption expenditure – Government final consumption expenditure – Net exports + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 30,000 crore – ₹ 11,000 crore – ₹ 14,000 crore – ₹ 3,000 crore + ₹ 300 crore + ₹ 300 crore – ₹ 700 crore

= ₹ 1,900 crore

Wages and Salaries

= National income – Operating surplus – Mixed income of self-employed – Net factor income from abroad

= ₹ 30,000 crore – ₹ 12,000 crore – ₹ 3,500 crore – ₹ 700 crore

= ₹ 13,800 crore

Gross domestic capital formation = ₹ 1,900 crore.

Wages and Salaries = ₹ 13,800 crore.

76. "Higher Gross Domestic Product (GDP) means greater per capita availability of goods in the economy." Do you agree with the given statement? Give valid reason in support of your answer. *[CBSE 2019 (58/2/1)]*

Ans. One needs to distinguish between GDP at current prices and GDP at constant prices(also called real GDP). Higher GDP would mean greater availability of goods in the economy only when there is a rise in real GDP, not when GDP rise is caused by a rise in the general price level. A rise in real GDP is a situation when the level of output in the economy tends to rise, leading to a rise in the flow of goods and services in the economy.

77. Explain the meaning of Real Gross Domestic Product and Nominal Gross Domestic Product, using a numerical example. *[CBSE 2019 (58/2/1)]*

Ans. Real Gross Domestic Product (GDP) is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the base year prices (P*).

Nominal Gross Domestic Product (GDP) is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the current year prices (P).

Suppose, the output of commodity-X during the year 2018 was 500 units. The market price of the commodity during the same year was ₹ 50 per unit while the price in the base year was ₹ 40 per unit. So, the nominal GDP and Real GDP would be:

Nominal GDP = 500 × ₹ 50 = ₹ 25,000.

Real GDP = 500 × ₹ 40 = ₹ 20,000.

78. Define the following:

(*a*) Value addition. **(*b*) Gross domestic product.**

(*c*) Flow variables. **(*d*) Income from property and entrepreneurship.** *[CBSE 2019 (58/2/1)]*

Ans. (*a*) Value addition is the difference between value of output of an enterprise and the value of its intermediate consumption.

Value Addition = Value of output – Intermediate consumption

(*b*) Gross domestic product is the market value of final goods and services produced within the domestic territory of the country (by resident and non-resident producers) within one year, inclusive of depreciation.

(*c*) Flow variables are those variables which are measured per unit of time period. It has time dimension as per hour, per day, per month.
Examples: Consumption, investment.

(*d*) Income from property and entrepreneurship is the income earned by property owners. It can also be termed as operating surplus. Income from property can be rent and interest while income from entrepreneurship are profits which are often split as corporation tax and undistributed profits.

79. Given the following data, find the values of 'Gross Domestic Capital Formation' and 'Operating Surplus'.

	Items	**(₹ in crore)**
(*i*)	National income	22,100
(*ii*)	Wages and Salaries	12,000
(*iii*)	Private final consumption expenditure	7,200
(*iv*)	Net indirect taxes	700
(*v*)	Gross domestic capital formation	?
(*vi*)	Depreciation	500
(*vii*)	Government final consumption expenditure	6,100
(*viii*)	Mixed income of self-employed	4,800
(*ix*)	Operating surplus	?
(*x*)	Net exports	3,400
(*xi*)	Rent	1,200
(*xii*)	Net factor income from abroad	(–) 150

[*CBSE 2019 (58/2/1)*]

Ans. Gross Domestic Capital Formation

= National income – Private final consumption expenditure – Government final consumption expenditure – Net exports + Depreciation + Net indirect taxes – Net factor income from abroad

= ₹ 22,100 crore – ₹ 7,200 crore – ₹ 6,100 crore – ₹ 3,400 crore + ₹ 500 crore + ₹ 700 crore – (–) ₹ 150 crore

= ₹ 22,100 crore – ₹ 7,200 crore – ₹ 6,100 crore – ₹ 3,400 crore + ₹ 500 crore + ₹ 700 crore + ₹ 150 crore

= ₹ 6,750 crore

Operating Surplus

= National income – Wages and Salaries – Mixed income of self-employed – Net factor income from abroad

= ₹ 22,100 crore – ₹ 12,000 crore – ₹ 4,800 crore – (–) ₹ 150 crore

= ₹ 22,100 crore – ₹ 12,000 crore – ₹ 4,800 crore + ₹ 150 crore

= ₹ 5,450 crore

Gross domestic capital formation = ₹ 6,750 crore.

Operating surplus = ₹ 5,450 crore.

80. If in a locality, a new park is developed by the municipal corporation, it will have externalities, both positive and negative. State one example each of both types of externalities with reason.

[*CBSE 2019 (58/3/1)*]

Ans. **Example of a Positive Externality:** When the new park developed by municipal corporation raises welfare of people of the locality.

Example of a Negative Externality: When the new park developed by municipal corporation is used by anti-social elements and leads to insecurity of the residents.

81. Given the following data, find the values of 'Government Final Consumption Expenditure' and 'Mixed Income of Self-employed':

Items	(₹ in crore)
(*i*) National income	7,100
(*ii*) Government final consumption expenditure	?
(*iii*) Gross domestic capital formation	1,000
(*iv*) Mixed income of self-employed	?
(*v*) Net indirect taxes	200
(*vi*) Net factor income from abroad	100
(*vii*) Private final consumption expenditure	4,000
(*viii*) Consumption of fixed capital	300
(*ix*) Profits	120
(*x*) Wages and Salaries	1,500
(*xi*) Net exports	500
(*xii*) Operating surplus	3,000

[*CBSE 2019 (58/3/1)*]

Ans. Government Final Consumption Expenditure

= National income – Private final consumption expenditure – Gross domestic capital formation – Net exports + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 7,100 crore – ₹ 4,000 crore – ₹ 1,000 crore – ₹ 500 crore + ₹ 300 crore + ₹ 200 crore – ₹ 100 crore

= ₹ 2,000 crore

Mixed Income of Self-employed

= National income – Wages and Salaries – Operating surplus – Net factor income from abroad

= ₹ 7,100 crore – ₹ 1,500 crore – ₹ 3,000 crore – ₹ 100 crore

= ₹ 2,500 crore

Government final consumption expenditure = ₹ 2,000 crore.

Mixed income of self-employed = ₹ 2,500 crore.

82. Given the following data, find the values of 'Operating Surplus' and 'Gross Domestic Capital Formation':

Items	(₹ in crore)
(*i*) Government final consumption expenditure	2,000
(*ii*) Mixed income of self-employed	1,500
(*iii*) National income	12,000
(*iv*) Net factor income from abroad	200
(*v*) Operating surplus	?
(*vi*) Profits	500
(*vii*) Private final consumption expenditure	6,000
(*viii*) Net indirect taxes	700
(*ix*) Net exports	1,800
(*x*) Consumption of fixed capital	600
(*xi*) Gross domestic capital formation	?
(*xii*) Wages and Salaries	6,000

[*CBSE 2019 (58/3/2)*]

Ans. Operating Surplus

= National income – Wages and Salaries – Mixed income of self-employed – Net factor income from abroad

= ₹ 12,000 crore – ₹ 6,000 crore – ₹ 1,500 crore – ₹ 200 crore

= ₹ 4,300 crore

Gross Domestic Capital Formation

= National income – Private final consumption expenditure – Government final consumption expenditure – Net exports + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 12,000 crore – ₹ 6,000 crore – ₹ 2,000 crore – ₹ 1,800 crore + ₹ 600 crore + ₹ 700 crore – ₹ 200 crore

= ₹ 3,300 crore

Operating surplus = ₹ 4,300 crore.

Gross domestic capital formation = ₹ 3,300 crore.

83. Given the following data, find the values of 'Operating Surplus' and 'Net Exports':

	Items	**(₹ in crore)**
(*i*)	Mixed income of self-employed	700
(*ii*)	Net factor income from abroad	150
(*iii*)	Private final consumption expenditure	2,200
(*iv*)	Profits	200
(*v*)	Net indirect taxes	150
(*vi*)	National income	5,000
(*vii*)	Gross domestic capital formation	1,100
(*viii*)	Wages and Salaries	2,200
(*ix*)	Net exports	?
(*x*)	Government final consumption expenditure	1,300
(*xi*)	Consumption of fixed capital	200
(*xii*)	Operating surplus	?

[CBSE 2019 (58/3/3)]

Ans. Operating Surplus

= National income – Wages and Salaries – Mixed income of self-employed – Net factor income from abroad

= ₹ 5,000 crore – ₹ 2,200 crore – ₹ 700 crore – ₹ 150 crore

= ₹ 1,950 crore

Net Exports

= National income – Private final consumption expenditure – Government final consumption expenditure – Gross domestic capital formation + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 5,000 crore – ₹ 2,200 crore – ₹ 1,300 crore – ₹ 1,100 crore + ₹ 200 crore + ₹ 150 crore – ₹ 150 crore

= ₹ 600 crore

Operating surplus= ₹ 1,950 crore.

Net exports = ₹ 600 crore.

84. How is Real Gross Domestic Product (GDP) different from Nominal Gross Domestic Product (GDP)? Explain using a numerical example. *[CBSE 2019 (58/4/1)]*

Ans. Real GDP (Gross Domestic Product) is the market value of the final goods and services produced within the domestic territory of a country during an accounting year, as estimated using the base year prices. Base year is the year of comparison.

Nominal GDP (Gross Domestic Product) is the market value of the final goods and services produced within the domestic territory of a country during an accounting year, as estimated using the current year prices. Current year prices are the prices prevailing during the year of estimation.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$

If real GDP = 600 and price index = 110, then

$$\text{Nominal GDP} = \text{Real GDP} \times \frac{\text{Price Index}}{100}$$

$$= 600 \times \frac{110}{100} = 660$$

85. (*a*) Define 'net factor income from abroad'. How is it different from 'net exports'?

(*b*) Calculate the value of "Rent" from the following data :

	Items	**(₹ in crore)**
(*i*)	Gross domestic product at market price	18,000
(*ii*)	Mixed income of self-employed	7,000
(*iii*)	Subsidies	250
(*iv*)	Interest	800
(*v*)	Rent	?
(*vi*)	Profit	975
(*vii*)	Compensation of employees	6,000
(*viii*)	Consumption of fixed capital	1,000
(*ix*)	Indirect tax	2,000

[CBSE 2019 (58/4/1)]

Ans. (*a*) Net factor income from abroad refers to the excess of factor income earned by our residents from rest of the world over factor income earned by non-residents from the domestic territory of our country.

Net export, on the other hand, refers to the difference between exports and imports during an accounting year:

Net Exports = Exports – Imports

(*b*) Rent

= Gross domestic product at market price – Compensation of employees – Interest – Profit – Mixed income of self-employed – Consumption of fixed capital – Indirect tax + Subsidies

= ₹ 18,000 crore – ₹ 6,000 crore – ₹ 800 crore – ₹ 975 crore – ₹ 7,000 crore – ₹ 1,000 crore – ₹ 2,000 crore + ₹ 250 crore

= ₹ 475 crore

Rent = ₹ 475 crore.

86. (*a*) Define net exports. How is it different from net factor income from abroad?

(*b*) Calculate value of "Interest" from the following data:

	Items	**(₹ in crore)**
(*i*)	Indirect tax	1,500
(*ii*)	Subsidies	700
(*iii*)	Profits	1,100

(*iv*) Consumption of fixed capital	700
(*v*) Gross domestic product at market price	17,500
(*vi*) Compensation of employees	9,300
(*vii*) Interest	?
(*viii*) Mixed income of self-employed	3,500
(*ix*) Rent	800

[*CBSE 2019 (58/4/2)*]

Ans. (*a*) See Q. 85(*a*), page 61.

(*b*) Interest

= Gross domestic product at market price – Compensation of employees – Rent – Profits – Mixed income of self-employed – Consumption of fixed capital – Indirect tax + Subsidies

= ₹ 17,500 crore – ₹ 9,300 crore – ₹ 800 crore – ₹ 1,100 crore – ₹ 3,500 crore – ₹ 700 crore – ₹ 1,500 crore + ₹ 700 crore

= ₹ 1,300 crore

Interest = ₹ 1,300 crore.

87. (*a*) Define 'value of output'. How is it different from 'value addition' ?

(*b*) Calculate the value of "Mixed Income of Self-employed" from the following data:

Items	**(₹ in crore)**
(*i*) Compensation of employees	17,300
(*ii*) Interest	1,200
(*iii*) Consumption of fixed capital	1,100
(*iv*) Mixed income of self-employed	?
(*v*) Subsidies	750
(*vi*) Gross domestic product at market price	27,500
(*vii*) Indirect taxes	2,100
(*viii*) Profits	1,800
(*ix*) Rent	2,000

[*CBSE 2019 (58/4/3)*]

Ans. (*a*) Value of output refers to market value of the goods (or services) produced by a firm during an accounting year.

Value of Output = Sales + ΔStock

While value added refers to the market value of the goods produced minus market value of the goods used as inputs/raw material in the process of production.

Value Added = Value of output – Intermediate consumption

(*b*) Mixed Income of Self-employed

= Gross domestic product at market price – Compensation of employees – Rent – Interest – Profits – Consumption of fixed capital – Indirect tax + Subsidies

= ₹ 27,500 crore – ₹ 17,300 crore – ₹ 2,000 crore – ₹ 1,200 crore – ₹ 1,800 crore – ₹ 1,100 crore – ₹ 2,100 crore + ₹ 750 crore

= ₹ 2,750 crore

Mixed income of self-employed = ₹ 2,750 crore.

88. Distinguish between net factor income from abroad and net exports. [*CBSE 2019 (58/5/1)*]

Ans. Net factor income from abroad is the difference between (*i*) factor income earned by our residents who are temporarily residing abroad, and (*ii*) factor income earned by non-residents who are temporarily residing in our country.

Net Factor Income from Abroad = Factor income earned by our residents from rest of the world – Factor income earned by non-residents from the domestic territory of our country

Net exports, on the other hand, refer to the difference between exports and imports during an accounting year. Exports are an expenditure by the foreigners on the domestically produced final goods and services, while imports are an expenditure on the goods and services produced abroad.

Net Exports = Exports – Imports

89. What are 'non-monetary exchanges'? Discuss with suitable example. [*CBSE 2019 (58/5/1)*]

Ans. See Q. 47, page 46, 47.

90. (*a*) What is meant by the problem of double counting? Discuss briefly the two approaches to avoid this problem.

(*b*) Define 'capital goods'. [*CBSE 2019 (58/5/1)*]

Ans. (*a*) See Q. 71, page 54, 55.

(*b*) Capital goods are fixed assets of the producers which are repeatedly used in the production of other goods and services and which are of high value. **Example:** Tractors used by the farmers.

91. Given the following data, find the values of 'Operating Surplus' and 'Net Exports':

Items	**(₹ in crore)**
(*i*) Wages and Salaries	2,400
(*ii*) National income	4,200
(*iii*) Net exports	?
(*iv*) Net factor income from abroad	200
(*v*) Gross domestic capital formation	1,100
(*vi*) Mixed income of self-employed	400
(*vii*) Private final consumption expenditure	2,000
(*viii*) Net indirect taxes	150
(*ix*) Operating surplus	?
(*x*) Government final consumption expenditure	1,000
(*xi*) Consumption of fixed capital	100
(*xii*) Profits	500

[*CBSE 2019 (58/5/1)*]

Ans. Operating Surplus

= National income – Wages and Salaries – Mixed income of self-employed – Net factor income from abroad

= ₹ 4,200 crore – ₹ 2,400 crore – ₹ 400 crore – ₹ 200 crore

= ₹ 1,200 crore

Net Exports

= National income – Private final consumption expenditure – Government final consumption expenditure – Gross domestic capital formation + Consumption of fixed capital + Net indirect taxes – Net factor income from abroad

= ₹ 4,200 crore – ₹ 2,000 crore – ₹ 1,000 crore – ₹ 1,100 crore + ₹ 100 crore + ₹ 150 crore – ₹ 200 crore

= ₹ 150 crore

Operating surplus = ₹ 1,200 crore.

Net exports = ₹ 150 crore.

NCERT & MISCELLANEOUS QUESTIONS

1. What is the difference between microeconomics and macroeconomics? *[NCERT]*

Ans. (*i*) Microeconomics studies economic issues or economic problems at the level of an individual– an individual firm, an individual household or an individual consumer. On the other hand, macroeconomics studies economic issues or economic problems at the level of the economy as a whole.

(*ii*) Allocation of resources to different uses is the central issue in microeconomics. On the other hand, determination of the level of output and employment is the central issue in macroeconomics.

(*iii*) There is a smaller degree of aggregation in microeconomics. **Example:** We study output behaviour of an industry which is aggregate of all the firms producing a particular commodity. On the other hand, there is a larger degree of aggregation in macroeconomics. **Example:** We study national output which is aggregate of output of all the producing units in the economy.

2. Describe the Great Depression of 1929. *[NCERT]*

Ans. It was precisely in 1929 that great depression affected developed economies of the capitalistic world. Its impact continued almost for the entire decade of 30's. During that worldwide depression, there was a persistent fall in the level of employment and output. In USA, unemployment shot up from 3% to 25% between the period 1929-33. Fall in employment was accompanied with a fall in GDP. Between the period 1929-33, GDP in USA fell by about 33%.

3. Describe the four major sectors in an economy according to the macroeconomic point of view. *[NCERT]*

Ans. An economy is generally classified into the following four sectors:

(*i*) Household sector, engaged in the consumption of goods and services.

(*ii*) Producing sector, engaged in the production of goods and services.

(*iii*) Government sector, engaged in such activities which are related to taxation and subsidies.

(*iv*) Rest of the world sector, engaged in exports and imports.

4. Distinguish between stock and flow. Between net investment and capital which is a stock and which is a flow? Compare net investment and capital with flow of water into a tank. *[NCERT]*

Ans. Stock is that quantity of an economic variable which is measured at a particular point of time. Stock has no time dimension. Flow is that quantity of an economic variable which is measured during the period of time. Flow has time dimension as per hour, per day, per month.

Net investment is a flow variable and capital is a stock variable. Flow of water in a tank is flow because it is measured per unit of time period. Whereas, stock of water in a tank is stock because it is measured at a point of time. Capital is like a stock of water in the tank at a point of time.

5. What is the difference between planned and unplanned inventory accumulation? Write down the relation between change in inventories and value added of a firm. *[NCERT]*

Ans. Planned inventory accumulation refers to desired inventory stock. This is maintained by the producers with a view to exploiting potential demand for his product. Otherwise, the producer might suffer the loss of unfulfilled demand. Unplanned inventory accumulation refers to undesired inventory stock. It arises because demand for the product turns out to be lower than expected. Accordingly, unplanned inventory accumulation leads to losses.

Value Added = Sales, net of intermediate costs + Change in inventory stock
(Closing inventory stock – Opening inventory stock)

6. What are the four factors of production and what are the remunerations to each of these called? *[NCERT]*

Ans. The four factors of production are land, labour, capital and entrepreneurship. The remunerations to each of these are called compensation of employees (reward for labour), rent (reward for land), interest (reward for capital) and profit (reward for entrepreneurship).

7. Why should the aggregate final expenditure of an economy be equal to the aggregate factor payments? Explain. *[NCERT]*

Ans. Factor payments are equal to factor incomes. Income is either spent on the purchase of final goods and services or is saved. Expenditure of income on the final goods either causes final consumption expenditure or investment expenditure. To the extent income is saved (or not spent), final goods remain unsold. But unsold goods are treated as a part of inventory investment and therefore, a part of total investment expenditure in the economy. Hence, aggregate final expenditure of an economy is equal to aggregate factor payments. Algebraically,

$$Y = C + S$$
$$= C + I, \text{ because } S = I.$$

8. Write down the three identities of calculating the GDP of a country by the three methods. Also briefly, explain why each of these should give us the same value of GDP. *[NCERT]*

Ans. **Three Identities of Calculating GDP**

Value Addition		**Income Generated**		**Final Expenditure**
Value of output (Sales + ΔStock) – Intermediate consumption = GVA_{MP} = GDP_{MP}	≡	Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Depreciation + Net indirect taxes = GDP_{MP}	≡	Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed investment + Inventory investment + Export – Import = GDP_{MP}

Value added is identical with income generated because value added (in terms of NDP_{FC}) is distributed as factor incomes among households who are owners of the factors of production. Further GDP_{MP} (in terms of value addition) is identical with expenditure on final goods and services, because value of expenditure is nothing but market price of the domestically produced final goods and services during an accounting year.

9. Suppose the GDP at market price of a country in a particular year was ₹ 1,100 crore. Net factor income from abroad was ₹ 100 crore. The value of indirect taxes – subsidies was ₹ 150 crore and national income was ₹ 850 crore. Calculate the aggregate value of depreciation. *[NCERT]*

Ans. GDP_{MP} = ₹ 1,100 crore, NFIA (Net factor income from abroad) = ₹ 100 crore, NIT (Net indirect taxes) = ₹ 150 crore and NNP_{FC} (National income) = ₹ 850 crore.

$$NNP_{FC} + NIT = NNP_{MP}$$
$$= ₹\ 850 \text{ crore} + ₹\ 150 \text{ crore}$$
$$= ₹\ 1{,}000 \text{ crore}$$
$$GDP_{MP} + NFIA = GNP_{MP}$$
$$= ₹\ 1{,}100 \text{ crore} + ₹\ 100 \text{ crore}$$
$$= ₹\ 1{,}200 \text{ crore}$$
$$\text{Depreciation} = GNP_{MP} - NNP_{MP}$$
$$= ₹\ 1{,}200 \text{ crore} - ₹\ 1{,}000 \text{ crore}$$
$$= ₹\ 200 \text{ crore}$$

Depreciation = ₹ 200 crore.

10. In a single day Raju, the barber, collects ₹ 500 from haircuts; over this day, his equipment depreciates in value by ₹ 50. Of the remaining ₹ 450, Raju pays sales tax worth ₹ 30, takes home ₹ 200 and retains ₹ 220 for improvement and buying of new equipment. He further pays ₹ 20 as income tax from his income. Based on this information, complete Raju's contribution to the following measures of income: (*i*) Gross Domestic Product, (*ii*) NNP at market price, (*iii*) NNP at factor cost. *[NCERT]*

Ans. Assuming intermediate consumption = 0 and change in stock (ΔStock) = 0.

(*i*) GVA_{MP} = ₹ 500 (Raju's contribution to GDP)

(*ii*) NVA_{MP} = GVA_{MP} – Depreciation

= ₹ 500 – ₹ 50

= ₹ 450 (Raju's contribution to NNP_{MP})

(*iii*) NVA_{FC} = NVA_{MP} – Net indirect taxes

= ₹ 450 – ₹ 30

= ₹ 420 (Raju's contribution to NNP_{FC})

11. The value of the nominal GNP of an economy was ₹ 2,500 crore in a particular year. The value of GNP of that country during the same year, evaluated at the prices of same base year, was ₹ 3,000 crore. Calculate the value of the GNP deflator of the year in percentage terms. Has the price level risen between the base year and the year under consideration? *[NCERT]*

Ans. $$\text{GNP Deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

$$= \frac{2{,}500}{3{,}000} \times 100$$

$$= 83.33\%$$

The price level falls between the base year and the year under consideration.

12. Write down some of the limitations of using GDP as an index of welfare of a country. *[NCERT]*

Ans. Following are the limitations of using GDP as an index of welfare of a country:

(*i*) Distribution of GDP is not taken into account.

(*ii*) Composition of GDP is not accounted for.

(*iii*) Non-monetary exchanges remain un-recorded, to which extent GDP remains underestimated.

(*iv*) Externalities are not considered, even when these have considerable impact on social welfare.

13. Distinguish between microeconomics and macroeconomics.

Ans.

Microeconomics	Macroeconomics
(*i*) Microeconomics studies economic issues or economic problems at the level of an individual– an individual firm, an individual household or an individual consumer.	(*i*) Macroeconomics studies economic issues or economic problems at the level of the economy as a whole.
(*ii*) Allocation of resources to different uses is the central issue in microeconomics.	(*ii*) Distribution of the level of output and employment is the central issue in macroeconomics.
(*iii*) There is a smaller degree of aggregation in microeconomics. **Example:** We study output behaviour of an industry which is aggregate of all the firms producing a particular commodity.	(*iii*) There is a larger degree of aggregation in macroeconomics. **Example:** We study national output which is aggregate of output of all the producing units in the economy.

14. Distinguish between intermediate goods and final goods.

Ans. The difference between intermediate goods and final goods are as under:

Intermediate Goods	Final Goods
(*i*) Intermediate goods are those goods which are used as raw material for further production or are purchased for resale.	(*i*) Final goods are those goods which are used either for final consumption or for investment.
(*ii*) These goods are within the boundary line of production.	(*ii*) These goods have crossed the boundary line of production.
(*iii*) Value is yet to be added to these goods by way of further processing or resale.	(*iii*) Value is not to be added to these goods by way of further processing or resale.
(*iv*) These goods are not included in the estimation of national income.	(*iv*) These goods are included in the estimation of national income.
Example: A carpenter buys wood worth ₹ 5,000 and converts it into chairs worth ₹ 10,000. Here, chairs are final goods while wood is an intermediate good.	

15. Distinguish between consumption of fixed capital and capital loss.

Ans. Consumption of fixed capital refers to depreciation of fixed assets. It refers to loss of value of fixed assets while these are being used in the process of production. It occurs on account of: (*i*) normal wear and tear, (*ii*) accidental damages, and (*iii*) expected obsolescence.

On the other hand, capital loss is a loss of value of fixed assets when these are not being used. It occurs on account of: (*i*) natural calamities (like earthquake, floods or fire), and (*ii*) fall in market value of the assets during periods of economic recession.

16. Distinguish between depreciation and depreciation reserve fund.

Ans. Depreciation is the loss of fixed assets in use on account of: (*i*) normal wear and tear, (*ii*) normal rate of accidental damages, and (*iii*) expected or foreseen obsolescence.

On the other hand, depreciation reserve fund is a provision of funds to cope with depreciation losses. These funds are used for the replacement of fixed assets when these are worn-out or when these become obsolete/outdated.

17. Giving reasons, classify the following into intermediate goods and final goods:

(*i*) Curtain cloth purchased by a household.

(*ii*) Machinery installed in an office.

Ans. (*i*) Curtain cloth purchased by a household is a final good because the household is the final user of the curtain cloth and no value is to be added to the curtain cloth.

(*ii*) Machinery installed in an office is a final good because machinery is finally and repeatedly used by the office for several years and these are of high value.

18. Giving reasons, classify the following into intermediate goods and final goods:

(*i*) Ceiling fan purchased by a tailor for his shop.

(*ii*) Chalks, dusters, etc., purchased by a school.

Ans. (*i*) Ceiling fan purchased by a tailor for his shop is a final good because tailor is the final user of the ceiling fan and no value is to be added to the ceiling fan. This will be deemed as investment expenditure because ceiling fan is used by the tailor for several years and is of high value.

(*ii*) Chalks, dusters, etc., purchased by a school are intermediate goods as these are used up in the process of value addition during the year.

19. Distinguish between money flows and real flows.

Ans. Flow of income refers to flow of goods and services (or their money value) across different sectors of the economy. It is called real flow in case it occurs in the form of goods and services, *e.g.*, households rendering their factor services to the producers and in return producers offering final goods and services to the households.

It is called money flow because there is a flow of money value from one sector to the other, *e.g.*, producers make factor payments to the households and households make payments to the producers for the purchase of goods and services.

20. Why is the flow of income and product called a circular flow?

Ans. It is because of the following reasons that the flow of income and product is called a circular flow:

(*i*) Corresponding to each real flow to one direction, there is a money/income flow from the opposite direction. **Example:** Corresponding to the flow of factor services (which is a real flow) from household to the producer sector, there is a flow of factor payments (which is a money flow) from producer to the household sector.

(*ii*) In a two sector economy, receipts of one sector are equal to payments to other sector. In case receipts are less than the payments (or payments are less than the receipts), circularity is bound to stop at one point or the other.

(*iii*) Activities of production, income generation and expenditure never stop in the economy. They keep chasing one another in a circular manner.

21. How money flows are opposite to real flows?

Ans. Money flows are opposite to real flows. Because money flows are in response to the real flows. **Example:** There is a real flow of goods and services from the producers to the households. It is in response to it, that the households make payments to the producers. So that money flows from the households to producers in terms of consumption expenditure. Likewise, there is a real flow of factor services from the households to the producers. It is in response to it, that the producers make payments to the households. So that, money flows from producers to the households in terms of factor payments.

22. Explain the concepts of injections and leakages in the circular flow of income.

Ans. Injections refer to addition of value in the process of circular flow. This causes positive multiplier effect on the level of income and employment in the economy. Important injections are: (*i*) Consumption expenditure by the government, (*ii*) Investment expenditure by the government, and (*iii*) Exports.

Leakages refer to loss of value in the process of circular flow. This has a negative multiplier effect on the level of income and employment in the economy. Important leakages are: (*i*) Saving, (*ii*) Taxation, and (*iii*) Imports.

23. Explain circular flow with two sector economy.

Ans. In a two sector economy, there are only two sectors of economic activity, namely households and firms. Households supply factor services to firms and firms hire factor services from households. Households spend their entire income on consumption. Firms sell what is produced to the households.

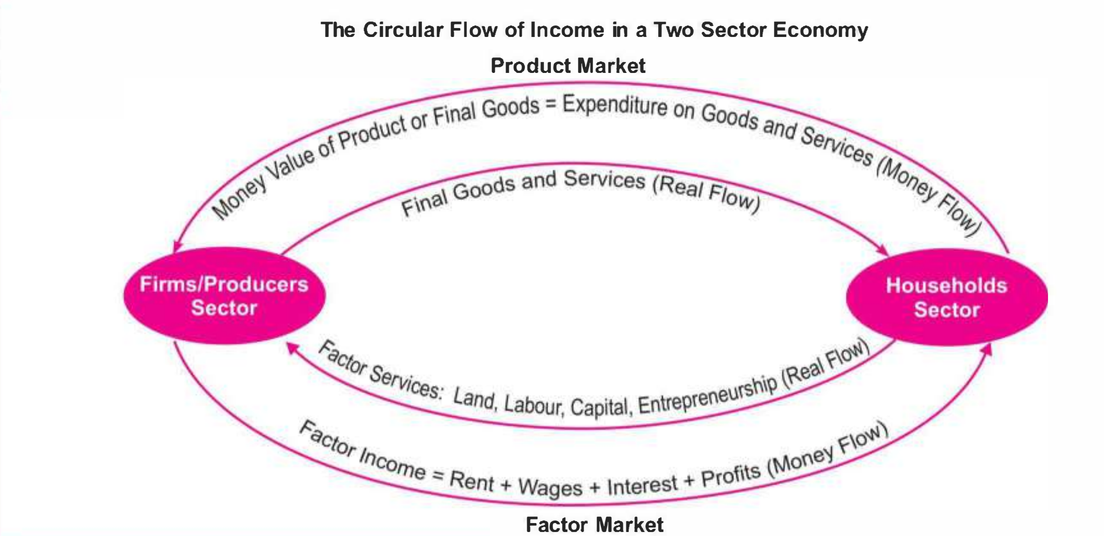
There are two types of markets:

Product market—market for goods and services.

Factor market—market for factors of production.

In this type of economy, circular flow can be explained with the help of **Fig. 3**.

FIGURE 3



As seen from the diagram (**Fig. 3**):

(*i*) Total production of goods and services by firms = Total consumption of goods and services by household sector.

(*ii*) Factor payments by firms = Factor incomes of household sector.

(*iii*) Consumption expenditure of household sector = Income of household sector.

(*iv*) Thus, Real flows of production and consumption of firms and households = Money flows of income and expenditure of firms and households.

24. When will be domestic factor income greater than national income?

Ans. Domestic Factor Income = Wages + Rent + Interest + Profit + Mixed income of self-employed.

National Income = Domestic factor income + Net factor income from abroad.

Thus, domestic factor income is greater than national income when net factor income from abroad is negative.

25. What are the items that are excluded from GNP? Give reasons.

Ans. Items that are excluded from GNP are: leisure time activities (like gardening), services rendered by housewives and other such activities whose value cannot be measured in monetary terms; income generated through unlawful activities is also not included, because such income is not legally accountable.

26. Distinguish between domestic income and national income.

Ans. See Q. 62, page 52.

27. Distinguish between gross domestic product at market price and net domestic product at factor cost.

Ans.

$$NDP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net indirect taxes}$$

The equation offers following observations relating to the difference between GDP_{MP} and NDP_{FC}:

Gross Domestic Product at Market Price (GDP_{MP})	Net Domestic Product at Factor Cost (NDP_{FC})
(*i*) It is the market value of the final goods and services produced within the domestic territory of a country during the period of an accounting year, inclusive of depreciation (consumption of fixed capital).	(*i*) It is the sum total of factor payments (compensation of employees + rent + interest + profit + mixed income of self-employed) generated within the domestic territory of a country during the period of an accounting year.
(*ii*) It includes depreciation.	(*ii*) It does not include depreciation.
(*iii*) It includes net indirect taxes.	(*iii*) It does not include indirect taxes.

28. Distinguish between gross domestic product at market price and net national product at factor cost.

Ans.

$$NNP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net indirect taxes} + \text{Net factor income from abroad}$$

The equation offers following observations relating to the difference between GDP_{MP} and NNP_{FC}:

Gross Domestic Product at Market Price (GDP_{MP})	Net National Product at Factor Cost (NNP_{FC})
(*i*) It is produced within domestic territory of a country by normal residents as well as non-residents.	(*i*) It is produced both within and outside the domestic territory of a country, but only by normal residents of a country.
(*ii*) It includes depreciation.	(*ii*) It does not include depreciation.
(*iii*) It includes net indirect taxes.	(*iii*) It does not include net indirect taxes.
(*iv*) It does not include net factor income from abroad.	(*iv*) It includes net factor income from abroad.

29. Explain briefly the distinction between gross domestic product at factor cost and net national product at market price.

Ans.

$$NNP_{MP} = GDP_{FC} - \text{Depreciation} + \text{Net indirect taxes} + \text{Net factor income from abroad}$$

The equation offers following observations relating to the difference between GDP_{FC} and NNP_{MP}:

Gross Domestic Product at Factor Cost (GDP_{FC})	Net National Product at Market Price (NNP_{MP})
(*i*) It is produced within the domestic territory of a country both by normal residents as well as non-residents.	(*i*) It is produced both within and outside the domestic territory of a country, but only by the normal residents of a country.
(*ii*) It includes depreciation.	(*ii*) It does not include depreciation.
(*iii*) It does not include net indirect taxes.	(*iii*) It includes net indirect taxes.
(*iv*) It does not include net factor income from abroad.	(*iv*) It includes net factor income from abroad.

30. Differentiate between factor inputs and non-factor inputs.

Ans. Factor inputs or primary inputs are factors of production and classified as land, labour, capital and enterprise while non-factor or secondary inputs are those non-durable producer goods and services which are used by the producers for production of goods and services. These are also called intermediate goods. **Examples:** Seeds, manures.

31. Explain briefly the basis of classification of production units into primary, secondary and tertiary sectors.

Ans. Production units engaged in exploiting natural resources are grouped under primary sector. **Example:** Crop farming. Those engaged in transforming one type of commodity into another are grouped into secondary sector. **Example:** Cloth manufacturing. Those rendering services are grouped into tertiary sector. **Example:** Shipping services.

32. What type of data is required to measure national income at each of the three phases of its circular flow?

Ans. The following data are required:

(i) **Production Phase:** The data relating to net value added at factor cost in primary, secondary and tertiary sectors and net factor income from abroad.

(ii) **Income Phase:** The data relating to net interest, net rent, net profit, net wages and net factor income from abroad.

(iii) **Expenditure Phase:** The data relating to private consumption expenditure, government consumption expenditure, gross domestic capital formation, net exports, depreciation, net indirect taxes and net factor income from abroad.

33. What precautions are necessary while using value added method of measuring national income?

Ans. See Q. 56, page 50.

34. What precautions are necessary while using income method of measuring national income?

Ans. Following are the necessary precautions while using income method of measuring national income:

(*i*) Income from transfer payments should not be included.

(**Example:** ₹ 5,000 given to you by your father as your b'day gift.)

(*ii*) Income in terms of capital gain should not be included.

(**Example:** Gain from the sale of old property, shares and bonds.)

(*iii*) Imputed rent of owner-occupied houses must be included.

(*iv*) Imputed value of self-owned factor inputs (like use of own premises or own funds in business) should be taken account of.

35. What precautions are necessary while using expenditure method of measuring national income?

Ans. See Q. 55, page 49, 50.

36. Give an outline of the steps involved in the estimation of national income with the help of value added method.

Ans. Value added method is that method which measures the contribution of each producing enterprise to production in the domestic territory of the country.

Steps in Value Added Method: The following steps are taken while measuring national income with the help of value added method:

(*i*) **First Step:** It involves classification of productive enterprises into three categories, *viz*., (*a*) Primary sector, (*b*) Secondary sector, and (*c*) Tertiary sector.

(*ii*) **Second Step:** Value of output (of a producing unit) is determined by multiplying the quantity of the product by its market price. Gross value added is estimated by deducting the intermediate consumption from the value of output. Depreciation is deducted from gross value added to get net value added.

(*iii*) **Third Step:** Net indirect taxes are deducted from net value added at market price to get net value added at factor cost which is equal to net domestic income. Net factor income from abroad is added to net domestic income to get national income.

37. Give an outline of the steps involved in the estimation of national income with the help of income method.

Ans. Income method is that method which measures national income from the side of payments made in the form of wages, rent, interest and profit to the primary factors of production in an accounting year.

Steps in Income Method: The following steps are taken while measuring national income with the help of income method:

(*i*) **First Step:** All the producing enterprises are classified broadly in the following three sectors: (*a*) Primary sector, (*b*) Secondary sector, and (*c*) Tertiary sector.

(*ii*) **Second Step:** The net domestic income is calculated by adding:

(*a*) Compensation of employees (Wages + Supplementary income + Payments in kind),

(*b*) Operating surplus (Rent + Profit + Interest), and

(*c*) Mixed income.

(*iii*) **Third Step:** Net national income is estimated by adding net factor income from abroad to net domestic income.

38. Briefly outline the steps involved in the estimation of national income with the help of expenditure method.

Ans. The expenditure method involves the following steps:

(*i*) **First Step:** Sum total of the following final expenditure incurred in one year gives gross domestic product at market price: (*a*) Private final consumption expenditure, (*b*) Government final consumption expenditure, (*c*) Gross domestic fixed capital formation, (*d*) Changes in stocks, and (*e*) Net exports (Exports – Imports).

(*ii*) **Second Step:** The net indirect taxes and depreciation are deducted from gross domestic product at market price to get net domestic income.

(*iii*) **Third Step:** The net factor income from abroad is added to net domestic income to get national income.

The expenditure method tries to measure the flow of goods and services for the following purposes: (*i*) For private consumption, (*ii*) For government consumption, (*iii*) For gross domestic capital formation, and (*iv*) For net exports.

39. Explain the components of domestic factor income.

Ans. Domestic factor income is the sum total of factor incomes generated within the domestic territory of a country during one year.

Components of Domestic Factor Income:

(*i*) **Compensation of Employees:** It is the payments by producers, of wages and salaries to their employees in cash and in kind and of contributions paid or imputed in respect of their employees to social security schemes.

(*ii*) **Operating Surplus:** It is the total income from property and entrepreneurship in the form of rent, interest and profit. Profit includes dividends, corporation tax and undistributed profits.

(*iii*) **Mixed Income of the Self-employed:** It is the total income of own account workers as well as profits generated in the unincorporated enterprises.

To find out national income, net factor income from abroad is added to domestic income.

National Income = Domestic factor income + Net factor income from abroad

Net factor income from abroad is added to domestic income to find national income because (*i*) it facilitates the exclusion of factor incomes earned by non-residents within our domestic territory, and (*ii*) it facilitates inclusion of factor incomes earned by our normal residents in rest of the world.

40. State the various components of the income method that are used to calculate national income.

Ans. Income method measures domestic income (NDP_{FC}) in terms of factor payments to the owners of factors of production for rendering their factor services. It includes the following components:

(*i*) **Compensation of Employees:** It includes: (*a*) Wages and salaries in cash, (*b*) Payment in kind, (*c*) Employers' contribution to social security schemes, and (*d*) Pension on retirement.

(*ii*) **Operating Surplus:** It refers to income from property and entrepreneurship. It includes the following items: (*a*) Rent, (*b*) Interest, and (*c*) Profit.

(*iii*) **Mixed Income:** It refers to the incomes of the self-employed persons using their own labour, land, capital and entrepreneurship to produce goods and services. These incomes are a mixture of wages, rent, interest and profit.

The above three components add up to NDP_{FC}, briefly called domestic income. Thus,

NDP_{FC} = Compensation of employees + Operating surplus + Mixed income

Domestic income is adjusted as under to find national income (NNP_{FC}):

NDP_{FC} + Net factor income from abroad

= NNP_{FC} (National Income)

41. State the various components of the expenditure method that are used to calculate national income. [*CBSE Sample Paper 2016*]

Ans. Expenditure method measures GDP_{MP} in terms of expenditure on the purchase of final goods and services produced in the economy during an accounting year. It includes the following components:

(*i*) **Private Final Consumption Expenditure (C_h):** It refers to expenditure on final goods and services by the individuals, households and non-profit private institutions serving society.

(*ii*) **Government Final Consumption Expenditure (C_g):** It refers to expenditure on final goods and services by the government, like expenditure on the purchase of goods for consumption by the defence personnel.

(*iii*) **Investment Expenditure (I):** It refers to expenditure on the purchase of final goods by the producers. These goods are to be further used in the process of production. This includes:

(*a*) expenditure on fixed assets, called fixed investment, and

(*b*) change in stocks called inventory investment.

(*iv*) **Net Exports (NE):** It is the difference between exports and imports during an accounting year.

$$C_h + C_g + I + NE = GDP_{MP}$$

GDP_{MP} is adjusted as under to find national income (NNP_{FC})

GDP_{MP} – Depreciation – Net indirect taxes + Net factor income from abroad

= NNP_{FC} (National Income)

42. Explain the problem of double counting in estimating national income with the help of an example. Also, explain two alternative ways of avoiding the problem.

Ans. The counting of the value of commodity more than once is called double counting. This leads to overestimation of the value of goods and services produced. Thus, the importance of avoiding double counting lies in avoiding overestimating the value of domestic product.

For example, a farmer produces one ton of wheat and sells it for ₹ 400 in the market to a flour mill. The flour mill sells it for ₹ 600 to the baker. The baker sells the bread to the shopkeeper for ₹ 800. The shopkeeper sells the entire bread to the final consumers for ₹ 900. Thus,

Value of Output = ₹ 400 + ₹ 600 + ₹ 800 + ₹ 900 = ₹ 2,700

Infact, the value of the wheat is counted four times, the value of services of the miller thrice, and the value of services by the baker twice. In other words, the value of wheat and value of services of the miller and of the baker have been counted more than once. The counting of the value of commodity more than once is called double counting.

To avoid the problem of double counting two methods are used: (*i*) Final Output Method, and (*ii*) Value Added Method.

(*i*) **Final Output Method:** According to this method, the value of intermediate goods is not considered. Only the value of final goods and services is considered. In the above example, the value of final goods, *i.e.*, bread is ₹ 900.

(*ii*) **Value Added Method:** Another method to avoid the problem of double counting is to estimate the total value added at each stage of production. In the above example, the value added at each stage of production is ₹ 400 + ₹ 200 + ₹ 200 + ₹ 100 = ₹ 900.

43. Differentiate between gross domestic product at current prices and at constant prices.

Ans. Gross domestic product at current prices is the market value of the final goods and services (produced in an economy during the year) and estimated at prices prevailing during the current year. Gross domestic product at constant prices is the market value of the final goods and services (produced in an economy during the year) and estimated at prices prevailing during the base year (which happens to be the year of comparison).

44. Explain the concepts of Real GDP and Nominal GDP, using a suitable numerical example.

[*CBSE Sample Paper 2017*]

Ans. Real GDP (or GDP at constant prices) is the value measured at constant prices of the final goods and services produced within the domestic territory of a country during an accounting year.

Nominal GDP (or GDP at current prices) is the value measured at current prices of the final goods and services produced within the domestic territory of a country during an accounting year.

Example:

Year	Output (Units)	Market Price per unit (₹)
2015	500	20
2016	550	25

Real GDP during the year 2015 = 500 × ₹ 20 = ₹ 10,000

Real GDP during the year 2016 = 550 × ₹ 20 = ₹ 11,000

Nominal GDP during the year 2015 = 500 × ₹ 20 = ₹ 10,000

Nominal GDP during the year 2016 = 550 × ₹ 25 = ₹ 13,750

45. Use following information of an imaginary country:

Year	Nominal GDP	GDP Deflator
2014-2015	6.5	100
2015-2016	8.4	140
2016-2017	9	125

(*i*) For which year is real GDP and nominal GDP same and why?

(*ii*) Calculate Real GDP for the given years. Is there any year for which Real GDP falls?

[*CBSE Sample Paper 2018*]

Ans. **Real GDP or GDP at Constant Prices**

Year	Nominal GDP	GDP Deflator	Real GDP $\left(= \frac{\text{Nominal GDP}}{\text{GDP Deflator}} \times 100\right)$
2014-2015	6.5	100	$\frac{6.5}{100} \times 100 = 6.5$
2015-2016	8.4	140	$\frac{8.4}{140} \times 100 = 6$
2016-2017	9	125	$\frac{9}{125} \times 100 = 7.2$

We find that,

(*i*) In 2014-2015, real GDP and nominal GDP are the same. This is because, it is the base year, when the GDP deflator = 100.

(*ii*) Real GDP falls from 6.5 to 6 in 2015-2016. This is because of a high rise in the price level, even when nominal GDP has risen.

46. State the significance of real GDP.

Ans. Following observations highlight the significance of real GDP or GDP at constant prices:

(*i*) **Change in Availability of Goods and Services:** Only real GDP shows a change in the availability of goods and services to the people of a country. Because any change in real GDP implies a corresponding change in the flow of goods and services in the economy.

(*ii*) **Change in Level of Economic Activity:** Real GDP shows change in the level of economic activity in the country. Increase in real GDP implies increase in the level of economic activity (in terms of increase in the level of production).

(*iii*) **Inter-regional and International Comparison:** Real GDP facilitates inter-regional and international comparison of the level of production. Nominal GDP does not serve this purpose.

47. Can gross domestic product be used as an index of welfare of the people? Give reasons.

Ans. Often gross domestic product (GDP) is considered as an index of welfare of the people, but there are strong exceptions to this generalisation. Following are the reasons:

(*i*) If with every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise. Only fewer people tend to benefit from an unequal distribution. Hence, the gulfbetween haves and have-nots may increase which results in lesser welfare of the society.

(*ii*) Composition of GDP may not be welfare oriented even when the level of GDP tends to rise. There is no direct increase in the welfare of the masses if GDP has risen owing largely to the increase in the production of defence goods.

48. Social welfare may not increase even when real GDP increases. Explain.

Ans. Increase in GDP may not cause increase in welfare in a situation when distribution of income becomes skewed (unequal). If, along with increase in GDP, the percentage of population below poverty line happens to increase, it implies a situation of deprivation on one hand, and concentration of economic power on the other. It is a situation when a rising percentage of GDP is pocketed by a smaller percentage of population. The bulk of population suffers poverty, while only a small segment of society enjoys prosperity owing to a rise in GDP. The rise in GDP is achieved at the cost of social justice.

49. How 'distribution of gross domestic product' is a limitation in taking gross domestic product as an index of welfare? Explain.

Ans. Increase in gross domestic product (GDP) is often taken as a measure of economic welfare. This is because increase in GDP implies increased flow of goods and services in the economy. However, distribution of GDP acts as a limitation in this context. If with every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise. Only fewer people tend to benefit from a larger share of the cake. The gulf between haves and have-nots may increase. The bulk of the population may have even lesser goods than before even when the overall level of GDP has tended to rise.

50. How 'non-monetary exchanges' are a limitation in taking gross domestic product as an index of welfare? Explain.

Ans. See Q. 47, page 46, 47.

51. How 'externalities' are a limitation in taking gross domestic product as an index of welfare? Explain.

Ans. Externalities are the good and bad impact of an activity without paying the price or penalty for that. **Example:** Positive externalities occur when a beautiful garden maintained by Mr. X raises welfare of Mr. Y even when Mr. Y is not paying for it. There is no valuation of it in the estimation of GDP. Negative externalities occur when smoke omitted by factories causes air pollution, or the industrial waste is driven into rivers causing water pollution. Environmental pollution causes a loss of social welfare. But nobody is penalised for it and there is no valuation of it in the estimation of GDP. Impact of externalities (positive or negative) is not accounted in the index of social welfare in terms of GDP. To that extent, GDP as an index of welfare is not an appropriate index. It either underestimates or overestimates the level of welfare.

52. GDP may not be an appropriate index of welfare of the people. How?

Or

Explain any four limitations of using GDP as a measure/index of welfare of a country.

[*CBSE Sample Paper 2016*]

Ans. When real GDP rises, flow of goods and services tends to rise. Other things remaining constant, this implies greater availability of goods per person, leading to higher level of welfare. But there are strong exceptions to this generalisation. Following observations/limitations may be noted in this context:

(*i*) **Distribution of GDP:** If with every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise. In this situation, the bulk of the population may have even lesser goods than before (even when the overall level of GDP has tended to rise).

(*ii*) **Composition of GDP:** Composition of GDP may not be welfare oriented even when the level of GDP tends to rise. There is no direct increase in the welfare of the masses if GDP has risen owing largely to the increase in the production of defence goods.

(*iii*) **Non-monetary Exchanges:** In economies like of India, non-monetary transactions are quite evident in rural areas where payments for farm-labour are often made in kind rather than cash. Such transactions remain unrecorded. To that extent, GDP remains underestimated and is, therefore, not a proper index of welfare.

(*iv*) **Externalities:** Externalities refer to good and bad impact of an activity without paying the price or penalty for that. **Example:** Negative externalities occur when smoke omitted by factories causes air pollution. Environmental pollution causes a loss of social welfare. Impact of externalities is omitted in the estimation of GDP. To that extent, GDP is not an appropriate index of welfare.

53. Explain the treatment assigned to the following while estimating national income. Give reasons.

(*i*) Expenditure on maintenance of a building.

(*ii*) Expenditure on adding a floor to the building.

(*iii*) Expenditure on fertilisers by a farmer.

Ans. (*i*) Expenditure on maintenance of a building is not included in national income. It is an intermediate expenditure incurred on the maintenance of an income generating asset.

(*ii*) Expenditure on adding a floor to the building is included in national income. It is an investment expenditure or capital formation, as an additional floor leads to asset formation.

(*iii*) Expenditure on fertilisers by a farmer is not included in national income because it is an intermediate cost for the farmer, as fertilisers are used up in the process of production.

54. Will the following factor incomes be included in domestic factor income of India? Give reasons for your answer.

(*i*) Compensation of employees to the residents of Japan working in Indian embassy in Japan.

(*ii*) Rent received by an Indian resident from Russian embassy in India.

(*iii*) Profits earned by a branch of State Bank of India in England.

Ans. (*i*) Compensation of employees to the residents of Japan working in Indian embassy in Japan is a part of domestic factor income of India because Indian embassy in Japan is a part of domestic territory of India.

(*ii*) Rent received by an Indian resident from Russian embassy in India is not a part of domestic factor income of India because Russian embassy in India is not a part of domestic territory of India.

(*iii*) Profits earned by a branch of State Bank of India in England is not a part of domestic factor income of India because the branch of State Bank of India in England is not a part of domestic territory of India.

55. Will the following be included in the national income of India? Give reasons.

(*i*) Profits earned by an Indian bank from its branches abroad.

(*ii*) Salaries paid to non-resident Indians working in Indian embassy in America.

(*iii*) Payment of interest on a loan taken by an employee from the employer.

Ans. (*i*) Profits earned by an Indian bank from its branches abroad is included in national income of India because it is a part of net factor income from abroad.

(*ii*) Salaries paid to non-resident Indians working in Indian embassy in America is reflected in the national income of India as a negative component because it is a part of factor income to rest of the world.

(*iii*) Payment of interest on a loan taken by an employee from the employer is not included in the estimation of national income as the loan is not taken for production purposes.

56. How will the following be treated while estimating national income of India? Give reasons.

(*i*) Dividend received by an Indian from his investment in shares of a foreign company.

(*ii*) Money received by a family in India from relatives working abroad.

(*iii*) Interest received on loans given to a friend for purchasing a car.

Ans. (*i*) Dividend received by an Indian from his investment in shares of a foreign company is included in national income of India because it is a part of net factor income from abroad.

(ii) Money received by a family in India from relatives working abroad is not included in national income of India because it is a transfer payment.

(iii) Interest received on loans given to a friend for purchasing a car is not included in national income of India because loans are used not for production purpose.

57. How will the following be treated while estimating national income of India? Give reasons.

(i) Dividend received by a foreigner from investment in shares of an Indian company.

(ii) Payment of interest by a government firm.

(iii) Scholarship given to Indian students studying in India by a foreign company.

Ans. (i) Dividend received by a foreigner from investment in shares of an Indian company is included in national income of India as a negative component. Because it is a part of net factor income to rest of the world.

(ii) Payment of interest by a government firm should be included while estimating national income of India because it is a kind of factor payment.

(iii) Scholarship given to Indian students studying in India by a foreign company is not included in national income of India as it is a transfer payment.

58. Explain the treatment assigned to the following while estimating national income. Give reasons.

(i) Family members working free on the farm owned by the family.

(ii) Rent free house from an employer.

(iii) Expenditure on free services provided by government.

Ans. (i) Family members working free on the farm owned by the family are engaged in the value addition process. Imputed value of their farm output is included in the estimation of national income. Accordingly, income generated by the farming family would be treated as mixed income of self-employed, which includes compensation of labour.

(ii) Rent free house from an employer is included in the estimation of national income because it is a kind of wages in kind and therefore, a part of compensation of employees.

(iii) Expenditure on free services provided by government should be included in the estimation of national income because expenditure on these services is a part of government final consumption expenditure.

59. How will the following be treated while estimating national income? Give reasons.

(i) Expenditure on education of children by a family.

(ii) Payment of electricity bill by a school.

(iii) Payment of excise duty by a firm.

Ans. (i) Expenditure on education of children by a family is included in the estimation of national income since it is a part of private final consumption expenditure.

(ii) Payment of electricity bill by a school is not included in national income since it is a part of intermediate consumption.

(iii) Payment of excise duty by a firm only increases the market value of final goods and services. It is a tax and therefore a transfer payment. This is not included in the estimation of national income.

60. How will the following be treated while estimating national income of India? Give reasons.

(i) Entertainment tax received by the government.

(ii) Capital gains to Indian residents from sale of shares of a foreign company.

(iii) Remittances from non-resident Indians to their families in India.

Ans. (i) Entertainment tax like any other tax is a transfer payment. It is not to be included in the estimation of national income.

(ii) Capital gains to Indian residents from sale of shares of a foreign company is not included in the national income of India because it is a part of financial transactions corresponding to which there is no flow of goods and services in the economy.

(*iii*) Remittances from non-resident Indians to their families in India are to be treated as transfer payments. Accordingly, these are not to be included in the estimation of national income of India.

61. While estimating national income, how will the following be treated? Give reasons.

(*i*) Imputed rent of self-occupied houses.

(*ii*) Interest received on debentures.

(*iii*) Financial help received by flood victims.

Ans. (*i*) Imputed rent of self-occupied houses is included in the estimation of national income. This is because all houses have rental value, no matter whether these are rented out or self-occupied.

(*ii*) Interest received on debentures is included in the estimation of national income. This is because income from debentures is a factor income.

(*iii*) Financial help received by flood victims is not included in the estimation of national income. This is because financial help is a transfer payment.

62. How will the following be treated while estimating national income? Give reasons.

(*i*) Capital gain on sale of a house.

(*ii*) Prize won in a lottery.

(*iii*) Interest on public debt.

Ans. (*i*) Capital gain on sale of a house is not included in the estimation of national income because it does not add to the flow of goods and services in the economy.

(*ii*) Prize won in a lottery is not included in the estimation of national income because it is a windfall gain and therefore treated as a transfer payment.

(*iii*) Interest on public debt is deemed as transfer payment. Hence, not included in the estimation of national income.

63. How will the following be treated while estimating national income of India? Give reasons.

(*i*) Value of bonus shares received by shareholders of a company.

(*ii*) Fees received from students.

(*iii*) Interest received on loan given to a foreign company in India.

Ans. (*i*) Value of bonus shares received by shareholders of a company is not included in the estimation of national income of India because these are just financial transactions (leading to change of ownership of financial assets), not contributing to the flow of goods and services in the economy.

(*ii*) From the students' point of view, expenditure on fees is to be treated as a part of private final consumption expenditure. Accordingly, it is to be included in the estimation of national income of India when expenditure method is used to estimate it. However, from the schools' point of view, fee received is just a revenue from the sale of services.

(*iii*) Interest received on loan given to a foreign company in India is included in estimating national income of India as a part of net factor income from abroad.

64. Giving reason, explain how should the following be treated in estimating gross domestic product of India.

(*i*) Fees to a mechanic paid by a firm.

(*ii*) Expenditure on purchasing a car for use by a firm.

(*iii*) Salary of Indian residents working in Russian Embassy in India.

Ans. (*i*) Fees to a mechanic paid by a firm will not be included in the estimation of gross domestic product of India because this fees is an intermediate expenditure for the firm and not a final expenditure.

(*ii*) Expenditure on purchasing a car for use by a firm will be included in the estimation of gross domestic product of India because it is an investment expenditure. The car purchased will be used by the firm for many years and the firm will be a final user of the car, provided it is neither a second hand car nor purchased for further sale.

(*iii*) Salary of Indian residents working in Russian Embassy in India is not included in gross domestic product of India because Russian Embassy is not a part of domestic territory of India.

65. How should the following be treated while estimating national income? Give reasons.

(*i*) Purchase of taxi by a taxi driver.

(*ii*) Bonus paid to employees.

(*iii*) Expenditure on providing police services by the government.

Ans. (*i*) Purchase of taxi by a taxi driver will be included in the estimation of national income because it is an investment expenditure. A taxi will be used by the taxi driver for several years to earn his living.

(*ii*) Bonus paid to employees will be included in the estimation of national income since it is a component of compensation of employees.

(*iii*) Expenditure on providing police services by the government should be included in the estimation of national income because expenditure incurred by the government is a part of government's final consumption expenditure.

66. Will the following factor income be included in domestic factor income of India? Give reasons for your answer: [*CBSE Sample Paper 2018*]

(*i*) Compensation of employees to the resident of Japan working in Indian embassy in Japan.

(*ii*) Payment of fees to a chartered accountant by a firm.

(*iii*) Rent received by an Indian resident from Russian embassy in India.

(*iv*) Compensation given by insurance company to an injured worker.

Ans. (*i*) Compensation of employees to the resident of Japan working in Indian embassy in Japan is included in domestic factor income of India because Indian embassy in Japan is a part of domestic territory of India.

(*ii*) Payment of fees to a chartered accountant by a firm is not included in the domestic factor income of India as it is an intermediate expenditure of the firm.

(*iii*) Rent received by an Indian resident from Russian embassy in India is not included in domestic factor income of India because Russian embassy in India is not a part of domestic territory of India.

(*iv*) Compensation given by insurance company to an injured worker is not included in domestic factor income of India. Because this compensation is not a part of factor payment (or a part of compensation of employees).

NUMERICALS

1. From the following data, calculate the 'Gross Domestic Product at Market Price':

Items	**(₹ in crore)**
(*i*) Value of output of primary sector	2,000
(*ii*) Intermediate consumption of secondary sector	800
(*iii*) Intermediate consumption of primary sector	1,000
(*iv*) Net factor income from abroad	(–) 30
(*v*) Net indirect taxes	300
(*vi*) Value of output of tertiary sector	1,400
(*vii*) Value of output of secondary sector	1,800
(*viii*) Intermediate consumption of tertiary sector	600

Sol. Gross Domestic Product at Market Price

= (*i*) + (*vi*) + (*vii*) – (*ii*) – (*iii*) – (*viii*)

= ₹ 2,000 crore + ₹ 1,400 crore + ₹ 1,800 crore – ₹ 800 crore – ₹ 1,000 crore – ₹ 600 crore

= ₹ 2,800 crore

Gross domestic product at market price = ₹ 2,800 crore.

2. Find out 'Gross Domestic Product at Factor Cost' from the following data:

Items	**(₹ in crore)**
(*i*) Compensation of employees	110
(*ii*) Operating surplus	90
(*iii*) Mixed income of the self-employed	100
(*iv*) Consumption of fixed capital	70
(*v*) Net indirect taxes	10

Sol. Gross Domestic Product at Factor Cost

= Compensation of employees + Operating surplus + Mixed income of the self-employed + Consumption of fixed capital

= ₹ 110 crore + ₹ 90 crore + ₹ 100 crore + ₹ 70 crore

= ₹ 370 crore

Gross domestic product at factor cost = ₹ 370 crore.

3. Calculate 'Net Domestic Product at Market Price' from the following data:

Items	**(₹ in crore)**
(*i*) Net indirect taxes	38
(*ii*) Consumption of fixed capital	34
(*iii*) Net factor income from abroad	(–) 3
(*iv*) Rent	10
(*v*) Profit	25
(*vi*) Interest	20
(*vii*) Royalty	5
(*viii*) Wages and salaries	170
(*ix*) Employers' contribution to social security schemes	30

Sol. Net Domestic Product at Market Price

= Wages and salaries + Employers' contribution to social security schemes + Rent + Profit + Interest + Royalty + Net indirect taxes

= ₹ 170 crore + ₹ 30 crore + ₹ 10 crore + ₹ 25 crore + ₹ 20 crore + ₹ 5 crore + ₹ 38 crore

= ₹ 298 crore

Net domestic product at market price = ₹ 298 crore.

4. Given the following data, calculate 'Net Domestic Product at Factor Cost or Domestic Income':

Items	**(₹ in crore)**
(*i*) Wages	10,000
(*ii*) Rent	5,000
(*iii*) Interest	400
(*iv*) Dividend	3,000
(*v*) Mixed Income of the self-employed	400
(*vi*) Undistributed profit	200
(*vii*) Contribution to social security	400
(*viii*) Corporation profit tax	400

Sol. Net Domestic Product at Factor Cost

= Wages + Rent + Interest + Dividend + Mixed income of the self-employed + Undistributed profit + Contribution to social security + Corporation profit tax

= ₹ 10,000 crore + ₹ 5,000 crore + ₹ 400 crore + ₹ 3,000 crore + ₹ 400 crore + ₹ 200 crore + ₹ 400 crore + ₹ 400 crore

= ₹ 19,800 crore

Net domestic product at factor cost = ₹ 19,800 crore.

5. Calculate 'Gross National Product at Market Price' from the following data:

Items	**(₹ in crore)**
(*i*) Profit	220
(*ii*) Compensation of employees	350
(*iii*) Interest	100
(*iv*) Consumption of fixed capital	50
(*v*) Opening stock	30
(*vi*) Subsidies	20
(*vii*) Closing stock	50
(*viii*) Mixed income of the self-employed	150
(*ix*) Contribution to social security schemes	30
(*x*) Net factor income from abroad	10
(*xi*) Rent	80
(*xii*) Indirect taxes	90

Sol. Gross National Product at Market Price

= Compensation of employees + Profit + Interest + Rent + Mixed income of the self-employed + Net factor income from abroad + Consumption of fixed capital + Indirect taxes – Subsidies

= ₹ 350 crore + ₹ 220 crore + ₹ 100 crore + ₹ 80 crore + ₹ 150 crore + ₹ 10 crore + ₹ 50 crore + ₹ 90 crore – ₹ 20 crore

= ₹ 1,030 crore

Gross national product at market price = ₹ 1,030 crore.

[**Note:** Item (*ix*) is already included in item (*ii*).]

6. From the following data, calculate 'Gross National Product at Factor Cost':

Items	**(₹ in crore)**
(*i*) Gross fixed capital formation	100
(*ii*) Change in stocks	20
(*iii*) Net capital formation	110
(*iv*) Mixed income of the self-employed	200
(*v*) Net factor income from abroad	(–) 10
(*vi*) Net exports	(–) 20
(*vii*) Compensation of employees	250
(*viii*) Operating surplus	400
(*ix*) Net indirect taxes	50

Sol. Gross National Product at Factor Cost

= Compensation of employees + Operating surplus + Mixed income of the self-employed + Net factor income from abroad+ Consumption of fixed capital (= Gross fixed capital formation + Change in stocks − Net capital formation)

= ₹ 250 crore + ₹ 400 crore + ₹ 200 crore + (–) ₹ 10 crore + (₹ 100 crore + ₹ 20 crore – ₹ 110 crore)

= ₹ 250 crore + ₹ 400 crore + ₹ 200 crore – ₹ 10 crore + ₹ 10 crore

= ₹ 850 crore

Gross national product at factor cost = ₹ 850 crore.

[**Hint:** Consumption of fixed capital is calculated as difference between Gross domestic capital formation (Gross fixed capital formation + Change in stocks) and Net capital formation.]

7. **Calculate 'Net National Product at Market Price', and 'Net National Product at Factor Price' from the following data:**

	Items	**(₹ in crore)**
(*i*)	Indirect taxes	9,000
(*ii*)	Subsidies	1,800
(*iii*)	Depreciation	1,700
(*iv*)	Mixed income of self-employed	1,600
(*v*)	Operating surplus	6,000
(*vi*)	Gross domestic product at market price	20,000
(*vii*)	Net factor income to abroad	(–) 200

Sol. Net National Product at Market Price

= Gross domestic product at market price – Depreciation – Net factor income to abroad

= ₹ 20,000 crore – ₹ 1,700 crore – (–) ₹ 200 crore

= ₹ 20,000 crore – ₹ 1,700 crore + ₹ 200 crore

= ₹ 18,500 crore

Net National Product at Factor Cost

= Net national product at market price – Indirect taxes + Subsidies

= ₹ 18,500 crore – ₹ 9,000 crore + ₹ 1,800 crore

= ₹ 11,300 crore

Net national product at market price = ₹ 18,500 crore.

Net national product at factor cost = ₹ 11,300 crore.

8. **Firm A spent ₹ 500 on non-factor inputs and produced goods worth ₹ 900. It sold goods worth ₹ 600 and ₹ 300 to Firm B and consumer households respectively. Find out Gross Value Added by Firm A.**

Sol. Gross Value Added by Firm A

= Value of goods produced (Sold to firm B + Sold to consumer households) – Value of non-factor inputs

= ₹ 900 (₹ 600 + ₹ 300) – ₹ 500

= ₹ 400

Gross value added by firm A = ₹ 400.

9. **Calculate 'Value Added by Firm X and Firm Y' from the following data:**

	Items	**(₹ in lakh)**
(*i*)	Sales by firm X to households	100
(*ii*)	Sales by firm Y	500
(*iii*)	Purchases by households from firm Y	300
(*iv*)	Exports by firm Y	50
(*v*)	Change in stock of firm X	20
(*vi*)	Change in stock of firm Y	10

(vii) Imports by firm X 70

(viii) Sales by firm Z to firm Y 250

(ix) Purchases by firm Y from firm X 200

Sol. (₹ in lakh)

	Sales (1)	Change in Stock (2)	Purchases from Other Firms (3)	Value Added (4)
Firm X	100, 200 } 300	20	70	250
Firm Y	500	10	250, 200 } 450	60
Firm Z	250			

Value added by firm X = (1) + (2) – (3) = 300 + 20 – 70 = **₹ 250 lakh.**

Value added by firm Y = (1) + (2) – (3) = 500 + 10 – 450 = **₹ 60 lakh.**

10. Find out 'Value Added by Firm B' from the following data:

Items	**(₹ in lakh)**
(i) Purchases by firm B from firm A	30
(ii) Sales by firm B to firm C	25
(iii) Sales by firm B to households	35
(iv) Opening stock of firm B	5
(v) Opening stock of firm C	10
(vi) Closing stock of firm B	10
(vii) Purchases by firm B from firm D	15
(viii) Exports by firm B	20

Sol. Value Added by Firm B = Sales by firm B + Change in stock of firm B – Purchases from other firms

Description	(₹ in lakh)
(i) Sales = Sales by Firm B to Firm C	25
+ Sales by Firm B to Households	35
+ Export by Firm B	20
Total	80
(ii) Change in Stock of Firm B = Closing Stock – Opening stock = 10 – 5	5
(iii) Purchases of Firm B from other Firms	
= Purchase by Firm B from Firm A + Purchase by Firm B from Firm D = 30 + 15	45
Value Added = (80 + 5) – 45	40

Value added by firm B = ₹ 40 lakh.

11. From the following data about Firm X, calculate 'Gross Value Added at Factor Cost' by it:

Items	**(₹ in crore)**
(i) Sales	500
(ii) Opening stock	30
(iii) Closing stock	20

(*iv*) Purchase of intermediate products	300
(*v*) Purchase of machinery	150
(*vi*) Subsidy	40

Sol. Gross Value Added at Factor Cost by Firm X

= Sales + Change in stock (Closing stock – Opening stock) – Purchase of intermediate products + Subsidy

= ₹ 500 crore + (₹ 20 crore – ₹ 30 crore) – ₹ 300 crore + ₹ 40 crore

= ₹ 500 crore – ₹ 10 crore – ₹ 300 crore + ₹ 40 crore

= ₹ 230 crore

Gross value added at factor cost by firm X = ₹ 230 crore.

12. From the following data about Firm A, calculate 'Net Value Added at Market Price' by it:

Items	**(₹ in lakh)**
(*i*) Sales	700
(*ii*) Change in stock	40
(*iii*) Depreciation	80
(*iv*) Net indirect taxes	100
(*v*) Purchase of machinery	250
(*vi*) Purchase of intermediate products	400

Sol. Net Value Added at Market Price by Firm A

= Sales + Change in stock – Depreciation – Purchase of intermediate products

= ₹ 700 lakh + ₹ 40 lakh – ₹ 80 lakh – ₹ 400 lakh

= ₹ 260 lakh

Net value added at market price by firm A = ₹ 260 lakh.

13. Calculate 'Net Value Added at Factor Cost' from the following data:

Items	**(₹ in lakh)**
(*i*) Purchases of raw materials	300
(*ii*) Import duty	20
(*iii*) Excise duty	30
(*iv*) Net addition to stocks	50
(*v*) Value of output	500
(*vi*) Depreciation	10

Sol. Net Value Added at Factor Cost

= Value of output – Purchase of raw materials – Depreciation – Import duty – Excise duty

= ₹ 500 lakh – ₹ 300 lakh – ₹ 10 lakh – ₹ 20 lakh – ₹ 30 lakh

= ₹ 140 lakh

Net value added at factor cost = ₹ 140 lakh.

14. Calculate 'Value of Output' from the following data:

Items	**(₹ in lakh)**
(*i*) Net value added at factor cost	150
(*ii*) Intermediate consumption	100
(*iii*) Excise duty	20
(*iv*) Subsidy	5
(*v*) Depreciation	10

Sol. Value of Output

= Net value added at factor cost + Intermediate consumption + Excise duty – Subsidy + Depreciation

= ₹ 150 lakh + ₹ 100 lakh + ₹ 20 lakh – ₹ 5 lakh + ₹ 10 lakh

= ₹ 275 lakh

Value of output = ₹ 275 lakh.

15. Calculate 'Intermediate Consumption' from the following data:

	Items	**(₹ in crore)**
(*i*)	Value of output	220
(*ii*)	Net value added at factor cost	100
(*iii*)	Sales tax	15
(*iv*)	Subsidy	5
(*v*)	Depreciation	20

Sol. Intermediate Consumption

= Value of output – Net value added at factor cost – Net indirect taxes – Depreciation

= ₹ 220 crore – ₹ 100 crore – (₹ 15 crore – ₹ 5 crore) – ₹ 20 crore

= ₹ 220 crore – ₹ 100 crore – ₹ 10 crore – ₹ 20 crore

= ₹ 90 crore

Intermediate consumption = ₹ 90 crore.

16. Calculate 'Sales' from the following data:

	Items	**(₹ in lakh)**
(*i*)	Net value added at factor cost	300
(*ii*)	Intermediate consumption	240
(*iii*)	Indirect tax	30
(*iv*)	Depreciation	40
(*v*)	Change in stock	(–) 60

Sol. Sales

= Net value added at factor cost – Change in stock + Intermediate consumption + Depreciation + Net indirect tax

= ₹ 300 lakh – (–) ₹ 60 lakh + ₹ 240 lakh + ₹ 40 lakh + (₹ 30 lakh – ₹ 0 lakh)

= ₹ 300 lakh + ₹ 60 lakh + ₹ 240 lakh + ₹ 40 lakh + ₹ 30 lakh

= ₹ 670 lakh

Sales = ₹ 670 lakh.

17. Find 'Net Value Added at Market Price':

	Items	
(*i*)	Output sold (units)	1,000
(*ii*)	Price per unit of output (₹)	30
(*iii*)	Excise (₹)	1,600
(*iv*)	Import duty (₹)	400
(*v*)	Net change in stocks (₹)	(–) 500
(*vi*)	Depreciation (₹)	2,000
(*vii*)	Intermediate cost (₹)	8,000

Sol. Net Value Added at Market Price

= Sales (Output sold × Price per unit of output) + Net change in stocks – Intermediate cost – Depreciation

= (1,000 × ₹ 30) + (–) ₹ 500 – ₹ 8,000 – ₹ 2,000

= ₹ 30,000 – ₹ 500 – ₹ 8,000 – ₹ 2,000

= ₹ 19,500

Net value added at market price = ₹ 19,500.

18. Calculate 'National Income' from the following data:

	Items	**(₹ in crore)**
(*i*)	Mixed income of the self-employed	200
(*ii*)	Old-age pension	20
(*iii*)	Dividends	100
(*iv*)	Operating surplus	900
(*v*)	Wages and salaries	500
(*vi*)	Profit	400
(*vii*)	Employers' contribution to social security schemes	50
(*viii*)	Net factor income from abroad	(–) 10
(*ix*)	Consumption of fixed capital	50
(*x*)	Net indirect taxes	50

Sol. National Income

= Wages and salaries + Employers' contribution to social security schemes + Operating surplus + Mixed income of the self-employed + Net factor income from abroad

= ₹ 500 crore + ₹ 50 crore + ₹ 900 crore + ₹ 200 crore + (–) ₹ 10 crore

= ₹ 500 crore + ₹ 50 crore + ₹ 900 crore + ₹ 200 crore – ₹ 10 crore

= ₹ 1,640 crore

National income = ₹ 1,640 crore.

19. Calculate 'National Income' from the following data:

	Items	**(₹ in crore)**
(*i*)	Current transfers by government	15
(*ii*)	Private final consumption expenditure	400
(*iii*)	Net current transfers from rest of the world	20
(*iv*)	Government final consumption expenditure	100
(*v*)	Net factor income from abroad	(–) 10
(*vi*)	Net domestic capital formation	80
(*vii*)	Consumption of fixed capital	50
(*viii*)	Net exports	40
(*ix*)	Net indirect taxes	60

Sol. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 400 crore + ₹ 100 crore + ₹ 80 crore + ₹ 40 crore – ₹ 60 crore + (–) ₹ 10 crore

= ₹ 400 crore + ₹ 100 crore + ₹ 80 crore + ₹ 40 crore – ₹ 60 crore – ₹ 10 crore

= ₹ 550 crore

National income = ₹ 550 crore.

20. Calculate 'Gross National Product at Market Price' from the following data:

Items	(₹ in crore)
(*i*) Current transfers from government	25
(*ii*) Compensation of employees	600
(*iii*) Net current transfers from rest of the world	20
(*iv*) Rent	100
(*v*) Consumption of fixed capital	50
(*vi*) Interest	120
(*vii*) Net indirect taxes	110
(*viii*) Profit	80
(*ix*) Mixed income of the self-employed	200
(*x*) Net factor income from abroad	(–) 10

Sol. Gross National Product at Market Price

= Compensation of employees + Rent + Interest + Profit + Mixed income of the self-employed + Consumption of fixed capital + Net indirect taxes + Net factor income from abroad

= ₹ 600 crore + ₹ 100 crore + ₹ 120 crore + ₹ 80 crore + ₹ 200 crore + ₹ 50 crore + ₹ 110 crore + (–) ₹ 10 crore

= ₹ 600 crore + ₹ 100 crore + ₹ 120 crore + ₹ 80 crore + ₹ 200 crore + ₹ 50 crore + ₹ 110 crore – ₹ 10 crore

= ₹ 1,250 crore

Gross national product at market price = ₹ 1,250 crore.

21. Calculate 'National Income' from the following data:

Items	(₹ in crore)
(*i*) Net current transfers to abroad	15
(*ii*) Net exports	(–) 20
(*iii*) Private final consumption expenditure	400
(*iv*) Net factor income to abroad	10
(*v*) Government final consumption expenditure	100
(*vi*) Indirect tax	30
(*vii*) Net domestic capital formation	50
(*viii*) Change in stocks	7
(*ix*) Subsidy	5

Sol. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net factor income to abroad – Net indirect taxes (Indirect tax – Subsidy)

= ₹ 400 crore + ₹ 100 crore + ₹ 50 crore + (–) ₹ 20 crore – ₹ 10 crore – (₹ 30 crore – ₹ 5 crore)

= ₹ 400 crore + ₹ 100 crore + ₹ 50 crore – ₹ 20 crore – ₹ 10 crore – ₹ 25 crore

= ₹ 495 crore

National income = ₹ 495 crore.

22. Calculate 'National Income' from the following data:

Items	(₹ in crore)
(*i*) Private final consumption expenditure	600
(*ii*) Net domestic capital formation	70

(*iii*) Net exports	(–) 20
(*iv*) Current transfers from government	5
(*v*) Government final consumption expenditure	100
(*vi*) Net indirect taxes	30
(*vii*) Net factor income from abroad	10

Sol. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 600 crore + ₹ 100 crore + ₹ 70 crore + (–) ₹ 20 crore – ₹ 30 crore + ₹ 10 crore

= ₹ 600 crore + ₹ 100 crore + ₹ 70 crore – ₹ 20 crore – ₹ 30 crore + ₹ 10 crore

= ₹ 730 crore

National income = ₹ 730 crore.

23. Calculate 'National Income' from the following:

Items	**(₹ in crore)**
(*i*) Net domestic fixed capital formation	120
(*ii*) Private final consumption expenditure	400
(*iii*) Consumption of fixed capital	120
(*iv*) Net factor income to abroad	(–) 10
(*v*) Government final consumption expenditure	300
(*vi*) Net indirect taxes	100
(*vii*) Net imports	30
(*viii*) Change in stocks	(–) 20

Sol. Gross Domestic Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Consumption of fixed capital + Change in stocks – Net imports

= ₹ 400 crore + ₹ 300 crore + ₹ 120 crore + ₹ 120 crore + (–) ₹ 20 crore – ₹ 30 crore

= ₹ 400 crore + ₹ 300 crore + ₹ 120 crore + ₹ 120 crore – ₹ 20 crore – ₹ 30 crore

= ₹ 890 crore

National Income

= Gross domestic product at market price – Consumption of fixed capital – Net indirect taxes – Net factor income to abroad

= ₹ 890 crore – ₹ 120 crore – ₹ 100 crore – (–) ₹ 10 crore

= ₹ 890 crore – ₹ 120 crore – ₹ 100 crore + ₹ 10 crore

= ₹ 680 crore

National income = ₹ 680 crore.

24. Calculate 'Net Domestic Product at Factor Cost' from the following:

Items	**(₹ in crore)**
(*i*) Wages and salaries	1,200
(*ii*) Net current transfers to abroad	(–) 20
(*iii*) Rent	100
(*iv*) Interest paid by the production units	130
(*v*) Corporation tax	50
(*vi*) Contribution to social security schemes by employers	250

(*vii*) Dividends	100
(*viii*) Undistributed profits	20

Sol. Net Domestic Product at Factor Cost

= Wages and salaries + Contribution to social security schemes by employers + Rent + Interest + Corporation tax + Dividends + Undistributed profits

= ₹ 1,200 crore + ₹ 250 crore + ₹ 100 crore + ₹ 130 crore + ₹ 50 crore + ₹ 100 crore + ₹ 20 crore

= ₹ 1,850 crore

Net domestic product at factor cost = ₹ 1,850 crore.

25. Calculate 'Gross National Product at Market Price' from the following:

Items	**(₹ in crore)**
(*i*) Net factor income to abroad	10
(*ii*) Net indirect taxes	250
(*iii*) Operating surplus	600
(*iv*) Corporation tax	170
(*v*) Undistributed profits	10
(*vi*) Mixed income	500
(*vii*) Consumption of fixed capital	100
(*viii*) Personal taxes	150
(*ix*) Compensation of employees	1,100

Sol. Gross National Product at Market Price

= Compensation of employees + Operating surplus + Mixed income + Consumption of fixed capital + Net indirect taxes – Net factor income to abroad

= ₹ 1,100 crore + ₹ 600 crore + ₹ 500 crore + ₹ 100 crore + ₹ 250 crore – ₹ 10 crore

= ₹ 2,540 crore

Gross national product at market price = ₹ 2,540 crore.

26. Find out 'Net National Product at Market Price':

Items	**(₹ in crore)**
(*i*) Net current transfers from abroad	(–) 10
(*ii*) Wages and salaries	650
(*iii*) Net factor income to abroad	(–) 20
(*iv*) Social security contributions by employers	50
(*v*) Net indirect taxes	80
(*vi*) Rent	200
(*vii*) Consumption of fixed capital	120
(*viii*) Corporate tax	50
(*ix*) Dividend	150
(*x*) Undistributed profits	60
(*xi*) Interest	250

Sol. Net National Product at Market Price

= Wages and salaries + Social security contributions by employers + Rent + Interest + Corporate tax + Dividend + Undistributed profits + Net indirect taxes – Net factor income to abroad

= ₹ 650 crore + ₹ 50 crore + ₹ 200 crore + ₹ 250 crore + ₹ 50 crore + ₹ 150 crore + ₹ 60 crore + ₹ 80 crore – (–) ₹ 20 crore

= ₹ 650 crore + ₹ 50 crore + ₹ 200 crore + ₹ 250 crore + ₹ 50 crore + ₹ 150 crore + ₹ 60 crore + ₹ 80 crore + ₹ 20 crore

= ₹ 1,510 crore

Net national product at market price = ₹ 1,510 crore.

27. **Find out 'Gross Domestic Product at Market Price':**

Items	(₹ in crore)
(*i*) Private final consumption expenditure	900
(*ii*) Depreciation	100
(*iii*) Net factor income to abroad	(–) 10
(*iv*) Closing stock	20
(*v*) Government final consumption expenditure	400
(*vi*) Net indirect taxes	50
(*vii*) Opening stock	20
(*viii*) Net domestic fixed capital formation	180
(*ix*) Net exports	15

Sol. Gross Domestic Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Change in stocks (Closing stock – Opening stock) + Depreciation + Net exports

= ₹ 900 crore + ₹ 400 crore + ₹ 180 crore + (₹ 20 crore – ₹ 20 crore) + ₹ 100 crore + ₹ 15 crore

= ₹ 900 crore + ₹ 400 crore + ₹ 180 crore + ₹ 0 crore + ₹ 100 crore + ₹ 15 crore

= ₹ 1,595 crore

Gross domestic product at market price = ₹ 1,595 crore.

28. **Find out 'Gross National Product at Market Price':**

Items	(₹ in crore)
(*i*) Net indirect taxes	35
(*ii*) Private final consumption expenditure	600
(*iii*) Consumption of fixed capital	50
(*iv*) Closing stock	10
(*v*) Government final consumption expenditure	250
(*vi*) Net domestic fixed capital formation	200
(*vii*) Net factor income to abroad	(–) 15
(*viii*) Net imports	20
(*ix*) Opening stock	10

Sol. Gross National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Net domestic fixed capital formation + Change in stocks (Closing stock – Opening stock) + Consumption of fixed capital – Net imports – Net factor income to abroad

= ₹ 600 crore + ₹ 250 crore + ₹ 200 crore + (₹ 10 crore – ₹ 10 crore) + ₹ 50 crore – ₹ 20 crore – (–) ₹ 15 crore

= ₹ 600 crore + ₹ 250 crore + ₹ 200 crore + ₹ 0 crore + ₹ 50 crore – ₹ 20 crore + ₹ 15 crore

= ₹ 1,095 crore

Gross national product at market price = ₹ 1,095 crore.

29. Calculate 'Gross Domestic Product at Market Price' by (*a*) Production Method, and (*b*) Income Method:

Items	(₹ in crore)
(*i*) **Intermediate Consumption of:**	
(*a*) Primary sector	500
(*b*) Secondary sector	400
(*c*) Tertiary sector	300
(*ii*) **Value of Output of:**	
(*a*) Primary sector	1,000
(*b*) Secondary sector	900
(*c*) Tertiary sector	700
(*iii*) Rent	10
(*iv*) Emoluments of employees	400
(*v*) Mixed income	650
(*vi*) Operating surplus	300
(*vii*) Net factor income from abroad	(–) 20
(*viii*) Interest	5
(*ix*) Consumption of fixed capital	40
(*x*) Net indirect tax	10

Sol. (*a*) **Production Method:**

Gross Domestic Product at Market Price

= (Value of output of primary sector – Intermediate consumption of primary sector) + (Value of output of secondary sector – Intermediate consumption of secondary sector) + (Value of output of tertiary sector – Intermediate consumption of tertiary sector)

= (₹ 1,000 crore – ₹ 500 crore) + (₹ 900 crore – ₹ 400 crore) + (₹ 700 crore – ₹ 300 crore)

= ₹ 500 crore + ₹ 500 crore + ₹ 400 crore

= ₹ 1,400 crore

(*b*) **Income Method:**

Gross Domestic Product at Market Price

= Emoluments of employees + Operating surplus + Mixed income + Consumption of fixed capital + Net indirect tax

= ₹ 400 crore + ₹ 300 crore + ₹ 650 crore + ₹ 40 crore + ₹ 10 crore

= ₹ 1,400 crore

Gross domestic product at market price (by production and income methods) = ₹ 1,400 crore.

30. From the following data, calculate 'Net National Product at Market Price' by (*a*) Expenditure Method, and (*b*) Income Method:

Items	(₹ in lakh)
(*i*) Personal consumption expenditure	700
(*ii*) Wages and salaries	700
(*iii*) Employers' contribution to social security schemes	100
(*iv*) Gross business fixed investment	60
(*v*) Gross residential construction investment	60

(*vi*) Gross public investment	40
(*vii*) Inventory investment	20
(*viii*) Profit	100
(*ix*) Government purchases of goods and services	200
(*x*) Rent	50
(*xi*) Exports	40
(*xii*) Imports	20
(*xiii*) Interest	40
(*xiv*) Mixed income of the self-employed	100
(*xv*) Net factor income from abroad	(–) 10
(*xvi*) Depreciation	0
(*xvii*) Indirect taxes	20
(*xviii*) Subsidies	10

Sol. (*a*) **Expenditure Method:**

Net National Product at Market Price

= Personal consumption expenditure + Gross business fixed investment + Gross public investment + Gross residential construction investment + Inventory investment + Government purchases of goods and services + Exports – Imports + Net factor income from abroad

= ₹ 700 lakh + ₹ 60 lakh + ₹ 40 lakh + ₹ 60 lakh + ₹ 20 lakh + ₹ 200 lakh + ₹ 40 lakh – ₹ 20 lakh + (–) ₹ 10 lakh

= ₹ 700 lakh + ₹ 60 lakh + ₹ 40 lakh + ₹ 60 lakh + ₹ 20 lakh + ₹ 200 lakh + ₹ 40 lakh – ₹ 20 lakh – ₹ 10 lakh

= ₹ 1,090 lakh

(*b*) **Income Method:**

Net National Product at Market Price

= Wages and salaries + Employers' contribution to social security schemes + Profit + Rent + Interest + Mixed income of the self-employed + Net factor income from abroad + Indirect taxes – Subsidies

= ₹ 700 lakh + ₹ 100 lakh + ₹ 100 lakh + ₹ 50 lakh + ₹ 40 lakh + ₹ 100 lakh + (–) ₹ 10 lakh + ₹ 20 lakh – ₹ 10 lakh

= ₹ 700 lakh + ₹ 100 lakh + ₹ 100 lakh + ₹ 50 lakh + ₹ 40 lakh + ₹ 100 lakh – ₹ 10 lakh + ₹ 20 lakh – ₹ 10 lakh

= ₹ 1,090 lakh

Net national product at market price (by expenditure and income methods) = ₹ 1,090 lakh.

31. From the following data, calculate (*a*) Gross Domestic Product at Factor Cost, and (*b*) Factor Income to Abroad:

Items	**(₹ in crore)**
(*i*) Compensation of employees	1,000
(*ii*) Profits	200
(*iii*) Dividends	80
(*iv*) Gross national product at market price	1,800
(*v*) Rent	250
(*vi*) Interest	200

(*vii*)	Gross domestic capital formation	300
(*viii*)	Net fixed capital formation	200
(*ix*)	Change in stock	50
(*x*)	Factor income from abroad	80
(*xi*)	Net indirect taxes	120

Sol. (*a*) Gross Domestic Product at Factor Cost

= Compensation of employees + Profits + Rent + Interest + Consumption of fixed capital [Gross domestic capital formation – (Net fixed capital formation + Change in stock)]

= ₹ 1,000 crore + ₹ 200 crore + ₹ 250 crore + ₹ 200 crore + [₹ 300 crore – (₹ 200 crore + ₹ 50 crore)]

= ₹ 1,000 crore + ₹ 200 crore + ₹ 250 crore + ₹ 200 crore + ₹ 50 crore

= ₹ 1,700 crore

(*b*) Gross National Product at Factor Cost

= Gross national product at market price – Net indirect taxes

= ₹ 1,800 crore – ₹ 120 crore

= ₹ 1,680 crore

Net Factor Income from Abroad

= Gross national product at factor cost – Gross domestic product at factor cost

= ₹ 1,680 crore – ₹ 1,700 crore

= (–) ₹ 20 crore

Net Factor Income from Abroad

= Factor income from abroad – Factor income to abroad

Or, Factor Income to Abroad

= Factor income from abroad – Net factor income from abroad

= ₹ 80 crore – (–) ₹ 20 crore

= ₹ 80 crore + ₹ 20 crore

= ₹ 100 crore

(*a*) Gross domestic product at factor cost = ₹ 1,700 crore.

(*b*) Factor income to abroad = ₹ 100 crore.

32. Calculate (*a*) Gross Domestic Product at Market Price, and (*b*) Factor Income from Abroad from the following data:

	Items	**(₹ in crore)**
(*i*)	Profits	550
(*ii*)	Exports	40
(*iii*)	Compensation of employees	1,600
(*iv*)	Gross national product at factor cost	3,000
(*v*)	Net current transfers from rest of the world	90
(*vi*)	Rent	300
(*vii*)	Interest	400
(*viii*)	Factor income to abroad	120
(*ix*)	Net indirect taxes	300
(*x*)	Net domestic capital formation	650

(*xi*) Gross fixed capital formation	700
(*xii*) Change in stock	50

Sol. (*a*) Gross Domestic Product at Market Price

= Compensation of employees + Profits + Rent + Interest + Net indirect taxes + Consumption of fixed capital (Gross fixed capital formation + Change in stock – Net domestic capital formation)

= ₹ 1,600 crore + ₹ 550 crore + ₹ 300 crore + ₹ 400 crore + ₹ 300 crore + (₹ 700 crore + ₹ 50 crore – ₹ 650 crore)

= ₹ 1,600 crore + ₹ 550 crore + ₹ 300 crore + ₹ 400 crore + ₹ 300 crore + ₹ 100 crore

= ₹ 3,250 crore

(*b*) Gross National Product at Market Price

= Gross national product at factor cost + Net indirect taxes

= ₹ 3,000 crore + ₹ 300 crore

= ₹ 3,300 crore

Net Factor Income from Abroad

= Gross national product at market price – Gross domestic product at market price

= ₹ 3,300 crore – ₹ 3,250 crore

= ₹ 50 crore

Net Factor Income from Abroad

= Factor income from abroad – Factor income to abroad

Or, Factor Income from Abroad

= Net factor income from abroad + Factor income to abroad

= ₹ 50 crore + ₹ 120 crore

= ₹ 170 crore

(*a*) Gross domestic product at market price = ₹ 3,250 crore.

(*b*) Factor income from abroad = ₹ 170 crore.

33. From the following data relating to a firm, calculate its Net Value Added at Factor Cost:

Items	**(₹ in crore)**
(*i*) Subsidy	40
(*ii*) Sales	800
(*iii*) Depreciation	30
(*iv*) Exports	100
(*v*) Closing stock	20
(*vi*) Opening stock	50
(*vii*) Intermediate purchases	500
(*viii*) Purchase of machinery used in factory	200
(*ix*) Import of raw material	60

Sol. Net Value Added at Factor Cost

= Sales + Change in stock – Intermediate purchases – Depreciation – Net indirect taxes (Indirect taxes – Subsidy)

= ₹ 800 crore + (₹ 20 crore – ₹ 50 crore) – ₹ 500 crore – ₹ 30 crore – (₹ 0 crore – ₹ 40 crore)

= ₹ 800 crore – ₹ 30 crore – ₹ 500 crore – ₹ 30 crore + ₹ 40 crore

= ₹ 280 crore

Net value added at factor cost = ₹ 280 crore.

34. Calculate Net Value Added at Factor Cost:

Items	**(₹ in crore)**
(*i*) Opening stock	20
(*ii*) Sales tax	15
(*iii*) Subsidy	5
(*iv*) Consumption of fixed capital	50
(*v*) Closing stock	40
(*vi*) Sales	500
(*vii*) Intermediate consumption	320
(*viii*) Operating surplus	60

Sol. Net Value Added at Factor Cost

= Sales + Closing stock – Opening stock – Intermediate consumption – Consumption of fixed capital – Sales tax + Subsidy

= ₹ 500 crore + ₹ 40 crore – ₹ 20 crore – ₹ 320 crore – ₹ 50 crore – ₹ 15 crore + ₹ 5 crore

= ₹ 140 crore

Net value added at factor cost = ₹ 140 crore.

35. Calculate Value Added by Firm A and Firm B from the following data:

Items	**(₹ in crore)**
(*i*) Sales by firm B to general government	50
(*ii*) Total sales by firm A	500
(*iii*) Purchases by households from firm B	400
(*iv*) Exports by firm B	50
(*v*) Change in stock of firm A	30
(*vi*) Imports by firm A	80
(*vii*) Change in stock of firm B	20
(*viii*) Sales by firm C to firm B	200
(*ix*) Sales by firm A to firm B	150

Sol. Value Added by Firm A

= Total sales by firm A + Change in stock of firm A – Imports by firm A

= ₹ 500 crore + ₹ 30 crore – ₹ 80 crore

= ₹ 450 crore

Value Added by Firm B

= Sales by firm B to general government. + Sales to households + Exports + Change in stock of firm B – Purchases from firm C – Purchases from firm A

= ₹ 50 crore + ₹ 400 crore + ₹ 50 crore + ₹ 20 crore – ₹ 200 crore – ₹ 150 crore

= ₹ 520 crore – ₹ 350 crore

= ₹ 170 crore

Value added by firm A = ₹ 450 crore.

Value added by firm B = ₹ 170 crore.

36. From the following data, calculate Gross Value Added at Factor Cost:

Items	(₹ in crore)
(*i*) Sales	180
(*ii*) Rent	5
(*iii*) Subsidies	10
(*iv*) Change in stock	15
(*v*) Purchase of raw materials	100
(*vi*) Profits	25

Sol. Gross Value added at Factor Cost

= Sales + Change in stock – Purchase of raw materials + Subsidies

= ₹ 180 crore + ₹ 15 crore – ₹ 100 crore + ₹ 10 crore

= ₹ 105 crore

Gross value added at factor cost = ₹ 105 crore.

37. From the following data, calculate Gross Value Added at Factor Cost:

Items	(₹ in crore)
(*i*) Net indirect tax	20
(*ii*) Purchase of intermediate products	120
(*iii*) Purchase of machines	300
(*iv*) Sales	250
(*v*) Consumption of fixed capital	20
(*vi*) Change in stock	30

Sol. Gross Value added at Factor Cost

= Sales + Change in stock – Purchase of intermediate products – Net indirect tax

= ₹ 250 crore + ₹ 30 crore – ₹ 120 crore – ₹ 20 crore

= ₹ 140 crore

Gross value added at factor cost = ₹ 140 crore.

38. Calculate Gross Domestic Product at Factor Cost from the following data:

Items	(₹ in crore)
(*i*) Private final consumption expenditure	800
(*ii*) Net domestic capital formation	150
(*iii*) Change in stock	30
(*iv*) Net factor income from abroad	(–) 20
(*v*) Net indirect tax	120
(*vi*) Government final consumption expenditure	450
(*vii*) Net exports	(–) 30
(*viii*) Gross fixed capital formation	170
(*ix*) Export of machinery	40

Sol. Gross Domestic Product at Factor Cost

= Private final consumption expenditure + Government final consumption expenditure + Gross fixed capital formation + Change in stock + Net exports – Net indirect taxes

= ₹ 800 crore + ₹ 450 crore + ₹ 170 crore + ₹ 30 crore + (–) ₹ 30 crore – ₹ 120 crore

= ₹ 800 crore + ₹ 450 crore + ₹ 170 crore + ₹ 30 crore – ₹ 30 crore – ₹ 120 crore

= ₹ 1,300 crore

Gross domestic product at factor cost = ₹ 1,300 crore.

39. Calculate Net National Product at Market Price from the following data:

Items	**(₹ in crore)**
(*i*) Net factor income from abroad	(–) 5
(*ii*) Private final consumption expenditure	100
(*iii*) Personal tax	20
(*iv*) Government final consumption expenditure	20
(*v*) Corporation tax	15
(*vi*) Gross domestic capital formation	30
(*vii*) Net exports	(–) 10
(*viii*) Consumption of fixed capital	25

Sol. Net National Product at Market Price

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation + Net exports – Consumption of fixed capital + Net factor income from abroad

= ₹ 100 crore + ₹ 20 crore + ₹ 30 crore + (–) ₹ 10 crore – ₹ 25 crore + (–) ₹ 5 crore

= ₹ 100 crore + ₹ 20 crore + ₹ 30 crore – ₹ 10 crore – ₹ 25 crore – ₹ 5 crore

= ₹ 110 crore

NNP_{MP} = ₹ 110 crore.

40. Calculate National Income from the following data:

Items	**(₹ in crore)**
(*i*) Compensation of employees	800
(*ii*) Rent	500
(*iii*) Interest	300
(*iv*) Consumption of fixed capital	80
(*v*) Net indirect taxes	150
(*vi*) Profit	500
(*vii*) Mixed income of self-employed	800
(*viii*) Net factor income from abroad	(–) 50

Sol. National Income

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 800 crore + ₹ 500 crore + ₹ 300 crore + ₹ 500 crore + ₹ 800 crore + (–) ₹ 50 crore

= ₹ 800 crore + ₹ 500 crore + ₹ 300 crore + ₹ 500 crore + ₹ 800 crore – ₹ 50 crore

= ₹ 2,850 crore

National income = ₹ 2,850 crore.

41. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

Items	**(₹ in crore)**
(*i*) Government final consumption expenditure	300
(*ii*) Subsidies	10
(*iii*) Rent	400
(*iv*) Wages and salaries	400
(*v*) Indirect tax	60
(*vi*) Private final consumption expenditure	600
(*vii*) Gross domestic capital formation	120

(*viii*)	Social security contributions by employers	55
(*ix*)	Royalty	25
(*x*)	Net factor income paid to abroad	30
(*xi*)	Interest	20
(*xii*)	Net domestic capital formation	110
(*xiii*)	Profit	130
(*xiv*)	Net exports	70

Sol. (*a*) **Income Method:**

National Income

= Wages and salaries + Social security contributions by employers + Rent + Royalty + Interest + Profit – Net factor income paid to abroad

= ₹ 400 crore + ₹ 55 crore + ₹ 400 crore + ₹ 25 crore + ₹ 20 crore + ₹ 130 crore – ₹ 30 crore

= ₹ 1,000 crore

(*b*) **Expenditure Method:**

National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect tax – Net factor income paid to abroad

= ₹ 600 crore + ₹ 300 crore + ₹ 110 crore + ₹ 70 crore – (₹ 60 crore – ₹ 10 crore) – ₹ 30 crore

= ₹ 600 crore + ₹ 300 crore + ₹ 110 crore + ₹ 70 crore – ₹ 50 crore – ₹ 30 crore

= ₹ 1,000 crore

National income (by income and expenditure methods) = ₹ 1,000 crore.

42. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Private final consumption expenditure	300
(*ii*)	Mixed income of self-employed	85
(*iii*)	Gross domestic fixed capital formation	70
(*iv*)	Opening stock	15
(*v*)	Compensation of employees	200
(*vi*)	Closing stock	25
(*vii*)	Government final consumption expenditure	150
(*viii*)	Operating surplus	200
(*ix*)	Consumption of fixed capital	10
(*x*)	Net indirect taxes	25
(*xi*)	Net factor income from abroad	(–) 5
(*xii*)	Exports	10
(*xiii*)	Imports	20

Sol. (*a*) **Income Method:**

National Income

= Compensation of employees + Operating surplus + Mixed income of self-employed + Net factor income from abroad

= ₹ 200 crore + ₹ 200 crore + ₹ 85 crore + (–) ₹ 5 crore

= ₹ 200 crore + ₹ 200 crore + ₹ 85 crore – ₹ 5 crore

= ₹ 480 crore

(*b*) **Expenditure Method:**

National Income

= Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed capital formation + Change in stock (Closing stock – Opening stock) + Net exports – Consumption of fixed capital – Net indirect taxes + Net factor income from abroad

= ₹ 300 crore + ₹ 150 crore + ₹ 70 crore + (₹ 25 crore – ₹ 15 crore) + (₹ 10 crore – ₹ 20 crore) – ₹ 10 crore – ₹ 25 crore + (–) ₹ 5 crore

= ₹ 300 crore + ₹ 150 crore + ₹ 70 crore + ₹ 10 crore – ₹ 10 crore – ₹ 10 crore – ₹ 25 crore – ₹ 5 crore

= ₹ 480 crore

National income (by income and expenditure methods) = ₹ 480 crore.

43. Estimate National Income by (*a*) Expenditure Method, and (*b*) Income Method from the following data:

Items	**(₹ in crore)**
(*i*) Private final consumption expenditure	210
(*ii*) Government final consumption expenditure	50
(*iii*) Net domestic capital formation	40
(*iv*) Net exports	(–) 5
(*v*) Wages and salaries	170
(*vi*) Employers' contribution to provident fund	10
(*vii*) Profit	45
(*viii*) Interest	20
(*ix*) Indirect taxes	30
(*x*) Subsidies	5
(*xi*) Rent	10
(*xii*) Net factor income from abroad	3
(*xiii*) Consumption of fixed capital	25
(*xiv*) Royalty	15

Sol. (*a*) **Expenditure Method:**

National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Indirect taxes + Subsidies + Net factor income from abroad

= ₹ 210 crore + ₹ 50 crore + ₹ 40 crore + (–) ₹ 5 crore – ₹ 30 crore + ₹ 5 crore + ₹ 3 crore

= ₹ 210 crore + ₹ 50 crore + ₹ 40 crore – ₹ 5 crore – ₹ 30 crore + ₹ 5 crore + ₹ 3 crore

= ₹ 273 crore

(*b*) **Income Method:**

National Income

= Wages and salaries + Employers' contribution to provident fund + Rent + Royalty + Interest + Profit + Net factor income from abroad

= ₹ 170 crore + ₹ 10 crore + ₹ 10 crore + ₹ 15 crore + ₹ 20 crore + ₹ 45 crore + ₹ 3 crore

= ₹ 273 crore

National income (by expenditure and income methods) = ₹ 273 crore.

44. From the following data, calculate Gross National Product at Market Price by (*a*) Income Method, and (*b*) Expenditure Method:

Items	**(₹ in crore)**
(*i*) Mixed income of self-employed	400
(*ii*) Compensation of employees	500
(*iii*) Private final consumption expenditure	900
(*iv*) Net factor income from abroad	(–) 20
(*v*) Net indirect taxes	100
(*vi*) Consumption of fixed capital	120
(*vii*) Net domestic capital formation	280
(*viii*) Net exports	(–) 30
(*ix*) Profit	350
(*x*) Rent	100
(*xi*) Interest	150
(*xii*) Government final consumption expenditure	450

Sol. (*a*) Gross National Product at Market Price (by Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Consumption of fixed capital + Net indirect taxes+ Net factor income from abroad

= ₹ 500 crore + ₹ 100 crore + ₹ 150 crore + ₹ 350 crore + ₹ 400 crore + ₹ 120 crore + ₹ 100 crore + (–) ₹ 20 crore

= ₹ 500 crore + ₹ 100 crore + ₹ 150 crore + ₹ 350 crore + ₹ 400 crore + ₹ 120 crore + ₹ 100 crore – ₹ 20 crore

= ₹ 1,700 crore

(*b*) Gross National Product at Market Price (by Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports + Consumption of fixed capital + Net factor income from abroad

= ₹ 900 crore + ₹ 450 crore + ₹ 280 crore + (–) ₹ 30 crore + ₹ 120 crore + (–) ₹ 20 crore

= ₹ 900 crore + ₹ 450 crore + ₹ 280 crore – ₹ 30 crore + ₹ 120 crore – ₹ 20 crore

= ₹ 1,700 crore

GNP_{MP} (by income and expenditure methods) = ₹ 1,700 crore.

45. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

Items	**(₹ in crore)**
(*i*) Private final consumption expenditure	1,000
(*ii*) Government final consumption expenditure	2,000
(*iii*) Compensation of employees	1,200
(*iv*) Net exports	(–) 20
(*v*) Net indirect taxes	370
(*vi*) Net domestic capital formation	800
(*vii*) Consumption of fixed capital	100
(*viii*) Net factor income from abroad	(–) 10

(*ix*)	Interest	310
(*x*)	Rent	200
(*xi*)	Mixed income of self-employed	800
(*xii*)	Profit	900

Sol. (*a*) National Income (by Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 1,200 crore + ₹ 200 crore + ₹ 310 crore + ₹ 900 crore + ₹ 800 crore + (–) ₹ 10 crore

= ₹ 1,200 crore + ₹ 200 crore + ₹ 310 crore + ₹ 900 crore + ₹ 800 crore – ₹ 10 crore

= ₹ 3,400 crore

(*b*) National Income (by Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 1,000 crore + ₹ 2,000 crore + ₹ 800 crore + (–) ₹ 20 crore – ₹ 370 crore + (–) ₹ 10 crore

= ₹ 1,000 crore + ₹ 2,000 crore + ₹ 800 crore – ₹ 20 crore – ₹ 370 crore – ₹ 10 crore

= ₹ 3,400 crore

National income (by income and expenditure methods) = ₹ 3,400 crore.

46. From the following data calculate Gross National Product at Market Price by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Net domestic capital formation	375
(*ii*)	Compensation of employees	600
(*iii*)	Net indirect taxes	150
(*iv*)	Profit	450
(*v*)	Rent	200
(*vi*)	Private final consumption expenditure	1,100
(*vii*)	Consumption of fixed capital	115
(*viii*)	Government final consumption expenditure	700
(*ix*)	Interest	250
(*x*)	Mixed income of self-employed	500
(*xi*)	Net factor income from abroad	(–) 15
(*xii*)	Net exports	(–) 25

Sol. (*a*) Gross National Product at Market Price (by Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Consumption of fixed capital + Net indirect taxes + Net factor income from abroad

= ₹ 600 crore + ₹ 200 crore + ₹ 250 crore + ₹ 450 crore + ₹ 500 crore + ₹ 115 crore + ₹ 150 crore + (–) ₹ 15 crore

= ₹ 600 crore + ₹ 200 crore + ₹ 250 crore + ₹ 450 crore + ₹ 500 crore + ₹ 115 crore + ₹ 150 crore – ₹ 15 crore

= ₹ 2,250 crore

(*b*) Gross National Product at Market Price (by Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports + Consumption of fixed capital + Net factor income from abroad

= ₹ 1,100 crore + ₹ 700 crore + ₹ 375 crore + (–) ₹ 25 crore + ₹ 115 crore + (–) ₹ 15 crore

= ₹ 1,100 crore + ₹ 700 crore + ₹ 375 crore – ₹ 25 crore + ₹ 115 crore – ₹ 15 crore

= ₹ 2,250 crore

GNP_{MP} (by income and expenditure methods) = ₹ 2,250 crore.

47. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Compensation of employees	1,000
(*ii*)	Net factor income from abroad	(–) 20
(*iii*)	Net indirect tax	120
(*iv*)	Profit	800
(*v*)	Private final consumption expenditure	2,000
(*vi*)	Net domestic capital formation	770
(*vii*)	Consumption of fixed capital	130
(*viii*)	Rent	600
(*ix*)	Interest	620
(*x*)	Mixed income of self-employed	700
(*xi*)	Net exports	(–) 30
(*xii*)	Government final consumption expenditure	1,100

Sol. (*a*) National Income (Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 1,000 crore + ₹ 600 crore + ₹ 620 crore + ₹ 800 crore + ₹ 700 crore + (–) ₹ 20 crore

= ₹ 1,000 crore + ₹ 600 crore + ₹ 620 crore + ₹ 800 crore + ₹ 700 crore – ₹ 20 crore

= ₹ 3,700 crore

(*b*) National Income (Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 2,000 crore + ₹ 1,100 crore + ₹ 770 crore + (–) ₹ 30 crore – ₹ 120 crore + (–) ₹ 20 crore

= ₹ 2,000 crore + ₹ 1,100 crore + ₹ 770 crore – ₹ 30 crore – ₹ 120 crore – ₹ 20 crore

= ₹ 3,700 crore

National income (by income and expenditure methods) = ₹ 3,700 crore.

48. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Compensation of employees	600
(*ii*)	Government final consumption expenditure	550
(*iii*)	Net factor income from abroad	(–) 10
(*iv*)	Net export	(–) 15

(*v*) Profit	400
(*vi*) Net indirect tax	60
(*vii*) Mixed income of self-employed	350
(*viii*) Rent	200
(*ix*) Interest	310
(*x*) Private final consumption expenditure	1,000
(*xi*) Net domestic capital formation	385
(*xii*) Consumption of fixed capital	85

Sol. (*a*) National Income (Income Method)

= Compensation of employees + Rent + Interest+ Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 600 crore + ₹ 200 crore + ₹ 310 crore + ₹ 400 crore + ₹ 350 crore + (–) ₹ 10 crore

= ₹ 600 crore + ₹ 200 crore + ₹ 310 crore + ₹ 400 crore + ₹ 350 crore – ₹ 10 crore

= ₹ 1,850 crore

(*b*) National Income (Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net export – Net indirect taxes + Net factor income from abroad

= ₹ 1,000 crore + ₹ 550 crore + ₹ 385 crore + (–) ₹ 15 crore – ₹ 60 crore + (–) ₹ 10 crore

= ₹ 1,000 crore + ₹ 550 crore + ₹ 385 crore – ₹ 15 crore – ₹ 60 crore – ₹ 10 crore

= ₹ 1,850 crore

National income (by income and expenditure methods) = ₹ 1,850 crore.

49. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

Items	**(₹ in crore)**
(*i*) Private final consumption expenditure	900
(*ii*) Net domestic capital formation	200
(*iii*) Compensation of employees	500
(*iv*) Mixed income of self-employed	400
(*v*) Government final consumption expenditure	400
(*vi*) Net factor income from abroad	(–) 10
(*vii*) Profit	220
(*viii*) Rent	90
(*ix*) Net exports	(–) 25
(*x*) Interest	100
(*xi*) Net indirect tax	165
(*xii*) Net current transfers from rest of the world	50

Sol. (*a*) National Income (Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 500 crore + ₹ 90 crore + ₹ 100 crore + ₹ 220 crore + ₹ 400 crore + (–) ₹ 10 crore

= ₹ 500 crore + ₹ 90 crore + ₹ 100 crore + ₹ 220 crore + ₹ 400 crore – ₹ 10 crore

= ₹ 1,300 crore

(*b*) National Income (Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports − Net indirect taxes + Net factor income from abroad

= ₹ 900 crore + ₹ 400 crore + ₹ 200 crore + (–) ₹ 25 crore – ₹ 165 crore + (–) ₹ 10 crore

= ₹ 900 crore + ₹ 400 crore + ₹ 200 crore – ₹ 25 crore – ₹ 165 crore – ₹ 10 crore

= ₹ 1,300 crore

National income (by income and expenditure methods) = ₹ 1,300 crore.

50. From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Compensation of employees	800
(*ii*)	Private final consumption expenditure	1,200
(*iii*)	Profit	500
(*iv*)	Rent	200
(*v*)	Government final consumption expenditure	800
(*vi*)	Interest	150
(*vii*)	Net factor income from abroad	20
(*viii*)	Net indirect taxes	190
(*ix*)	Mixed income of self-employed	630
(*x*)	Net exports	(–) 30
(*xi*)	Net domestic capital formation	500
(*xii*)	Consumption of fixed capital	150

Sol. (*a*) National Income (Income Method)

= Compensation of employees + Rent + Interest + Profit + Mixed income of self-employed + Net factor income from abroad

= ₹ 800 crore + ₹ 200 crore + ₹ 150 crore + ₹ 500 crore + ₹ 630 crore + ₹ 20 crore

= ₹ 2,300 crore

(*b*) National Income (Expenditure Method)

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 1,200 crore + ₹ 800 crore + ₹ 500 crore + (–) ₹ 30 crore – ₹ 190 crore + ₹ 20 crore

= ₹ 1,200 crore + ₹ 800 crore + ₹ 500 crore – ₹ 30 crore – ₹ 190 crore + ₹ 20 crore

= ₹ 2,300 crore

National income (by income and expenditure methods) = ₹ 2,300 crore.

51. Compute National Income:

	Items	**(₹ in crore)**
(*i*)	Mixed income of self-employed	2,500
(*ii*)	Net factor income from abroad	(–) 50
(*iii*)	Rent	500
(*iv*)	Private income	4,000
(*v*)	Consumption of fixed capital	400

(*vi*)	Corporation tax	700
(*vii*)	Profits	300
(*viii*)	Net retained earnings of private enterprises	500
(*ix*)	Compensation of employees	1,600
(*x*)	Net indirect taxes	500
(*xi*)	Net current transfers from abroad	150
(*xii*)	Net exports	(–) 40
(*xiii*)	Interest	500
(*xiv*)	Direct taxes paid by households	300

[*CBSE Sample Paper 2017*]

Sol. National Income

= Compensation of employees + Rent + Interest + Profits + Mixed income of self-employed + Net factor income from abroad

= ₹ 1,600 crore + ₹ 500 crore + ₹ 500 crore + ₹ 300 crore + ₹ 2,500 crore + (–) ₹ 50 crore

= ₹ 1,600 crore + ₹ 500 crore + ₹ 500 crore + ₹ 300 crore + ₹ 2,500 crore – ₹ 50 crore

= ₹ 5,350 crore

National income = ₹5,350 crore.

52. Find National Income from following using Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Current transfers from rest of the world	50
(*ii*)	Net indirect taxes	100
(*iii*)	Net exports	(–) 25
(*iv*)	Rent	90
(*v*)	Private final consumption expenditure	900
(*vi*)	Net domestic capital formation	200
(*vii*)	Compensation of employees	500
(*viii*)	Net factor income from abroad	(–) 10
(*ix*)	Government final consumption expenditure	400
(*x*)	Profit	220
(*xi*)	Mixed income of self-employed	400
(*xii*)	Interest	230

[*CBSE Sample Paper 2018*]

Sol. National Income

= Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation + Net exports – Net indirect taxes + Net factor income from abroad

= ₹ 900 crore + ₹ 400 crore + ₹ 200 crore + (–) ₹ 25 crore – ₹ 100 crore + (–) ₹ 10 crore

= ₹ 900 crore + ₹ 400 crore + ₹ 200 crore – ₹ 25 crore – ₹ 100 crore – ₹ 10 crore

= ₹ 1,365 crore

National income = ₹ 1,365 crore.

53. In an economy, following transactions took place. Calculate Value of Output and Value Added by firm B:

(*i*) Firm A sold to firm B goods of ₹ 80 crore; to firm C ₹ 50 crore; to household ₹ 30 crore and goods of value ₹ 10 crore remains unsold.

(*ii*) Firm B sold to firm C goods of ₹ 70 crore; to firm D ₹ 40 crore; goods of value ₹ 30 crore were exported and goods of value ₹ 5 crore was sold to government. [*CBSE Sample Paper 2019*]

Sol. Value of Output of Firm B = Sales to firm C + Sales to firm D + Exports + Sales to the government

= ₹ 70 crore + ₹ 40 crore + ₹ 30 crore + ₹ 5 crore

= ₹ 145 crore

Value Added by Firm B = Value of output of firm B – Purchases from firm A

= ₹ 145 crore – ₹ 80 crore

= ₹ 65 crore

Value of output of firm B = ₹ 145 crore.

Value added by firm B = ₹ 65 crore.

MONEY AND BANKING

2
UNIT

- Barter System of Exchange
- Concept of Money
- Supply of Money
- Commercial Banks
- Central Bank

POWER POINTS

1. Barter System of Exchange

Barter system of exchange is a system in which goods are exchanged for goods. Money as a medium of exchange does not exist.

Principal Drawbacks of the Barter System:

(*i*) It requires double coincidence of wants: Between two individuals, each one wants to buy that commodity which the other wants to sell. So that, each individual sells one commodity and buys the other at the same time.

(*ii*) It lacks common unit of exchange.

2. Concept of Money

Definition

Anything which is commonly accepted as a medium of exchange (like notes and coins) is called money.

Overtime, functions of money have expanded. Besides serving as a medium of exchange, money is used as a store of value (for savings) as well as for transfer of value. Accordingly, some economists define money in these words "Money is what money does". It refers to all functions of money. However, restricting ourselves to the limits of the syllabus, we are not discussing functions of money in detail other than noting the commonly known facts that money serves as a medium of exchange, a store of value, a unit of value (all prices are expressed in terms of money), and a means of transfer of value (transfer of funds from one place to the other).

Types/Forms of Money

(*i*) **Fiat Money:** It is the money issued by order of the government (notes and coins in circulation).

(*ii*) **Fiduciary Money:** It is the money backed with mutual trust between the payer and the payee (cheques and drafts).

(*iii*) **Full Bodied Money:** It refers to money in terms of coins whose commodity value is equal to the money value as and when these are issued.

(*iv*) **Credit Money:** It is the money of which money value is more than commodity value.

3. Supply of Money

It is a stock concept. It refers to total currency and notes with the people as well as demand deposits of the commercial banks at a point of time. It may be noted that while estimating total money supply we include all such financial instruments which act as money.

Supply of Money = Currency held by the People + Net Demand Deposits held by Commercial Banks

4. Commercial Banks

These are those financial institutions which accept deposits from the people and make advances.

Primary Functions of Commercial Banks are:

(*i*) Accepting deposits, and (*ii*) Advancing loans.

Money/Credit Creation by Commercial Banks

Commercial banks create money on the basis of their cash reserves. Money created is many times more than the cash reserves of the commercial banks.

This is also called credit creation by the commercial banks. It depend on CRR (Cash Reserve Ratio) as fixed by the central bank of the country (like Reserve Bank of India). Higher the CRR, lower the credit creation and *vice versa*.

Credit Multiplier

Credit multiplier is the reciprocal of CRR. It shows the number of times cash reserves of the commercial banks (with RBI) multiply to be equal to demand deposits.

$$k = \frac{1}{CRR}$$

(Here, k = Credit multiplier; CRR = Cash reserve ratio: a percentage of demand deposits of the commercial banks to be kept with RBI as cash reserves.)

Thus, if CRR = 5%, Credit multiplier $= \frac{1}{5\%} = 20.$

Likewise, if CRR = 10%, Credit multiplier $= \frac{1}{10\%} = 10.$

[**Note:** Credit multiplier reflects the maximum amount of credit that the commercial banks can legally create on the basis of CRR (also called legal reserve ratio).]

5. Central Bank

Cental bank is an apex banking institution which controls and manages the entire banking system in the country. It is a bank of all the banks as well as a bank of the government.

Functions of Central Bank:

(*i*) Issuing of notes, (*ii*) Banker to the government, (*iii*) Banker's bank, (*iv*) Lender of the last resort, (*v*) Custodian of foreign exchange, (*vi*) Clearing house function, and (*vii*) Control of credit.

'Control of Credit' Function of the Central Bank

The central bank controls the creation of credit by the commercial banks by exercising its monetary policy.

Instruments of monetary policy are broadly classified as:

(A) Quantitative Instruments: (*i*) Repo rate, (*ii*) Bank rate, (*iii*) Reverse repo rate, (*iv*) Open market operations, (*v*) CRR (Cash Reserve Ratio), and (*vi*) SLR (Statutory Liquidity Ratio).

(B) Qualitative Instruments: (*i*) Margin requirement, (*ii*) Rationing of credit, and (*iii*) Moral suasion.

QUESTION-ANSWERS

BARTER SYSTEM OF EXCHANGE

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **A system in which commodities are exchanged for commodities is called:**
   (*a*) barter system of exchange
   (*b*) monetary system of exchange
   (*c*) commodity for commodity exchange economy
   (*d*) both (*a*) and (*c*)
2. **Which of the following is the basic characteristic of the barter system of exchange?**
   (*a*) Medium of exchange (*b*) Double coincidence of wants
   (*c*) Store of value (*d*) Both (*a*) and (*c*)
3. **C-C economy refers to that system where:**
   (*a*) goods are exchanged for goods (*b*) goods are exchanged for domestic currency
   (*c*) goods are exchanged for foreign currency (*d*) goods are not exchanged at all

Ans. **1.** (*d*) **2.** (*b*) **3.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. In ____________, goods are exchanged for goods.
   (barter system of exchange/monetary system of exchange)
2. C-C economy is dominated by ____________ system of exchange. (barter/monetary)

Ans. **1.** barter system of exchange **2.** barter

C. True or False

State whether the following statements are True or False:

1. There is no difficulty of double coincidence of wants in barter system. (True/False)
2. In the C-C economy, saving is possible only by way of storage of goods. (True/False)

Ans. **1.** False **2.** True

D. Very Short Answer Questions

1. **Define barter system of exchange.**

Ans. Barter system of exchange is the system in which goods are exchanged for goods.

2. **What do you understand by double coincidence of wants?**

Ans. Double coincidence of wants means that (at a point of time), the two individuals are in possession of such goods which they are willing to exchange for the satisfaction of their wants.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Under barter system of exchange, goods are exchanged for goods.**

Ans. True. Barter system of exchange is a system in which goods are exchanged for goods.

2. **A common medium of exchange exists in the C-C economy.**

Ans. False. A common medium of exchange does not exist in the C-C economy. It is an economy where goods are exchanged for goods.

3. **Double coincidence of wants is the principal feature of the barter system of exchange.**

Ans. True. Double coincidence of wants is the principal feature of the barter system of exchange. This arises because goods are exchanged for goods, and there is no common medium of exchange like money.

4. **In the C-C economy, saving is ruled out because there is no money in this economy.**

Ans. False. Saving is not ruled out in the C-C economy. Saving is possible by way of storage of goods.

5. **Amisha buys an ice cream from a grocery shop for ₹ 20 and at the same time sells the packaging material to the grocery shop for ₹ 200. The sale and purchase by Amisha refer to barter system of exchange as it involves double coincidence of wants.**

Ans. False. Sale and purchase by Amisha does not refer to barter system of exchange. Because, both sale and purchase are done using money as a common medium of exchange.

▶ CONCEPT OF MONEY

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Money is:**
   (*a*) anything which requires double coincidence of wants
   (*b*) anything which is commonly accepted as a medium of exchange
   (*c*) anything which is commonly accepted as a commodity money
   (*d*) none of these

2. **Evolution of money has facilitated:**
   (*a*) a common unit of exchange (*b*) store of value
   (*c*) transfer of value (*d*) all of these

3. **With the introduction of money:**
   (*a*) acts of sale and purchase have been separated
   (*b*) acts of exchange have been separated
   (*c*) acts of production and consumption have been separated
   (*d*) both (*b*) and (*c*)

4. **Money which is accepted as a medium of exchange because of the trust between the payer and the payee is called:**
   (*a*) full bodied money (*b*) credit money
   (*c*) fiat money (*d*) fiduciary money

5. **Money that is issued by the authority of the government is called:**
   (*a*) full bodied money (*b*) credit money
   (*c*) fiat money (*d*) fiduciary money
6. **Money value is equal to commodity value in case of:**
   (*a*) fiat money (*b*) full bodied money
   (*c*) fiduciary money (*d*) credit money
7. **Electronic transfer of money in terms of credit/debit entries of the account-holders in the banks is called:**
   (*a*) e-marketing (*b*) e-business
   (*c*) e-money (*d*) e-banking
8. **In case of credit money:**
   (*a*) money value = commodity value (*b*) money value > commodity value
   (*c*) money value < commodity value (*d*) none of these
9. **e-money functions as a medium of exchange by way of:**
   (*a*) transfer of value from one account to the other
   (*b*) cash payments
   (*c*) payments through cheques
   (*d*) all of these
10. **Money is a:**
   (*a*) static factor (*b*) dynamic factor
   (*c*) contingent factor (*d*) all of these

Ans. **1.** (*b*) **2.** (*d*) **3.** (*a*) **4.** (*d*) **5.** (*c*) **6.** (*b*)
7. (*c*) **8.** (*b*) **9.** (*a*) **10.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Money was evolved in order to remove the drawbacks of __________ system. (barter/monetary)
2. Anything can be money which is generally accepted as __________ (medium of exchange/medium of store)
3. __________ money is issued by order of the government. (Fiat/Fiduciary)
4. Credit money is that money whose money value is __________ than its commodity value. (more/less)

Ans. **1.** barter **2.** medium of exchange **3.** Fiat **4.** more

C. True or False

State whether the following statements are True or False:

1. Full-bodied money is that money whose money value is equal to its commodity value. (True/False)
2. Cheques are fiduciary money. (True/False)
3. Money value of a paper note is what is written on it. (True/False)

Ans. **1.** True **2.** True **3.** True

D. Very Short Answer Questions

1. What is meant by money?

Ans. Money can be defined as something that is generally accepted as a means of exchange and acts as a measure and as a store of value.

2. Define fiat money.

Ans. Fiat money is the money issued by order of the government.

3. Define fiduciary money.

Ans. Fiduciary money is the money backed with mutual trust between the payer and the payee.

4. What is full bodied money?

Ans. Full bodied money refers to money in terms of coins whose commodity value is equal to the money value as and when these are issued.

5. What is credit money?

Ans. Credit money is the money of which money value is more than commodity value.

6. Define bank money.

Ans. Bank money is the money created by the bank in the form of demand deposits, over and above cash deposits of the people with the banks. It is a credit money and not a legal tender.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Money is what money does.

Ans. True. Basically, money facilitates exchange of goods and services. Accordingly, money is defined as 'anything that acts as a medium of exchange'.

2. Introduction of money has removed the major drawback of double coincidence of wants in the barter system of exchange.

Ans. True. Use of money as a medium of exchange has removed the major drawback of double coincidence of wants in the barter system of exchange. With the introduction of money, acts of sale and purchase have been separated.

3. Fiat money is that money which is accepted as a medium of exchange because of the trust between the payer and the payee.

Ans. False. Fiat money is that money which is issued by order/authority of the government.

4. Cheques are fiat money.

Ans. False. Cheques are fiduciary money because these are accepted as a means of payment on the basis of trust, not on the basis of any order of the government.

5. Commodity value of a ten rupee coin in India is more than its money value.

Ans. False. Commodity value of a ten rupee coin in India is definitely less than its money value. Otherwise, people would have melted the coins and sold them as a commodity.

6. Money value of a Thousand rupee note is what is written on it.

Ans. True. Money value of money is the value which is inscribed on a coin or written on a paper note. Thus, money value of a Thousand rupee note is what is written on it.

7. Money is a dynamic factor.

Ans. True. Money is a dynamic factor because it has imparted dynamism to the process of production, consumption, investment and exchange.

8. Money has facilitated the sale and purchase of goods and services.

Ans. True. Money has facilitated the sale and purchase of goods and services. With the use of money as a medium of exchange, goods and services can be purchased for money any time. Similarly, goods and and services can be sold for money any time.

9. **Measurement of value was very difficult in the barter system of exchange.**

Ans. True. Measurement of value was very difficult in the barter system of exchange because there was no common unit of value.

10. **Emergence of financial market increases the consumption and investment expenditure in the economy.**

Ans. True. Financial market offers funds for investment as well as the purchase of consumer durables. Availability of funds through financial market has led to a multiple increase in consumption expenditure as well as investment expenditure.

SUPPLY OF MONEY

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Which of the following is correct?**
   (*a*) Supply of money is a stock concept
   (*b*) Supply of money does not include stock of money held by the government
   (*c*) Supply of money does not include stock of money held by the banking system of a country
   (*d*) All of these

2. **Which of the following is not a component of M_1 measurement of money supply?**
   (*a*) Demand deposits (*b*) Currency
   (*c*) Other deposits (*d*) Term deposits

3. **In India, coins are issued by:**
   (*a*) State Bank of India (*b*) Reserve Bank of India
   (*c*) Ministry of Finance (*d*) Ministry of Urban development

4. **Which of the following systems is followed by Reserve Bank of India for issuing currency?**
   (*a*) Proportionate system (*b*) Simple deposit system
   (*c*) Minimum reserve system (*d*) Fixed fiduciary issue system

5. **Term deposits are those:**
   (*a*) against which no cheque can be issued
   (*b*) against which no interest is paid to the depositors
   (*c*) which are fixed deposits
   (*d*) both (*a*) and (*c*)

Ans. **1.** (*d*) **2.** (*d*) **3.** (*c*) **4.** (*c*) **5.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Supply of money means stock of money with the ________________. (people/supplier of money)
2. ________________ demand deposits are taken as a part of money supply. (Gross/Net)
3. ________________ is called monetary base in the economy. (Bank money/High powered money)

Ans. **1.** people **2.** Net **3.** High powered money

C. True or False

State whether the following statements are True or False:

1. In India, note issue system conforms to Minimum Reserve System. (True/False)
2. Term deposits are deposits withdrawn by cheque. (True/False)
3. In India, one rupee notes are issued by the Government of India. (True/False)

Ans. **1.** True **2.** False **3.** True

D. Very Short Answer Questions

1. **Define money supply.**

Ans. Money supply refers to the total quantity or stock of money available in the economy at a point of time.

[**Note:** It does not include stock of money held by the suppliers of money, *viz.*, the central bank, the commercial banks and the government.]

2. **Define M_1 measure of money supply.**

Ans. M_1 = Currency (including notes and coins held by the people) + Demand deposits + Other deposits.

3. **What are the components of money supply?**

Ans. The components of money supply are: (*i*) Currency held by the public, (*ii*) Demand deposits of the people with the commercial banks, and (*iii*) Other deposits (demand deposits with RBI of domestic and foreign institutions other than that of the government of the country and commercial banks within the country).

4. **Who are the suppliers of money in India?**

Ans. Suppliers of money include: (*i*) the government of the country, (*ii*) the central bank of the country, and (*iii*) the commercial banks.

5. **What is the difference between term deposits and demand deposits?**

Ans. Term deposits are always for a specific period of time called 'the term'. Cheques cannot be issued against term deposits. Demand deposits, on the other hand, are not for any specific period of time. Cheques can be issued against demand deposits.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Demand deposits with commercial banks are a part of money supply.**

Ans. True. Demand deposits with the commercial banks are a part of M_1 measure of money supply. These are chequeable deposits and therefore, serve like notes and coins.

2. **Money supply in the economy include only notes and coins issued by the central bank.**

Ans. False. Money supply in the economy includes notes and coins with the people as well as demand deposits with the banks.

3. **Money can be withdrawn as and when needed by the depositors in case of term deposits.**

Ans. False. Depositors cannot withdraw money as and when needed in case of term deposits because term deposits are always for a specific period of time. These are not chequeable deposits.

4. **Stock of money with the government is a part of money supply.**

Ans. False. Stock of money with the suppliers/creators of money is not to be treated a part of money supply in the country. We know, the government is the supplier of money.

5. **Commercial banks are the principal suppliers of money in India.**

Ans. False. RBI (Reserve Bank of India) is the principal supplier of money in India.

6. **Gross demand deposits are not a part of money supply while net deposits are.**

Ans. True. Gross demand deposits include inter-banking claims whereas net demand deposits do not include inter-banking claims. Inter-banking claims are not a part of demand deposits of the people. Hence, only net demand deposits are taken as a part of money supply, not the gross deposits.

7. **Term deposits are near money, and therefore should be treated as a component of M_1 supply of money.**

Ans. False. M_1 supply of money includes only most liquid components of money supply. There are those components (like currency with the people) which can be used for purpose of sale and purchase of goods any time. Term deposits are not so liquid and therefore, not included in M_1 supply of money.

COMMERCIAL BANKS

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **A commercial bank is that financial institution:**
   (*a*) which only accepts deposits from the people
   (*b*) which only offers loans to the people
   (*c*) which accepts deposits from the people as well as offers loans to them
   (*d*) which only deals in foreign exchange transactions
2. **For the commercial banks, the source of profit is:**
   (*a*) unclaimed deposits
   (*b*) grants by the government
   (*c*) spread: the difference between the interest they charge and the interest they pay
   (*d*) none of these
3. **Those deposits against which money cannot be withdrawn any time are called:**
   (*a*) fixed deposits (*b*) term deposits
   (*c*) non-chequeable deposits (*d*) all of these
4. **Commercial banks advance loans:**
   (*a*) only to the extent of their term deposits
   (*b*) only to the extent of their gold reserves
   (*c*) only to the extent of their demand deposits
   (*d*) multiple times of their required cash reserves with the RBI
5. **Primary deposits are:**
   (*a*) cash deposits with the commercial banks
   (*b*) gold reserves with the commercial banks
   (*c*) reserves of foreign exchange
   (*d*) none of these

6. **Those deposits which arise on account of loans by the banks to the people are called:**
   (*a*) primary deposits (*b*) secondary deposits
   (*c*) cash deposits (*d*) term deposits
7. **Cash reserves of the commercial banks with RBI, as a percentage of their total deposits refer to:**
   (*a*) cash reserve ratio (*b*) repo rate
   (*c*) reverse repo rate (*d*) statutory liquidity ratio
8. **Credit creation by the commercial banks is equal to:**
   (*a*) $\frac{1}{\text{RR}}$ (*b*) $\frac{1}{\text{RR}} \times \frac{1}{\text{Cash Reserves}}$
   (*c*) $\frac{1}{\text{RR}} \times \text{Total Deposits}$ (*d*) $\frac{1}{\text{RR}} \times \text{Cash Reserves}$
9. **CRR in India is fixed by:**
   (*a*) the commercial banks (*b*) the government
   (*c*) the RBI (*d*) supply-demand forces in the money market
10. **Money that the commercial banks can create on the basis of CRR is:**
   (*a*) the maximum amount of money that they can create
   (*b*) the minimum amount of money that they can create
   (*c*) the amount of money that they wish to create
   (*d*) none of these

Ans. **1.** (*c*) **2.** (*c*) **3.** (*d*) **4.** (*d*) **5.** (*a*) **6.** (*b*)
7. (*a*) **8.** (*d*) **9.** (*c*) **10.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. _______________ deposits indicate savings of the depositors with the banks. (Primary/Secondary)
2. Profit earning is the basic objective of the _______________. (commercial bank/central bank)
3. Higher the cash reserve ratio _______________ is the credit creation. (lower/higher)
4. Loans offered by the commercial banks _______________ the supply of money in the economy. (increase/decrease)

Ans. **1.** Primary **2.** commercial bank **3.** lower **4.** increase

C. True or False

State whether the following statements are True or False:

1. Commercial bank is a note issuing authority. (True/False)
2. Bank money is the money created by the banks. (True/False)
3. Primary Deposits + Secondary Deposits = Demand Deposits. (True/False)
4. Commercial bank does not deal with the general public. (True/False)

Ans. **1.** False **2.** True **3.** True **4.** False

D. Very Short Answer Questions

1. **Define the term commercial bank.**

Ans. Commercial banks are those financial institutions which accept deposits from the people and offer them loans for purpose of consumption and investment.

2. **Name the two primary functions of the commercial banks.**

Ans. (*i*) Acceptance of deposits, and

(*ii*) Advancing of loans.

3. **Define credit multiplier.**

Ans. Credit multiplier is the reciprocal of CRR. It is the number of times cash reserves of the commercial banks multiply to be equal to demand deposits.

$$\text{Credit Multiplier} = \frac{1}{\text{CRR}}$$

Example: If CRR = 5%, Credit multiplier = $\frac{1}{5\%} = 20.$

4. **Define primary deposits.**

Ans. Primary deposits are cash deposits with the commercial banks by the people. These are reflected as a part of demand deposits of the banks.

5. **Define secondary deposits.**

Ans. Secondary deposits are those deposits which arise on account of loans by the banks to the people. These are reflected as a part of demand deposits of the banks. These are also called derivative deposits.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **The commercial banks generate their profits by way of 'spread'.**

Ans. True. The commercial banks generate their profits by way of 'spread' which is the difference between the rate of interest charged by the banks for the loans they offer and the rate of interest paid by the banks for the deposits they accept.

2. **All financial institutions are banking institutions.**

Ans. False. All financial institutions are not banking institutions, even when all banking institutions are financial institutions. **Example:** LIC is a financial institution, but not a banking institution. A financial institution is a banking institution only when: (*i*) it accepts deposits from the people, and (*ii*) offers loans to the people.

3. **Loans offered by the commercial banks are a part of the cash reserves of the commercial banks.**

Ans. False. Loans offered by the commercial banks are a part of demand deposits of the commercial banks.

4. **Higher cash deposit ratio implies higher credit creation capacity of the commercial banks.**

Ans. True. Higher cash deposit ratio would lead to greater cash reserves of the commercial banks. Implying higher credit creation capacity of the commercial banks.

5. **Both primary and secondary deposits are demand deposits.**

Ans. True. Both primary and secondary deposits are demand deposits because these can be withdrawn on demand by writing cheques.

6. **If reserve requirement = 25% of deposits, the credit multiplier = 10.**

Ans. False. If reserve requirement = 25% of deposits,

$$\text{Credit Multiplier} = \frac{1}{\text{Reserve Requirement}} = \frac{1}{25\%} = 4.$$

7. **CRR and SLR are the two components of LRR.**

Ans. False. CRR and SLR are not the two components of LRR. These are the two variants of LRR. These cannot be added up to find LRR.

8. **Total demand deposits of the commercial banks is equal to the difference between the primary deposits and secondary deposits of the commercial banks.**

Ans. False. Total demand deposits of the commercial banks is equal to the sum total of primary deposits and secondary deposits of the commercial banks.

▶ CENTRAL BANK

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **The central bank:**
   (*a*) is an apex bank
   (*b*) is the sole agency of note-issuing
   (*c*) focuses on stability and growth of the economy
   (*d*) all of these
2. **Liquid assets include:**
   (*a*) unencumbered approved securities (*b*) cash
   (*c*) gold (*d*) all of these
3. **SLR refers to:**
   (*a*) cash reserves with the bank (*b*) gold reserves with the bank
   (*c*) reserves of unencumbered securities (*d*) all of these
4. **With an increase in market rate of interest, cost of credit:**
   (*a*) decreases (*b*) increases
   (*c*) remains constant (*d*) none of these
5. **Which of the following is the function of central bank of the country?**
   (*a*) Bank of note-issuing (*b*) Lender's last resort
   (*c*) Custodian of foreign exchange (*d*) All of these
6. **Quantitative instruments of monetary policy:**
   (*a*) focuses on quantity of money across select sectors of the economy
   (*b*) focuses on the overall supply of money in the economy
   (*c*) focuses on inflationary and deflationary gaps in the economy
   (*d*) both (*b*) and (*c*)
7. **Repo rate relates to:**
   (*a*) short-term borrowings by the commercial banks
   (*b*) long-term borrowings by the commercial banks
   (*c*) overnight borrowings by the commercial banks
   (*d*) none of these
8. **In order to correct the situation of deflation:**
   (*a*) securities are purchased by the commercial banks
   (*b*) securities are sold by the commercial banks
   (*c*) securities are purchased by the central bank
   (*d*) securities are sold by the central bank
9. **The rate at which commercial banks are allowed to park their surplus funds with the RBI is called:**
   (*a*) bank rate (*b*) repo rate
   (*c*) currency rate (*d*) reverse repo rate

10. Moral suasion by the RBI relates to:
(*a*) pressure by the RBI to follow its directives
(*b*) persuasion by the RBI to follow its directives
(*c*) persuasion as well as pressure by the RBI to follow its directives
(*d*) none of these

11. With an increase in SLR, flow of credit in the economy:
(*a*) increases (*b*) decreases
(*c*) remains unchanged (*d*) none of these

12. Margin requirement =
(*a*) Current value of the security offered for loan – Value of loan granted
(*b*) Current value of the security offered for loan + Value of loan granted
(*c*) Current value of the security offered for loan × Value of loan granted
(*d*) Current value of the security offered for loan ÷ Value of loan granted

Ans. **1.** (*d*) **2.** (*d*) **3.** (*d*) **4.** (*b*) **5.** (*d*) **6.** (*d*)
7. (*a*) **8.** (*c*) **9.** (*d*) **10.** (*c*) **11.** (*b*) **12.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. That bank which is at the highest place in the banking organisation is called ________. (commercial bank/central bank)
2. Buying and selling of securities is called ________. (open market operations/narrow market operations)
3. The increase in bank rate is often followed by ________ in the market rate of interest. (increase/decrease)
4. ________ is also called Repurchase Rate. (Repo rate/Reverse repo rate)
5. Statutory liquidity ratio is the ________ method of credit control. (quantitative/qualitative)
6. At ________, central bank accepts deposits from the commercial banks. (bank rate/reverse repo rate)
7. By the withdrawal of rationing of credit, ________ is controlled. (inflation/deflation)

Ans. **1.** central bank **2.** open market operations **3.** increase **4.** Repo rate
5. quantitative **6.** reverse repo rate **7.** deflation

C. True or False

State whether the following statements are True or False:

1. Central bank is the custodian of nation's foreign exchange reserves. (True/False)
2. Reserve Bank of India is the central bank of India. (True/False)
3. In India, CRR is fixed by the commercial banks. (True/False)
4. In order to control money supply, central bank increases the bank rate. (True/False)
5. Central bank accepts deposits from the commercial banks. (True/False)
6. In order to increase money supply in the economy, margin requirement is raised. (True/False)

Ans. **1.** True **2.** True **3.** False **4.** True **5.** True **6.** False

D. Very Short Answer Questions

1. Define a central bank.

Ans. A central bank is an apex institution of a country that controls and regulates the cost of credit as well as the flow of credit in the economy with a view to achieving growth and stability.

2. Define bank rate.

Ans. The bank rate is the rate at which the central bank of the country offers loans to the commercial banks by discounting the securities. It is also called discount rate: the rate at which securities are discounted for purpose of loans. It does not involve any collateral.

3. What is repo rate?

Ans. Repo rate (or policy interest rate) is the rate of interest at which commercial banks can raise short-term loans from the central bank by offering 'unencumbered securities' as collateral.

4. What is reverse repo rate?

Ans. Reverse repo rate is the rate of interest at which commercial banks can park their surplus funds with the central bank.

5. Define cash reserve ratio.

Ans. Cash reserve ratio refers to the legal reserve ratio (fixed by the RBI) indicating some percentage of demand deposits of the commercial banks to be kept as cash reserves with RBI.

6. Define statutory liquidity ratio.

Ans. Statutory liquidity ratio refers to liquid assets of the commercial banks which they are required to maintain (on daily basis) as a minimum percentage of their total deposits.

7. Define legal reserve ratio.

Ans. Legal reserve ratio refers to CRR (as well as SLR) as fixed by the central bank and which the commercial banks are required to maintain as a percentage of their demand deposits.

8. What do you mean by open market operations?

Ans. Open market operations refer to the sale and purchase of government securities in the open market by the central bank of the country.

9. Define margin requirement.

Ans. Margin requirement refers to the difference between market value of the security offered for loans and the amount of loans offered by the commercial banks.

10. Define moral suasion.

Ans. Moral suasion refers to persuasion as well as pressure exercised by the central bank on the commercial banks to be restricted and selective in lending during inflation, and to be liberal in lending during deflation.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. The central bank is the banker's bank.

Ans. True. The central bank is an apex bank of all banks in the country. Because, all banks are to work according to guidelines and directives of the central bank.

2. The central bank is the currency authority.

Ans. True. The central bank is the sole-issuing authority in the country. It has the exclusive right of note-issuing.

3. The central bank offers loans to the government.

Ans. True. The central bank offers loans to the government against government securities or treasury bills. It is a bank to the government of the country.

4. Bank rate is the rate of interest charged by the bank on commodity loans.

Ans. False. Bank rate is that rate at which central bank gives loans to the commercial banks.

5. **Open market operations are meant to increase or decrease the supply of money in the economy.**

Ans. True. In order to increase or decrease the money supply in the economy, central bank purchases or sells securities in the open market. Supply of money increases when securities are purchased and it decreases when securities are sold by the RBI.

6. **Reverse repo rate is the rate at which the central bank offers short period loans to the commercial banks.**

Ans. False. Reverse repo rate is the rate at which commercial banks are allowed to park their surplus funds with the RBI.

7. **The goal of central bank is to maximise profit.**

Ans. False. The goal of central bank is to achieve stability and growth of the economy.

8. **Qualitative instruments control the flow of credit to select sectors of the economy.**

Ans. True. Qualitative instruments focus on select sectors of the economy. These instruments control the flow of credit to select sectors not by varying policy rates and ratios, but by issuing advisories to the commercial banks

9. **If reverse repo rate is 4%, then repo rate will be lower than this.**

Ans. False. If reverse repo rate is 4%, then repo rate will be higher than this. Because, the standard practice is to keep 'reverse repo rate' lower than the 'repo rate'. It is like lending rate being higher than the borrowing rate by the bank.

10. **A fall in SLR increases money supply in the economy.**

Ans. True. Money supply in the economy increases when SLR decreases, because fall in SLR enhances capacity of the commercial banks to create credit.

11. **In order to curb inflation, repo rate is decreased.**

Ans. False. In order to curb inflation, repo rate is increased. Increase in repo rate causes increase in market interest rate (rate of interest charged by the commercial banks from the general public). Accordingly, the cost of credit (also called the cost of capital) increases. This reduces the flow of credit, as desired to curb inflation.

12. **To reduce money supply in the economy, securities are purchased by the central bank of the country.**

Ans. False. To reduce money supply in the economy, securities are sold by the central bank. Sale of securities soaks purchasing power from the money market. When liquidity is soaked/reduced, cash reserves of the commercial banks are squeezed. Implying a check on their credit creation capacity, and a cut in money supply.

3. HOTS & Applications

1. **Is money ever used as a commodity?**

Ans. Money is used as a commodity when intrinsic value of money (value of the metal the coins are made of) exceeds its face value. People will then sell coins as a metal, rather than using them at their face value.

Example: Silver coins in circulation during the British rule in India are now used as a commodity rather than money.

2. **There is no equivalent cash to the amount of demand deposits with the banks. Why should then demand deposits be taken as a part of money supply?**

Ans. This is because all demand deposits are chequable deposits and can be used as money by way of issuing the cheques.

3. **Distinguish between 'face value' and 'intrinsic value of money'.**

Ans. Face value refers to what is indicated on a note or a coin, like five rupees or ten rupees.

Intrinsic value refers to market value of the material with which money is made of. In olden days, coins were made of gold and silver. Intrinsic value of a coin then implied the market value of gold or silver that the coin was made of.

4. **Distinguish between 'money' and 'near money'.**

Ans. Money refers to notes and coins or things like cheques which are commonly accepted as a medium of exchange.

Near money refers to all such financial instruments (likes Kisan Vikas Patra) which are sometimes used like money as a medium of exchange or for the store of value or for the transfer of value from one individual to the other.

5. **What is credit creation?**

Ans. Credit creation refers to creation of demand deposits with the commercial banks on the basis of their cash reserves. Often, the deposits are created many times more than the cash reserves (the ratio between the cash reserves and deposits is called cash reserve ratio). This is based on the historical experience of the banks that cash withdrawal of funds is only a small percentage of the total demand deposits. If against the cash reserves of ₹ 100, demand deposits of ₹ 1,000 are created, it is called credit creation by a multiple of 10 or 10 is treated as credit multiplier.

6. **What is selective credit control?**

Ans. Selective credit control refers to credit control policy of the central bank that seeks to increase the flow of credit to priority sectors of the economy. It would also mean restricting the flow of credit to certain sectors, particularly those related to speculative business activity.

7. **How is quantitative credit control different from qualitative credit control?**

Ans. Quantitative credit control refers to overall credit control in the economy, affecting all sectors of the economy equally and without discrimination. Qualitative credit control refers to selective credit control that focuses on allocation of credit to different sectors of the economy. Flow of credit is encouraged to the priority sectors, while it is discouraged to the non-priority sectors (particularly those engaged in speculative business activity).

8. **While performing their primary functions of accepting deposits and making advances, the commercial banks happen to be the suppliers of money. Explain.**

Ans. The commercial banks make advances many times more than cash reserves. Where does the money come from? From no where. They just open account in favour of the borrower and show his borrowing as demand deposits. The value of demand deposits far exceeds the value of cash reserves of the banks which is what adds to the supply of money in the economy. The banks are required to keep only a small fraction of demand deposits in the form of cash (CRR). These demand deposits serve as money as these are chequeable deposits. This is how banks happen to be the suppliers of money while they perform their primary functions of accepting deposits and making advances.

4. Analysis & Evaluation

1. **If CRR is scrapped as a legal requirement, do you think the banks can create unlimited amount of money supply?**

Ans. No. Even if CRR is scrapped as a legal requirement, the commercial banks must continue to hold some cash reserves as a percentage of their demand deposits. Because, in the absence of these reserves, the banks may sink into 'crises of confidence'. People may start withdrawing their deposits from the banks enmass and the banks will simply have no reserves to cope with the withdrawals. If CRR is not fixed by the Apex Bank (like RBI in India), the banks on their own must hold cash reserves on the basis of their historical experience, as to how much of cash reserves should be enough to cope with the routine cash withdrawals by the depositors. This practice (of voluntarily holding cash reserves) has been followed in many countries like UK and Canada.

2. **Imagine yourself the RBI Governor. How would you use the instrument of CRR to increase investment in the economy?**

Ans. CRR refers to that ratio of demand deposits of the commercial banks which they are legally bound to keep as reserves with the RBI. To increase the investment in the economy, it would be appropriate to reduce the CRR. Reduction of CRR increases credit creation capacity of the commercial banks. Accordingly, the flow of credit increases in the market.

Also, rate of interest tends to decrease when the availability of credit increases. Consequently, demand for credit increases for the purpose of investment.

3. In the present scenario when the industrial growth is low, do you think a cut in repo rate by the RBI would accelerate the pace of industrial growth?

Ans. If repo rate is cut, industrial growth is expected to accelerate in two ways, as under:

(*i*) Cost of investment would reduce. Because a cut in repo rate (the rate at which commercial banks take loan from the RBI) is expected to lead to a cut in the market rate of interest (the rate at which investors take loan from the commercial banks). Reduction in cost of investment would lead to higher industrial investment, and therefore, higher industrial growth.

(*ii*) Consumer loans would become cheaper (again because market rate of interest is expected to reduce following a cut in repo rate). This would increase the demand for credit for the purchase of consumer durables. Increase in demand for consumer durables would induce higher industrial investment, leading to higher rate of growth.

4. Why is RBI, sometimes reluctant to lower the repo rate even when investment is low because of high market rate of interest?

Ans. It is true that a cut in repo rate is expected to lead to a cut in market rate of interest. Accordingly, cost of investment would fall and investment would increase. But, sometimes RBI does not appreciate lowering repo rate. This is because a cut in repo rate allows commercial banks to build up their cash reserves and increase their capacity to create credit. If the supply of credit/money increases, the rate of inflation starts multiplying. Thus, RBI is reluctant to lower repo rate in a situation when the existing rate of inflation is high and is expected to rise further.

CBSE QUESTIONS (2015–2019) & ANSWERS

1. Explain 'government's bank' function of central bank. [*CBSE Delhi 2015; (F) 2015, 2016*]

Or

Explain 'banker to the government' function of the central bank. [*CBSE Delhi 2017*]

Ans. Central bank acts as a banker, agent and financial advisor to the government. As a banker to the government, it keeps the accounts of all government banks and manages government treasuries. The loans are given to the government without any interest for short-term. It also transfers government funds. It also buy and sells securities, treasury bills on behalf of the government. Being the apex bank of the country, it advises the government from time to time on economic, financial and monetary matters.

2. Explain the 'bank of issue' function of central bank. [*CBSE Delhi 2015; (AI) 2015; (F) 2016*]

Ans. The central bank is the sole note-issuing authority in the country. Often, the central banks divides its functions into two departments–banking department and issue department. It is the issue department that is responsible for note-issuing. It issues currency to cope with the demand for it, which depends upon the level of economic activity in the economy.

3. Government of India has recently launched 'Jan-Dhan Yojana' aimed at every household in the country to have at least one bank account. Explain how deposits made under the plan are going to affect national income of the country. [*CBSE Delhi 2015*]

Ans. With the introduction of 'Jan-Dhan Yojana' by the Government of India, millions of households have opened their bank account in the country. This has enhanced primary deposits of the commercial banks. It is on the basis of their primary deposits (cash deposits) that the banks are able to create secondary deposits. Expansion of cash deposits leads to expansion of credit creation capacity of the commercial banks. Increase in the creation of credit implies a increase in the availability of credit in the market. This is expected to raise the demand for credit for investment purpose. Higher investment leads to increase in national income of the country.

4. Explain the "bankers' bank" function of the central bank. [*CBSE (AI) 2015, 2017; (F) 2015, 2016*]

Ans. Central bank is an apex bank of all banks in the country. The central bank has almost the same relation with other banks in the country as a commercial bank has with its customers. As a banker's bank, the central bank offers loans to the commercial bank and also, accepts deposits from them. The central bank keeps some cash balances of the commercial banks as a compulsory deposit. Central bank uses these funds to offer loans to the commercial banks as and when they need it. For its short period loans to commercial banks, the banks charges interest rate, often called repo rate. The central bank also offers commercial banks the facility of parking their surplus funds with it. The interest paid to commercial banks for these funds is called 'reverse repo rate'. This is how the central bank of a country plays the role of a banker's bank.

5. Currency is issued by the central bank, yet we say that commercial banks create money. Explain. How is this money creation by commercial banks likely to affect the national income? Explain. [*CBSE (AI) 2015*]

Or

Why do we say that commercial banks create money while we also say that the central bank has the sole right to issue currency? Explain. What is the likely impact of money creation by the commercial banks on national income? [*CBSE (F) 2015*]

Ans. Money supply has two components: currency and demand deposits. Currency is issued by the central bank whereas demand deposits are created by the commercial banks. They create money in the form of demand deposit related to the loans offered by them. Demand deposits of the commercial banks are many times more than their cash reserves. This is based on the historical experience of the banks that cash withdrawal of funds is only a small percentage of the total demand deposits.

The money created by the commercial banks in the form of demand deposits is mainly used for investment or production purposes. Any rise in investment leads to many times more increase in the national income of an economy, *via*., the multiplier effect.

6. Explain how open market operations are helpful in controlling credit creation. [*CBSE Delhi 2016*]

Ans. Open market operations refers to sale and purchase of government securities in the open market by the central bank of the country. By selling the securities, the central bank withdraws cash balances from the system and by buying the securities, the central bank injects cash balances into the system.

To control credit creation by the commercial banks, cash reserves needs to be reduced. For reducing cash reserves, securities are sold off by the central bank. Sale of securities sucks purchasing power from the money market. When liquidity is sucked (as during inflation), cash reserves of the commercial banks are squeezed. Implying a cut in their credit creation capacity. Because any change in cash reserves of the banks causes a multiple change in the supply of money in the economy.

7. Explain how 'bank rate' is helpful in controlling credit creation. [*CBSE Delhi 2016*]

Ans. Bank rate is the rate at which the central bank offers loans to the commercial banks. To control credit creation (or money supply) in the economy, central bank increases bank rate.

Increase in bank rate makes borrowings by commercial banks from the central bank costlier than before. Accordingly, their liquidity reduces. This reduces credit creation capacity of the commercial banks. Also, increase in bank rate causes increase in market interest rate (rate of interest charged by the commercial banks from the general public). Owing to increase in market rate of interest, borrowings from commercial banks tend to shrink. This further restricts credit creation capacity of the commercial banks. Thus, the overall supply of credit/money is reduced in the economy.

8. Explain how 'margin requirements' are helpful in controlling credit creation. [*CBSE Delhi 2016*]

Ans. Margin requirement refers to the difference between market value of the security offered for loan and the amount of loan offered by the commercial banks.

In case credit creation is to be controlled (reduced), the RBI raises margin requirement. It would lower the demand for loans and increase liquidity of the commercial banks for a given amount of loans. When liquidity rises against a given amount of loans, credit creation capacity of the commercial banks is reduced.

9. Explain the role of cash reserve ratio in controlling credit creation. *[CBSE (AI) 2016]*

Ans. Cash Reserve Ratio (CRR) refers to the legally required cash reserves of the commercial banks with the central bank as a percentage of their total deposits.

To control credit creation, cash reserve ratio needs to be increased. Increase in CRR causes a multiple times decrease in credit creation capacity of the commercial banks. Because, there is an inverse relation between CRR and credit creation. That is higher the CRR, lower the credit creation. In fact, credit multiplier $= \frac{1}{\text{CRR}}$. Briefly, a rise in CRR leads to a multiple times cut in credit creation.

10. Explain how 'repo rate' can be helpful in controlling credit creation. *[CBSE (AI) 2016]*

Ans. The repo rate (or policy interest rate) is the rate at which the central bank of the country offers loans or gives short period credit to the commercial banks.

To control credit creation, when supply of money/credit is to be reduced, repo rate is increased. This reduces borrowing by the commercial banks, implying a reduction in their cash reserves and therefore, a reduction in their capacity to create credit. Following this increase in repo rate, market rate of interest is also raised, implying a check on borrowings from the commercial banks. Thus, the overall supply of credit/money is reduced in the economy.

11. Explain the role of reverse repo rate in controlling credit creation. *[CBSE (AI) 2016]*

Or

Explain the role of reverse repo rate in controlling money supply. *[CBSE Delhi 2017]*

Ans. Reverse repo rate is the rate of interest at which commercial banks can park their surplus funds with the central bank, for short period of time.

To control credit creation, reverse repo rate is increased. As a follow-up action, the commercial banks will be encouraged to increase their deposits with the central bank. This, in turn, will reduce their ability to lend money. Implying a cut in their credit creation capacity.

12. State the meaning and components of money supply. *[CBSE Delhi 2017]*

Ans. Money supply refers to the total quantity or stock of money available in the economy at a point of time.

The components of money supply are:

(*i*) Currency held by the public,

(*ii*) Demand deposits of the people with the commercial banks, and

(*iii*) Other deposits (demand deposits with RBI of domestic and foreign institutions other than that of the government of the country and commercial banks within the country).

13. The ratio of total deposits that a commercial bank has to keep with Reserve Bank of India is called: (choose the correct alternative) *[CBSE Delhi 2017]*

(*a*) Statutory liquidity ratio (*b*) Deposit ratio

(*c*) Cash reserve ratio (*d*) Legal reserve ratio

Ans. (*c*)

14. Demand deposits include (choose the correct alternative): *[CBSE (AI) 2017]*

(*a*) saving account deposits and fixed deposits

(*b*) saving account deposits and current account deposits

(*c*) current account deposits and fixed deposits

(*d*) all types of deposits

Ans. (*b*)

15. Explain "difficulty in storing wealth" problem faced in the barter system of exchange. **[CBSE (AI) 2017]**

Ans. In the barter system, people can save only in terms of expensive goods. This leads to two basic problems: (*i*) the problem of storage, and (*ii*) the problem of transfer of savings. Consequently, savings remain low. It leads to low level of investment, and therefore, rate of GDP growth. Evolution of money has made storage and transfer of wealth much easier. Saving has considerably expanded. Investment has proportionately risen. Accordingly, GDP growth has tended to rise enormously.

16. Explain the process of credit creation by commercial banks. **[CBSE (AI) 2017]**

Or

Explain money creation function of commercial banks. **[CBSE (F) 2017]**

Ans. Credit creation is an important function of the commercial banks. Following observations highlight how it happens:

(*i*) Banks receive cash deposits from the people.

(*ii*) Banks lend many times more than their cash reserves.

(*iii*) Lending is done not in cash but by way of opening demand deposits in favour of the borrowers. Thus, cash reserves of the banks are only a small percentage of their demand deposits. This is possible because, banks by way of their historical experience know that only a small percentage of deposits is withdrawn as cash during a period of time. Banks enjoy confidence of the people that their money is safe with the banks.

(*iv*) **Example:** If cash reserves of the commercial banks are ₹ 10,000 and their demand deposits (total liability of the commercial banks towards the people) are ₹ 10,000, then the commercial banks have converted ₹ 10,000 into ₹ 1,00,000. Implying that the supply of money through deposit/credit creation amounts to ₹ 1,00,000, even when cash reserves of the banks are only ₹ 10,000. Credit multiplier $= \frac{1,00,000}{10,000} = 10$.

(*v*) In case of crises of confidence (when people start making bulk withdrawals from the banks) the central bank plays its role as a lender of last resort and sees to it that the banks are not pushed in liquidity crises.

(*vi*) Cash reserves of commercial banks are governed by the central bank through CRR (cash reserve ratio) which is a legally determined ratio of cash reserves to the total demand deposits of the commercial banks. These cash reserves (according to CRR) are to be kept by the commercial banks with the central bank. Beyond these legally required cash reserves, the commercial banks tend to keep some reserves with themselves. These are called 'chest cash'.

17. Define money. List its components. **[CBSE (F) 2017]**

Ans. Money can be defined as something that is generally accepted as a means of exchange (like notes and coins).

Its components are:

(*i*) Notes, (*ii*) Coins, (*iii*) Bank cheques & drafts, and (*iv*) e-money.

18. Repo rate is the rate at which: **[CBSE (F) 2017]**

(*a*) commercial banks purchase government securities from the central bank

(*b*) commerial banks can take loans from the central bank

(*c*) commercial banks can keep their deposits with the central bank

(*d*) short-term loans are given by commercial banks

Ans. (*b*)

19. Explain the "varying reserve requirements" method of credit control by the central bank. **[CBSE (F) 2017]**

Ans. "Varying reserve requirements" [changing CRR (cash reserve ratio)] refers to the legally required cash reserves of the commercial banks with the central bank as a percentage of their total deposits.

To reduce credit creation, cash reserve ratio needs to be raised. Increase in CRR causes a multiple times decrease in credit creation capacity of the commercial banks. Because, there is an inverse relation between CRR and credit creation. That is higher the CRR, lower the credit creation. In fact, credit multiplier = $\frac{1}{\text{CRR}}$. On the other hand, CRR needs to be lowered to accelerate the process of credit creation.

20. State the two components of M_1 measure of money supply. *[CBSE 2018]*

Ans. (*i*) Currency held by the public, and

(*ii*) Demand deposits of the people with the commercial banks.

21. Credit creation by commercial banks is determined by (choose the correct alternative): *[CBSE 2018]*

(*a*) Cash Reserve Ratio (CRR) **(*b*) Statutory Liquidity Ratio (SLR)**

(*c*) Initial Deposits **(*d*) All the above**

Ans. (*d*)

22. What is monetary policy? State any three instruments of monetary policy. *[CBSE 2018]*

Ans. Monetary policy is the policy pursued by the central bank to regulate supply of money in the economy.

The three main instruments of monetary policy are as follows:

(*i*) Repo Rate: Repo rate of a country is the rate at which the central bank lends money to the commercial banks. Increase in repo rate increases the cost of borrowings by the commercial banks. This prompt them to increase the market rate of interest. Market demand for credit is reduced. It leads to a cut in credit supply by the commercial banks. Accordingly, money supply is reduced. On the other hand, when money supply is to be raised, the central bank lowers the repo rate.

(*ii*) Reverse Repo Rate: Reverse repo rate is the rate of interest at which commercial banks can park their surplus funds with the central bank. This allows the commercial banks to generate interest income. A rise in reverse repo rate may induce the commercial banks to park more funds with the central bank to generate interest income. This lowers their capacity to offer these funds as CRR funds to the central bank. Accordingly, supply of money is reduced in the economy. Likewise, when reverse repo rate is lowered, the commercial banks are prompted to create more credit, leading to a rise in money supply.

(*iii*) Open Market Operations: Open market operations refer to the sale and purchase of government securities in the open market by the central bank of the country. By selling the securities in the open market, the central bank withdraws cash balances from the economy. Accordingly, money supply is reduced. When money supply needs to be raised, the central bank resorts to the purchase of securities.

23. (*a*) State any two components of M_1 measure of money supply. *[CBSE 2019 (58/1/1)]*

(*b*) Elaborate any two instruments of credit control, as exercised by the Reserve Bank of India.

Ans. (*a*) See Q. 20 above.

(*b*) The following are the two principal instruments of credit control as used by Reserve Bank of India (RBI):

(*i*) Repo Rate: Repo rate is the rate at which the RBI lends money to the commercial banks. The increase (or decrease) in repo rate is often followed by increase (or decrease) in the market rate of interest. Accordingly, the cost of credit (also called the cost of capital) changes in the market. During inflation, the cost of capital is increased by increasing the repo rate. This reduces the flow of credit, as desired. On the other hand, during deflation the cost of capital is reduced by reducing the repo rate. This increases the flow of credit, as desired.

(*ii*) Open Market Operations: Open market operations refers to sale and purchase of securities by the RBI in the open market. To increase money supply (as during deflation) securities are purchased by the RBI. On the other hand, to decrease money supply (as during inflation) securities are sold off by the RBI. By buying the securities, the RBI releases liquidity and hence, a rise in capacity to create credit of the commercial banks. By selling the securities, liquidity is sucked from the economy and hence, a reduction in capacity to create credit of the commercial banks.

24. Define credit multiplier. What role does it play in determining the credit creation power of the banking system? Use a numerical illustration to explain. *[CBSE 2019 (58/1/1)]*

Ans. Credit multiplier indicates the maximum amount of money that the commercial banks can legally create on the basis of their cash reserves with the central bank. It is the reciprocal of CRR.

$$\text{Credit Multiplier} = \frac{1}{\text{CRR}}$$

Credit creation is an important function of the commercial banks. By creating credit, commercial banks contribute to money supply in the economy. They create credit in the form of demand deposits. The credit creation by commercial banks depends on credit multiplier as it is inversely related to CRR. Higher the credit multiplier, higher will be capacity of commercial banks to create credit.

Example: If CRR = 5%, then

$$\text{Credit Multiplier} = \frac{1}{5\%} = \frac{100}{5} = 20$$

It implies that if CRR = 5% then the commercial banks can credit money 20 times of their cash reserves with the central bank. Thus:

If cash reserves are = ₹10,000, the commercial banks can create credit as per the following equation:

$$\text{Credit Creation or Money Creation} = \frac{1}{\text{CRR}} \times \text{Cash Reserves}$$

$$= \frac{1}{5\%} \times ₹\ 10{,}000$$

$$= 20 \times ₹\ 10{,}000$$

$$= ₹\ 2{,}00{,}000$$

In the above example, cash reserves of ₹ 10,000 allow demand deposits of ₹ 2,00,000, which serve as a source of money supply.

25. Define 'money multiplier'. *[CBSE 2019 (58/2/1)]*

Ans. Money multiplier (or Credit multiplier) is the reciprocal of CRR. It is the number of times cash reserves of the commercial banks multiply to be equal to demand deposits.

26. Distinguish between 'Qualitative and Quantitative tools' of credit control as may be used by a Central Bank. *[CBSE 2019 (58/2/1)]*

Ans. Qualitative credit control refers to selective credit control that focuses on allocation of credit to different sectors of the economy. Flow of credit is encouraged to the priority sectors, while it is discouraged to the non-priority sectors (particularly those engaged in speculative business activity). Quantitative credit control, on the other hand, refers to overall credit control in the economy, affecting all sectors of the economy equally and without discrimination.

27. Discuss briefly the following functions of a Central Bank:

(*i*) Banker's bank.

(*ii*) Lender of last resort. *[CBSE 2019 (58/2/2)]*

Ans. (*i*) **Banker's Bank:** As a banker's bank, the central bank keeps some cash balances of the commercial banks as a compulsory deposit. Central bank uses these funds to offer loans to the commercial banks as and when they need it. For its short period loans to commercial banks, the banks charges interest rate, often called repo rate. The central bank also offers commercial banks the facility of parking their surplus funds with it. The interest paid to commercial banks for these funds is called 'reverse repo rate'.

(*ii*) **Lender of Last Resort:** As a lender of last resort, the central bank stands as a guarantor to the commercial banks during financial emergencies. A commercial bank may lose confidence of the depositors prompting them to withdraw their deposits enmass. Since cash reserves of the commercial bank are only a fraction of its demand deposits, its reserves may run out, pushing the bank into financial crises. It is the central bank during such times that stands by the commercial bank as a guarantor and saves it from insolvency.

28. Discuss briefly the "credit controller" function of a Central Bank. [*CBSE 2019 (58/2/3)*]

Ans. The central bank (like RBI in India) acts as a controller of money supply and credit, using the following instruments of monetary policy:

(*i*) **Bank/Repo Rate:** It is the rate at which the central bank offers loans to the commercial banks as 'a lender of last resort'. During inflation when supply of money/credit is to be reduced, bank/repo rate is increased. This reduces borrowing by the commercial banks, implying a reduction in their cash reserves and therefore, a reduction in their capacity to create credit. Following increase in bank/repo rate, market rate of interest is also raised, implying a check on borrowings from the commercial banks. Thus, overall supply of money/credit is reduced in the economy. Exactly opposite is done to combat deflation: bank/repo rate is lowered to increase the supply of money/credit.

(*ii*) **Reverse Repo Rate:** Reverse repo rate is the rate of interest at which the commercial banks can park (deposit) their surplus funds with the central bank. This allows the commercial banks to generate interest income. When reverse repo rate is lowered (as during deflation), banks are discouraged to park their surplus funds with the central bank. Instead, the banks may use these funds as CRR funds with the central bank, and thereby increased their capacity to create credit. Accordingly, supply of money is enhanced in the economy, as desired to curb deflation On the other hand, a rise in reverse repo rate (as during inflation) may induce the commercial banks to park more funds with the central bank to generate interest income. This lowers their capacity to create credit. Accordingly, supply of money is reduced in the economy, as desired to curb inflation.

(*iii*) **Open Market Operations:** This refers to sale and purchase of securities by the central bank in the open market. To increase money supply (as during deflation) securities are purchased by the central bank. On the other hand, to decrease money supply (as during inflation) securities are sold off by the central bank. Buying the securities, the commercial banks reduce their cash deposits and hence, their capacity to create credit. Selling the securities, the commercial banks add to their cash reserves and enhance their capacity to create credit.

(*iv*) **CRR (Cash Reserve Ratio) and SLR (Statutory Liquidity Ratio):** CRR requires the commercial banks to maintain certain minimum cash reserves with the central bank, as a percentage of their total deposits. SLR requires the commercial banks to maintain a specified percentage of their deposits (implying their liabilities) in the form of liquid assets. The liquid assets include: (*a*) cash reserves held by the commercial banks with themselves, (*b*) gold reserves of the commercial banks, and (*c*) unencumbered approved securities held by the commercial banks. When CRR and SLR are raised (as during inflation) credit creation capacity of the commercial banks is curtailed. On the other hand, when CRR and SLR are lowered (as during deflation) credit creation capacity of the commercial banks is enhanced.

(*v*) **Margin Requirement:** A margin refers to the difference between market value of the security offered for loan (like the value of house pledged for loan) and the amount of loan offered by the commercial banks. During inflation, supply of money/credit is reduced by raising the requirement of 'margin'. During deflation, supply of money/credit is increased by lowering the requirement of 'margin'. This measure is often used to discourage the flow of credit into speculative business activities.

(*vi*) **Moral Suasion:** It refers to moral pressure exercised by the central bank on the commercial banks to be restricted and selective in lending during inflation and to be liberal in lending during deflation. Generally, this measure is used as a selective credit control instrument to channelise the flow of credit to priority areas.

29. According to a report forwarded by the Reserve Bank of India, there was a fall in rate of inflation as measured by Consumer Price Index (CPI) on year-on-year basis to 5% from 8% in the previous year. Which of the following statements represents the situation? [*CBSE 2019 (58/3/1)*]

(*a*) CPI has fallen

(*b*) CPI has risen at a rate lower than the preceding year

(*c*) CPI is constant

(*d*) None of the above

Ans. (*b*)

30. Explain the process of money creation by a commercial bank using a hypothetical numerical example. [*CBSE 2019 (58/3/1)*]

Or

Discuss briefly the credit creation process of the banking system, using a hypothetical numerical example. [*CBSE 2019 (58/4/3)*]

Ans. Money/credit creation is an important function of the commercial banks. By creating credit, commercial banks contribute to money supply in the economy. They create credit in the form of demand deposits. Demand deposits of the commercial banks are many times more than their cash reserves. If cash reserves are (say) ₹ 1,000 and if demand deposits are (say) ₹ 10,000, then the commercial banks are creating credit ten times of their cash reserves. Accordingly, on the basis of cash reserves of ₹ 1,000, the commercial banks are contributing ₹ 10,000 to the supply of money. The process of credit creation is like this: Initially, bank receives deposits of ₹ 1,000. The required reserves to tackle the liability of ₹ 1,000 is equal to ₹ 100 (on the assumption that cash reserve ratio is 10% of total deposits). Implying that the banks have excess reserves = ₹ 1,000 – ₹ 100 = ₹ 900 which they can use for the purpose of lending. When these excess reserves are loaned out, total deposits of the banks amount to ₹ 1,000 + ₹ 900 = ₹ 1,900. The bank need to hold cash reserves as 10% of 1,900 or 190, while their actual reserves are ₹ 1,000. Implying excess reserves of ₹ 1,000 – ₹ 190 = ₹ 810 which can be loaned. This process continues till total demand deposits are ₹ 10,000 and cash reserves are ₹ 1,000.

Thus, if required reserve ratio is equal to 10%, total cash reserves of ₹ 1,000 allows the bank to create demand deposits up to ₹ 10,000. So that,

$$\begin{aligned}\text{Demand Deposits} &= \frac{1}{\text{RR}} \times \text{Cash Reserves}\\ &= \frac{1}{10\%} \times ₹\ 1{,}000\\ &= 10 \times ₹\ 1{,}000\\ &= ₹\ 10{,}000\end{aligned}$$

Here, RR refers to reserve requirement of the commercial banks as a percentage of their demand deposits.

Here, it is important to note that loans are never offered in cash. These are always reflected as demand deposits in favour of the borrowers. Accordingly, when loans are offered, demand deposits of the banks tend to build up. In the above example, cash reserves of ₹ 1,000 allow demand deposits of ₹ 10,000, which serve as a source of money supply.

31. Define "demand deposits". [*CBSE 2019 (58/4/1)*]

Ans. Demand deposits are those deposits which can be withdrawn from the bank on demand or by writing a cheque any time.

32. State the role played by the central bank as the "lender of last resort". [*CBSE 2019 (58/4/1)*]

Ans. As a lender of last resort, the central bank stands as a guarantor to the commercial banks during financial emergencies.

33. Explain, using a numerical example, how an increase in reserve deposit ratio affects the credit creation power of the banking system. [CBSE 2019 (58/4/1)]

Ans. Reserve deposit ratio is the minimum reserves that a commercial bank must maintain as per the instructions of the central bank. Credit creation is inversely related to the reserve deposit ratio.

Example: If reserve ratio = 0.4%, and initial deposit is ₹10,000, then

$$\text{Credit Creation or Money Creation} = \frac{1}{\text{RR}} \times \text{Initial deposit}$$

$$= \frac{1}{0.4} \times ₹\ 10{,}000$$

$$= 2.5 \times ₹\ 10{,}000 = ₹\ 25{,}000$$

In case, if reserve ratio = 0.5%, and initial deposit is ₹10,000, then

$$\text{Credit Creation or Money Creation} = \frac{1}{\text{RR}} \times \text{Initial deposit}$$

$$= \frac{1}{0.5} \times ₹\ 10{,}000$$

$$= 2 \times ₹\ 10{,}000$$

$$= ₹\ 20{,}000$$

Hence, increase in reserve deposit ratio will decrease the credit creation power of the banking system.

34. Explain, using a numerical example, how a reduction in reserve deposit ratio, affects the credit creation power of the banking system. [CBSE 2019 (58/4/2)]

Ans. Reserve deposit ratio is the minimum reserves that a commercial bank must maintain as per the instructions of the central bank. Credit creation is inversely related to the reserve deposit ratio.

Example: If reserve ratio = 0.5%, and initial deposit is ₹10,000, then

$$\text{Credit Creation or Money Creation} = \frac{1}{\text{RR}} \times \text{Initial deposit}$$

$$= \frac{1}{0.5} \times ₹\ 10{,}000$$

$$= 2 \times ₹\ 10{,}000$$

$$= ₹\ 20{,}000$$

In case, if reserve ratio = 0.4%, and initial deposit is ₹10,000, then

$$\text{Credit Creation or Money Creation} = \frac{1}{\text{RR}} \times \text{Initial deposit}$$

$$= \frac{1}{0.4} \times ₹\ 10{,}000$$

$$= 2.5 \times ₹\ 10{,}000$$

$$= ₹\ 25{,}000$$

Hence, decrease in reserve deposit ratio will increase the credit creation power of the banking system.

35. If legal reserve ratio is 20%, the value of money multiplier would be __________. (Choose the correct alternative) [CBSE 2019 (58/5/1)]

(*a*) 2 (*b*) 3

(*c*) 5 (*d*) 4

Ans. (*c*)

36. What are primary deposits? [CBSE 2019 (58/5/1)]

Ans. Primary deposits are cash deposits with the commercial banks by the people.

37. Explain the following functions of the Central Bank:

(*i*) Banker's bank.

(*ii*) Authority of currency issue. [*CBSE 2019 (58/5/1)*]

Ans. (*i*) **Banker's Bank:** See Q. 27, point (*i*), page 128.

(*ii*) **Authority of Currency Issue:** The central bank is the sole note-issuing authority in the country. Often, the central banks divides its functions into two departments–banking department and issue department. It is the issue department that is responsible for note-issuing. It issues currency to cope with the demand for it, which depends upon the level of economic activity in the economy.

38. Explain the following functions of the Central Bank:

(*i*) Lender of last resort.

(*ii*) Banker to the Government. [*CBSE 2019 (58/5/2)*]

Ans. (*i*) **Lender of Last Resort:** See Q. 27, point (*ii*), page 129.

(*ii*) **Banker to the Government:** As a banker to the government, it keeps the accounts of all government banks and manages government treasuries. The loans are given to the government without any interest for short-term. It also transfers government funds. It also buy and sells securities, treasury bills on behalf of the government. Being the apex bank of the country, it advises the government from time to time on economic, financial and monetary matters.

39. (*a*) Explain how using "Bank Rate" the Central Bank can regulate money supply in an economy.

(*b*) What is meant by 'Repo Rate' ? [*CBSE 2019 (58/5/3)*]

Ans. (*a*) See Q. 7, page 124.

(*b*) Repo rate (or policy interest rate) is the rate of interest at which commercial banks can raise short-term loans from the central bank by offering 'unencumbered securities' as collateral.

NCERT & MISCELLANEOUS QUESTIONS

1. What is a barter system? What are its drawbacks? [*NCERT*]

Ans. Barter system is a system where goods are exchanged for goods.

It has the following drawbacks:

(*i*) Both sale and purchase should occur simultaneously implying double coincidence of wants.

(*ii*) There is no common unit of exchange in a barter system, accordingly, exchange remains limited.

(*iii*) Barter system does not allow any convenient method of storage of value.

(*iv*) Division of goods in exchange may not be possible, so some wants may remain unsatisfied.

2. How does money overcome the shortcomings of a barter system? [*NCERT*]

Ans. Use of money overcomes the drawbacks of barter system of exchange in the following manner:

(*i*) Use of money as a medium of exchange has overcome the difficulty of double coincidence of wants. Accordingly, exchange has tended to expand.

(*ii*) Money facilitates storage of value just in terms of paper claims, avoiding the storage of goods under barter system.

(*iii*) Money facilitates satisfaction of wants even in smaller units which is not possible in barter system.

(*iv*) It facilitates electronic transfer of value which is ruled out under barter system of exchange.

3. What are the alternative definitions of money supply in India? [*NCERT*]

Ans. In India, there are four alternative measures (or definitions) of money supply, popularly known as M_1, M_2, M_3, and M_4, given below:

M_1 = Currency with Public + Demand Deposits + Other Deposits with the Reserve Bank

$M_2 = M_1 +$ Deposits with Post Office Saving Bank Account

$M_3 = M_1$ + Net Time Deposits with the Commercial Banks

$M_4 = M_3$ + Total Deposits with Post Offices (other than in the form of National Saving Certificate).

4. What is 'fiat money'? *[NCERT]*

Ans. Fiat money refers to money backed with order (authority) of the government.

5. What is high powered money? *[NCERT]*

Ans. High powered money means cash (coins and notes) with the people and cash reserves with the commercial banks.

6. What are the instruments of monetary policy of RBI? *[NCERT]*

Ans. Instruments of monetary policy of RBI are broadly classified as:

(i) **Quantitative Instruments:** *(a)* Repo rate, *(b)* Bank rate, (c) Reverse repo rate, *(d)* Open market operations, *(e)* CRR (Cash Reserve Ratio), and *(f)* SLR (Statutory Liquidity Ratio).

(ii) **Qualitative Instruments:** *(a)* Margin requirement, *(b)* Rationing of credit, and *(c)* Moral suasion.

7. Do you consider a commercial bank 'creator of money' in the economy? *[NCERT]*

Ans. Yes, commercial banks are an important source of creating credit in the economy. They create credit in the form of demand deposit related to the loans offered by them. Demand deposits of the commercial banks are many times more than their cash reserves. This is based on the historical experience of the banks that cash withdrawal of funds is only a small percentage of the total demand deposits. If cash reserves are (say) ₹ 1,000 and if demand deposits are (say) ₹ 10,000, then the commercial banks are creating credit ten times of their cash reserves. Accordingly, on the basis of cash reserves of ₹ 1,000, the commercial banks are contributing ₹ 10,000 to the supply of money.

8. What role of RBI is known as 'lender of last resort'? *[NCERT]*

Ans. See Q. 27, point *(ii)*, page 129.

9. Describe the evolution of money.

Ans. To overcome the difficulties of barter system (a system of direct exchange of goods against goods, that prevailed prior to the invention of money), man invented money—a thing that was commonly accepted as a medium of exchange. Initially, metal coins of gold and silver were introduced. Subsequently, alloy metal came to be used for coinage, besides the introduction of paper money. And, now is the age of plastic money in the form of debit cards and credit cards. Thus, money finds its origin in the need to facilitate exchange; hence, it came to be defined as "a thing that is commonly accepted as a medium of exchange".

10. Explain the problem of double coincidence of wants faced under barter system. How has money solved it?

Ans. Double coincidence of wants means that goods in possession of two different individuals are needed by each other. But it is difficult to find a person who wants your good and at the same time possesses a good that you want to buy. Accordingly, under the barter system, exchange remained extremely limited.

Money as a medium of exchange has removed the major difficulty of double coincidence of wants. It means that money acts as an intermediary for the goods and services in exchange transactions. In the monetary system, acts of sale and purchase of the goods and services are separated from each other. If one wants to buy goods, he can do so with money. And, if one wants to sell goods, he can sell these for money.

11. How does money overcome the main problem of exchange in the barter system? Explain.

Ans. Medium of exchange is an important function of money. It means that money acts as an intermediary for the goods and services in exchange transactions. Use of money as a medium of exchange has removed the major difficulty of double coincidence of wants in the barter system. In the monetary system, acts of sale and purchase of the goods and services are separated from each other. If one wants to buy goods, he can do so with money, and if one wants to sell goods, he can sell these for money.

12. What is meant by an ideal supply of money?

Ans. Ideal money supply is that amount of money supply which keeps the total purchasing power or aggregate demand in a state of balance with aggregate supply so that the economy does not suffer inflationary or deflationary situations.

13. Distinguish between chequeable deposits and non-chequeable deposits.

Ans. Chequeable deposits are those deposits against which cheques can be issued and therefore, money can be withdrawn any time. Non-chequeable deposits are those deposits against which cheques cannot be issued and therefore, money cannot be withdrawn any time. Instead, money in these deposits is kept as reserve with the bank for some fixed period of time. Accordingly, these deposits are also called fixed deposits.

14. Explain the supervisor function of the central bank.

Ans. While discharging its supervisory functions, the central bank regulates and controls credit creation activity of the commercial banks by fixing '2 ratios' and '2 rates' which are to be followed in practice by the commercial banks as a matter of legal binding.

The 2 ratios are: (*i*) CRR (Cash Reserve Ratio), and (*ii*) SLR (Statutory Liquidity Ratio).

The 2 rates are: (*i*) Repo Rate, and (*ii*) Reverse Repo Rate.

It is by varying these rates and ratios that the central bank supervises/monitors the functioning of commercial banks.

15. Distinguish between cash reserve ratio and statutory liquidity ratio.

Ans. Cash reserve ratio (CRR) requires the commercial banks to maintain certain minimum cash reserves with the central bank, as a percentage of their total deposits. Statutory liquidity ratio (SLR) requires the commercial banks to maintain a specified percentage of their deposits (implying their liabilities) in the form of liquid assets. The liquid assets include: (*a*) cash reserves held by the commercial banks with themselves, (*b*) gold reserves of the commercial banks, and (*c*) unencumbered approved securities held by the commercial banks. When CRR or SLR are raised (as during inflation), credit creation capacity of the commercial banks is curtailed. On the other hand, when CRR and SLR are lowered (as during deflation), credit creation capacity of the commercial banks is enhanced.

16. Distinguish between statutory liquidity ratio and legal reserve ratio.

Ans. Statutory liquidity ratio (SLR) requires the commercial banks to maintain a specified percentage of their deposits (implying their liabilities) in the form of liquid assets. The liquid reserves may be in the form of (*i*) cash reserves, (*ii*) gold reserves, and (*iii*) unencumbered approved securities.

Legal reserve ratio may be defined as CRR, referring to cash reserves held by the commercial banks with the central bank, as a percentage of their demand deposits and as a matter of legal requirement.

[**Note:** Legal reserve ratio should not be confused as comprising of two components, *viz.*, SLR and CRR. These are just the two variants of legal reserve ratio.]

17. Distinguish between bank rate and repo rate.

Ans. The principal differences between bank rate and repo rate are as follows:

Bank Rate	Repo Rate
(*i*) The bank rate is the rate of interest at which the central bank of the country gives loans to the commercial banks without any collateral.	(*i*) The repo rate (or policy interest rate) is the rate of interest at which the central bank of the country gives short period loans to the commercial banks against collateral.
(*ii*) Bank rate does not allow any facility of repurchase of securities. The bank rate is also simply the Rate of Discount.	(*ii*) Repo rate allows repurchase of securities. The holder of securities can repurchase them at a later date. Therefore, repo rate is also called Repurchase Rate.
(*iii*) Bank rate is often higher than the repo rate.	(*iii*) Repo rate is often lower than the bank rate.

18. Distinguish between central bank and commercial banks.

Ans. The principal differences between the central bank and the commercial banks are as follows:

Central Bank	Commercial Banks
(*i*) Central bank functions as the apex bank of the country.	(*i*) Commercial banks function according to the rules and regulations stipulated by the central bank.
(*ii*) The central bank designs and controls all instruments of monetary policy of the country.	(*ii*) Commercial banks only executes the monetary policy as directed by the central bank.
(*iii*) Central bank is the sole authority of note-issuing.	(*iii*) Commercial banks contribute to the flow of money only by way of credit creation.
(*iv*) Central bank does not deal directly with the general public. It does not accept deposits or advance loans.	(*iv*) Commercial banks deal directly with the general public by accepting deposits and advancing loans.

19. What are the components of legal reserve ratio?

Ans. Legal reserve ratio has two variants: (*i*) Cash reserve ratio, and (*ii*) Statutory liquidity ratio.

Cash reserve ratio (CRR) refers to cash reserves of commercial banks with the central bank as a percentage of their deposits. Statutory liquidity ratio (SLR) refers to reserves in the form of liquid assets (including: (*i*) cash, (*ii*) gold, and (*iii*) approved securities) with the commercial banks themselves, as a percentage of their total deposits.

[**Note:**

(i) Both CRR and SLR are fixed by the central bank, and both are a legal binding for the commercial banks. In this sense, both CRR and SLR are legal reserve ratios.

(ii) **CRR and SLR cannot be treated as components of legal reserve ratio. Because, whereas CRR by definition includes cash reserves only, SLR includes (*a*) cash reserves, (*b*) gold reserves, and (*c*) reserves of approved securities, with the commercial banks.**

(iii) If CRR and SLR are treated as components of legal reserve ratio, both CRR and SLR should add up to LRR (legal reserve ratio). In practice, however, this is not true. If CRR + SLR = LRR then, in a situation when LRR is constant, any increase in CRR must imply a corresponding decrease in SLR. There is no evidence to such a situation whatsoever.

Hence, the students are advised to treat CRR and SLR not as components of LRR, but only as variants of LRR.]

20. How does statutory liquidity ratio increase the money supply in the economy?

Ans. Statutory liquidity ratio (SLR) refers to liquid assets that the commercial banks must hold (on daily basis) as a percentage of their total deposits. To increase money supply in the economy, statutory liquidity ratio needs to be reduced. When SLR is reduced, credit creation capacity of the commercial banks is enhanced. This increases money supply in the economy.

21. How does the central bank perform the function of controller of credit?

Or

State briefly the various instruments of monetary policy.

Ans. See Q. 28, page 129.

22. Explain the functions of the central bank.

Ans. The principal functions of the central bank are as follows:

(*i*) **Issuing of Notes or Currency Authority:** The central bank is the sole note-issuing authority in the country. Large number of central banks have divided their functions into two parts—banking department and issue department. It is the issue department that is responsible for note-issuing.

(*ii*) **Banker to the Government:** Central bank acts as a banker, agent and financial advisor to the government. As a banker to the government it keeps the accounts of all government banks and manages government treasuries. The loans are given to the government without any interest for short-term. It also transfers government funds. It also buy and sells securities, treasury bills on behalf of the government. Being the apex bank of the country, it advises the government from time to time on economic, financial and monetary matters.

(*iii*) Banker's Bank: It performs the function of a banker to all other banks in the country. Central bank keeps part of the cash balances of all commercial banks as deposit with a view to meeting liabilities of these banks in times of crisis.

(*iv*) Lender of the Last Resort: The central bank also acts as lender of the last resort for the other banks of the country. It means that if a commercial bank fails to get financial accommodation from anywhere, it approaches the central bank as a last resort. Central bank advances loan to such a bank against approved securities.

(*v*) Custodian of the Nation's Reserves of Foreign Exchange: Central bank also functions as the custodian of nation's foreign exchange reserves. These reserves are regulated:

(*a*) to stabilise exchange rate in the international money market, and

(*b*) to promote exports.

(*vi*) Clearing House Function: Central bank also performs the function of a clearing house. Every bank keeps cash reserves with the central bank. The claims of banks against one another can be easily and conveniently settled by simple transfers from and to their account.

(*vii*) Control of Credit: The most important function of the central bank is to control the credit activities of the commercial banks. Credit control refers to the increase or decrease in the volume of credit money in accordance with the monetary requirement of the country. Central bank seeks to contain credit money within reasonable limits.

In short, central bank performs several important functions, *e.g.*, issue of notes, banker to banks, banker to the government, lender of the last resort, control of credit, etc. It plays a significant role in the context of economic development of the country.

DETERMINATION OF INCOME AND EMPLOYMENT

3
UNIT

- Aggregate Demand and Aggregate Supply
- Consumption Function and Saving Function
- Equilibrium Output/Equilibrium GDP
- Concept of Investment and Multiplier
- Excess Demand, Deficient Demand and their Correction

POWER POINTS

1. Aggregate Demand and Aggregate Supply

Aggregate demand is measured in terms of total expenditure on the goods and services in the economy during a period of time, generally one year.

Total Expenditure (Aggregate Demand) is measured as the sum total of consumption expenditure (C) and investment expenditure (I). Hence,

$$AD = C + I$$

It is important to note that, in the context of macroeconomic equilibrium, AD always refers to 'desired AD' or planned AD. It is also called ex-ante AD.

Aggregate supply is measured as planned output of goods and services during a period of time, generally one year. At the +2 level, AS may be treated as identical with GDP. It is indicated by a 45° line from the origin when GDP is shown on the X-axis and AS on the Y-axis.

2. Consumption Function and Saving Function

Consumption Function

Consumption function is the functional relationship between consumption (C) and income (Y). Consumption is positively related to income, *i.e.*, rise in Y causes a rise in C and *vice versa*. However, there is always some minimum level of C, irrespective of the level of Y. Thus,

$$C = \overline{C} + bY$$

Here, $\overline{C}$ = Constant C or the minimum level of C.

b = The rate at which C increases when there is a rise in Y. This is called MPC (marginal propensity to consume).

Saving Function

Saving function is the functional relationship between saving (S) and income (Y). Saving increases as income increases. Implying that saving is positively related to income.

However, since there is always some minimum level of consumption even when income is zero, it implies that there must be some negative saving (indicated by $-\overline{C}$ in the saving function) when Y = 0. [Because, Y = C + S. And, if C = 5 when Y = 0, S must be equal to – 5 (= $-\overline{C}$) when Y = 0]. Thus,

$$S = -\overline{C} + (1 - b)Y$$

Here, $-\overline{C}$ = Constant S (indicating S when Y = 0).

1 – b = The rate at which S increases when there is a rise in Y. It is called MPS (marginal propensity to save).

Propensity to Consume (APC and MPC) and Propensity to Save (APS and MPS)

Average Propensity to Consume

Average propensity to consume (APC) refers to the proportion of total income going to consumption expenditure. It is measured as the ratio between total consumption (C) and total income (Y). Thus,

$$APC = \frac{C}{Y}$$

Marginal Propensity to Consume

Marginal propensity to consume (MPC) refers to the proportion of additional income going to consumption expenditure. It is measured as the ratio between change in consumption (ΔC) and change in income (ΔY). Thus,

$$MPC = \frac{\Delta C}{\Delta Y}$$

Average Propensity to Save

Average propensity to save (APS) refers to the proportion of total income that goes to saving. It is measured as the ratio between total saving (S) and total income (Y). Thus,

$$APS = \frac{S}{Y}$$

Marginal Propensity to Save

Marginal propensity to save (MPS) refers to the proportion of additional income that goes to saving. It is measured as the ratio between change in saving (ΔS) and change in income (ΔY). Thus,

$$MPS = \frac{\Delta S}{\Delta Y}$$

3. Equilibrium Output/Equilibrium GDP

In the context of macroeconomics, short run may be defined as a period of time when 'technology' as a factor (affecting the level of output) remains constant. Accordingly, level of output is determined exclusively by the level of employment in the economy (briefly employment of labour). Higher level of employment causes proportionately higher level of output and *vice versa*. So long as there is unemployment in the economy (implying the existence of excess capacity) general price level is assumed to remain constant even when output level is increased.

Equilibrium output/Equilibrium GDP refers to a situation when in an economy:

$$AD = AS$$

[Aggregate Demand = Aggregate Supply]

So that, all that the producers wish to produce (or plan to produce) during the year is exactly equal to what the buyers wish to spend on the purchase of goods and services during the year.

Since, AD = C + I, and AS = C + S

We can write the equation of equilibrium output/equilibrium GDP as under:

$$\text{Equilibrium Output/Equilibrium GDP} = C + S = C + I$$

Or, $$C = I$$

Thus, equilibrium output/equilibrium GDP is achieved when:

$$AD = AS$$
Or
$$C = I$$

Ex-post and Ex-ante AS and AD (or S and I)

In national income accounting,

$$(C + S) = (C + I) \text{ always}$$

Or, $$S = I \text{ always}$$

But this equality refers to the equality between ex-post AS and AD or between ex-post S and I which is an accounting identity. Ex-post means 'actual' or 'realised' and actual S is always equal to actual I.

In the context of equilibrium level of income/output, what matters, is the equality between ex-ante AS and AD, or between ex-ante S and I. Ex-ante means 'planned' or 'desired' or intend.

Equilibrium is struck only when planned AS = planned AD (or planned S = planned I). It refers to AS as planned by the producers for the year ahead and AD as planned by the consumers and investors for the year ahead.

4. Concept of Investment and Multiplier

Investment

Investment refers to expenditure that increases the stock of capital. It is also called capital formation.

Types of Investment

(*i*) Induced investment, and (*ii*) Autonomous investment.

Induced Investment is related to the cost of investment (rate of interest) as well as the level of income in the economy.

Autonomous Investment is not related to the cost of investment or the level of income in the economy.

Multiplier

Investment multiplier (briefly called multiplier) is the ratio between change in income and change in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

Where, K = Multiplier; ΔY = Change in income; ΔI = Change in investment.

Keep the Basic Fundas in Mind

(i) Higher MPS implies lower multiplier (K), as $K = \frac{1}{MPS}$.

(ii) Higher MPC implies higher multiplier (K), as $K = \frac{1}{1 - MPC}$.

(iii) Generally, $1 \geq MPC \geq 0$; therefore, $K \geq 1$.

5. Excess Demand, Deficient Demand and their Correction

Meaning of Full Employment and Involuntary Unemployment

Full Employment refers to a situation when all those who are able to work and are willing to work (at the existing wage rate) are getting work.

Involuntary Unemployment refers to a situation when people are willing to work at the existing wage rate, but are not getting work owing to lack of demand in the market.

Meaning of Excess Demand/Inflationary Gap and Deficient Demand/Deflationary Gap

Excess Demand/Inflationary Gap occurs when AD > AS corresponding to full employment level in the economy.

Deficient Demand/Deflationary Gap occurs when AD < AS corresponding to full employment level in the economy.

Situations of excess demand and deficient demand point to instability in economy.

Correction of Excess Demand and Deficient Demand: Fiscal and Monetary Policies

Fiscal Policy refers to the revenue and expenditure policy of the government to control the situations of inflation and deflation in the economy.

Monetary Policy refers to the policy of controlling inflationary and deflationary situations in the economy through increase or decrease in the flow of credit in the economy.

QUESTION-ANSWERS

▶ AGGREGATE DEMAND AND AGGREGATE SUPPLY

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **AD refers to:**
   (*a*) demand for all goods and services produced in the economy during a period of one year
   (*b*) total unplanned expenditure on the goods and services in the economy during an accounting year
   (*c*) sum total of investment expenditure and saving in the economy during an accounting year
   (*d*) all of these
2. **In an open economy, aggregate demand is estimated as:**
   (*a*) private consumption expenditure + net exports
   (*b*) private consumption expenditure + government expenditure
   (*c*) private investment expenditure + government expenditure + net exports
   (*d*) private consumption expenditure + private investment expenditure + government expenditure + net exports
3. **Expenditure on Goods and Services =**
   (*a*) Government expenditure + Investment expenditure
   (*b*) Consumption expenditure + Government consumption expenditure
   (*c*) Consumption expenditure + Investment expenditure
   (*d*) None of these
4. **45° line in the context of equilibrium GDP is a:**
   (*a*) line of reference (*b*) line of AS (when AS = GDP)
   (*c*) line of equality between AS and AD (*d*) all of these

5. **AD schedule shows the relationship between:**
   (*a*) AD and Y (*b*) C and I
   (*c*) C and S (*d*) none of these
6. **Domestic economy includes:**
   (*a*) household sector (*b*) producer sector
   (*c*) government sector (*d*) all of these
7. **AD is:**
   (*a*) positively related to Y (*b*) negatively related to Y
   (*c*) not related to Y (*d*) always equal to Y
8. **AD curve:**
   (*a*) is a diagrammatic presentation of AD schedule
   (*b*) shows desired expenditure corresponding to different levels of income in the economy
   (*c*) indicates ex-post demand in the economy
   (*d*) both (*a*) and (*b*)
9. **Rest of the world sector leads to:**
   (*a*) export of goods and services (*b*) import of goods and services
   (*c*) both (*a*) and (*b*) (*d*) none of these
10. **When household consumption expenditure = ₹ 9,000, private investment expenditure = ₹ 7,000, government expenditure = ₹ 12,000, exports = ₹ 1,000 and imports = ₹ 3,000, the level of AD in an open economy will be:**
   (*a*) ₹ 16,000 (*b*) ₹ 26,000
   (*c*) ₹ 28,000 (*d*) ₹ 29,000

Ans. **1.** (*a*) **2.** (*d*) **3.** (*c*) **4.** (*d*) **5.** (*a*) **6.** (*d*)
7. (*a*) **8.** (*d*) **9.** (*c*) **10.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Aggregate demand is a ______________ concept. (stock/flow)
2. There is a ______________ relationship between income and AD. (positive/negative)
3. In a/an ______________ economy, AD = C + I + G + X – M. (closed/open)
4. Aggregate supply refers to ______________. (desired production/actual production)
5. ______________ is the basic assumption of Keynesian macroeconomic model. (Excess demand/Excess capacity)
6. ______________ add to AD in the domestic economy. (Exports/Imports)
7. AD curve tends to slope ______________ with respect to income. (upward/downward)

Ans. **1.** flow **2.** positive **3.** open **4.** desired production
5. Excess capacity **6.** Exports **7.** upward

C. True or False

State whether the following statements are True or False:

1. Aggregate demand is never zero. (True/False)
2. AD is measured as the sum total of physical quantities of goods demanded in the economy. (True/False)

3. There is no government sector in a two sector closed economy. (True/False)

4. Producers purchase capital goods for purpose of investment. (True/False)

5. Total government expenditure includes government consumption expenditure and government investment expenditure. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** True **5.** True

D. Very Short Answer Questions

1. **What is aggregate demand?**

Ans. Aggregate demand refers to planned expenditure on the domestically produced goods and services during the period of an accounting year.

$$AD = C + I + G + X - M$$

2. **How is AD estimated in an economy?**

Ans. AD is estimated as the sum total of consumption expenditure and investment expenditure that the people wish to make (during the period of an accounting year) corresponding to different levels of income in the economy.

3. **What are the components of AD in an open economy?**

Ans. $AD = C + I + G + (X - M)$

(Here, C = Household consumption expenditure; I = Private investment expenditure; G = Government expenditure; X – M = Net exports.)

4. **Define AD schedule.**

Ans. AD schedule is a table showing AD corresponding to different levels of income in the economy.

5. **What is AD curve?**

Ans. AD curve is diagrammatic presentation of AD schedule, showing AD corresponding to different levels of Y (income) in the economy.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **In macroeconomics, aggregate demand refers to planned purchase of goods and services during a year.**

Ans. True. AD is the sum total of expenditure that the people plan or desire to incur on the purchase of goods and services produced in the economy during an accounting year.

2. **AD is measured not as the sum total of goods but as the sum total of planned expenditure on the goods during an accounting year.**

Ans. True. Because, it is not possible to add up physical quantities of the goods and services planned to be purchased by the people. Accordingly, AD is measured in terms of planned expenditure on the goods and services during an accounting year.

3. **The government makes collective consumption expenditure in a three sector economy.**

Ans. True. Collective consumption expenditure refers to public consumption expenditure or consumption expenditure on behalf of the society as a whole.

4. **Minimum level of expenditure is dependent of the level of income in the economy.**

Ans. False. Minimum level of expenditure is independent of the level of income in the economy.

5. **AD curve (indicating aggregate expenditure at different levels of income) slopes downward from left to right.**

Ans. False. AD curve (indicating aggregate expenditure at different levels of income) slopes upward from left to right. This is because expenditure is positively related to income.

6. **Exports in an open economy indicate demand for foreign goods.**

Ans. False. Exports in an open economy indicate demand for goods produced in the domestic economy.

7. **When exports = ₹ 40,000 and imports = ₹ 50,000, value of net exports will be equal to ₹ 10,000.**

Ans. False. We know that,

Net exports = Exports – Imports

When exports = ₹ 40,000 and imports = ₹ 50,000

Net exports = ₹ 40,000 – ₹ 50,000

= (–) ₹ 10,000

▶ CONSUMPTION FUNCTION AND SAVING FUNCTION

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **When C function shoots from Y-axis, it indicates that:**
   (*a*) consumption is zero when income is zero
   (*b*) saving is negative when income is zero
   (*c*) consumption is positive when income is zero
   (*d*) both (*b*) and (*c*)
2. **Consumption depends on:**
   (*a*) income
   (*b*) saving
   (*c*) investment
   (*d*) none of these
3. **Minimum level of consumption refers to:**
   (*a*) dependent consumption
   (*b*) independent consumption
   (*c*) autonomous consumption
   (*d*) both (*b*) and (*c*)
4. **Constant slope of S-line indicates that:**
   (*a*) S-line will be a straight line
   (*b*) saving function will be non-linear
   (*c*) saving function will be linear
   (*d*) both (*a*) and (*c*)
5. **When the saving line crosses the X-axis and income is zero:**
   (*a*) autonomous consumption is zero
   (*b*) autonomous consumption is positive
   (*c*) autonomous consumption is negative
   (*d*) none of these
6. **Propensity to consume is equal to:**
   (*a*) change in income to change in consumption
   (*b*) ratio between consumption and income
   (*c*) ratio between consumption and saving
   (*d*) none of these
7. **Average Propensity to Consume =**
   (*a*) $\frac{C}{Y}$
   (*b*) $\frac{\Delta C}{\Delta Y}$
   (*c*) $\frac{Y}{C}$
   (*d*) $\frac{\Delta Y}{\Delta C}$
8. **Propensity to save is the:**
   (*a*) additional income that is not be saved
   (*b*) ratio of saving to income
   (*c*) level of saving at which saving and consumption are equal
   (*d*) tendency of the consumer towards higher saving

9. **Marginal Propensity to Save =**

(a) $\frac{\Delta Y}{\Delta S}$ (b) $\frac{Y}{S}$

(c) $\frac{\Delta S}{\Delta Y}$ (d) $\frac{S}{Y}$

10. **$\bar{C}$ indicates:**

(a) consumption related to income

(b) consumption not related to income

(c) minimum consumption level even when income is zero

(d) both (b) and (c)

11. **Slope of Consumption Function =**

(a) $\frac{C}{Y}$ (b) $\frac{\Delta C}{\Delta Y}$

(c) $\frac{\Delta Y}{\Delta C}$ (d) $\frac{Y}{C}$

12. **Which of the following is correct?**

(a) APS = $\frac{S}{Y}$ (b) MPC = 1 – MPS

(c) APC + APS = 1 (d) All of these

13. **In the consumption function, 200 + 0.6Y, the value of autonomous saving will be:**

(a) 200 (b) –200

(c) 0.6 (d) 0.4

14. **When $\bar{C}$ = 75, MPC = 0.65 and Y = 1,500, consumption will be:**

(a) 900 (b) 975

(c) 1,050 (d) none of these

15. **When $\bar{C}$ = 50, MPC = 0.6 and Y = 800, value of saving will be:**

(a) 270 (b) 320

(c) 370 (d) none of these

Ans. **1.** (d) **2.** (a) **3.** (d) **4.** (d) **5.** (b) **6.** (b)
7. (a) **8.** (b) **9.** (c) **10.** (d) **11.** (b) **12.** (d)
13. (b) **14.** (c) **15.** (a)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Consumption function states that consumption is the function of ________. (income/employment)
2. ________ shows saving per unit of total income. (APS/MPS)
3. MPC + MPS = ________ (One/Zero)
4. Consumption function would be linear in case MPC is ________. (constant/rising)
5. ________ is the ratio between additional saving and additional income. (APC/MPS)

Ans. **1.** income **2.** APS **3.** One **4.** constant **5.** MPS

C. True or False

State whether the following statements are True or False:

1. The rate at which consumption increases is more than the rate at which income increases. (True/False)
2. The value of marginal propensity to consume can be greater than one. (True/False)
3. Slope of C-function is indicated by APC. (True/False)
4. If APC is 30%, then APS will be 70%. (True/False)
5. Negative saving is a situation in which consumption expenditure exceeds income. (True/False)

Ans. **1.** False **2.** False **3.** False **4.** True **5.** True

D. Very Short Answer Questions

1. **What is the consumption function?**

Ans. Consumption function refers to the functional relationship between consumption (C) and income (Y).

$$C = \overline{C} + bY$$

2. **Define autonomous consumption.**

Ans. Autonomous consumption refers to minimum level of consumption, even when income is zero. It is indicated by $\overline{C}$ in the consumption function:

$$C = \overline{C} + bY$$

3. **What is a linear consumption function?**

Ans. Linear consumption function is a straight line consumption function in which MPC remains constant.

4. **What is meant by propensity to consume?**

Ans. Propensity to consume refers to the proportion of income used as consumption expenditure. It is measured as the ratio between consumption and income.

5. **What is meant by average propensity to consume?**

Ans. Average propensity to consume is the ratio of aggregate consumption expenditure to aggregate income.

$$APC = \frac{C}{Y}$$

6. **Define marginal propensity to consume.**

Ans. Marginal propensity to consume is the ratio of change in consumption to change in income.

$$MPC = \frac{\Delta C}{\Delta Y}$$

7. **What determines the level of household consumption demand in an economy?**

Ans. The level of household consumption demand is determined by the income level of the household.

8. **What is the saving function?**

Ans. Saving function refers to the functional relationship between saving (S) and income (Y).

$$S = -\overline{C} + (1 - b)Y$$

Note:

$-\overline{C}$ refers to negative saving corresponding to $\overline{C}$ (consumption when Y = 0). It indicates the value of S when Y = 0.
It is '–' because C is positive when Y = 0.
(1 – b) refers to MPS (marginal propensity to save).

9. What is meant by propensity to save?

Ans. Propensity to save refers to the proportion of income which is kept as saving. It is expressed as the ratio between saving and income.

10. What is meant by average propensity to save?

Ans. Average propensity to save is the ratio of aggregate saving to aggregate income.

$$APS = \frac{S}{Y}$$

11. Define marginal propensity to save.

Ans. Marginal propensity to save is the ratio of change in saving to change in income.

$$MPS = \frac{\Delta S}{\Delta Y}$$

12. What is the relationship between average propensity to consume and average propensity to save?

Ans. Aggregate of average propensity to consume and average propensity to save is equal to one or APC + APS = 1.

13. What is the relationship between marginal propensity to consume and marginal propensity to save?

Ans. Aggregate of marginal propensity to consume and marginal propensity to save is equal to one or MPC + MPS = 1.

14. What is the value of marginal propensity to consume when marginal propensity to save is zero?

Ans. The value of marginal propensity to consume will be 1 (one).

15. What can be the maximum value of marginal propensity to save?

Ans. The maximum value of marginal propensity to save can be 1 (one).

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. When income is zero, consumption is also zero.

Ans. False. When income is zero, consumption is not zero. Because, there is always some minimum level of consumption in the economy even when income = 0 (zero).

2. Consumption depends on investment in the economy.

Ans. False. Consumption (C) depends on income (Y) in the economy. Higher level of Y often leads to higher level of C.

3. When consumption function is: C = 50 +0.6Y, C-line starts from the point of origin.

Ans. False. When consumption function is: C = 50 +0.6Y, C-line starts from the Y-axis because 50 in the equation points to minimum level of consumption even when income (Y) = 0.

4. When consumption function is: C = 40 +0.7Y, saving will be equal to –40 when Y = 0.

Ans. True. When Y = 0, autonomous consumption ($\bar{C}$) is 40. At zero level of Y, saving ($\bar{S}$) is equal to the negative expression of $\bar{C}$. Hence, when $\bar{C}$ = 40, $\bar{S}$ will be equal to –40.

5. Saving function would be linear in case MPS is found to be constant.

Ans. True. Saving function would be linear in case MPS is constant. This is because a linear saving function is a straight line saving function. The slope of a straight line is constant. And the slope is indicated by MPS. Constant MPS implies constant slope and therefore, a straight line linear saving function.

6. MPC is the ratio between total consumption (C) and total income (Y).

Ans. False. MPC is the ratio between change in total consumption (ΔC) and change in total income (ΔY).

$$MPC = \frac{\Delta C}{\Delta Y}$$

7. Value of average propensity to consume can be one.

Ans. True. Value of average propensity to consume (APC) can be one. It happens when consumption is equal to income. Thus, $\frac{C}{Y} = 1$ when C = Y.

8. MPC + MPS = 1.

Ans. True. We know that,

$$\text{MPC} = \frac{\Delta C}{\Delta Y} \text{ and MPS} = \frac{\Delta S}{\Delta Y}$$

$$\text{MPC} + \text{MPS} = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y}$$

$$= \frac{\Delta C + \Delta S}{\Delta Y}$$

$$= \frac{\Delta Y}{\Delta Y} \qquad (\because \Delta Y = \Delta C + \Delta S)$$

Or, $$\text{MPC} + \text{MPS} = 1$$

9. The value of marginal propensity to consume can be greater than one.

Ans. False. The value of marginal propensity to consume cannot be greater than one. It is because change in consumption cannot be greater than change in income.

10. The value of average propensity to save can be negative.

Ans. True. The value of average propensity to save (APS) can be negative. It happens when:

Consumption > Income

Or, when: $\text{APC} > 1$.

11. APS can be greater than one.

Ans. False. Because APS is the ratio between total saving and total income (APS = $\frac{S}{Y}$). And, total saving cannot be greater than total income during an accounting year. Saving is just a part of income. Putting differently, we can say that if APS > 1 then S must be greater than Y, in which case C must be negative. This can never ever happen.

12. MPC or MPS can be negative.

Ans. False. Neither MPC nor MPS can ever be negative. This is because MPC is the ratio between additional consumption (ΔC) and additional income (ΔY). Likewise, MPS is the ratio between additional saving (ΔS) and additional income (ΔY).

The ratio $\frac{\Delta C}{\Delta Y}$ refers to slope of C-function which is always positive (because of positive relationship between C and Y). Likewise, the ratio $\frac{\Delta S}{\Delta Y}$ refers to slope of S-function which is always positive (because of positive relationship between S and Y).

13. The value of marginal propensity to save can never be negative.

Ans. True. Marginal propensity to save is the ratio between additional saving and additional income which is always positive because of positive relationship between saving and income.

14. Average propensity to save is always greater than zero.

Ans. False. Average propensity to save is not always greater than zero. It can be negative in situations when saving is negative or when consumption is greater than income.

15. When the value of average propensity to save is negative, the value of marginal propensity to save will also be negative.

Ans. False. The value of average propensity to save (APS) is negative when consumption is greater than income but this does not mean that marginal propensity to save (MPS) will also be negative. In fact, MPS is never negative. Because it is the ratio between ΔS and ΔY and ΔS can never be negative, as a component of ΔY.

▶ EQUILIBRIUM OUTPUT/ EQUILIBRIUM GDP

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **In Keynesian Economics, equilibrium level of income implies:**
   (*a*) equilibrium level of output
   (*b*) equilibrium level of productivity
   (*c*) equilibrium level of employment
   (*d*) both (*a*) and (*c*)
2. **Aggregate supply refers to:**
   (*a*) desired level of output in the economy during an accounting year
   (*b*) the actual level of output in the economy during an accounting year
   (*c*) the level of GDP that the producers wish to produce during an accounting year
   (*d*) both (*a*) and (*c*)
3. **Equilibrium level of income/output is established when:**
   (*a*) AS = AD
   (*b*) S = I
   (*c*) both (*a*) and (*b*)
   (*d*) neither (*a*) nor (*b*)
4. **Desired saving during an accounting year is called:**
   (*a*) ex-ante saving
   (*b*) ex-post saving
   (*c*) actual saving
   (*d*) none of these
5. **In Keynesian theory, equilibrium GDP is discussed with reference to:**
   (*a*) market period
   (*b*) short period
   (*c*) long period
   (*d*) none of these
6. **Level of planned output coincides with planned expenditure when:**
   (*a*) AD = AS
   (*b*) AD > AS
   (*c*) AD < AS
   (*d*) all of these
7. **Perfectly elastic AS implies that:**
   (*a*) there is fuller utilisation of resources in the economy
   (*b*) there is unemployment of resources in the economy
   (*c*) there is excess capacity in the economy
   (*d*) both (*b*) and (*c*)
8. **The equilibrium level of GDP is determined when:**
   (*a*) $Y = \overline{C} + MPC\ (Y) - I$
   (*b*) $Y = \overline{C} + MPC\ (Y) + I$
   (*c*) $Y = \overline{C} - MPC\ (Y) - I$
   (*d*) $Y = \overline{C} - MPC\ (Y) + I$
9. **At the point of equilibrium:**
   (*a*) AD-line crosses the line of reference
   (*b*) AD-line is above the line of reference
   (*c*) AD-line is below the line of reference
   (*d*) none of these
10. **AD function is indicated by:**
    (*a*) the line C + I
    (*b*) the line C + S
    (*c*) the line Y
    (*d*) none of these
11. **In a situation of S < I:**
    (*a*) fall in expenditure through 'S' < rise in expenditure through 'I'
    (*b*) fall in expenditure through 'S' > rise in expenditure through 'I'
    (*c*) AD > AS
    (*d*) both (*a*) and (*c*)

12. **When the planned flow of goods and services in the economy is less than their planned demand:**

(a) AS = AD (b) AS > AD

(c) AS < AD (d) none of these

13. **Owing to injections, AD function shifts:**

(a) downwards (b) upwards

(c) rightwards (d) all of these

14. **At the equilibrium point when: C = 100 + 0.5Y and I = 200, saving will be:**

(a) 100 (b) 200

(c) 400 (d) none of these

15. **When C = 200 + 0.7Y and I = 5,500, equilibrium level of income is:**

(a) 4,050 (b) 5,500

(c) 19,000 (d) none of these

Ans. **1.** (d) **2.** (d) **3.** (c) **4.** (a) **5.** (b) **6.** (a) **7.** (d) **8.** (b) **9.** (a) **10.** (a) **11.** (d) **12.** (c) **13.** (b) **14.** (b) **15.** (c)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ______ refers to desired expenditure in the economy during an accounting year. (Aggregate demand/Aggregate supply)
2. Ex-ante saving is the ______ saving during the period of one year. (planned/actual)
3. In case aggregate supply is ______ than aggregate demand, the producers would suffer the loss of unfulfilled demand. (more/less)
4. According to saving-investment approach, equilibrium GDP is reached when ______. (S = I/S < I)
5. Keynes assumes that aggregate supply is ______. (perfectly elastic/perfectly inelastic)
6. ______ economy has no economic relations with rest of the world. (Closed/Open)
7. Increase in ______ leads to increase in the level of AD. (investment/saving)

Ans. **1.** Aggregate demand **2.** planned **3.** less **4.** S = I **5.** perfectly elastic **6.** Closed **7.** investment

C. True or False

State whether the following statements are True or False:

1. According to Keynesian Theory, technology remaining constant, there is one-to-one relationship between output and employment. (True/False)
2. Desired consumption expenditure is related to the level of income. (True/False)
3. Equilibrium GDP is reached only in a situation of full employment. (True/False)
4. Saving is positively related to income. (True/False)
5. In the context of income and employment equilibrium, saving and investment imply realised saving and realised investment. (True/False)

6. If AS < AD, then supply of goods and services tends to be greater than their demand. (True/False)
7. Aggregate supply refers to planned output in the economy. (True/False)

Ans. **1.** True **2.** True **3.** False **4.** True **5.** False
6. False **7.** True

D. Very Short Answer Questions

1. **What is aggregate supply?**

Ans. Aggregate supply refers to the planned production of goods and services in an economy during an accounting year.

2. **What is meant by equilibrium?**

Ans. Equilibrium is a situation when what the producers wish to produce (AS) is exactly equal to what the people wish to buy (AD) during an accounting year.

3. **What is equilibrium income?**

Ans. Equilibrium income is that level of income where AS = AD or when S = I.

4. **Can there be excess stocks in a state of equilibrium in the economy?**

Ans. No. There cannot be excess stocks in the economy in a state of equilibrium.

5. **Are inventory stocks zero when AS = AD?**

Ans. No. Only undesired inventory stocks are zero when AS = AD. Desired inventory stocks are maintained.

6. **What happens to undesired inventory stocks when AS > AD?**

Ans. Undesired inventory stocks tend to pile up when AS > AD.

7. **What are 'desired stocks' with the producers?**

Ans. Desired stocks refer to that level of stock where AS = AD and the producers are in a state of equilibrium.

8. **What are 'actual stocks' with the producers?**

Ans. Actual stocks include both desired as well as undesired stock.

9. **When are actual stocks greater than the desired stocks?**

Ans. Actual stocks are greater than the desired stocks when aggregate demand falls short of the expectations of the producers, and some output remains unsold.

10. **When are actual stocks less than the desired stocks?**

Ans. Actual stocks are less than the desired stocks when aggregate supply falls short of aggregate demand, and the producers suffer a loss due to unfulfilled demand.

11. **What is meant by ex-ante aggregate demand?**

Ans. Ex-ante aggregate demand refers to desired or planned expenditure of the people in the economy during an accounting year.

12. **What is meant by ex-ante aggregate supply?**

Ans. Ex-ante aggregate supply refers to the desired level of output in the economy during an accounting year. It is the level of GDP that the producers wish to produce (or plan to produce) during an accounting year.

13. **What is meant by ex-ante saving?**

Ans. Ex-ante saving refers to desired saving (or planned saving) at different levels of income in the economy.

14. **What is meant by ex-post saving?**

Ans. Ex-post saving refers to actual saving in the economy during the period of one year.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. In the Keynesian theory, technology changes as the level of output changes.

Ans. False. In the Keynesian theory, technology is assumed to remain constant.

2. Equilibrium GDP refers to that level of GDP where AD = AS but S > I.

Ans. False. Equilibrium GDP refers to that level of GDP where AD = AS as well as S = I.

3. When AD = AS, producers suffer the burden of unwanted supplies.

Ans. False. When AD = AS, the producers do not suffer the burden of unwanted supplies or unsold stocks. Because in such a situation, actual stocks with the producers = desired stocks with the producers.

4. Ex-ante saving and ex-ante investment are equal at the point of equilibrium.

Ans. True. Ex-ante investment is the investment expenditure which is intended to be made in the economy during the period of one year. Ex-ante saving is the saving which people intend to make in the economy during the period of one year. Equilibrium is struck when ex-ante saving (S) = ex-ante investment (I).

5. There are no exports in a closed economy.

Ans. True. A closed economy is the one which has no economic relations with the rest of the world. Accordingly, there are no exports in this economy.

6. AS is perfectly elastic owing to the excess supply in the economy.

Ans. False. AS is perfectly elastic owing to the existence of excess capacity in the economy.

7. AS increases proportionate to the increase in AD so long as there is excess capacity in the economy.

Ans. True. AS increases proportionate to the increase in AD so long as there is excess capacity in the economy. Because, excess capacity arises because of the deficiency of demand. So that, as demand increases, supply increases proportionately.

8. An economy can attain the maximum equilibrium GDP level even when excess capacity is not fully exhausted.

Ans. False. An economy can attain the maximum equilibrium GDP level only when excess capacity is fully exhausted or the level when there is full employment of resources in the economy.

9. When AS < AD, AS adjusts itself to AD.

Ans. True. When AS < AD, flow of goods and services in the economy tends to be less than their demand. The existing stocks of the producers would be sold out and the producers would suffer the loss of unfulfilled demand. To rebuild the desired stocks and avoid the loss of unfulfilled demand, the producers would plan greater production. AS would increase to become equal to AD. This is how AS converges with AD.

10. When S > I, level of income and employment tends to shrink.

Ans. True. In case S > I, it implies a situation when a fall in expenditure through 'S' is more than the rise in expenditure through 'I'. Accordingly, aggregate expenditure in the economy would be less than what is needed to buy the planned output. Stocks of the producers would be in excess of the desired stocks. Planned output for the subsequent year will fall. Level of income and employment will tend to shrink till the point when S = I.

11. In an economy, the equilibrium level of income is 800. The autonomous consumption is 70 and the investment expenditure is 250. Marginal propensity to consume in this economy will be 0.5.

Ans. False. Marginal propensity to consume in this economy will be 0.6.

Given, equilibrium level of income (Y) = 800

Autonomous consumption ($\overline{C}$) = 70

Investment expenditure (I) = 250

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\,(Y) + I$$

$\Rightarrow$ $$800 = 70 + MPC\,(800) + 250$$

$\Rightarrow$ $$800 = 320 + 800\,(MPC)$$

$\Rightarrow$ $$800\,(MPC) = 800 - 320$$

$\Rightarrow$ $$800\,(MPC) = 480$$

$\Rightarrow$ $$MPC = \frac{480}{800}$$

$\Rightarrow$ $$MPC = 0.6$$

Therefore, marginal propensity to consume in this economy will be 0.6.

12. In an economy, the investment expenditure is 600 and the consumption function is: C = 90 + 0.7Y. The economy is in equilibrium at an income level 2,000.

Ans. False. The economy is in equilibrium at an income level of 2,300.

Given, $C = 90 + 0.7Y$

Investment expenditure (I) = 600

At the equilibrium level,

$$Y = C + I$$

$\Rightarrow$ $$Y = 90 + 0.7Y + 600$$

$\Rightarrow$ $$Y = 690 + 0.7Y$$

$\Rightarrow$ $$Y - 0.7Y = 690$$

$\Rightarrow$ $$0.3Y = 690$$

$\therefore$ $$Y = \frac{690}{0.3} = 2{,}300$$

Thus, the economy is not in equilibrium. Because, the equilibrium level of income is 2,300 which is greater than the given income level of 2,000.

CONCEPT OF INVESTMENT AND MULTIPLIER

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. Ex-post investment refers to:
(*a*) actual investment in the economy during the period of one year
(*b*) desired investment during the period of one year
(*c*) planned investment during the period of one year
(*d*) none of these

2. Investment which changes as the level of income changes in the economy is called:
(*a*) autonomous investment (*b*) induced investment
(*c*) independent investment (*d*) both (*a*) and (*c*)

3. **Autonomous investment refers to that investment which is:**

(*a*) independent of the rate of interest in the economy
(*b*) independent of the level of GDP in the economy
(*c*) independent of the level of income in the economy
(*d*) all of these

4. **Investment multiplier is the ratio between:**

(*a*) income and investment (*b*) investment and income
(*c*) change in income and change in investment (*d*) change in investment and change in income

5. **The formula of multiplier is:**

(*a*) $\frac{1}{1-\text{MPC}}$ (*b*) $\frac{1}{\text{MPS}}$
(*c*) $\frac{\Delta Y}{\Delta I}$ (*d*) all of these

6. **The relationship between multiplier and MPC is:**

(*a*) direct (*b*) indirect
(*c*) one-to-one (*d*) none of these

7. **If investment increases by 40 and income increases by 120, the value of multiplier will be:**

(*a*) 4 (*b*) 3
(*c*) 2 (*d*) 1

8. **If MPC = 0.8, value of multiplier will be:**

(*a*) 2 (*b*) 3
(*c*) 4 (*d*) 5

9. **If MPS = 0, the value of multiplier is:**

(*a*) 0 (*b*) 1
(*c*) ∞ (*d*) none of these

10. **The value of multiplier lies between:**

(*a*) 0 and 1 (*b*) 0 and ∞
(*c*) –1 and 1 (*d*) 1 and ∞

11. **If investment increases from 250 to 370 and income increases from 1,800 to 3,000, the value of MPS will be:**

(*a*) 0.1 (*b*) 0.2
(*c*) 0.3 (*d*) 0.4

12. **When the level of saving increases by 500, income increases by 2,000, the value of multiplier will be:**

(*a*) 0.25 (*b*) 0.33
(*c*) 4 (*d*) 5

Ans.					
1. (*a*)	**2.** (*b*)	**3.** (*d*)	**4.** (*c*)	**5.** (*d*)	**6.** (*a*)
7. (*b*)	**8.** (*d*)	**9.** (*c*)	**10.** (*d*)	**11.** (*a*)	**12.** (*c*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Autonomous investment is __________ to the level of GDP. (related/not related)

2. Multiplier = __________. $\left(\frac{1}{\text{MPS}} \Big/ \frac{1}{1-\text{MPS}}\right)$

3. Due to multiplier effect, increase in income is __________ than the increase in investment. (more/less)

4. Multiplier and ______ are positively related.
(marginal propensity to save/marginal propensity to consume)
5. Increase in MPS implies ______ in the value of multiplier. (increase/decrease)
6. When the level of consumption increases by 750 and income increases by 1,000, value of multiplier will be ______. (4/5)
7. ______ investment includes both planned as well as unplanned investment.
(Ex-post/Ex-ante)

Ans. **1.** not related **2.** $\frac{1}{\text{MPS}}$ **3.** more **4.** marginal propensity to consume
5. decrease **6.** 4 **7.** Ex-post

C. True or False

State whether the following statements are True or False:

1. Ex-post investment refers to actual investment in the economy during the period of one year. (True/False)
2. Higher the MPS, greater will be the value of multiplier. (True/False)
3. Expenditure is an injection into the income generation process and saving is a leakage. (True/False)
4. If MPS = 0.25, value of multiplier will be 4. (True/False)
5. If investment falls, multiplier process will not work. (True/False)
6. There is a direct relationship between multiplier and MPC. (True/False)
7. Due to forward action of the multiplier, additional investment causes a multiple increase in income. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** True **5.** False **6.** True
7. True

D. Very Short Answer Questions

1. **What is investment?**

Ans. Investment is an addition to capital stock of the producers. It is also called capital formation.

2. **What is ex-ante investment?**

Ans. Ex-ante investment refers to desired (or planned) investment corresponding to different income levels in the economy.

3. **Define ex-post investment.**

Ans. Ex-post investment refers to actual investment in the economy during the period of one year.

4. **What is autonomous investment?**

Ans. Autonomous investment refers to investment which is independent of the level of income in the economy.

5. **Define induced investment.**

Ans. Induced investment refers to that investment which changes as the rate of interest changes or as the level of income changes in the economy.

6. **What is demand for private investment?**

Ans. Demand for private investment refers to planned investment expenditure by the private sector in the economy.

7. **What are the components of demand for private investment?**

Ans. Components of demand for private investment are: (*i*) desired or planned private fixed investment (like purchase of machinery), and (*ii*) desired increase in inventory stocks of the firms in private sector.

8. If in an economy investment is greater than saving, what is the effect on the national income?

Ans. If investment is greater than saving, the level of income will rise so long as full employment is not reached.

9. What happens to aggregate income in an economy in which intended saving exceeds intended investment?

Ans. If intended saving is greater than intended investment, aggregate income will tend to fall.

10. What is investment multiplier?

Ans. Investment multiplier is the ratio of a change in income to a given change in investment.

11. Give a formula of multiplier.

Ans. Multiplier (K) $= \frac{\Delta Y}{\Delta I} = \frac{1}{1 - MPC} = \frac{1}{MPS}$.

(Here, ΔY = Change in income; ΔI = Change in investment; MPC = Marginal propensity to consume; MPS = Marginal propensity to save.)

12. What is the minimum value of investment multiplier?

Ans. The minimum value of investment multiplier is equal to ONE.

13. What is the relationship between marginal propensity to save and multiplier?

Ans. There is an inverse relation between multiplier and marginal propensity to save (MPS). Higher is the value of MPS, lower is the value of multiplier and *vice versa* [Multiplier $= \frac{1}{MPS}$].

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Autonomous investment increases with increase in the level of income.

Ans. False. Because, autonomous investment does not change with any change in the level of income. It remains constant, no matter what the level of income is in the economy.

2. Ex-ante investment is the desired investment.

Ans. True. Ex-ante investment is the desired investment or planned investment. This is the investment expenditure which is intended to be made in the economy during the period of an accounting year.

3. Saving and investment are always equal.

Ans. False. Saving (S) and investment (I) can be realised (ex-post) or planned (ex-ante). Planned S and planned I are equal only at equilibrium level. Realised S and realised I are always equal.

4. There is an inverse relationship between the value of marginal propensity to save and investment multiplier.

Ans. True. Marginal propensity to save (MPS) and multiplier are negatively related. Higher the MPS, lower the multiplier and lower the MPS, higher the multiplier, as $K = \frac{1}{MPS}$. Saving is a leakage in the circular flow of income. Greater the saving, greater the leakage and lower the value of investment multiplier.

5. Value of multiplier $= \frac{1}{1 - MPS}$.

Ans. False. Value of multiplier (K) $= \frac{1}{1 - MPC} = \frac{1}{MPS}$. The proof is as under:

We know that, $$K = \frac{\Delta Y}{\Delta I} \quad \ldots(i)$$

We also know that, $$\Delta Y = \Delta C + \Delta I$$

Or, $$\Delta I = \Delta Y - \Delta C$$

Substituting the value of ΔI in equation (*i*), we get

$$K = \frac{\Delta Y}{\Delta Y - \Delta C}$$

Dividing right hand side of the equation by ΔY,

$$K = \frac{\frac{\Delta Y}{\Delta Y}}{\frac{\Delta Y}{\Delta Y} - \frac{\Delta C}{\Delta Y}} = \frac{1}{1 - \frac{\Delta C}{\Delta Y}}$$

$$= \frac{1}{1 - MPC} = \frac{1}{MPS} \qquad (\because MPS = 1 - MPC)$$

Hence verified.

6. When MPC = 0, the value of investment multiplier is also zero.

Ans. False. The value of investment multiplier (K) is 1, when MPC = 0.

We know, $$K = \frac{1}{1 - MPC}$$

When MPC = 0,

$$K = \frac{1}{1 - 0} = 1$$

7. Value of multiplier will be infinity if entire additional income is converted into additional consumption.

Ans. True. Because, in such a situation, $\Delta C = \Delta Y$ (or change in consumption = change in income) or that

$$MPC = \frac{\Delta C}{\Delta Y} = 1$$

Accordingly, K (or multiplier) would be:

$$K = \frac{1}{1 - MPC} = \frac{1}{1 - 1} = \frac{1}{0} = \infty$$

The multiplier value would tend towards infinity.

8. When marginal propensity to save is less than marginal propensity to consume, the value of investment multiplier will be greater than 5.

Ans. False. We know, MPC + MPS = 1. When MPS < MPC, the value of MPS can be anything less than 0.5 and greater than 0. Let us assume MPS = 0.4. The value of investment multiplier (K) in this case will be,

$$K = \frac{1}{1 - MPC} = \frac{1}{MPS}$$

$$= \frac{1}{0.4} = 2.5$$

Which is less than 5.

Similarly, when the value of MPS = 0.3, the value of K will be 3.33 which is less than 5 and when MPS = 0.2, K will be 5 which is also not greater than 5 but equal to 5.

Hence, only when the value of MPS is less than 0.2 that the value of investment multiplier will be greater than 5.

9. Value of investment multiplier varies between one and infinity.

Ans. True. Value of investment multiplier varies between one and infinity. The minimum value of investment multiplier is = 1, when MPC = 0. The maximum value of investment multiplier is = ∞, when MPC = 1.

In case MPC = 0,

$$K = \frac{1}{1-MPC}$$

$$= \frac{1}{1-0} = \frac{1}{1} = 1$$

In case MPC = 1,

$$K = \frac{1}{1-MPC}$$

$$= \frac{1}{1-1} = \frac{1}{0} = \infty$$

So that value of K (multiplier) always varies between 1 and ∞.

10. When as a result of increase in income from 1,600 to 2,600, investment increases by 400. The value of MPC will be equal to 0.4.

Ans. False. The value of MPC will be equal to 0.6.

Here, $\Delta Y = 2{,}600 - 1{,}600 = 1{,}000$ and $\Delta I = 400$

We know that, $$K = \frac{\Delta Y}{\Delta I}$$

$\Rightarrow$ $$K = \frac{1{,}000}{400} = 2.5$$

We also know that, $$K = \frac{1}{1 - MPC}$$

Or, $$1 - MPC = \frac{1}{K}$$

Or, $$1 - MPC = \frac{1}{2.5}$$

Or, $$1 - MPC = 0.4$$

Or, $$MPC = 1 - 0.4$$
$$= 0.6$$

EXCESS DEMAND, DEFICIENT DEMAND AND THEIR CORRECTION

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. A situation when AS = AD along with fuller utilisation of resources in the economy is called:

(*a*) underemployment equilibrium
(*b*) full employment equilibrium
(*c*) equilibrium without excess capacity
(*d*) both (*b*) and (*c*)

2. In case of underemployment equilibrium:

(*a*) AS = AD
(*b*) there is excess capacity in the economy
(*c*) resources are not fully utilised
(*d*) all of these

3. **Full employment:**
(*a*) is consistent with 'natural rate of unemployment'
(*b*) occurs when demand for labour force = supply of labour force
(*c*) is a situation of zero unemployment
(*d*) both (*a*) and (*b*)

4. **Problem of unemployment refers to:**
(*a*) the problem of voluntary unemployment
(*b*) the problem of involuntary unemployment
(*c*) both (*a*) and (*b*)
(*d*) neither (*a*) nor (*b*)

5. **Excess demand refers to a situation when:**
(*a*) AD > AS (corresponding to full employment level)
(*b*) AD < AS (corresponding to full employment level)
(*c*) AS > AD (corresponding to underemployment level)
(*d*) none of these

6. **Deficient demand leads to:**
(*a*) deflationary gap
(*b*) excess capacity
(*c*) low level of employment
(*d*) all of these

7. **Planned AD is short of its full employment level in a situation of:**
(*a*) excess demand
(*b*) deficient demand
(*c*) inflationary gap
(*d*) none of these

8. **Inflationary gap is measured as:**
(*a*) $AD_E + AD_F$
(*b*) $AD_E - AD_F$
(*c*) $AD_E \times AD_F$
(*d*) $AD_E \div AD_F$
(Here, AD_E = Aggregate demand beyond full employment; AD_F = Aggregate demand at full employment.)

9. **Aggregate demand falls owing to:**
(*a*) increase in exports
(*b*) increase in consumption expenditure
(*c*) increase in imports
(*d*) both (*a*) and (*c*)

10. **Fiscal policy refers to:**
(*a*) revenue and expenditure policy of the government
(*b*) budgetary policy of the the government
(*c*) both (*a*) and (*b*)
(*d*) neither (*a*) nor (*b*)

11. **The policy which corrects the situations of excess and deficient demand by regulating interest rate and availability of credit in the economy is called:**
(*a*) fiscal policy
(*b*) monetary policy
(*c*) budgetary policy
(*d*) all of these

12. **In order to correct the situation of excess demand:**
(*a*) cost of credit is raised
(*b*) availability of credit is raised
(*c*) availability of credit is reduced
(*d*) both (*a*) and (*c*)

13. **By increasing the tax burden on the producers, the government intends to:**
(*a*) correct the situation of deficient demand
(*b*) correct the situation of inflationary gap
(*c*) correct the situation of excess demand
(*d*) both (*b*) and (*c*)

14. **Which of the following can be used to correct inflationary gap?**
(*a*) Increase in taxation
(*b*) Cut in the cost of credit
(*c*) Cut in government expenditure
(*d*) both (*a*) and (*c*)

15. **Which of the following can be used to correct deflationary gap?**
   (*a*) Increase in bank rate
   (*b*) Increase in CRR
   (*c*) Reduction in SLR
   (*d*) Increase in margin requirement

Ans. **1.** (*d*) **2.** (*d*) **3.** (*d*) **4.** (*b*) **5.** (*a*) **6.** (*d*) **7.** (*b*) **8.** (*b*) **9.** (*c*) **10.** (*c*) **11.** (*b*) **12.** (*d*) **13.** (*d*) **14.** (*d*) **15.** (*c*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. In a situation of deficient demand, ________________. (AD > AS/AD < AS)
2. In a situation of ________________ equilibrium, there is no excess capacity or unemployment in the economy. (full employment/underemployment)
3. In a situation of ________________ unemployment some people are not getting work, even when they are willing to work at the existing wage rate. (voluntary/involuntary)
4. A rise in ________________ leads to a fall in AD. (imports/exports)
5. The minimum rate of unemployment that must always exist in the economy is called ________________ rate of unemployment. (natural/voluntary)
6. ________________ gap is measured in terms of excess demand. (Inflationary/Deflationary)
7. A cut in ________________ leads to a cut in AD. (government consumption expenditure/tax rate)
8. Inflationary gap can be corrected by ________________ the bank rate. (raising/lowering)
9. With a view to correcting deficient demand, supply of credit is ________________. (reduced/increased)
10. ________________ money policy is pursued to curb excess demand. (Dear/Cheap)

Ans. **1.** AD < AS **2.** full employment **3.** involuntary **4.** imports **5.** natural **6.** Inflationary **7.** government consumption expenditure **8.** raising **9.** increased **10.** Dear

C. True or False

State whether the following statements are True or False:

1. Problem of unemployment is the problem of voluntary unemployment. (True/False)
2. Structural unemployment occurs because of the long-term decline of certain industries. (True/False)
3. AD is in excess when there is excess capacity in the economy. (True/False)
4. Deficiency of demand creates deflationary gap in the economy. (True/False)
5. Due to excess demand, the market value of goods and services tends to decline. (True/False)
6. Full employment does not mean a situation of zero unemployment. (True/False)
7. In a situation of excess demand, opportunities of employment tend to rise in the economy. (True/False)
8. Monetary policy is pursued by the central bank of a country. (True/False)
9. Securities are sold by the Reserve Bank of India to soak liquidity. (True/False)
10. Fall in public debt reduces liquidity with the people. (True/False)

Ans. **1.** False **2.** True **3.** False **4.** True **5.** False **6.** True **7.** False **8.** True **9.** True **10.** False

D. Very Short Answer Questions

1. What is full employment equilibrium?

Ans. Full employment equilibrium refers to that situation in the economy when AS = AD along with fuller utilisation of resources.

2. What is underemployment equilibrium?

Ans. Underemployment equilibrium refers to that situation in the economy when AS = AD but full employment is not achieved.

3. Define full employment.

Ans. Full employment refers to a situation in which all those who are able to work and are willing to work at the existing wage rate get work.

4. What is voluntary unemployment?

Ans. Voluntary unemployment is a situation in which a worker is not willing to work at the existing rate of wage.

5. What is involuntary unemployment?

Ans. Involuntary unemployment is a situation in which a worker is willing to work at the existing rate of wage but does not get work.

6. What is the natural rate of unemployment?

Ans. Natural rate of unemployment refers to the minimum rate of unemployment which always exists in the economy even when labour market is in a state of equilibrium.

7. Define frictional unemployment.

Ans. Frictional unemployment is that unemployment which is associated with changing the jobs in a dynamic economy.

8. Define structural unemployment.

Ans. Structural unemployment is that unemployment which is associated with structural changes in the economy, like change in technology.

9. Does full employment mean zero unemployment?

Ans. Full employment does not mean a situation of zero unemployment. Natural rate of unemployment (minimum rate of unemployment) always exists in the economy.

10. When does a situation of excess demand arise in an economy?

Ans. Excess demand arises when AD is in excess of AS corresponding to full employment in an economy.

11. When does a situation of deficient demand arise in an economy?

Ans. Deficient demand arises when AD is short of AS corresponding to full employment in an economy.

12. What is meant by inflationary gap?

Ans. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy.

13. What is meant by deflationary gap?

Ans. Deflationary gap refers to a situation of deficiency of demand when aggregate demand is short of aggregate supply corresponding to full employment level.

14. What do you mean by fiscal policy?

Ans. Fiscal policy is the revenue and expenditure policy of the government with a view to combat the situation of inflationary or deflationary gap in the economy.

15. What do you mean by monetary policy?

Ans. Monetary policy refers to that policy which corrects the situations of excess and deficient demand by regulating interest rate and availability of credit in the economy.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. In the situation of underemployment equilibrium, there is no unutilised capacity in the economy.

Ans. False. Underemployment equilibrium refers to that situation in the economy when AS = AD but without fuller utilisation of resources. Accordingly, there is unutilised capacity or excess capacity in the economy.

2. Full employment implies there is zero unemployment in the economy.

Ans. False. Full employment does not imply that there is zero unemployment in the economy. Some people may not be willing to work at all, or not willing to work at the existing wage rate. Also, some natural rate of unemployment always exists in the economy.

3. The economy fails to create enough jobs under involuntary unemployment.

Ans. True. Involuntary unemployment occurs when some people are not getting work, even when they are willing to work at the existing wage rate. In such a situation, the economy fails to create enough jobs because planned output is lower than the full employment level of output. This may be owing to the lack of aggregate demand.

4. The problem of unemployment means the problem of voluntary unemployment.

Ans. False. The problem of unemployment means the problem of involuntary unemployment. It refers to those people who are able to work and are willing to work at the existing wage rate, but are not getting work.

5. In a situation of deficient demand, there is underemployment equilibrium in the economy.

Ans. True. Because owing to deficient AD, equilibrium between desired AD and desired AS is struck at a lower level of GDP, lower than full employment in the economy. This is a situation of underemployment equilibrium.

6. Under deflationary gap, voluntary unemployment occurs in the economy.

Ans. False. Under deflationary gap, involuntary unemployment occurs in the economy.

7. Excess demand refers to the situation when AD > AS, corresponding to underemployment in the economy.

Ans. False. Excess demand refers to the situation when aggregate demand (AD) is in excess of aggregate supply (AS) corresponding to full employment in the economy.

8. Excess demand raises the market value of the output.

Ans. True. Excess demand raises the market value of the output. Because in a situation of excess demand, output level remaining constant, higher demand (higher than the supply) leads to a rise in the general price level. Implying a situation when market value of the output increases in the economy.

9. Price and output increase in a situation of inflationary gap.

Ans. False. Inflationary gap is the excess of AD over and above its level required to maintain full employment equilibrium in the economy. Inflationary gap generates extra pressure on the existing flow of goods and services at the level of full employment. Accordingly, prices tend to rise but output will not increase. Output remains constant corresponding to full employment level in the economy.

10. Fiscal policy focuses on economic stability and economic growth.

Ans. True. Fiscal policy focuses on economic stability and economic growth. Stability is achieved by correcting the situations of excess demand (inflationary gap) and deficient demand (deflationary gap). Growth is achieved by way of lower taxation and higher subsidies to the producers.

11. Excess demand can be corrected by increasing the government expenditure.

Ans. False. Excess demand can be corrected by reducing the government expenditure. A reduction in government expenditure (particularly) non-development expenditure like on defence, law & order and subsides will cause an overcall cut in aggregate demand. So that excess aggregate demand is corrected.

12. Central bank buys government securities in the open market to correct the situation of inflationary gap.

Ans. False. Central bank sells government securities in the open market to correct the situation of inflationary gap. It is by selling the securities that the bank soaks liquidity from the market which is expected to correct the inflationary gap.

13. Repo rate is reduced to correct the situation of deficient demand.

Ans. True. To correct the situation of deficient demand, repo rate is reduced. As a follow-up action, the commercial banks lower the market rate of interest (the rate at which the commercial banks lend money to the consumers and the investors). This increases demand for credit. Consequently, consumption expenditure and investment expenditure are increased. Implying a expansion in aggregate demand, as required to correct deficient demand.

14. SLR is increased to correct the situation of deflationary gap.

Ans. False. SLR is decreased to correct the situation of deflationary gap. Lower SLR increases credit creation capacity of the commercial banks. Because a cut in the SLR raises cash balances with the commercial banks. Accordingly, availability of credit increases in the capital market. This increases aggregate demand and deflationary gap is corrected.

3. HOTS & Applications

1. What does MPC refer to in a diagram showing consumption function or consumption line?

Ans. In a diagram showing consumption function or consumption line, MPC refers to the slope of consumption line.

2. Does an excess of AD over AS always imply a situation of inflationary gap?

Ans. No, excess of AD over AS does not always imply a situation of inflationary gap. Inflationary gap occurs only when AD is more than AS corresponding to the full employment level of output.

3. Find saving function when consumption function is gives as: C = 1,000 + 0.6Y.

Ans. We know, saving function is

$$S = -\overline{C} + (1 - MPC)Y$$

So that,

$$S = -1{,}000 + (1 - 0.6)Y$$
$$= -1{,}000 + 0.4Y$$

4. What happens if AD > AS prior to the full employment level of output?

Ans. Excess of AD over AS prior to the full employment level of output refers to the state of disequilibrium in the economy. AD being greater than AS, producers have to cater to demand out of their existing stock of goods. Implying that the desired level of stocks will decrease, inducing greater production and therefore, increase in AS. Increase in AS will continue till the equilibrium is struck between AD and AS.

5. Write an equation of equilibrium level of income. Spell out C-function in this equation.

Ans. Equation showing equilibrium level of income:

$$Y = C + I$$

When C-function is described, the equilibrium equation becomes as under:

$$Y = \overline{C} + bY + I$$

Here, Y = Equilibrium level of income.

$\overline{C}$ = Constant consumption or consumption level when Y = 0.

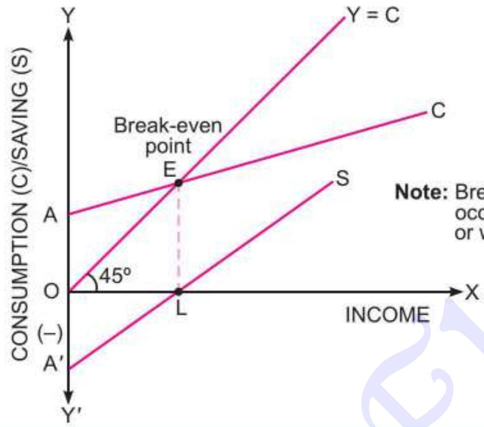
b = Marginal propensity to consume.

Y = Level of income.

I = Level of investment.

6. Draw consumption curve and saving curve in a single diagram and mark the 'break-even point'.

Ans. FIGURE 1



In **Fig. 1**, C is the consumption curve and S is the saving curve. OA is the minimum consumption when income level is zero and OA′ is negative saving when income is zero. At point E, consumption is equal to income and saving is equal to zero. This is called the break-even point.

7. In an economy, an increase in investment leads to 3-time increase in national income. Calculate marginal propensity to consume.

Ans. Increase in income = 3-time the increase in investment

Or, $\Delta Y = 3\Delta I$

Or, $\dfrac{\Delta Y}{\Delta I} = 3$

Thus, Multiplier (K) = 3 $\left(K = \dfrac{\Delta Y}{\Delta I}\right)$

We know,

$$K = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 3 = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 3(1 - MPC) = 1$$

$$\Rightarrow \quad 1 - MPC = \frac{1}{3}$$

$$\Rightarrow \quad 1 - MPC = 0.33$$

$$\Rightarrow \quad MPC = 1 - 0.33$$

$$= 0.67$$

Marginal propensity to consume = 0.67.

8. In an economy, an increase in investment leads to increase in national income which is three times more than the increase in investment. Calculate marginal propensity to consume.

Ans. Increase in income = 3 times more than the increase in investment + Increase in investment

Or, $\Delta Y = 3\Delta I + \Delta I$

Or, $\Delta Y = 4\Delta I$

Or, $$4 = \frac{\Delta Y}{\Delta I}$$

Thus, Multiplier (K) = 4 $\left(K = \frac{\Delta Y}{\Delta I}\right)$

We know,

$$K = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 4 = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 4(1 - MPC) = 1$$

$$\Rightarrow \quad 1 - MPC = \frac{1}{4}$$

$$\Rightarrow \quad 1 - MPC = 0.25$$

$$\Rightarrow \quad MPC = 1 - 0.25 = 0.75$$

Marginal propensity to consume = 0.75.

[Note: In Q. 8, income (Y) increases 3 times MORE than the increase in investment (I). This implies that increase in Y = ΔI + 3ΔI.

In Q. 7, income (Y) increases 3-time the increase in investment (I). This means that Y increases by a factor of 3. So that ΔY = 3ΔI.]

9. In an economy the autonomous investment is 360 and the marginal propensity to save is 0.3. If the equilibrium level of income is 1,400, then the autonomous consumption is 40. True or False? Justify your answer.

Ans. No, it is not true.

Given, autonomous investment = 360

Marginal propensity to save (MPS) = 0.3

Equilibrium level of income (Y) = 1,400

Marginal propensity to consume (MPC) = 1 – MPS

= 1 – 0.3 = 0.7

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\,(Y) + \overline{I}$$

$$\Rightarrow \quad 1{,}400 = \overline{C} + 0.7\,(1{,}400) + 360$$

$$\Rightarrow \quad 1{,}400 = \overline{C} + 980 + 360$$

$$\Rightarrow \quad 1{,}400 = \overline{C} + 1{,}340$$

$$\Rightarrow \quad \overline{C} = 1{,}400 - 1{,}340$$

$$\Rightarrow \quad \overline{C} = 60$$

Thus, it is proved that the given statement is false. The autonomous consumption = 60.

10. If in an economy saving function is given by S = (–) 50 + 0.2Y and Y = ₹ 2,000 crore; consumption expenditure for the economy would be ₹ 1,650 crore and the autonomous investment is ₹ 50 crore and the marginal propensity to consume is 0.8. True or False? Justify your answer with proper calculations. *[CBSE Sample Paper 2016]*

Ans. No, it is not true for all the values.

Given, saving function, S = (–) 50 + 0.2Y

Equilibrium level of income (Y) = 2,000

Marginal propensity to save (MPS) = 0.2

When $Y = 2{,}000$, $S = (-)\,50 + 0.2\,(2{,}000)$

$S = (-)\,50 + 400$

$S = 350$

At the equilibrium level, $S = I$

$\therefore$ $I = 350$ $(\because\ S = 350)$

We know that, $Y = C + S$

Or, $C = Y - S$

$= 2{,}000 - 350$

$= 1{,}650$

Marginal propensity to consume (MPC) $= 1 - \text{MPS}$

$= 1 - 0.2$

$= 0.8$

Consumption expenditure = ₹ 1,650 crore.

Autonomous investment = ₹ 350 crore.

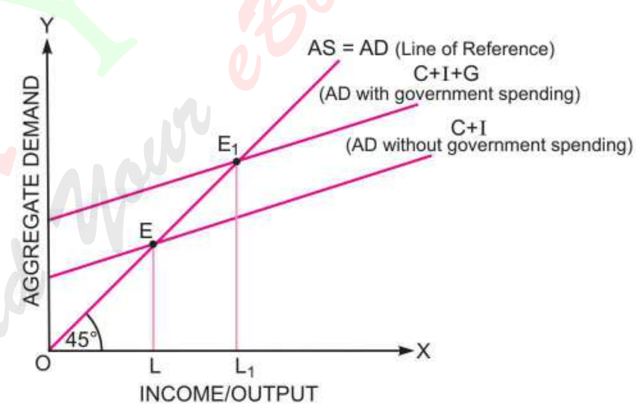
Marginal propensity to consume = 0.8.

11. Show diagrammatically, the effect on equilibrium level of income/output, of government spending.

Ans. Fig. 2 illustrates how government spending affects equilibrium level of income. It is assumed that like investment expenditure, government spending is also autonomous of the level of income. So that, government spending is indicated by a straight line above and parallel to the existing AD function.

Thus, C + I + G is above and parallel to the C + I line because G is assumed to be autonomous of income. Owing to upward shift in AD, equilibrium shifts from point E to E_1. Equilibrium level of income increases from OL to OL_1.

FIGURE 2



Government Spending Multiplier

It is the ratio between increase in income (ΔY) and increase in government spending (ΔG).

$$K_g = \frac{\Delta Y}{\Delta G} = \frac{1}{1-b} = \frac{1}{1-\text{MPC}}, \text{ where } K_g = \text{Government spending multiplier.}$$

12. If MPC = 0.5, and increase in investment is ₹ 1,000, how much is the total increase in income. Explain the process how income changes as a consequence of change in investment.

Ans. We know,

$$K\ (\text{Multiplier}) = \frac{1}{1-\text{MPC}}$$

$$= \frac{1}{1-0.5} = \frac{1}{0.5} = 2$$

Increase in income (ΔY) is K times the increase in investment (ΔI).

So that, $\Delta Y = K \cdot \Delta I$

Or, $\Delta Y = 2 \times 1{,}000 = ₹\ 2{,}000$

Process of Change in Income (also called Multiplier Process)

As a consequence of $\Delta I = ₹\ 1{,}000$, increase in income occurs in various rounds as under:

Round 1	$\Delta Y = 1\ (1{,}000) = 1{,}000$	Because expenditure of ₹ 1,000 becomes income of the households.
Round 2	$\Delta Y = 0.5\ (1{,}000) = 500$	Because out of ₹ 1,000, households spend 0.5 (1,000) = 500
Round 3	$\Delta Y = 0.5^2\ (1{,}000) = 250$	Because out of 500, households spend 0.5 (500) = $(0.5)^2$ 1,000 = 250
Round 4	$\Delta Y = 0.5^3\ (1{,}000) = 125$	Because out of 250, households spend 0.5 (250) = $(0.5)^3$1,000 = 125.

and so on ....

The process of income generation continues in an infinite geometric progression, which can be expressed as under:

$$\begin{aligned}
\Delta Y = {} & 1 \times 1{,}000 && \text{round 1}\\
& + (0.5) \times 1{,}000 && \text{round 2}\\
& + (0.5)^2 \times 1{,}000 && \text{round 3}\\
& + (0.5)^3 \times 1{,}000 && \text{round 4}\\
& + (0.5)^4 \times 1{,}000 && \text{round 5}\\
& + \ldots\ldots\ldots\ldots\ldots\\
= {} & \frac{1}{1-MPC} \times 1{,}000\\
= {} & \frac{1}{1-0.5} \times 1{,}000\\
= {} & \frac{1}{0.5} \times 1{,}000\\
= {} & 2 \times 1{,}000\\
= {} & ₹\ 2{,}000
\end{aligned}$$

4. Analysis & Evaluation

1. Shouldn't greater saving imply greater investment and greater flow of goods and services?

Ans. Relationship between greater saving and greater investment holds good in poor economies where what is lacking is the capacity to produce or aggregate supply in relation to aggregate demand. It does not hold good in affluent economies where what is lacking is aggregate demand or AD in relation to aggregate supply. In these economies, greater saving would mean lesser consumption, lesser demand and lesser production even when capacity to produce exists in the economy.

2. Examine the economic implications of increase in government investment expenditure when the economy is in a state of depression.

Ans. During depression, the economy faces a deficient demand situation. To correct this situation, the government takes various fiscal measures. Increase in government investment expenditure is the principal instrument to correct the deficiency of demand. Increase in government investment expenditure acts as a 'pump priming' when the inducement to invest is low, owing to deficiency of demand. It breaks the vicious circle of 'low demand → low inducement to invest → low production → low income → low demand'. The economy is pulled out of the state of depression. The GDP growth accelerates in response to increase in AD, triggered by increase in government investment expenditure.

3. If government spending leads to multiple times increase in GDP, why should fiscal deficit be curbed?

Ans. Government spending leads to multiple times increase in GDP only when there is excess capacity in the economy or when planned output is low owing to lack of aggregate demand (AD). But, in situations when excess capacity does not exist (or when AD is not deficient), government spending would only contribute to inflationary spiral in the economy. In such situations (when inflation needs to be curbed), the government must curb fiscal deficit.

4. "Economists are generally concerned about the rising marginal propensity to save (MPS) in an economy". Explain why? *[CBSE Sample Paper 2016]*

Ans. It is true that the economists are generally concerned about the rising marginal propensity to save (MPS). This is because rising MPS implies falling MPC (marginal propensity to consume). A cut in MPC leads to a cut in the rate at which consumption increases when income rises. This leads to a fall in the rate at which AD rises. A fall in the rate of rise in AD will lead to a fall in investment. Because, demand is a significant determinant of investment by the producers. Ultimately this would mean a fall in the rate of GDP growth.

Also, lower MPS implies lower value of multiplier.

5. Keynesian theory tells us that inflationary gap emerges only after full employment is reached. But, in India we often find high rate of inflation along with high rate of unemployment. How do you explain this paradox?

Ans. Keynesian theory is related to the problem of developed economies. In these economies, unemployment occurs because of the lack of aggregate demand (AD). Lack of AD leads to a cut in planned output. Accordingly, lay-off occurs and excess capacity emerges. In such situations, increase in expenditure (implying increase in AD) would lead to increase in planned output, without any increase in the price level. The inflationary gap would emerge only when AD continues to rise even when excess capacity is totally exhausted and full employment is reached.

In less developed countries like India, unemployment occurs not because of the lack of AD, because of the lack of production capacity or the lack of capital. Unlike developed countries, there is no excess capacity in less developed countries like India. Accordingly, price level starts rising following increase in AD, even when there is unemployment in the economy.

CBSE QUESTIONS (2015–2019) & ANSWERS

1. What is 'aggregate supply' in macroeconomics? *[CBSE Delhi 2015]*

Or

Define aggregate supply. *[CBSE 2018]*

Ans. Aggregate supply refers to the flow of goods and services in an economy during one year. This is ex-ante output during the year, or the output which the producers intend to produce during the year.

2. The value of multiplier is: (choose the correct alternative) *[CBSE Delhi 2015]*

(*a*) $\frac{1}{\text{MPC}}$ (*b*) $\frac{1}{\text{MPS}}$

(*c*) $\frac{1}{1-\text{MPS}}$ (*d*) $\frac{1}{\text{MPC}-1}$

Ans. (*b*)

3. An economy is in equilibrium. Calculate national income from the following:

Autonomous consumption = 100.

Marginal propensity to save = 0.2.

Investment expenditure = 200. *[CBSE Delhi 2015]*

Ans. Given, autonomous consumption ($\overline{C}$) = 100

Marginal propensity to save (MPS) = 0.2

Investment expenditure (I) = 200

Marginal propensity to consume (MPC) = 1 – MPS = 1 – 0.2 = 0.8

At the equilibrium level,

$$Y = C + I$$

Or, $Y = \overline{C} + MPC(Y) + I$

$\Rightarrow$ $Y = 100 + 0.8Y + 200$

$\Rightarrow$ $Y = 300 + 0.8Y$

$\Rightarrow$ $Y - 0.8Y = 300$

$\Rightarrow$ $0.2Y = 300$

$\Rightarrow$ $Y = \frac{300}{0.2} = 1{,}500$

National income = 1,500.

4. An economy is in equilibrium. Find 'autonomous consumption' from the following:

National income = 1,000.

Marginal propensity to consume = 0.8.

Investment expenditure = 100. *[CBSE Delhi 2015]*

Ans. Given, national income (Y) = 1,000

Marginal propensity to consume (MPC) = 0.8

Investment expenditure (I) = 100

At the equilibrium level,

$$Y = C + I$$

Or, $Y = \overline{C} + MPC(Y) + I$

$\Rightarrow$ $1{,}000 = \overline{C} + 0.8(1{,}000) + 100$

$\Rightarrow$ $1{,}000 = \overline{C} + 800 + 100$

$\Rightarrow$ $1{,}000 = \overline{C} + 900$

$\Rightarrow$ $\overline{C} = 1{,}000 - 900 = 100$

Autonomous consumption = 100.

5. An economy is in equilibrium. Find marginal propensity to consume from the following:

National income = 2,000.

Autonomous consumption = 400.

Investment expenditure = 200. *[CBSE Delhi 2015]*

Ans. Given, national income (Y) = 2,000

Autonomous consumption ($\overline{C}$) = 400

Investment expenditure (I) = 200

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\,(Y) + I$$

$$\Rightarrow \quad 2{,}000 = 400 + MPC\,(2{,}000) + 200$$

$$\Rightarrow \quad 2{,}000 = 600 + 2{,}000\,(MPC)$$

$$\Rightarrow \quad 2{,}000\,(MPC) = 2{,}000 - 600$$

$$\Rightarrow \quad 2{,}000\,(MPC) = 1{,}400$$

$$\Rightarrow \quad MPC = \frac{1{,}400}{2{,}000} = 0.7$$

Marginal propensity to consume = 0.7.

6. Explain the concept of inflationary gap. Explain the role of repo rate in reducing this gap. *[CBSE Delhi 2015]*

Ans. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy. It causes excess demand in the economy. Owing to excess demand, price level tends to rise without any rise in the level of income or employment in the economy.

Repo rate is the rate at which the central bank lends money to the commercial banks. To correct the situation of inflationary gap, repo rate is increased. As a follow-up action, the commercial banks raise the market rate of interest (the rate at which the commercial banks lend money to the consumers and the investors). This reduces demand for credit. Consequently, consumption expenditure and investment expenditure are reduced. Implying a reduction in aggregate demand, as required to correct inflationary gap.

7. Explain the concept of deflationary gap and the role of 'open market operations' in reducing this gap. *[CBSE Delhi 2015]*

Ans. Deflationary gap is the shortfall in aggregate demand from the level required to maintain full employment equilibrium in the economy. It causes deficient demand in the economy. Owing to deficient demand, planned level of output is reduced. Along with reduction in the level of output, level of income and employment also tend to reduce. The economy is driven into a state of low level equilibrium trap.

Open market operations is the policy that focuses on increasing and decreasing the stock of liquidity (or cash balances) with the people as well as with the commercial banks, through sale and purchase of securities by the central bank. During the situation of deflationary gap, when cash balances need to be increased (to stimulate the level of aggregate demand), the central bank starts buying securities. Purchase of securities injects purchasing power into the money market. Cash balances of the commercial banks start picking up. This enhances their capacity to create credit. Flow of credit increases, leading to increase in AD and deflationary gap is corrected.

8. What is 'aggregate demand' in macroeconomics? *[CBSE (AI) 2015]*

Ans. Aggregate demand is the total demand for goods and services in an economy, measured in terms of total expenditure.

9. If MPC = 1, the value of multiplier is: (choose the correct alternative) *[CBSE (AI) 2015]*

(*a*) 0 (*b*) 1

(*c*) between 0 and 1 (*d*) infinity

Ans. (*d*)

10. An economy is in equilibrium. Calculate the investment expenditure from the following:

National income = 800.

Marginal propensity to save = 0.3.

Autonomous consumption = 100. *[CBSE (AI) 2015]*

Ans. Given, national income (Y) = 800

Marginal propensity to save (MPS) = 0.3

Autonomous consumption ($\overline{C}$) = 100

Marginal propensity to consume (MPC) = 1 – MPS

$= 1 - 0.3 = 0.7$

At the equilibrium level,

$$Y = C + I$$

Or, $Y = \overline{C} + MPC\ (Y) + I$

$\Rightarrow$ $800 = 100 + 0.7\ (800) + I$

$\Rightarrow$ $800 = 100 + 560 + I$

$\Rightarrow$ $800 = 660 + I$

$\Rightarrow$ $I = 800 - 660 = 140$

Investment expenditure = 140.

11. An economy is in equilibrium. Calculate the marginal propensity to save from the following:

National income = 1,000.

Autonomous consumption = 100.

Investment = 120. *[CBSE (AI) 2015]*

Ans. Given, national income (Y) = 1,000

Autonomous consumption ($\overline{C}$) = 100

Investment (I) = 120

At the equilibrium level,

$$Y = C + I$$

Or, $Y = \overline{C} + MPC\ (Y) + I$

$\Rightarrow$ $1{,}000 = 100 + MPC\ (1{,}000) + 120$

$\Rightarrow$ $1{,}000 = 220 + 1{,}000\ (MPC)$

$\Rightarrow$ $1{,}000\ (MPC) = 1{,}000 - 220$

$\Rightarrow$ $1{,}000\ (MPC) = 780$

$\Rightarrow$ $MPC = \frac{780}{1{,}000} = 0.78$

$\Rightarrow$ $MPS = 1 - MPC$

$\Rightarrow$ $MPS = 1 - 0.78 = 0.22$

Marginal propensity to save = 0.22.

12. An economy is in equilibrium. Calculate the national income from the following:

Autonomous consumption = 120.

Marginal propensity to save = 0.2.

Investment expenditure = 150. *[CBSE (AI) 2015]*

Ans. Given, autonomous consumption ($\overline{C}$) = 120

Marginal propensity to save (MPS) = 0.2

Investment expenditure (I) = 150

Marginal propensity to consume (MPC) = 1 – MPS

$= 1 - 0.2 = 0.8$

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\ (Y) + I$$

$\Rightarrow$ $$Y = 120 + 0.8Y + 150$$

$\Rightarrow$ $$Y = 270 + 0.8Y$$

$\Rightarrow$ $$Y - 0.8Y = 270$$

$\Rightarrow$ $$0.2Y = 270$$

$\Rightarrow$ $$Y = \frac{270}{0.2} = 1{,}350$$

National income = 1,350.

13. What is 'deficient demand'? Explain the role of 'bank rate' in removing it. *[CBSE (AI) 2015]*

Ans. Deficient demand refers to a situation when aggregate demand (AD) is short of aggregate supply (AS) corresponding to full employment in an economy.

Bank rate is the rate at which the central bank lends money to the commercial banks. To correct the situation of deficient demand, bank rate is decreased. As a follow-up action, the commercial banks lower the market rate of interest (the rate at which the commercial banks lend money to the consumers and the investors). This increases demand for credit. Consequently, consumption expenditure and investment expenditure are increased, implying an expansion in aggregate demand, as required to correct deficient demand.

14. What is 'excess demand'? Explain the role of 'reverse repo rate' in removing it. *[CBSE (AI) 2015]*

Ans. Excess demand refers to the situation when aggregate demand is in excess of aggregate supply corresponding to full employment.

Reverse repo rate is the rate of interest at which commercial banks can park their surplus funds with the central bank, for short period of time. To correct the situation of excess demand, reverse repo rate is increased. As a follow-up action, the commercial banks will be encouraged to increase their deposits with the central bank. This, in turn, will reduce their ability to lend money. Consequently, consumption expenditure and investment expenditure will be reduced, implying a reduction in aggregate demand, as required to correct excess demand.

15. Name any two components of 'aggregate demand'. *[CBSE (F) 2015]*

Ans. (*i*) Consumption expenditure, and

(*ii*) Private investment.

16. If MPC = 0, the value of multiplier is: (choose the correct alternative) *[CBSE (F) 2015]*

(*a*) 0 (*b*) 1

(*c*) between 0 and 1 (*d*) infinity

Ans. (*b*)

17. An economy is in equilibrium. Calculate marginal propensity to save from the following:

National income = 1,000.

Autonomous consumption = 100.

Investment expenditure = 200. *[CBSE (F) 2015]*

Ans. Given, national income (Y) = 1,000

Autonomous consumption ($\overline{C}$) = 100

Investment expenditure (I) = 200

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\ (Y) + I$$

$$\Rightarrow \quad 1{,}000 = 100 + \text{MPC}\,(1{,}000) + 200$$
$$\Rightarrow \quad 1{,}000 = 300 + 1{,}000\,(\text{MPC})$$
$$\Rightarrow \quad 1{,}000\,(\text{MPC}) = 1{,}000 - 300$$
$$\Rightarrow \quad 1{,}000\,(\text{MPC}) = 700$$
$$\Rightarrow \quad \text{MPC} = \frac{700}{1{,}000} = 0.7$$

Marginal propensity to save (MPS) = 1 – MPC

$$\Rightarrow \quad \text{MPS} = 1 - 0.7 = 0.3$$

Marginal propensity to save = 0.3.

18. An economy is in equilibrium. Find the investment expenditure from the following:

National income = 750.

Autonomous consumption = 200.

Marginal propensity to save = 0.4 *[CBSE (F) 2015]*

Ans. Given, national income (Y) = 750

Autonomous consumption ($\overline{C}$) = 200

Marginal propensity to save (MPS) = 0.4

Marginal propensity to consume (MPC) = 1 – MPS = 1 – 0.4 = 0.6

At the equilibrium level,

$$Y = C + I$$

Or,
$$Y = \overline{C} + \text{MPC}\,(Y) + I$$
$$\Rightarrow \quad 750 = 200 + 0.6\,(750) + I$$
$$\Rightarrow \quad 750 = 200 + 450 + I$$
$$\Rightarrow \quad 750 = 650 + I$$
$$\Rightarrow \quad I = 750 - 650 = 100$$

Investment expenditure = 100.

19. An economy is in equilibrium. Calculate autonomous consumption from the following:

National income = 1,250.

Marginal propensity to save = 0.2.

Investment expenditure = 150. *[CBSE (F) 2015]*

Ans. Given, national income (Y) = 1,250

Marginal propensity to save (MPS) = 0.2

Investment expenditure (I) = 150

Marginal propensity to consume (MPC) = 1 – MPS

= 1 – 0.2 = 0.8

At the equilibrium level,

$$Y = C + I$$

Or,
$$Y = \overline{C} + \text{MPC}\,(Y) + I$$
$$\Rightarrow \quad 1{,}250 = \overline{C} + 0.8\,(1{,}250) + 150$$
$$\Rightarrow \quad 1{,}250 = \overline{C} + 1{,}000 + 150$$
$$\Rightarrow \quad 1{,}250 = \overline{C} + 1{,}150$$
$$\Rightarrow \quad \overline{C} = 1{,}250 - 1{,}150 = 100$$

Autonomous consumption = 100.

20. What is 'inflationary gap'? Explain the role of cash reserve ratio in removing this gap. *[CBSE (F) 2015]*

Ans. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy.

Cash reserve ratio (CRR) requires the commercial banks to maintain certain minimum cash reserves with the central bank, as a percentage of their total deposits. To correct the situation of inflationary gap, CRR is raised. A rise in the cash reserve ratio reduces credit creation capacity of the commercial banks. Because a rise in the cash reserves with RBI reduces cash balances with the commercial banks. And reduction in cash balances with the banks causes a multiple-times reduction in their demand deposits (implying a cut in the creation of credit by the commercial banks). Accordingly, flow of credit in the market is reduced; aggregate demand is decreased and inflationary gap is corrected.

21. What is 'deficient demand'? Explain the role of 'margin requirements' in removing this gap. *[CBSE (F) 2015]*

Ans. Deficient demand refers to a situation when aggregate demand (AD) is short of aggregate supply (AS) corresponding to full employment in an economy.

Margin requirements refer to minimum down payment that the borrowers have to make as a percentage of their total borrowing from the commercial banks. To correct the situation of deficient demand, margin requirement is reduced. Lower margin requirement acts as an incentive to borrow. This induces borrowers to raise more credit. Implying a rise in aggregate demand, as desired to correct deficient demand.

22. Distinguish between marginal propensity to consume and average propensity to consume. Give a numerical example. *[CBSE Delhi 2016]*

Or

Distinguish between average propensity to consume and marginal propensity to consume using a numerical example. *[CBSE (F) 2016]*

Ans. Average propensity to consume is the ratio between total consumption and total income.

Marginal propensity to consume is the ratio between change in consumption and change in income.

Example on APC and MPC

Hypothetical Figures:

Initial consumption (C)	4,000
Consumption after increase in income	5,000
Increase in consumption (ΔC)	1,000
Income at the beginning of the year	10,000
Income at the end of the year	15,000
Increase in income (ΔY)	5,000

(*i*) $\text{MPC} = \frac{\Delta C}{\Delta Y} \Rightarrow \frac{1{,}000}{5{,}000} = 0.2$

(*ii*) $\text{APC} = \frac{C}{Y} \Rightarrow \frac{4{,}000}{10{,}000} = 0.4$ at the beginning of the year

$\text{APC} = \frac{C}{Y} \Rightarrow \frac{5{,}000}{15{,}000} = 0.33$ at the end of year.

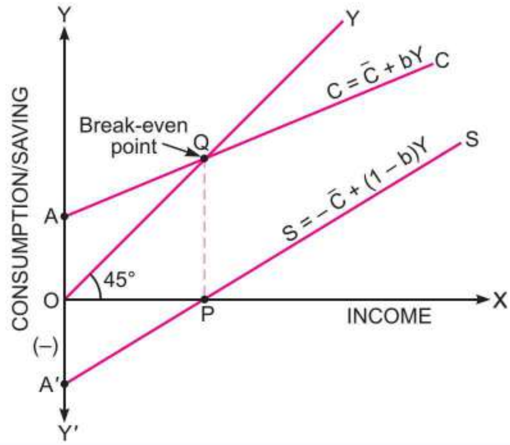
23. Given consumption curve, derive saving curve and state the steps taken in the process of derivation. Use diagram. *[CBSE Delhi 2016]*

Or

Given a consumption curve, outline the steps required to be taken in deriving a saving curve from it. Use diagram. *[CBSE (AI) 2017]*

Ans. Fig. 3 shows the derivation of saving curve from a given consumption curve.

FIGURE 3



It involves the following steps:

(*i*) We take OA′ = OA. Because OA = consumption when Y = 0, so that, OA′ (= OA) is the negative saving when Y = 0. It is indicated by – $\bar{C}$ in the saving function.

(*ii*) Point P on the saving curve is marked corresponding to point Q on the consumption curve. While Q indicates that Y = C, point P indicates that S = 0. Obviously, when Y = C, S = 0.

(*iii*) By joining points A′ and P and stretching it to form a straight line, we get S curve. S-function is linear C-function.

[**Note:** Since MPC + MPS = 1, MPS = 1 – MPC. So that while in C-function MPC is indicated by b, in S-function it is indicated by 1 – b.]

24. In an economy investment is increased by ₹ 300 crore. If marginal propensity to consume is $\frac{2}{3}$, calculate increase in national income. *[CBSE Delhi 2016]*

Ans. Given, increase in investment expenditure (ΔI) = ₹ 300 crore

Marginal propensity to consume (MPC) = $\frac{2}{3}$

We know that, $$\text{Multiplier (K)} = \frac{1}{1-\text{MPC}} = \frac{1}{1-\frac{2}{3}} = \frac{1}{\frac{1}{3}} = 3$$

$$\text{Increase in National Income} = K \times \Delta I$$
$$= 3 \times 300$$
$$= 900$$

Increase in national income = ₹ 900 crore.

25. Suppose marginal propensity to consume is 0.8. How much increase in investment is required to increase national income by ₹2,000 crore? Calculate. *[CBSE Delhi 2016]*

Ans. Given, increase in national income (ΔY) = ₹ 2,000 crore

Marginal propensity to consume (MPC) = 0.8

We know that, $$\text{Multiplier (K)} = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.8} = \frac{1}{0.2} = 5$$

$$\text{Increase in Investment } (\Delta I) = \frac{\Delta Y}{K}$$
$$= \frac{2{,}000}{5} = 400$$

Increase in investment = ₹ 400 crore.

26. In an economy an increase in investment by ₹100 crore led to 'increase' in national income by ₹1,000 crore. Find marginal propensity to consume. *[CBSE Delhi 2016]*

Ans. Given, increase in investment (ΔI) = ₹ 100 crore

Increase in national income (ΔY) = ₹ 1,000 crore

We know,

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I} = \frac{1{,}000}{100} = 10$$

We also know,

$$K = \frac{1}{1 - MPC}$$

$$1 - MPC = \frac{1}{10}$$

$$1 - MPC = 0.1$$

$$MPC = 1 - 0.1 = 0.9$$

Marginal propensity to consume = 0.9.

27. Explain the role of taxation in reducing excess demand. *[CBSE Delhi 2016]*

Ans. Taxes are imposed by the government. To correct the situation of excess demand, taxes (direct or indirect) are increased. Increase in tax rates leaves lesser disposable income with the people. It reduces their capacity to spend, even when their propensity to spend remains the same. Lower disposable income means lower level of aggregate demand. Accordingly, excess demand is reduced.

28. What is aggregate demand? State its components. *[CBSE (AI) 2016]*

Ans. Aggregate demand refers to the total expenditure on the goods and services in an economy during the period of one year.

Components of aggregate demand are as these:

(*i*) Consumption expenditure (C),

(*ii*) Private investment expenditure (= private fixed investment + change in inventory stocks) (I),

(*iii*) Government expenditure (G),

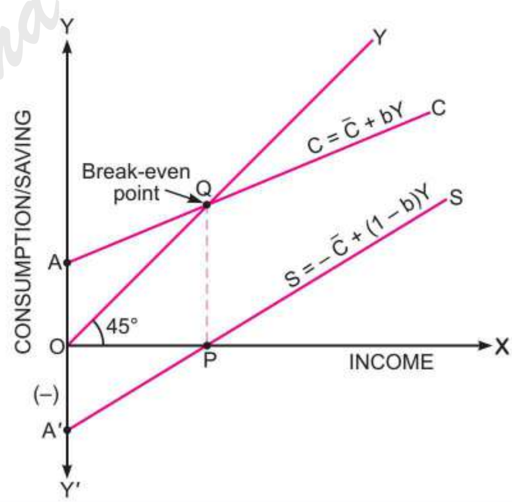
(*iv*) Net exports or difference between exports and imports (X – M).

$$AD = C + I + G + (X - M)$$

29. Given saving curve, derive consumption curve and state the steps in doing so. Use diagram. *[CBSE (AI) 2016]*

Ans. **Fig. 4** shows the derivation of consumption curve from a given saving curve.

FIGURE 4



It involves the following steps:

(*i*) We take OA = OA′. Because OA′ = negative saving when Y = 0 and this is exactly equal to minimum consumption when Y = 0.

(*ii*) Point Q on the Y-line (45° angle) is marked corresponding to point P on the saving curve. Because at point P, saving = 0 and at point Q, consumption = income (implying that S = 0).

(*iii*) Joining points A and Q and stretching it to form a straight line, we get C curve. C-function is linear as it is derived from a linear S-function.

[**Note:** Since MPC + MPS = 1, MPS = 1 – MPC. So that b in S-function indicates MPC.]

30. An economy is in equilibrium. Calculate marginal propensity to consume.

National income = 1,000.

Autonomous consumption expenditure = 200.

Investment expenditure = 100. [*CBSE (AI) 2016*]

Ans. Given, national income (Y) = 1,000

Autonomous consumption expenditure ($\overline{C}$) = 200

Investment expenditure (I) = 100

Now, we know that

$$Y = C + I$$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$1{,}000 = 200 + b \times 1{,}000 + 100$$
$$1{,}000 = 300 + b \times 1{,}000$$
$$1{,}000b = 1{,}000 - 300$$
$$1{,}000b = 700$$
$$b = \frac{700}{1{,}000} = 0.7$$

Marginal propensity to consume = 0.7.

31. An economy is in equilibrium. Find investment expenditure.

National income = 1,200.

Autonomous consumption expenditure = 150.

Marginal propensity to consume = 0.8. [*CBSE (AI) 2016*]

Ans. Given, national income (Y) = 1,200

Autonomous consumption expenditure ($\overline{C}$) = 150

Marginal propensity to consume (MPC) = 0.8

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\,(Y) + I$$

$\Rightarrow$ $$1{,}200 = 150 + 0.8\,(1{,}200) + I$$

$\Rightarrow$ $$1{,}200 = 150 + 960 + I$$

$\Rightarrow$ $$1{,}200 = 1{,}110 + I$$

$\Rightarrow$ $$I = 1{,}200 - 1{,}110 = 90$$

Investment expenditure = 90.

32. An economy is in equilibrium. Find investment expenditure.

National income = 1,000.

Autonomous consumption = 100.

Marginal propensity to consume = 0.8 *[CBSE (AI) 2016]*

Ans. Given, national income (Y) = 1,000

Autonomous consumption ($\overline{C}$) = 100

Marginal propensity to consume (MPC) = 0.8

At the equilibrium level,

$$Y = C + I$$

Or,
$$Y = \overline{C} + MPC\ (Y) + I$$

$\Rightarrow$
$$1{,}000 = 100 + 0.8\ (1{,}000) + I$$

$\Rightarrow$
$$1{,}000 = 100 + 800 + I$$

$\Rightarrow$
$$1{,}000 = 900 + I$$

$\Rightarrow$
$$I = 1{,}000 - 900 = 100$$

Investment expenditure = 100.

33. Explain how controlling money supply is helpful in reducing excess demand. *[CBSE (AI) 2016]*

Ans. Money supply refers to the total quantity or stock of money available in the economy at a point of time.

Controlling money supply amounts to controlling the demand for goods and services in the economy. Demand includes both consumption expenditure (C) as well as investment expenditure (I). Both C and I are important components of aggregate demand. Accordingly, when C and I are reduced, excess demand is automatically reduced.

34. Find equilibrium national income.

Autonomous consumption expenditure = 120.

Marginal propensity to consume = 0.9.

Investment expenditure = 1,100. *[CBSE (F) 2016]*

Ans. Given, autonomous consumption expenditure ($\overline{C}$) = 120

Marginal propensity to consume (MPC) = 0.9

Investment expenditure (I) = 1,100

At the equilibrium level,

$$Y = C + I$$

Or,
$$Y = \overline{C} + MPC\ (Y) + I$$

$\Rightarrow$
$$Y = 120 + 0.9Y + 1{,}100$$

$\Rightarrow$
$$Y = 1{,}220 + 0.9Y$$

$\Rightarrow$
$$Y - 0.9Y = 1{,}220$$

$\Rightarrow$
$$0.1Y = 1{,}220$$

$\Rightarrow$
$$Y = \frac{1{,}220}{0.1} = 12{,}200$$

National income = 12,200.

35. An economy is in equilibrium. Find marginal propensity to consume.

Autonomous consumption expenditure = 100.

Investment expenditure = 100.

National income = 2,000. *[CBSE (F) 2016]*

Ans. Given, autonomous consumption expenditure ($\overline{C}$) = 100

Investment expenditure (I) = 100

National income (Y) = 2,000

Now, we know that

$$Y = C + I$$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$2{,}000 = 100 + b \times 2{,}000 + 100$$
$$2{,}000 = 200 + b \times 2{,}000$$
$$2{,}000b = 2{,}000 - 200$$
$$2{,}000b = 1{,}800$$
$$b = \frac{1{,}800}{2{,}000} = 0.9$$

Marginal propensity to consume = 0.9.

36. An economy is in equilibrium. Find autonomous consumption expenditure.

National income = 1,600.

Investment expenditure = 300.

Marginal propensity to consume = 0.8. *[CBSE (F) 2016]*

Ans. Given, national income (Y) = 1,600

Investment expenditure (I) = 300

Marginal propensity to consume (MPC) = 0.8

Now, we know that

$$Y = C + I$$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$1{,}600 = \overline{C} + 0.8\ (1{,}600) + 300$$
$$1{,}600 = \overline{C} + 1{,}280 + 300$$
$$1{,}600 = \overline{C} + 1{,}580$$
$$\overline{C} = 1{,}600 - 1{,}580 = 20$$

Autonomous consumption expenditure = 20.

37. Derive the two alternative conditions of expressing national income equilibrium. Show these equilibrium conditions on a single diagram. *[CBSE (F) 2016]*

Ans. We know that,

Value Added (AS) ≡ Income Generated (Y = C + S) ≡ Expenditure on Goods and Services (AD = C + I)

Since, AS = Y, the equilibrium equation can be written as:

$$Y = AD \text{ (or } AS = AD)$$

Or

$$C + S = C + I$$

Or

$$S = I$$

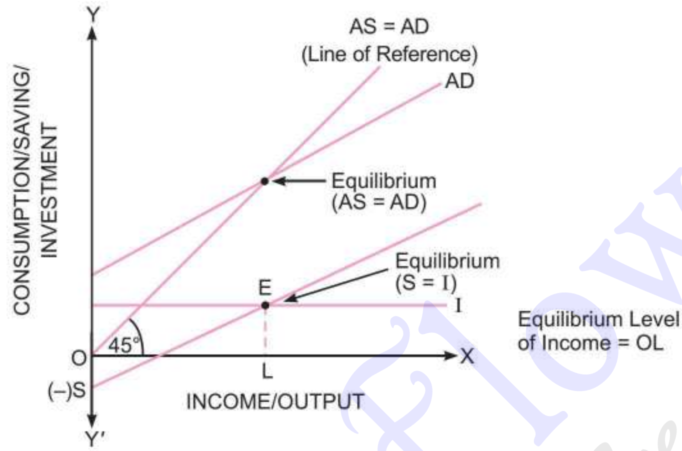
Thus, two alternative conditions of national income equilibrium are:

$$AS = AD$$

Or

$$S = I$$

Figure 5



38. Explain how can government spending be helpful in removing deficient demand.

[CBSE (F) 2016]

Ans. In a situation of deficient demand, aggregate demand (measured in terms of aggregate expenditure) is less than the aggregate supply corresponding to the full employment level in the economy. Accordingly, aggregate demand needs to be raised. But because of poor market sentiments (a characteristic feature of deficient demand), private expenditure remains low. It is in such a situation that the government spending (which is not driven by profit-motive) can play a significant role. It will act as an injection of demand into the system and is expected to induce private expenditure. Accordingly, the situation of deficient demand will be corrected.

39. Assuming that increase in investment is ₹1,000 crore and marginal propensity to consume is 0.9, explain the working of multiplier. *[CBSE Delhi 2017]*

Ans. Multiplier is the ratio between change in income and change in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

(Here, K = Multiplier; ΔY = Change in income; ΔI = Change in investment.)

It shows the number of times income would rise as a result of an initial rise in investment.

Following table explains how the multiplier process works. It is based on the given value that I (leading to increase in expenditure in the economy) = ₹ 1,000 crore and that MPC = 0.9.

Working of Multiplier **(₹ in crore)**

Round	ΔI	ΔY	Induced Change in Consumption [MPC (ΔY)]	Leakage/Saving
1	1,000	1,000	900 (= 0.9 × 1,000)	100
2	—	900	810 (= 0.9 × 900)	90
3	—	810	729 (= 0.9 × 810)	81
4	—	729	656.1 (= 0.9 × 729)	72.9
and so on ...				
	ΔI = 1,000	ΔY = 10,000	9,000	1,000

The table shows that in round-1, additional investment of ₹ 1,000 crore leads to additional income of ₹ 10,000 crore. But in every subsequent round 90% of additional income is spent (as MPC = 0.9). The remaining 10% leads to leakage/saving (as MPS = 0.1). Thus in round-2, additional income = ₹ 900 crore (0.9 × 1,000), in round-3 it is = ₹ 810 crore (0.9 × 900), in next round it is = ₹ 729 crore (0.9 × 810), and so on till the sum total of additional income = ₹ 10,000 crore.

The number of times income would increase consequent upon the initial increase in investment may be estimated by using the following formula:

$$K = \frac{1}{1 - MPC}$$

$$= \frac{1}{1 - 0.9} = \frac{1}{0.1} = 10$$

Given that ΔI = 1,000, and K = 10,

$$\Delta Y = 10 \times 1{,}000$$

$$= ₹\ 10{,}000 \text{ crore.}$$

40. Assuming that increase in investment is ₹800 crore and marginal propensity to consume is 0.8, explain the working of multiplier. *[CBSE Delhi 2017]*

Ans. Multiplier is the ratio between change in income and change in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

(Here, K = Multiplier; ΔY = Change in income; ΔI = Change in investment.)

It shows the number of times income would rise as a result of an initial rise in investment.

Following table explains how the multiplier process works. It is based on the given value that I (leading to increase in expenditure in the economy) = ₹ 800 crore and that MPC = 0.8.

Working of Multiplier **(₹ in crore)**

Round	ΔI	ΔY	Induced Change in Consumption [MPC (ΔY)]	Leakage/Saving
1	800	800	640 (0.8 × 800)	160
2	—	640	512 (0.8 × 640)	128
3	—	512	409.6 (0.8 × 512)	102.4
4	—	409.6	327.68 (0.8 × 409.6)	81.92
		and so on ...		
	ΔI = 800	ΔY = 4,000	3,200	800

The table shows that in round-1, additional investment of ₹ 800 crore leads to additional income of ₹ 800 crore. But in every subsequent round 80% of additional income is spent (as MPC = 0.8). The remaining 20% leads to leakage/saving (as MPS = 0.2). Thus in round-2, additional income = ₹ 640 crore (0.8 × 800), in round-3 it is = ₹ 512 crore (0.8 × 640), in next round it is = ₹ 409.6 crore (0.8 × 512), and so on till the sum total of additional income = ₹ 4,000 crore.

The number of times income would increase consequent upon the initial increase in investment may be estimated by using the following formula:

$$K = \frac{1}{1 - MPC}$$

$$= \frac{1}{1 - 0.8} = \frac{1}{0.2} = 5$$

Given that ΔI = 800, and K = 5,

$$\Delta Y = 5 \times 800$$

$$= ₹\ 4{,}000 \text{ crore.}$$

41. Assuming that 'increase' in investment is ₹900 crore and marginal propensity to consume is 0.6, explain the working of multiplier. *[CBSE Delhi 2017]*

Ans. Multiplier is the ratio between change in income and change in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

(Here, K = Multiplier; ΔY = Change in income; ΔI = Change in investment.)

It shows the number of times income would rise as a result of an initial rise in investment.

Following table explains how the multiplier process works. It is based on the given value that I (leading to increase in expenditure in the economy) = ₹ 900 crore and that MPC = 0.6.

Working of Multiplier **(₹ in crore)**

Round	ΔI	ΔY	Induced Change in Consumption [MPC (ΔY)]	Leakage/Saving
1	900	900	540 (0.6 × 900)	360
2	—	540	324 (0.6 × 540)	216
3	—	324	194.4 (0.6 × 324)	129.6
4	—	194.4	116.64 (0.6 × 194.4)	77.76
and so on ...				
	ΔI = 900	ΔY = 2,250	1,350	900

The table shows that in round-1, additional investment of ₹ 900 crore leads to additional income of ₹ 900 crore. But in every subsequent round 60% of additional income is spent (as MPC = 0.6). The remaining 40% leads to leakage/saving (as MPS = 0.4). Thus in round-2, additional income = ₹ 540 crore (0.6 × 900), in round-3 it is = ₹ 324 crore (0.6 × 540), in next round it is = ₹ 194.4 crore (0.6 × 324), and so on till the sum total of additional income = ₹ 2,250 crore.

The number of times income would increase consequent upon the initial increase in investment may be estimated by using the following formula:

$$K = \frac{1}{1-MPC}$$

$$= \frac{1}{1-0.6} = \frac{1}{0.4} = 2.5$$

Given that ΔI = 900, and K = 2.5,

$$\Delta Y = 2.5 \times 900$$

$$= ₹\ 2{,}250 \text{ crore.}$$

42. Aggregate demand can be increased by: (choose the correct alternative) *[CBSE Delhi 2017]*

(*a*) increasing bank rate

(*b*) selling government securities by Reserve Bank of India

(*c*) increasing cash reserve ratio

(*d*) none of the above

Ans. (*d*)

43. Give the meaning of involuntary unemployment. *[CBSE Delhi 2017]*

Or

Define the term "involuntary unemployment". *[CBSE 2019 (58/3/1)]*

Ans. Involuntary unemployment refers to a situation when people are willing to work at the existing wage rate, but are not getting work owing to lack of demand in the market.

44. An economy is in equilibrium. From the following data about an economy calculate autonomous consumption:

(*a*) Income = 5,000.

(*b*) Marginal propensity to save = 0.2.

(*c*) Investment expenditure = 800. *[CBSE Delhi 2017]*

Ans. Given, income (Y) = 5,000

Marginal propensity to save (MPS) = 0.2

Investment expenditure (I) = 800

Marginal propensity to consume (MPC) = 1 – MPS

= 1 – 0.2 = 0.8

Now, we know that $Y = C + I$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$5{,}000 = \overline{C} + 0.8\,(5{,}000) + 800$$
$$5{,}000 = \overline{C} + 4{,}000 + 800$$
$$5{,}000 = \overline{C} + 4{,}800$$
$$\overline{C} = 5{,}000 - 4{,}800 = 200$$

Autonomous consumption = 200.

45. An economy is in equilibrium. From the following data about an economy, calculate investment expenditure:

(*a*) Income = 10,000.

(*b*) Marginal propensity to consume = 0.9.

(*c*) Autonomous consumption = 100. *[CBSE Delhi 2017]*

Ans. Given, income (Y) = 10,000

Marginal propensity to consume (MPC) = 0.9

Autonomous consumption ($\overline{C}$) = 100

Now, we know that

$$Y = C + I$$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$10{,}000 = 100 + 0.9\,(10{,}000) + I$$
$$10{,}000 = 100 + 9{,}000 + I$$
$$I = 10{,}000 - 9{,}100$$
$$I = 900$$

Investment expenditure = 900.

46. An economy is in equilibrium. From the following data calculate autonomous consumption:

(*a*) Income = 10,000.

(*b*) Marginal propensity to save = 0.2.

(*c*) Investment = 1,500. *[CBSE Delhi 2017]*

Ans. Given, income (Y) = 10,000

Marginal propensity to save (MPS) = 0.2

Investment (I) = 1,500

Marginal propensity to consume (MPC) = 1 – MPS

$$= 1 - 0.2 = 0.8$$

Now, we know that

$$Y = C + I$$

Here, $C = \overline{C} + bY$, where b = MPC

Putting the given values, we get

$$10{,}000 = \overline{C} + 0.8\,(10{,}000) + 1{,}500$$
$$10{,}000 = \overline{C} + 8{,}000 + 1{,}500$$
$$10{,}000 = \overline{C} + 9{,}500$$
$$\overline{C} = 10{,}000 - 9{,}500$$
$$= 500$$

Autonomous consumption = 500.

47. Define marginal propensity to consume. *[CBSE (AI) 2017]*

Ans. Marginal propensity to consume is the ratio between change in consumption and change in income.

48. Define marginal propensity to save. *[CBSE (AI) 2017]*

Ans. Marginal propensity to save is the ratio of change in saving to change in income.

49. If the marginal propensity to consume is greater than marginal propensity to save, the value of the multiplier will be (choose the correct alternative): *[CBSE (AI) 2017]*

(*a*) greater than 2 (*b*) less than 2

(*c*) equal to 2 (*d*) equal to 5

Ans. (*a*)

50. An economy is in equilibrium. From the following data, calculate the marginal propensity to save: *[CBSE (AI) 2017]*

(*a*) Income = 10,000.

(*b*) Autonomous consumption = 500.

(*c*) Consumption expenditure = 8,000.

Ans. Given, income (Y) = 10,000

Autonomous consumption ($\overline{C}$) = 500

Consumption expenditure (C) = 8,000

We know that, $C = \overline{C} + MPC\,(Y)$

Putting the given values, we get

$$8{,}000 = 500 + MPC\,(10{,}000)$$
$$8{,}000 = 500 + 10{,}000\,(MPC)$$
$$10{,}000\,(MPC) = 8{,}000 - 500$$
$$10{,}000\,(MPC) = 7{,}500$$
$$MPC = \frac{7{,}500}{10{,}000} = 0.75$$
$$MPS = 1 - MPC$$
$$= 1 - 0.75$$
$$= 0.25$$

Marginal propensity to save = 0.25.

51. When aggregate demand is greater than aggregate supply, inventories: [CBSE (F) 2017]

(*a*) fall (*b*) rise

(*c*) do not change (*d*) first fall, then rise

Ans. (*a*)

52. Give the meaning of under-employment equilibrium. [CBSE (F) 2017]

Ans. Under-employment equilibrium is that situation in the economy when planned AS = planned AD but full employment is not achieved.

53. An economy is in equilibrium. From the following data calculate investment expenditure:

(*i*) Marginal propensity to consume = 0.9.

(*ii*) Autonomous consumption = 200.

(*iii*) Level of income = 10,000. [CBSE (F) 2017]

Ans. Given, marginal propensity to consume (MPC) = 0.9

Autonomous consumption $(\overline{C}) = 200$

Level of income (Y) = 10,000

At the equilibrium level,

$$Y = C + I$$

Or, $$Y = \overline{C} + MPC\,(Y) + I$$

$\Rightarrow$ $$10{,}000 = 200 + 0.9\,(10{,}000) + I$$

$\Rightarrow$ $$10{,}000 = 200 + 9{,}000 + I$$

$\Rightarrow$ $$10{,}000 = 9{,}200 + I$$

$\Rightarrow$ $$I = 10{,}000 - 9{,}200 = 800$$

Investment expenditure = 800.

54. In an economy, investment increased by 1,100 and as a result of it income increased by 5,500. Had the marginal propensity to save been 25 per cent, what would have been the increase in income? [CBSE (F) 2017]

Ans. We know,

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I} = \frac{5{,}500}{1{,}100} = 5$$

When marginal propensity to save (MPS) is 25 per cent, *i.e.*, $\frac{25}{100} = 0.25$:

$$K = \frac{1}{MPS} = \frac{1}{0.25} = 4$$

As we know, $$K = \frac{\Delta Y}{\Delta I}$$

$\Rightarrow$ $$\Delta Y = K \times \Delta I = 4 \times 1{,}100 = 4{,}400$$

Increase in income = 4,400.

55. What is ex-ante consumption? Distinguish between autonomous consumption and induced consumption. [CBSE 2018]

Ans. Ex-ante consumption refers to desired consumption (or planned consumption) at different levels of income in the economy.

Autonomous consumption refers to minimum level of consumption, even when income is zero. It is indicated by $\overline{C}$ in the consumption function: $C = \overline{C} + bY$.

Induced consumption changes as the level of income changes in the economy. It is determined by the marginal propensity to consume. Thus:

$$\underbrace{C = \overline{C}}_{\text{autonomous consumption}} + \underbrace{bY}_{\text{induced consumption}} \Rightarrow \text{ex-ante consumption}$$

56. What are the two alternative ways of determining equilibrium level of income? How are these related? *[CBSE 2018]*

Ans. Two alternative ways of determining equilibrium level of income are as these:

(*i*) Equilibrium is struck when: AD = AS, and

(*ii*) Equilibrium is struck when: S = I.

These two approaches are related to each other in this manner:

$$AD = AS$$

or

$$C + I = C + S$$

or

$$S = I$$

The first approach says that equilibrium is struck when planned demand is equal to planned supply in the economy. The second approach says that equilibrium is struck when withdrawal of expenditure (in the form of saving) is equal to injection of expenditure (in the form of investment).

Both the approaches give us identical result as in the following diagram:

See **Fig. 5**, page 179.

57. Define investment multiplier. How is it related to marginal propensity to consume? *[CBSE 2018]*

Ans. Investment multiplier is the ratio of a change in income to a given change in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

Here, K : Multiplier,

ΔY : Change in income, and

ΔI : Change in investment.

There is direct relationship between investment multiplier and marginal propensity to consume (MPC). Higher the marginal propensity to consume, greater is the size of multiplier. On the contrary, lower the marginal propensity to consume, smaller is the size of multiplier. It is evident from the following formula, often used for the estimation of multiplier coefficient:

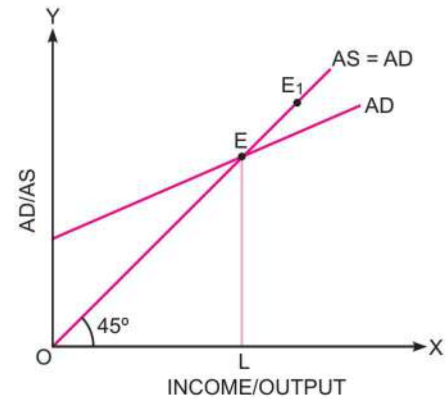
$$\text{Multiplier} = \frac{1}{1 - \text{MPC}}$$

Higher MPC must lead to higher coefficient of multiplier.

58. Define full employment in an economy. Discuss the situation when aggregate demand is more than aggregate supply at full employment income level. *[CBSE 2018]*

Ans. Full employment refers to a situation in which all those who are able to work and are willing to work at the existing wage rate get work. Full employment income level is indicated in the following diagram (**Fig. 6**):

FIGURE 6



AD represents aggregate demand curve and 45° line is the line of reference where AS (aggregate supply) is equal to AD (aggregate demand). Equilibrium level of income Y is determined at point E, where AD = AS. This is assumed to be full employment equilibrium in the economy.

Let us consider point E_1. Here, aggregate demand exceeds aggregate supply corresponding to the full employment level. It will lead to the following situation in the economy:

(*i*) Existing stocks with the producers will not be enough to cope with the level of AD.

(*ii*) Producers cannot produce more because resources are already fully employed.

(*iii*) Pressure of higher demand would lead to a rise in the price level.

(*iv*) Equilibrium output will not rise, even the price level is rising.

(*v*) Inflationary gap would strike the economy.

Briefly, when AD > AS corresponding to full employment, the economy would be driven to a situation of inflationary gap—a situation when the general price level tends to rise without any rise in the level of income/output.

59. Suppose in a hypothetical economy, the income rises from ₹ 5,000 crore to ₹ 6,000 crore. As a result, the consumption expenditure rises from ₹ 4,000 crore to ₹ 4,600 crore. Marginal propensity to consume in such a case would be ________. (Choose the correct alternative)

[CBSE 2019 (58/1/1)]

(*a*) 0.8 (*b*) 0.4

(*c*) 0.2 (*d*) 0.6

Ans. (*d*)

60. State and discuss the components of aggregate demand in a two sector economy.

[CBSE 2019 (58/1/1)]

Ans. Aggregate demand refers to the total expenditure on the goods and services in an economy during the period of one year.

Components of aggregate demand in a two sector economy are as these:

(*i*) Consumption Expenditure (C): It is also called household consumption expenditure. It comprises demand for all goods and services by the households of a country during an accounting year. Generally, it depends on the level of personal disposable income. Higher the level of personal disposable income, higher is private consumption expenditure, and *vice versa*.

(*ii*) Private Investment Expenditure: It refers to expenditure by private investors on the purchase of such goods which add to their stock of capital. Investment, implying increase in the stock of capital, is also called capital formation. Rate of interest is the principal determinant of private investment. Higher rate of interest generally implies lower investment expenditure.

61. Discuss the working of the adjustment mechanism in the following situations:

(*a*) Aggregate demand is greater than aggregate supply.

(*b*) Ex-ante investments are lesser than ex-ante savings. *[CBSE 2019 (58/1/1)]*

Ans. (*a*) If aggregate demand is greater than aggregate supply, *i.e.*, AD > AS, flow of goods and services in the economy tends to be less than their demand. The existing stocks of the producers would be sold out and the producers would suffer the loss of unfulfilled demand. To rebuild the desired stocks and avoid the loss of unfulfilled demand, the producers would plan greater production. AS would increase to become equal to AD. This is how AS converges with AD.

(*b*) In case ex-ante investments are less than ex-ante savings, *i.e.*, I < S, it implies a situation when a fall in expenditure through 'S' is more than the rise in expenditure through 'I'. Accordingly, aggregate expenditure in the economy would be less than what is needed to buy the planned output. Some output would remain unsold, and producers will have undesired stocks. To clear their stocks, the producers would now plan lesser output. Lesser output would mean lesser income. Lesser income would mean lesser saving. The process would continue till S = I. This is how S converges with I.

62. If in an economy:

Change in initial investments (ΔI) = ₹ 500 crore.

Marginal propensity to save (MPS) = 0.2.

Find the values of the following:

(*a*) Investment multiplier (K).

(*b*) Change in final income (ΔY). *[CBSE 2019 (58/1/1)]*

Ans. Given, change in initial investments (ΔI) = ₹ 500 crore

Marginal propensity to save (MPS) = 0.2

We know that,

$$\text{Multiplier (K)} = \frac{1}{\text{MPS}} = \frac{1}{0.2} = 5$$

$$\text{Increase in Income } (\Delta Y) = K \times \Delta I$$
$$= 5 \times 500 = 2{,}500$$

Investment multiplier = 5.

Change in final income = ₹ 2,500 crore.

63. If in an economy:

Change in initial investments (ΔI) = ₹ 700 crore.

Marginal propensity to save (MPS) = 0.2.

Find the values of the following:

(*a*) Investment multiplier (K).

(*b*) Change in final income (ΔY). *[CBSE 2019 (58/1/2)]*

Ans. Given, change in initial investments (ΔI) = ₹ 700 crore

Marginal propensity to save (MPS) = 0.2

We know that,

$$\text{Multiplier (K)} = \frac{1}{\text{MPS}} = \frac{1}{0.2} = 5$$

$$\text{Increase in Income } (\Delta Y) = K \times \Delta I$$
$$= 5 \times 700 = 3{,}500$$

Investment multiplier = 5.

Change in final income = ₹ 3,500 crore.

64. **If in an economy:**

Change in initial investment (ΔI) = ₹ 1,200 crore.

Marginal propensity to save (MPS) = 0.2.

Find the values of:

(*a*) Investment Multiplier (K).

(*b*) Change in final income (ΔY). [CBSE 2019 (58/1/3)]

Ans. Given, change in initial investment (ΔI) = ₹ 1,200 crore

Marginal propensity to save (MPS) = 0.2

We know that,

$$\text{Multiplier (K)} = \frac{1}{\text{MPS}} = \frac{1}{0.2} = 5$$

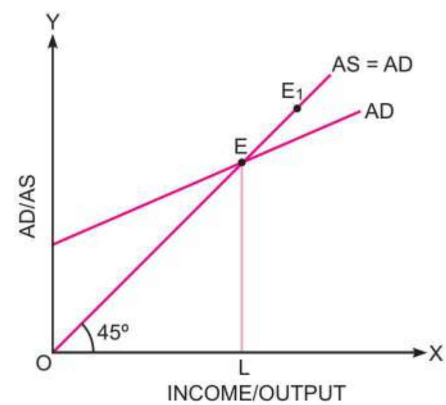
$$\begin{aligned}\text{Increase in Income } (\Delta Y) &= K \times \Delta I \\ &= 5 \times 1{,}200 \\ &= 6{,}000\end{aligned}$$

Investment multiplier = 5.

Change in final income = ₹ 6,000 crore.

65. **In the given figure, what does the gap 'KT' represent? State any two fiscal measures to correct the situation.** [CBSE 2019 (58/1/1)]

FIGURE 7



Ans. The gap 'KT' represents Deficient Demand.

Deficient demand occurs when aggregate demand is less than aggregate supply corresponding to full employment level in the economy.

The two fiscal measures to correct deficient demand are as follows:

(*i*) Public expenditure should be increased. Increase in expenditure will lead to a rise in aggregate demand.

(*ii*) The direct and indirect taxes should be decreased. It will lead to increase in disposable income and thereby, increase in demand.

66. **State the meaning of the following:**

(*a*) Ex-ante savings.

(*b*) Full employment.

(*c*) Autonomous consumption. [CBSE 2019 (58/2/1)]

Ans. (*a*) Ex-ante savings refers to 'desired saving' or planned saving during the period of one year. These are the savings which people intend to make in the economy during the period of one year.

(*b*) Full employment refers to a situation in which all those who are able to work and are willing to work at the existing wage rate get work.

(*c*) Autonomous consumption refers to minimum level of consumption, even when income is zero. It is indicated by $\overline{C}$ in the consumption function:

$$C = \overline{C} + bY$$

67. Discuss the adjustment mechanism in the following situations:

(*a*) Aggregate demand is lesser than aggregate supply.

(*b*) Ex-ante investments are greater than ex-ante savings. *[CBSE 2019 (58/2/1)]*

Ans. (*a*) If aggregate demand is less than aggregate supply, *i.e.*, AD < AS, flow of goods and services in the economy tends to exceed their demand. As a result, some of the goods would remain unsold. To clear unwanted stocks, the producers would plan a cut in production. Consequently, AS would reduce to become equal to AD. This is how AS adapts itself to AD.

(*b*) In case ex-ante investments are greater than ex-ante savings, *i.e.*, I > S, it implies a situation when a fall in expenditure through 'S' is less than the rise in expenditure through 'I'. Accordingly, aggregate expenditure in the economy would be greater than what is required to buy the planned output. It is a situation of higher AD than AS. The producers would suffer the loss of unfulfilled demand. This will prompt the producers to plan higher output. Higher output would mean higher income, and higher income would mean higher saving. The process would continue till S = I. This is how S converges with I.

68. Calculate change in final income, if marginal propensity to consume (MPC) is 0.8 and change in initial investment is ₹ 1,000 crore. *[CBSE 2019 (58/2/1)]*

Ans. Given, marginal propensity to consume (MPC) = 0.8

Change in initial investment (ΔI) = ₹ 1,000 crore

We know that,

$$\text{Multiplier (K)} = \frac{1}{1 - \text{MPC}} = \frac{1}{1 - 0.8} = \frac{1}{0.2} = 5$$

$$\text{Increase in Income } (\Delta Y) = K \times \Delta I$$

$$= 5 \times 1{,}000 = 5{,}000$$

Change in final income = ₹ 5,000 crore.

69. Estimate the change in initial investment if marginal propensity to save (MPS) is 0·10 and change in final income is ₹ 15,000 crore. *[CBSE 2019 (58/2/2)]*

Ans. Given, marginal propensity to save (MPS) = 0.10

Change in final income (ΔY) = ₹ 15,000 crore

We know that,

$$\text{Multiplier (K)} = \frac{1}{\text{MPS}} = \frac{1}{0.10} = 10$$

We also know, $$K = \frac{\Delta Y}{\Delta I}$$

$$10 = \frac{15{,}000}{\Delta I}$$

$$\Rightarrow \quad \Delta I = \frac{15{,}000}{10} = 1{,}500$$

Change in initial investment = ₹ 1,500 crore.

70. Estimate the change in final income if marginal propensity to consume (MPC) is 0.75 and change in initial investment is ₹ 2,000 crore. [CBSE 2019 (58/2/3)]

Ans. Given, marginal propensity to consume (MPC) = 0.75

Change in initial investment (ΔI) = ₹ 2,000 crore

We know that,

$$\text{Multiplier (K)} = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.75} = \frac{1}{0.25} = 4$$

$$\begin{aligned}\text{Increase in Income } (\Delta Y) &= K \times \Delta I \\ &= 4 \times 2{,}000 \\ &= 8{,}000\end{aligned}$$

Change in final income = ₹ 8,000 crore.

71. State the impact of "Excess Demand" under the Keynesian theory on employment, in an economy. [CBSE 2019 (58/2/1)]

Ans. Excess demand refers to a situation when aggregate demand is greater than aggregate supply corresponding to full employment level in the economy.

As a result of excess demand, employment will not increase in the economy because there is no involuntary unemployment in the economy. The economy has already achieved full employment. In other words, excess demand occurs only after a situation of full employment is reached; hence no question of increase in employment in a situation of excess demand.

72. If marginal propensity to save is 20% and is constant at all levels of income and the autonomous consumption is ₹ 100 crore, construct consumption function of the given hypothetical economy. [CBSE 2019 (58/3/1)]

Ans. Given, marginal propensity to save (MPS) = 20% = $\frac{20}{100} = 0.2$

MPC = 1 – MPS = 1 – 0.2 = 0.8

Autonomous consumption ($\bar{C}$) = 100

Consumption function would be:

$$\begin{aligned}C &= \bar{C} + \text{MPC}\,(Y) \\ &= 100 + 0.8Y\end{aligned}$$

73. If marginal propensity to save is 10% and is constant at all levels of income, and the autonomous consumption is ₹ 200 crore, construct consumption function of the given hypothetical economy. [CBSE 2019 (58/3/2)]

Ans. Given, marginal propensity to save (MPS) = 10% = $\frac{10}{100} = 0.1$

MPC = 1 – MPS = 1 – 0.1 = 0.9

Autonomous consumption ($\bar{C}$) = ₹ 200 crore

Consumption function would be:

$$\begin{aligned}C &= \bar{C} + \text{MPC}\,(Y) \\ &= 200 + 0.9Y\end{aligned}$$

74. If marginal propensity to consume is 80% and is constant at all levels of income, and the autonomous consumption is ₹ 400 crore, construct consumption function of the given hypothetical economy. [CBSE 2019 (58/3/3)]

Ans. Given, marginal propensity to consume (MPC) = 80% = $\frac{80}{100} = 0.8$

Autonomous consumption ($\bar{C}$) = ₹ 400 crore

Consumption function would be:

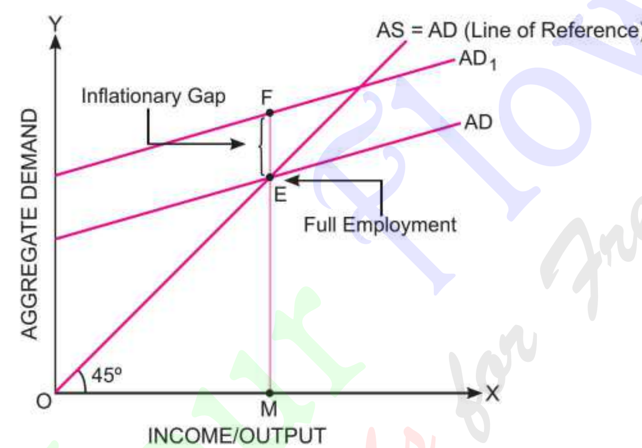
$$C = \bar{C} + MPC\,(Y)$$
$$= 400 + 0.8Y$$

75. Show inflationary gap using a well labelled diagram. Suggest any two fiscal measures to correct the situation of inflationary gap. [CBSE 2019 (58/3/1)]

Ans. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy.

In Fig. 8, full employment equilibrium is struck at point E. If the level of demand increases to AD_1, it is in excess of what is required to maintain full employment. This causes inflation. Hence, the difference between AD_1 and AD (EF) is called inflationary gap.

FIGURE 8



Inflationary gap from the economy can be corrected by adopting following two fiscal measures:

(*i*) Government expenditure on public works, public welfare and public investment should be reduced. Reduction in expenditure will lead to a fall in aggregate demand, as required to correct inflationary gap.

(*ii*) The direct and indirect taxes should be increased. It will lead to decrease in disposable income and thereby, decrease in demand, as required to correct inflationary gap.

76. State which of the following statements are true or false. Give valid reasons.

(*a*) According to Keynesian theory of employment, the state of full employment is obtained only when the economy is in equilibrium.

(*b*) In a two-sector economy, if consumption is equal to income, average propensity to save will be zero. [CBSE 2019 (58/3/1)]

Ans. (*a*) False. There may or may not be a situation of full employment at the point of equilibrium. Because equilibrium simply refers to a situation when the desired level of saving (implying a leakage from the circular flow of income) is equal to the desired level of investment (implying an injection into the circular flow of income). This equality may or may not coincide with the situation of full employment in the economy.

(*b*) True. We know that,

$$Y = C + S$$

When C = Y, S will be zero. Thus,

$$APS = \frac{S}{Y} = 0$$

77. State which of the following statements are true or false. Give valid reasons.

(*a*) According to Keynesian theory of employment, ex-ante savings and ex-post savings are always equal.

(*b*) In a two-sector economy if income is zero, consumption will also be zero. [*CBSE 2019 (58/3/2)*]

Ans. (*a*) False. Ex-ante savings are those savings which people intend to make in the economy during the period of one year. Ex-post savings refer to actual savings in the economy during the period of one year. So, the two may or may not be equal.

(*b*) False. If income is zero, consumption will not be zero. Because, there is always some minimum level of consumption (autonomous consumption) in the economy even when income level is zero. A minimum consumption is always required for survival, no matter what the level of income is.

78. State which of the following statements are true or false. Give valid reasons. [*CBSE 2019 (58/3/3)*]

(*a*) According to Keynesian theory of employment, a state of underemployment can never exist in an economy.

(*b*) In a two-sector economy, if income is zero, average propensity to consume will also zero.

Ans. (*a*) False. According to Keynesian theory of employment, a state of underemployment can exist in the economy. This state may occur at that level of income where equilibrium between AD and AS happens at less than full employment level.

(*b*) False. If income is zero, average propensity to consume will not be zero. Because, there is always some minimum level of consumption (autonomous consumption) in the economy even when income level is zero. Thus, APC $(= \frac{C}{Y})$ will not be zero.

79. Which of the two, average propensity to consume or average propensity to save, can be negative and why? [*CBSE 2019 (58/4/1)*]

Ans. Average propensity to save (APS) can be negative. It happens in situations when saving is negative or when consumption is greater than income.

$$\text{Consumption} > \text{Income}$$

Or, when: $\text{APC} > 1$.

80. Describe the adjustments that may take place in an economy when ex-ante savings are less than ex-ante investments. [*CBSE 2019 (58/4/1)*]

Or

Describe the adjustment mechanism, if in an economy, the planned savings are lesser than the planned investments. [*CBSE 2019 (58/5/2)*]

Ans. In case ex-ante savings are less than ex-ante investments, *i.e.*, S < I, following adjustments take place:

See Q. 67, point (*b*), page 189.

81. Describe the adjustments that may take place in an economy when ex-ante aggregate demand is greater than ex-ante aggregate supply. [*CBSE 2019 (58/4/2)*]

Ans. See Q. 61, point (*a*), page 187.

82. Describe the adjustments that may take place in an economy when ex-ante savings are greater than ex-ante investments. [*CBSE 2019 (58/4/3)*]

Or

Describe the adjustment mechanism, if in an economy the planned savings are more than the planned investments. [*CBSE 2019 (58/5/1)*]

Ans. In case ex-ante savings are greater than ex-ante investments, *i.e.*, S > I, following adjustments take place:

See Q. 61, point (*b*), page 187.

83. What is meant by the "Effective Demand Principle" in Keynesian theory of employment? Discuss using a schedule or a diagram. [*CBSE 2019 (58/4/1)*]

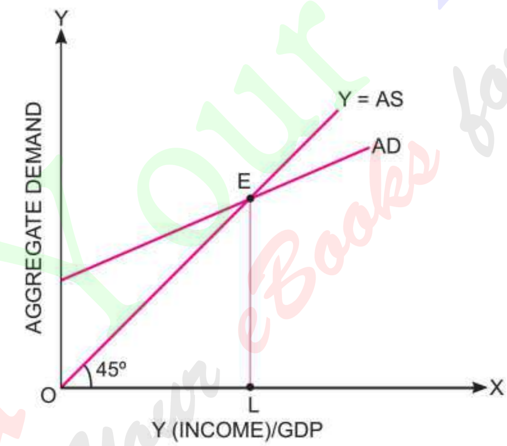
Ans. Effective demand refers to that level of AD where AS (Aggregate Supply) = AD (Aggregate Demand). Thus, effective demand always corresponds to the equilibrium level of income in the economy. It is called 'effective' as it is this level of AD which actually determines the equilibrium between AS and AD; AS just coincides with AD, because AS is assumed to be perfectly elastic.

Income	Consumption (C)	Saving (S)	Investment (I)	Aggregate Demand (C+I)	Aggregate Supply (C+S)
0	30	–30	20	50	0
20	40	–20	20	60	20
40	50	–10	20	70	40
60	60	0	20	80	60
80	70	10	20	90	80
100	**80**	**20**	**20**	**100**	**100**
120	90	30	20	110	120
140	100	40	20	120	140

It is clear from the above schedule that, equilibrium is struck when AS = AD = 100.

Equilibrium income of income = 100.

FIGURE 9



In the diagram, AD function shows different levels of aggregate demand. But it is only at point E that AS = AD. At point E, level of aggregate demand = EL. Hence, EL is effective demand, which is effective in striking an equilibrium between AS and AD.

84. The consumption function of an economy is : C = 40 + 0.8Y (amount in ₹ crore). Determine that level of income where average propensity to consume will be one. [*CBSE 2019 (58/4/1)*]

Ans. Given, C = 40 + 0.8Y

Average propensity to consume (APC = $\frac{C}{Y}$) will be one when:

$$Y = C$$
$$Y = 40 + 0.8Y$$
$$Y - 0.8Y = 40$$
$$0.2Y = 40$$
$$Y = \frac{40}{0.2} = 200$$

Average propensity to consume will be one when the level of income = ₹ 200 crore.

85. Describe the adjustment mechanism if ex-ante aggregate demand is lesser than ex-ante aggregate supply. *[CBSE 2019 (58/5/3)]*

Ans. See Q. 67, point (*a*), page 189.

86. Discuss briefly the relationship between marginal propensity to save and investment multiplier, using a hypothetical numerical example. *[CBSE 2019 (58/5/1)]*

Ans. There is an inverse relation between multiplier and marginal propensity to save (MPS). Higher is the value of MPS, lower is the value of multiplier and *vice versa* [Multiplier = $\frac{1}{\text{MPS}}$].

Example: If the value of MPS is 0.2, then the value of multiplier will be:

$$K = \frac{1}{0.2} = 5$$

If the value of MPS increases from 0.2 to 0.5, then the value of multiplier will be:

$$K = \frac{1}{0.5} = 2$$

Hence, higher is the value of MPS (from 0.2 to 0.5), lower is the value of multiplier (from 5 to 2).

87. State the meaning of the following:

(*i*) Full employment.

(*ii*) Involuntary unemployment. *[CBSE 2019 (58/5/1)]*

Ans. (*i*) See Q. 66, point (*b*), page 189.

(*ii*) See Q. 43, page 181.

88. The saving function of an economy is given as:

$$\mathbf{S = -25 + 0.25Y}$$

If the planned investment is ₹ 200 crore, calculate the following:

(*i*) Equilibrium level of income in the economy.

(*ii*) Aggregate demand at income of ₹ 500 crore. *[CBSE 2019 (58/5/1)]*

Ans. Given, S = –25 + 0.25Y

Planned investment (I) = ₹ 200 crore

At equilibrium, $S = I$

$$-25 + 0.25Y = 200$$
$$0.25Y = 200 + 25$$
$$0.25Y = 225$$
$$Y = \frac{225}{0.25} = 900$$

We know at equilibrium, $AD = C + I$

$$= 25 + (1 - 0.25)Y + 200$$
$$= 25 + 0.75\,(500) + 200$$
$$= 25 + 375 + 200$$
$$= 600$$

(*i*) Equilibrium level of income in the economy = ₹ 900 crore.

(*ii*) Aggregate demand at income of ₹ 500 crore = ₹ 600 crore.

89. The saving function of an economy is given as:

$$S = (-)\ 10 + 0{\cdot}20Y$$

If the ex-ante investments are ₹ 240 crore, calculate the following:

(*i*) Equilibrium level of income in the economy.

(*ii*) Additional investments which will be needed to double the present level of equilibrium income. *[CBSE 2019 (58/5/2)]*

Ans. Given, $S = -10 + 0.20Y$

Ex-ante investments (I) = ₹ 240 crore

At equilibrium,

$$S = I$$
$$-10 + 0.20Y = 240$$
$$0.20Y = 240 + 10$$
$$0.20Y = 250$$
$$Y = \frac{250}{0.20} = 1{,}250$$

We know that,

$$K = \frac{1}{MPS}$$
$$K = \frac{1}{0.20} = 5$$

We also know that, $\quad \text{multiplier } (K) = \dfrac{\Delta Y}{\Delta I}$

$$\Rightarrow \quad 5 = \frac{1{,}250}{\Delta I}$$
$$\Rightarrow \quad \Delta I = \frac{1{,}250}{5} = 250$$

(*i*) Equilibrium level of income in the economy = ₹ 1,250 crore.

(*ii*) Additional investments needed to double the present level of equilibrium income = ₹ 250 crore.

90. The saving function of an economy is given as:

$$S = (-)\ 50 + 0.10Y$$

If the ex-ante investments are ₹ 450 crore, calculate the following:

(*i*) Equilibrium level of income in the economy.

(*ii*) Additional investments which will be needed to gain an additional income level of ₹ 3,000 crore. *[CBSE 2019 (58/5/3)]*

Ans. Given, $S = -50 + 0.10Y$

Ex-ante investments (I) = ₹ 450 crore

At equilibrium,

$$S = I$$
$$-50 + 0.10Y = 450$$
$$0.10Y = 450 + 50$$
$$0.10Y = 500$$
$$Y = \frac{500}{0.10} = 5{,}000$$

We know that,

$$K = \frac{1}{MPS}$$

$$K = \frac{1}{0.10} = 10$$

We also know that, multiplier (K) $= \frac{\Delta Y}{\Delta I}$

$\Rightarrow$ $$10 = \frac{3{,}000}{\Delta I}$$

$\Rightarrow$ $$\Delta I = \frac{3{,}000}{10} = 300$$

(*i*) Equilibrium level of income in the economy = ₹ 5,000 crore.

(*ii*) Additional investments needed to gain an additional income level of ₹ 3,000 crore = ₹ 300 crore.

NCERT & MISCELLANEOUS QUESTIONS

1. What is marginal propensity to consume? How is it related to marginal propensity to save? [*NCERT*]

Ans. Marginal propensity to consume is the ratio of change in consumption to change in income.

$$MPC = \frac{\Delta C}{\Delta Y}$$

Marginal propensity to save is the ratio of change in saving to change in income.

$$MPS = \frac{\Delta S}{\Delta Y}$$

Aggregate of marginal propensity to save and marginal propensity to consume is equal to one or MPS + MPC = 1.

This is because $\frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y} = \frac{\Delta Y}{\Delta Y} = 1.$

2. What is the difference between ex-ante investment and ex-post investment? [*NCERT*]

Ans. Ex-ante investment refers to 'desired (or planned) investment' corresponding to different income levels in the economy. Ex-post investment refers to 'actual (or unplanned) investment' in the economy during the period of one year.

3. Measure the level of ex-ante aggregate demand when autonomous investment and consumption expenditure (A) is 50 crore, and MPS is 0.2 and level of income (Y) is ₹ 4,000 crore. State whether the economy is in equilibrium or not (cite reasons). [*NCERT*]

Ans. We know that, $AD = C + \bar{I}$

Or, $AD = \bar{C} + MPC\,(Y) + \bar{I}$

Or, $AD = \bar{C} + \bar{I} + MPC\,(Y)$

$= 50 + 0.8\,(4{,}000)$ [MPC = 1 – MPS = 1 – 0.2 = 0.8]

$= 50 + 3{,}200$

= ₹ 3,250 crore

Y = AS = ₹ 4,000 crore

Since, AS > AD, the economy is not in the equilibrium.

[**Note:** In the context of equilibrium GDP, all investment is considered as autonomous investment.]

4. What is deficient demand? *[NCERT]*

Ans. Deficient demand refers to a situation when AD < AS corresponding to full employment in the economy. It causes deflationary gap.

5. What is excess demand? *[NCERT]*

Ans. Excess demand refers to a situation when AD > AS corresponding to full employment in the economy. It causes inflationary gap.

6. How can the problems of excess and deficient demand be combated? *[NCERT]*

Ans. Monetary and fiscal instruments are the key to combat the problems of excess and deficient demand. Fiscal instruments revolve around revenue and expenditure policy of the government. Monetary instruments relate to the regulation of money supply in the economy. To combat excess demand, the government needs to curb its expenditures and raise its revenue. On the monetary front, it needs to pursue a Dear Money Policy, making availability of credit tougher than before and shrinking the credit creation capacity of the commercial banks. To combat deficient demand, on the other hand, expenditure needs to be stimulated while revenue needs to be curbed. On the monetary front, Cheap Money Policy needs to be pursued, facilitating easy availability of credit and enhancing credit creation capacity of the commercial banks.

7. Show that (*i*) APC + APS = 1, and (*ii*) MPC + MPS = 1.

Ans. (*i*) We know that, $APC = \frac{C}{Y}$, and $APS = \frac{S}{Y}$

We also know that, $Y = C + S$

So that, $APC + APS = \frac{C}{Y} + \frac{S}{Y}$

$$= \frac{C+S}{Y} = \frac{Y}{Y} = 1$$

Or, $APC + APS = 1$

(*ii*) We know that, $MPC = \frac{\Delta C}{\Delta Y}$, and $MPS = \frac{\Delta S}{\Delta Y}$

We also know that, $\Delta Y = \Delta C + \Delta S$

So that, $MPC + MPS = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y}$

$$= \frac{\Delta C + \Delta S}{\Delta Y} = \frac{\Delta Y}{\Delta Y} = 1$$

Or, $MPC + MPS = 1$.

8. Discuss the significance of 45 degree line in Keynesian Economics. *[CBSE Sample Paper 2018]*

Ans. 45° line in Keynesian Economics is a line of reference. Each point on this line shows that: AS = AD.

We know, equilibrium is struck when AS = AD.

Accordingly, equilibrium GDP in the economy must correspond to some point on the 45° line.

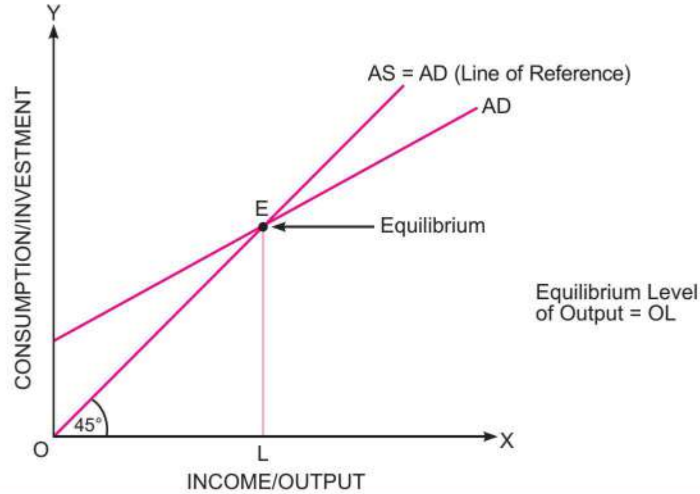
9. Explain the determination of equilibrium level of income through aggregate demand and aggregate supply curves. Also explain the changes that take place in an economy when the economy is not in equilibrium.

Ans. In an economy, equilibrium level of income and employment is determined when AD (aggregate demand) is equal to AS (aggregate supply).

According to Keynes, AS may be assumed to be perfectly elastic in an economy where full employment (of resources) is yet to be achieved. Accordingly, AD becomes the principal determinant of equilibrium level of income.

In **Fig. 10**, AD represents aggregate demand curve and 45° line is the line of reference where AS = AD. Equilibrium level of income Y is determined at point E, where AD = AS.

FIGURE 10



The equality between AS and AD implies that the desired level of output in the economy (as indicated by AS) is exactly equal to the desired level of expenditure (indicated by AD) in the economy. So that, the entire output as planned by the producers (during an accounting year) is purchased by the buyers. There are no undesired or unwanted inventories (stock of goods) with the producers.

When the economy is not in equilibrium:

(*i*) AD > AS, and (*ii*) AD < AS.

See Q. 61, point (*a*), page 187 and Q. 67, point (*a*), page 189.

10. Explain the equilibrium level of income with the help of saving and investment curves. Also explain the changes that take place in an economy when the economy is not in equilibrium.

Or

Explain how the economy achieves equilibrium level of income using Savings-Investment (S-I) approach. **[*CBSE Sample Paper 2016*]**

Ans. An economy is in equilibrium at a point where ex-ante or planned saving is equal to planned investment. This is because in equilibrium:

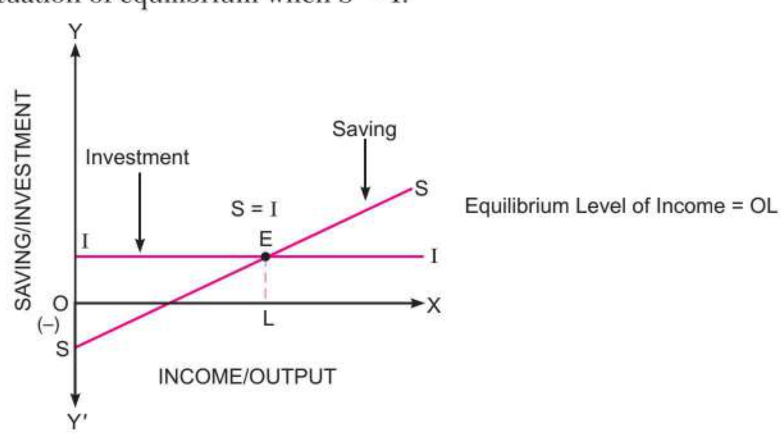
$$AS = AD$$

Or, $$C + S = C + I$$

Or, $$S = I$$

Fig. 11 illustrates the situation of equilibrium when S = I.

FIGURE 11



Equilibrium is struck at point E where S and I lines intersect each other. OL is the equilibrium level of income.

When the economy is not in equilibrium, two possibilities exist:

(*i*) S > I

In such a situation, the following changes will occur:

(*a*) Stocks of the producers would be in excess of the desired limit.

(*b*) Profits will start shrinking.

(*c*) Planned output for the subsequent year will fall.

(*d*) Level of income and employment will tend to shrink to the point where S = I. This corresponds to point E in the diagram.

Thus, the economy will come back to the state of equilibrium.

(*ii*) S < I

In such a situation, the following changes will occur:

(*a*) Existing stocks of the producers will not be enough to cope with the level of AD.

(*b*) Profits will not be maximum because the desired level of stock is not available.

(*c*) Producers will plan higher level of output for the subsequent years.

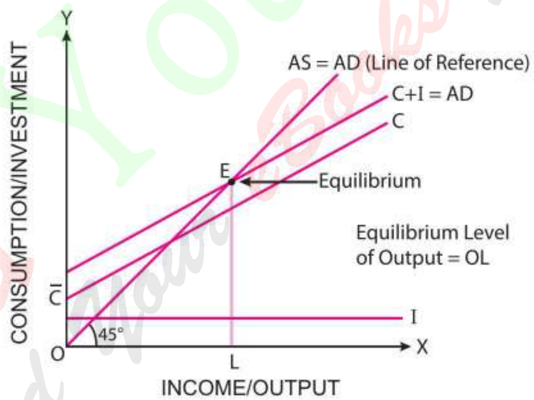
(*d*) Level of output and employment will rise to drive the economy to the point of equilibrium at point E.

11. Explain how the economy achieves equilibrium level of income using Consumption + Investment (C+I) approach. *[CBSE Sample Paper 2017]*

Ans. In an economy, equilibrium level of income and employment is determined when C + I = Y.

In **Fig. 12**, 45° line is the line of reference where Y = C + or AS = AD. Equilibrium level of income is to be determined somewhere on this line.

FIGURE 12

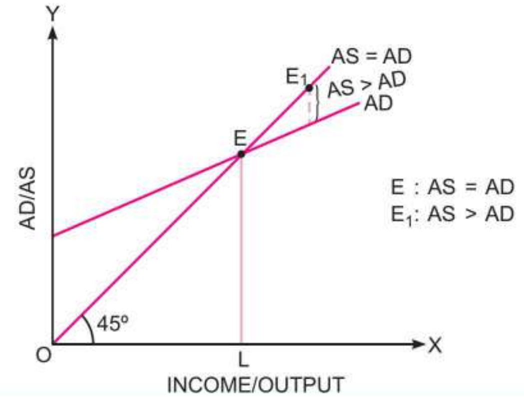


C-line indicates behaviour of consumption with respect to income. $O\overline{C}$ is equal to autonomous consumption. It is the level of C even when Y = 0. I is shown as a horizontal straight line. It is because only autonomous investment is considered in the context of equilibrium income. C + I line shows AD (aggregate demand). Equilibrium is struck at point E where AD line intersects the line of reference. OL is the equilibrium level of income.

12. In an economy, aggregate demand is less than aggregate supply. Is the economy in equilibrium? If not, explain the changes that will bring the economy in equilibrium.

Ans. If aggregate demand (AD) is less than aggregate supply (AS), then economy is not in equilibrium because an economy is in equilibrium when AS = AD. When AD < AS, flow of goods and services in the economy tends to exceed their demand. As a result, some of the goods would remain unsold. To clear unwanted stocks, the producers would plan a cut in production. Consequently, AS would reduce to become equal to AD. This is how AS adapts itself to AD.

FIGURE 13



In **Fig. 13**, equilibrium is struck at point E, where AD = AS. At point E_1, aggregate supply exceeds aggregate demand. It will cause following changes in the economy:

(*i*) Stocks of the producers would be in excess of the desired limit.

(*ii*) Profits will start shrinking.

(*iii*) Desired level of output for the subsequent year will face a cut.

(*iv*) Levels of income and employment will tend to shrink to the point where S = I, corresponding to point E in the diagram.

Thus, the economy will come back to the state of equilibrium.

13. Explain with the help of a diagram how equilibrium level of income in an economy is determined by saving and investment curves? Will there always be full employment at equilibrium level of income?

Ans. See Q. 10, page 198, 199 for the first part.

There may or may not be a situation of full employment at the point of equilibrium. Because equilibrium simply refers to a situation when the desired level of saving (implying a leakage from the circular flow of income) is equal to the desired level of investment (implying an injection into the circular flow of income). This equality may or may not coincide with the situation of full employment in the economy.

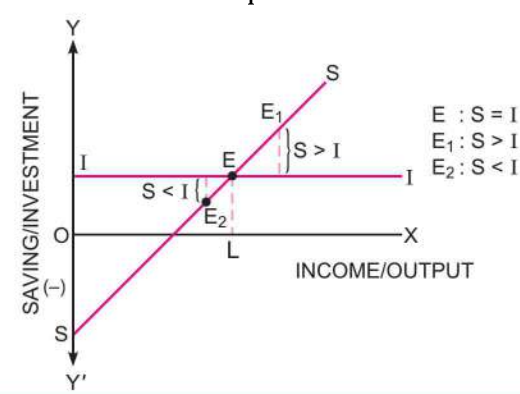
14. What changes will take place to bring an economy in equilibrium if

(*i*) planned savings are greater than planned investment, and

(*ii*) planned savings are less than planned investment?

Ans. The situation when S > I or when S < I are explained with reference to **Fig. 14**.

FIGURE 14



In the diagram, equilibrium is struck at point E when S = I. Equilibrium level of income = OL.

Let us consider a situation when S > I. It happens at point E_1. It is a situation when AS > AD. In such a situation, the following changes will occur:

See Q. 10, point (*i*), page 199.

Now consider a situation when S < I. It happens at point E_2. It is a situation when AD > AS. In such a situation, the following changes will occur:

See Q. 10, point (*ii*), page 199.

15. What is the difference between planned investment and actual investment?

Ans.

Planned Investment	Actual Investment
(*i*) Planned (or ex-ante) investment refers to the desired level of investment.	(*i*) Actual (or ex-post) investment refers to the realised level of investment.
(*ii*) In an accounting year, planned investment may or may not be equal to planned saving.	(*ii*) In an accounting year, actual investment is always equal to actual savings. (This is according to the principle of national income accounting.)
(*iii*) Equilibrium level of income is determined where planned investment = planned saving.	(*iii*) Actual investment has no relevance in the determination of equilibrium level of income.

16. Explain the working of investment multiplier with the help of a numerical example.

Ans. Investment multiplier is the ratio of a change in income to a given change in investment.

Multiplier can be calculated as follows:

$$K = \frac{\Delta Y}{\Delta I} = \frac{1}{1 - MPC} = \frac{1}{MPS}$$

(Here, K = Multiplier; ΔY = Change in income; ΔI = Change in investment; MPC = Marginal propensity to consume; MPS = Marginal propensity to save.)

Thus, if Y = ₹ 40; Y_1 = ₹ 100; I = ₹ 10; I_1 = ₹ 40,

$$K = \frac{\Delta Y}{\Delta I} = \frac{100 - 40}{40 - 10} = \frac{60}{30} = 2.$$

17. Explain the relationship between investment multiplier and marginal propensity to consume.

Ans. See Q. 57, page 185.

18. Explain with the help of a numerical example how an increase in investment in an economy affects its level of income.

Ans. Increase in investment in an economy generates a multiplier effect on its national income. The extent of multiplier effect (and therefore, the extent of total increase in income) depends on the marginal propensity to consume (MPC). Higher the MPC, greater would be the multiplier effect and *vice versa*.

Illustration: Let us assume that:

(*i*) Increase in investment = ₹ 1,000 crore.

(*ii*) MPC = 0.5.

$$\text{Increase in Income } (\Delta Y) = K \,.\, \Delta I, \text{ where, } K = \text{Multiplier} = \frac{1}{1 - MPC}$$

Accordingly,

$$\Delta Y = \frac{1}{1 - 0.5} \times 1{,}000$$

$$= \frac{1}{0.5} \times 1{,}000$$

$$= 2 \times 1{,}000$$

$$= ₹\ 2{,}000 \text{ crore.}$$

19. What is the range of values of investment multiplier? Clarify the relation of investment multiplier with marginal propensity to consume (MPC) and with marginal propensity to save (MPS). *[CBSE Sample Paper 2017]*

Ans. The range of values of investment multiplier varies between one and infinity.

There is direct relationship between investment multiplier and marginal propensity to consume (MPC). Higher the marginal propensity to consume, greater is the size of multiplier. On the contrary, lower the marginal propensity to consume, smaller is the size of multiplier.

Multiplier is inversely related to marginal propensity to save (MPS). Higher the marginal propensity to save, smaller the multiplier and smaller the marginal propensity to save, higher the multiplier will be. Thus,

$$\text{Multiplier (K)} = \frac{1}{1-\text{MPC}} = \frac{1}{\text{MPS}}$$

Example:

When MPC = 0.5, $$K = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.5} = \frac{1}{0.5} = 2$$

When MPC = 0.8, $$K = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.8} = \frac{1}{0.2} = 5$$

When MPS = 0.5 (in case of MPC = 0.5),

$$K = \frac{1}{\text{MPS}} = \frac{1}{0.5} = 2 \qquad (\because \text{ MPC + MPS} = 1)$$

When MPS = 0.2 (in case of MPC = 0.8),

$$K = \frac{1}{\text{MPS}} = \frac{1}{0.2} = 5$$

Therefore, multiplier is positively related to marginal propensity to consume and inversely related to marginal propensity to save.

20. State whether the following statements are true or false. Give valid reasons for your answers.

(*i*) Unplanned inventories accumulate when planned investment is less than planned saving.

(*ii*) Deflationary gap exists when aggregate demand is greater than aggregate supply at full employment level.

(*iii*) Average propensity to save can never be negative. [*CBSE Sample Paper 2018*]

Ans. (*i*) True. When planned investment is less than planned saving, aggregate expenditure in the economy would be less than what is needed to buy the planned output. As a result, some output would remain unsold, and producers will have undesired stocks/unplanned inventories.

(*ii*) False. Deflationary gap exists when aggregate demand is less than the aggregate supply corresponding to full employment level in the economy.

(*iii*) False. Average propensity to save can be negative. It is negative in situations when saving is negative or when consumption is greater than income.

21. State whether the following statements are true or false. Give reasons for your answer.

(*i*) The value of average propensity to save can never be greater than 1.

(*ii*) When investment multiplier is 1, the value of marginal propensity to consume is zero.

Ans. (*i*) True. The value of average propensity to save can never be greater than 1 because even when all the income is saved and nothing is spent on consumption, saving will be equal to income. In this case, average propensity to save (APS) will be equal to 1 and not greater than 1.

(*ii*) Yes, the statement is true. When investment multiplier is 1, marginal propensity to consume is zero.

We know that,

$$\text{Multiplier (K)} = \frac{1}{1-\text{MPC}}$$

$$1 = \frac{1}{1-\text{MPC}}$$

$$1 - \text{MPC} = 1$$

$$\text{MPC} = 1 - 1 = 0.$$

22. Giving reasons, state whether the following statements are true or false:

(i) Value of average propensity to save can never be less than zero.

(ii) When marginal propensity to consume is zero, the value of investment multiplier will also be zero.

Ans. (i) False. The value of average propensity to save (APS) can be less than zero. It happens when consumption is greater than income or when APC > 1.

Illustration:

Let us assume $Y = 100$

$C = 120$

$$S = Y - C = 100 - 120 = -20$$

In such a situation, $APS = \frac{-20}{100} = -0.2$; $APC = \frac{120}{100} = 1.2$.

(ii) False. Because $K = \frac{1}{1-MPC}$

When $MPC = 0$

$$K = \frac{1}{1-0} = \frac{1}{1} = 1$$

Therefore, when marginal propensity to consume is zero, the value of investment multiplier will be one.

23. Giving reasons, state whether the following statements are true or false:

(i) Sum of average propensity to consume and marginal propensity to consume is always equal to 1.

(ii) If the ratio of marginal propensity to consume and marginal propensity to save is 3 : 1, the value of investment multiplier will be 5.

Ans. (i) False. Sum of average propensity to consume and average propensity to save as well as sum of marginal propensity to consume and marginal propensity to save is always equal to one (1). There is no fixed relationship between APC and MPC.

(ii) False. Because, if the ratio of marginal propensity to consume and marginal propensity to save is 3:1, MPC will be 0.75 and investment multiplier (K) will be

$$K = \frac{1}{1-MPC}$$

$$= \frac{1}{1-0.75} = \frac{1}{0.25} = 4$$

[Students are advised to study the following details:

Assume that MPS = x, So that MPC = $3x$.

We know, $MPC + MPS = 1$

$\Rightarrow$ $3x + x = 1$

$\Rightarrow$ $4x = 1$

$\Rightarrow$ $x = \frac{1}{4} = 0.25$ $\Rightarrow$ $MPS = 0.25$

So that, $MPC = 3 \times 0.25 = 0.75$

or $MPC = 1 - MPS$

$= 1 - 0.25$

$= 0.75$]

24. Distinguish between voluntary and involuntary unemployment.

Ans.

Voluntary Unemployment	Involuntary Unemployment
(*i*) Voluntary unemployment is a situation in which a worker is not willing to work at the current rate of wages.	(*i*) Involuntary unemployment is a situation in which a worker is willing to work at current rate of wages but does not get work.
(*ii*) Voluntary unemployment is not considered in the estimation of total unemployment in a country.	(*ii*) Involuntary unemployment is considered in the estimation of total unemployment in the economy

25. Differentiate between full employment and underemployment equilibrium.

Ans.

Full Employment Equilibrium	Underemployment Equilibrium
(*i*) Full employment equilibrium refers to the situation where AD = AS and all those who are able to work and willing to work (at the existing wage rate) get work.	(*i*) Underemployment equilibrium refers to the situation where AD = AS but all those who are able to work and willing to work (at the existing wage rate) do not get work.
(*ii*) Full employment equilibrium corresponds to the highest possible level of output in the economy under the given circumstances.	(*ii*) Underemployment equilibrium does not correspond to the highest possible level of output in the economy.
(*iii*) Attempt to increase production beyond full employment equilibrium causes inflationary gap.	(*iii*) Attempt to increase production beyond underemployment equilibrium does not cause inflationary gap.

26. Distinguish between inflationary gap and deflationary gap.

Ans.

Inflationary Gap	Deflationary Gap
(*i*) Inflationary gap is the excess of AD over and above its level required to maintain full employment equilibrium in the economy.	(*i*) Deflationary gap is the deficiency of AD required to maintain full employment equilibrium in the economy.
(*ii*) Inflationary gap occurs when AD > AS (corresponding to full employment level).	(*ii*) Deflationary gap occurs when AD < AS (corresponding to full employment level).
(*iii*) Inflationary gap points to a situation of rise in the general price level (owing to excess demand), without any rise in the level of output/employment in the economy.	(*iii*) Deflationary gap points to a situation of excess capacity in the economy. This implies that the factors of production are not fully utilised, leading to unemployment in the economy.

27. What is the effect of excess demand on output, employment and prices?

Ans. ***(i)*** **Effect on Output:** In the situation of excess demand, output does not increase. The economy is already in the state of full capacity production.

(ii) **Effect on Employment:** Employment will not increase because there is no involuntary unemployment in the economy. The economy has already achieved full employment.

(iii) **Effect on Prices:** Excess demand only generates pressure of demand on the existing flow of goods and services in the economy. Accordingly, prices tend to rise.

28. What is the effect of deficient demand on output, employment and prices?

Ans. ***(i)*** **Effect on Output:** Low level of investment and employment implies low level of output.

(ii) **Effect on Employment:** Because of deficiency of demand, investment level is reduced. Accordingly, level of employment tends to fall.

(iii) **Effect on Prices:** Fall in prices is the immediate consequence of deficient demand. Because, owing to low sales, stocks tend to pile up, compelling the producers to lower the prices.

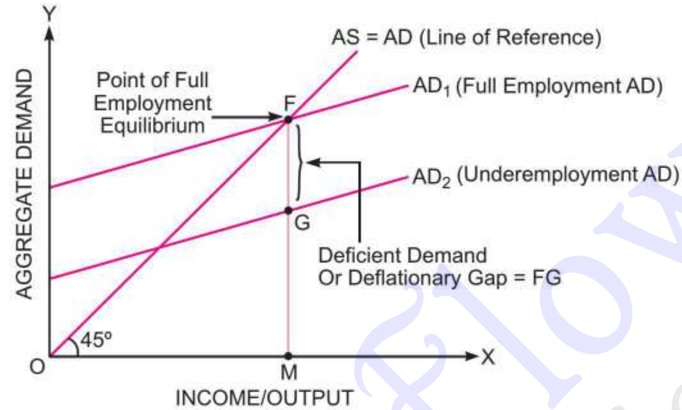
29. Explain the situation of deficient demand in an economy with the help of a diagram.

Ans. Deficient demand refers to a situation when AD < AS (corresponding to full employment level in the economy).

Accordingly, there is deflationary gap in the economy.

Fig. 15 illustrates this situation.

FIGURE 15



Full employment level of demand is indicated by AD_1 (intersecting the 45° line at point F, the point of full employment equilibrium).

If demand level happens to be AD_2, the gap between AD_1 and AD_2 is equal to FG which is a situation of deficient demand.

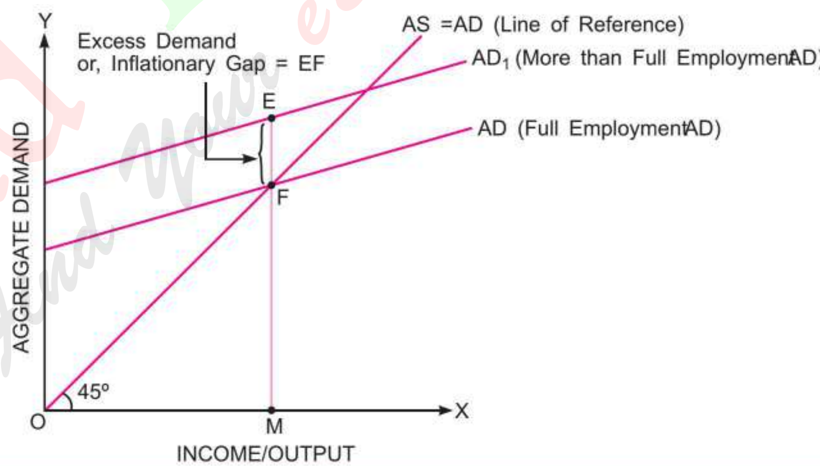
30. Explain the situation of excess demand in an economy with the help of a diagram.

Ans. Excess demand refers to a situation when AD > AS (corresponding to full employment level).

Accordingly, there is inflationary gap in the economy.

In **Fig. 16**, full employment requires FM level of aggregate demand. But it happens to be EM as shown in the figure. Accordingly, excess demand is equal to EF, which is known as inflationary gap.

FIGURE 16

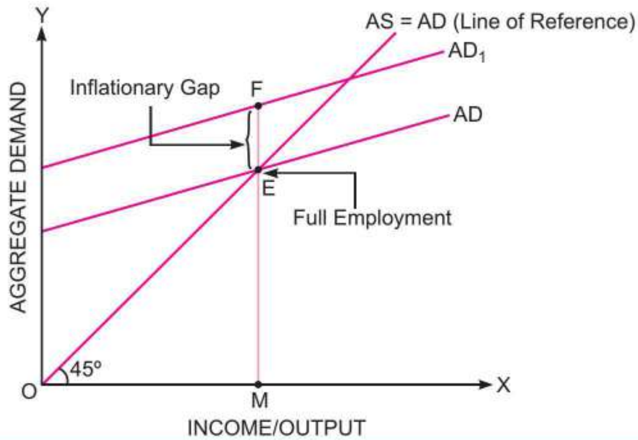


31. Explain the concept of inflationary gap with the help of a diagram.

Ans. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy.

In **Fig. 17**, full employment equilibrium is struck at point E. If the level of demand increases to AD_1, it is in excess of what is required to maintain full employment. This causes inflation. Hence, the difference between AD_1 and AD (EF) is called inflationary gap.

FIGURE 17

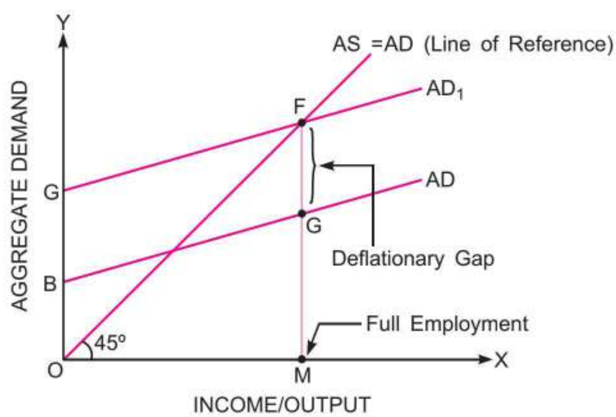


32. Explain the concept of deflationary gap with the help of a diagram.

Ans. Deflationary gap is the deficiency of AD required to maintain full employment equilibrium.

In **Fig. 18**, full employment equilibrium is struck at point F. However, if the level of demand happens to be AD, it is short of its full employment level. Accordingly, deflationary gap occurs to the tune of $AD_1 - AD = FG$.

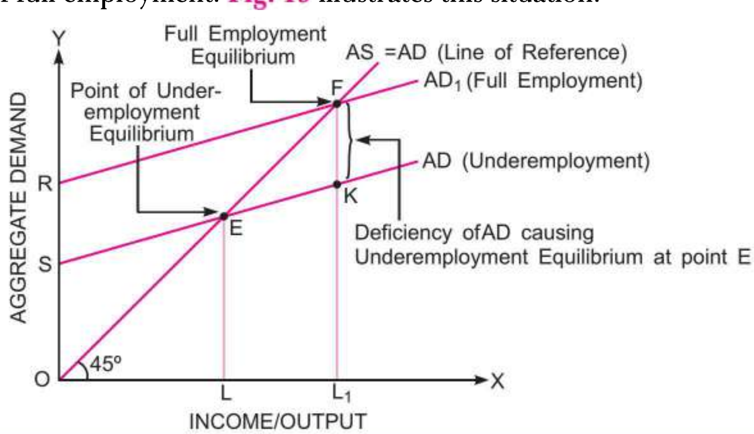
FIGURE 18



33. Explain the concept of underemployment equilibrium with the help of a diagram. Show on the same diagram the additional investment expenditure required to reach full employment equilibrium.

Ans. Underemployment equilibrium refers to the situation of equality between AS and AD when their level is less than that of full employment. **Fig. 19** illustrates this situation.

FIGURE 19



Underemployment equilibrium level of income = OL, while full employment equilibrium level of income = OL_1.

In order to achieve full employment equilibrium, deficiency of demand must be corrected through additional investment expenditure. In the diagram, deficiency of AD = FK = RS.

Thus, RS amount of additional investment is required to reach the level of full employment.

[**Note:** In a state of underemployment equilibrium, additional investment required is equal to the deficiency of demand corresponding to the full employment level.]

34. How can the government revive the economy during depression?

Ans. Government plays an important role in reviving the economy during periods of depression. During this period, investment in the private sector tends to slide to its bottom, because of falling prices and low profits. The economy is caught in a low level equilibrium trap. The government can break the deadlock of low demand → low investment, → low employment → low output by pumping investment into the economy and thereby, raising the level of AD till such time the private investment is revived to achieve a higher level of output and employment.

35. Explain three measures by which excess demand in an economy can be corrected.

Ans. The problem of excess demand can be corrected through the following measures:

(*i*) Public expenditure on public works, public welfare and public investment should be reduced. Reduction in expenditure will lead to a fall in aggregate demand.

(*ii*) The direct and indirect taxes should be increased. It will lead to decrease in disposable income and thereby, decrease in demand.

(*iii*) The repo rate should be increased. It will induce an increase in the market rate of interest. Consequently, demand for the funds for the purpose of consumption expenditure and investment expenditure will reduce. Implying a fall in aggregate demand.

36. Explain three measures by which deficient demand in an economy can be corrected.

Ans. The problem of deficient demand can be corrected through the following measures:

(*i*) Public expenditure on public works, public welfare and public investment should be increased. Increase in expenditure will lead to a rise in aggregate demand.

(*ii*) The direct and indirect taxes should be decreased. It will lead to increase in disposable income and thereby, increase in demand.

(*iii*) The repo rate should be decreased. It will lead to decrease in the market rate of interest. Consequently, demand for the funds for purpose of consumption expenditure and investment expenditure will increase. Implying a rise in aggregate demand.

37. Explain two fiscal measures by which excess demand in an economy can be corrected.

Ans. The two fiscal measures to reduce excess demand are as follows:

(*i*) Surplus Budget Policy: It is necessary that government's expenditure should be less than its income in order to correct the situation of excess demand. Demand will decrease following decrease in expenditure.

(*ii*) Increase in Taxes: The government should levy new taxes and enhance the rate of the existing ones. This would reduce disposable income of the people. Accordingly, aggregate demand will shrink.

38. Explain two monetary policy measures to correct excess demand in an economy.

Ans. The following two monetary policy measures may be adopted to correct excess demand in an economy:

(*i*) Open Market Operations: The central bank starts selling securities in open market so that some purchasing power is withdrawn from the banks. Implying a fall in aggregate demand.

(*ii*) Increase in Cash Reserve Ratio: Cash reserve ratio of the banks is enhanced with a view to restricting the credit creation capacity of the commercial banks. Implying a fall in aggregate demand.

39. Explain the role of government expenditure in correcting inflationary gap in an economy.

Ans. Inflationary gap refers to a situation of excess demand, when aggregate demand is greater than aggregate supply corresponding to full employment level in the economy. During this situation, general price level tends to rise, causing a rise in the rate of interest and consequently, a fall in investment and a fall in the growth rate of GDP. Correction of inflationary gap calls for a cut in expenditure. But owing to rising prices, wage rate tends to rise (along with other factor costs) which stokes the rate of inflation. In such a situation, a cut in government expenditure (particularly) non-development expenditure like on defence, law and order and subsides will cause an overcall cut in aggregate demand. So that excess aggregate demand is corrected and inflationary gap is eliminated.

40. Explain the role of repo rate in correcting excess demand in an economy.

Ans. Repo rate is the rate at which the central bank lends money to the commercial banks. To correct the situation of excess demand, repo rate is increased. As a follow-up action, the commercial banks raise the market rate of interest (the rate at which the commercial banks lend money to the consumers and the investors). This reduces demand for credit. Consequently, consumption expenditure and investment expenditure are reduced. Implying a reduction in aggregate demand, as required to correct excess demand.

41. Explain the role of open market operations in correcting deficient demand in an economy.

Ans. Open market operations is the policy that focuses on increasing and decreasing the stock of liquidity (or cash balances) with the people, through sale and purchase of securities by the central bank. During the situations of deficient demand, when cash balances need to be increased, the central bank starts buying securities. Purchase of securities injects purchasing power into the money market. Consequently, aggregate demand is increased, as required to correct deficient demand.

42. Explain the role of open market operations in correcting inflationary gap in an economy.

Ans. Open market operations is the policy that focuses on increasing and decreasing the stock of liquidity (or cash balances) with the people, through sale and purchase of securities by the central bank. When cash balances need to be reduced (as during situations of excess demand or inflationary gap), the central bank starts selling securities. Sale of securities sucks purchasing power from the money market. Consequently, aggregate demand is decreased and inflationary gap is corrected.

43. Explain the role of legal reserves in correcting the inflationary gap in an economy.

Ans. Legal reserves refer to cash reserves of the commercial banks (as a percentage of their deposits) with the central bank. These are mandatory reserves. These are used as a policy instrument to correct the inflationary/deflationary situations in the country. When there is inflationary gap in the economy, legal reserves are scaled up by raising the CRR (cash reserve ratio). A rise in the legal reserves reduces credit creation capacity of the commercial banks. Because a rise in the legal reserves reduces cash balances with the commercial banks. And reduction in cash balances with the banks causes a multiple-times reduction in their demand deposits (implying a cut in the creation of credit by the commercial banks). Accordingly, flow of credit in the market is reduced; AD is suppressed and inflationary gap is corrected.

44. Explain the role of legal reserves in correcting deficient demand in an economy.

Ans. Legal reserves refer to cash reserves of the commercial banks (as a percentage of their deposits) with the central bank. These are mandatory reserves. These are used as a policy instrument to correct the inflationary/deflationary situations in the economy. When there is deficient demand in the economy, legal reserves are scaled down by lowering the CRR (cash reserve ratio). A cut in the legal reserves raises credit creation capacity of the commercial banks. Because a cut in the legal reserves raises cash balances with the commercial banks. And a rise in cash balances with the banks causes a multiple-times rise in their demand deposits (implying creation of credit by the commercial banks). Accordingly, flow of credit in the market is raised; AD is pushed up and deficient demand is corrected.

NUMERICALS

1. Find out the value of multiplier, when MPC is 0.75.

Sol. $K = \frac{1}{1 - MPC} = \frac{1}{1 - 0.75} = \frac{1}{0.25} = 4$

Value of multiplier = 4.

2. Find out the value of multiplier, when MPS = 0.

Sol. $K = \frac{1}{MPS} = \frac{1}{0} = \infty$

Value of multiplier = ∞ (infinity).

3. Find out the size of multiplier, when MPC = 0.9.

Sol. MPC = 0.9

$$\text{Multiplier} = \frac{1}{1 - MPC}$$

$$= \frac{1}{1 - 0.9} = \frac{1}{0.1} = 10$$

Size of multiplier = 10.

4. Calculate marginal propensity to consume and marginal propensity to save from the following data:

Income (₹)	Consumption (₹)
2,000	300
4,000	1,300

Sol. $MPC = \frac{\Delta C}{\Delta Y}$

$$= \frac{1{,}300 - 300}{4{,}000 - 2{,}000} = \frac{1{,}000}{2{,}000} = 0.5$$

$MPS = \frac{\Delta S}{\Delta Y}$

$$= \frac{(4{,}000 - 1{,}300) - (2{,}000 - 300)}{4{,}000 - 2{,}000}$$

$$= \frac{2{,}700 - 1{,}700}{2{,}000} = \frac{1{,}000}{2{,}000} = 0.5$$

Marginal propensity to consume = 0.5.

Marginal propensity to save = 0.5.

5. If investment multiplier is 3, what will be the value of marginal propensity to consume?

Sol. Given, investment multiplier (K) = 3

We know that, $K = \frac{1}{1 - MPC}$

$\Rightarrow \quad 3 = \frac{1}{1 - MPC} \quad \Rightarrow \quad 1 - MPC = \frac{1}{3}$

$\Rightarrow \quad 1 - MPC = 0.33$

$\Rightarrow \quad MPC = 1 - 0.33$

$= 0.67$

Value of marginal propensity to consume = 0.67.

6. Complete the following table:

Level of Income (₹)	Consumption Expenditure (₹)	Marginal Propensity to Consume	Marginal Propensity to Save
400	240	—	—
500	320	—	—
600	395	—	—
700	465	—	—

Sol. This question has two way solution:

Way 1: On the assumption that initial level of income and consumption = zero.

Level of Income (Y) (₹)	Consumption Expenditure (C) (₹)	Marginal Propensity to Consume (MPC) = $\frac{\Delta C}{\Delta Y}$	Marginal Propensity to Save (MPS) = 1 – MPC
400	240	$\frac{240-0}{400-0}=\frac{240}{400}=0.60$	$1-0.60=0.40$
500	320	$\frac{320-240}{500-400}=\frac{80}{100}=0.80$	$1-0.80=0.20$
600	395	$\frac{395-320}{600-500}=\frac{75}{100}=0.75$	$1-0.75=0.25$
700	465	$\frac{465-395}{700-600}=\frac{70}{100}=0.70$	$1-0.70=0.30$

Way 2: On the assumption that initial level of income and consumption = ₹ 400 and ₹ 240 respectively.

Level of Income (Y) (₹)	Consumption Expenditure (C) (₹)	Marginal Propensity to Consume (MPC) = $\frac{\Delta C}{\Delta Y}$	Marginal Propensity to Save (MPS) = 1 – MPC
400	240	—	—
500	320	0.80	0.20
600	395	0.75	0.25
700	465	0.70	0.30

7. How much additional income will be generated in an economy with additional investment of ₹ 100 crore, when MPC = $\frac{1}{2}$?

Sol.

$$K = \frac{1}{1-MPC} = \frac{1}{1-\frac{1}{2}} = \frac{1}{\frac{1}{2}} = 2$$

We know that,

$$K = \frac{\Delta Y}{\Delta I}$$

and $$\Delta Y = K \times \Delta I$$

$$= 2 \times 100 = 200$$

Additional income = ₹ 200 crore.

8. A ₹ 200 crore increase in investment leads to a rise in national income by ₹ 1,000 crore. Find out marginal propensity to consume.

Sol. Given, increase in investment (ΔI) = ₹ 200 crore

Increase in national income (ΔY) = ₹ 1,000 crore

We know,

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I}$$

$$= \frac{1{,}000}{200} = 5$$

We also know,

$$K = \frac{1}{1 - MPC}$$

$$1 - MPC = \frac{1}{5}$$

$$1 - MPC = 0.2$$

$$MPC = 1 - 0.2 = 0.8$$

Marginal propensity to consume = 0.8.

9. It is planned to make a new investment of ₹ 1,400 crore in the economy. How much will be the increase in national income if marginal propensity to save is 0.4? Calculate.

Sol. Given, increase in investment = ₹ 1,400 crore

Marginal propensity to save (MPS) = 0.4

$$\text{Multiplier (K)} = \frac{1}{1 - MPC}$$

$$= \frac{1}{MPS} = \frac{1}{0.4} = 2.5$$

We know, $$K = \frac{\Delta Y}{\Delta I}$$

$\Rightarrow$ $$\Delta Y = K \times \Delta I$$

$$= 2.5 \times 1{,}400$$

$$= 3{,}500$$

Increase in national income = ₹ 3,500 crore.

10. In an economy, the equilibrium level of income is ₹ 15,000 crore. The ratio of marginal propensity to consume and marginal propensity to save is 3 : 1. Calculate the additional investment needed to reach a new equilibrium level of income of ₹ 22,000 crore.

Sol. Initial equilibrium level of income = ₹ 15,000 crore

Desired equilibrium level of income = ₹ 22,000 crore

Desired increase in equilibrium level of income (ΔY) = ₹ 22,000 crore – ₹ 15,000 crore

= ₹ 7,000 crore

Let us suppose that MPC = $3x$ and MPS = $1x$

We know,

$$MPC + MPS = 1$$

$$3x + 1x = 1$$

$$4x = 1 \quad \Rightarrow \quad x = \frac{1}{4} = 0.25$$

$\therefore$ $$MPC = 3x$$

$$= 3\,(0.25) = 0.75$$

and $$MPS = 1x$$

$$= 1\,(0.25) = 0.25$$

When MPC = 0.75, multiplier (K) will be

$$K = \frac{1}{1-MPC}$$

$$= \frac{1}{1-0.75} = \frac{1}{0.25} = 4$$

We also know,

$$K = \frac{\Delta Y}{\Delta I}$$

$$4 = \frac{7,000}{\Delta I}$$

$$\Rightarrow \quad \Delta I = \frac{7,000}{4} = 1,750$$

Hence, investment of ₹ 1,750 crore will be needed to reach a new equilibrium level of income of ₹ 22,000 crore.

11. In an economy, investment expenditure is increased by ₹ 400 crore and marginal propensity to consume is 0.6. Calculate the total increase in income and saving.

Sol. Given, increase in investment expenditure (ΔI) = ₹ 400 crore

Marginal propensity to consume (MPC) = 0.6

We know that,

$$\text{Multiplier (K)} = \frac{1}{1-MPC} = \frac{1}{1-0.6} = \frac{1}{0.4} = 2.5$$

$$MPS = 1 - MPC$$

$$= 1 - 0.6 = 0.4$$

$$\text{Increase in Income} = K \times \Delta I$$

$$= 2.5 \times 400$$

$$= 1,000$$

$$\text{Increase in Saving} = MPS \times \Delta Y$$

$$= 0.4 \times 1,000$$

$$= 400$$

Increase in income = ₹ 1,000 crore.

Increase in saving = ₹ 400 crore.

12. In an economy, investment expenditure is increased by ₹ 700 crore. The marginal propensity to consume is 0.8. Calculate the total increase in income and consumption expenditure.

Sol. Given, increase in investment expenditure = ₹ 700 crore

Marginal propensity to consume (MPC) = 0.8

We know that,

$$\text{Multiplier (K)} = \frac{1}{1-MPC} = \frac{1}{1-0.8} = \frac{1}{0.2} = 5$$

$$\text{Increase in Income} = K \times \Delta I$$

$$= 5 \times 700$$

$$= 3,500$$

$$\text{Increase in Consumption} = MPC \times \Delta Y$$

$$= 0.8 \times 3,500 = 2,800$$

Increase in income = ₹ 3,500 crore.

Increase in consumption expenditure = ₹ 2,800 crore.

13. As a result of an increase in investment by ₹ 100 crore, national income rises by ₹ 400 crore. Calculate marginal propensity to consume.

Sol. Given, increase in investment (ΔI) = ₹ 100 crore

Increase in national income (ΔY) = ₹ 400 crore

We know that,

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I} = \frac{400}{100} = 4$$

We also know that,

$$K = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 4 = \frac{1}{1 - MPC}$$

$$\Rightarrow \quad 1 - MPC = \frac{1}{4}$$

$$\Rightarrow \quad 1 - MPC = 0.25$$

$$\Rightarrow \quad MPC = 1 - 0.25 = 0.75$$

Marginal propensity to consume = 0.75.

14. If national income is ₹ 100 crore and consumption expenditure ₹ 90 crore, find out average propensity to save. When income rises to ₹ 120 crore and consumption expenditure to ₹ 108 crore, what will be the marginal propensity to consume and marginal propensity to save?

Sol. Given, national income (Y) = ₹ 100 crore

Consumption expenditure (C) = ₹ 90 crore

Saving (S) = Y – C

= ₹ 100 crore – ₹ 90 crore

= ₹ 10 crore

$$\text{Average Propensity to Save (APS)} = \frac{S}{Y} = \frac{10}{100} = 0.1$$

Increased Income (Y_1) = ₹ 120 crore

Increased Consumption Expenditure (C_1) = ₹ 108 crore

Increased Saving (S_1) = ₹ 120 crore – ₹ 108 crore

= ₹ 12 crore

Change in Income (ΔY) = ₹ 120 crore – ₹ 100 crore

= ₹ 20 crore

Change in Consumption Expenditure (ΔC) = ₹ 108 crore – ₹ 90 crore

= ₹ 18 crore

Change in Saving (ΔS) = ₹ 12 crore – ₹ 10 crore

= ₹ 2 crore

$$\text{Marginal Propensity to Consume (MPC)} = \frac{\Delta C}{\Delta Y} = \frac{18}{20} = 0.9$$

$$\text{Marginal Propensity to Save (MPS)} = \frac{\Delta S}{\Delta Y} = \frac{2}{20} = 0.1$$

Average propensity to save = 0.1.
Marginal propensity to consume = 0.9.
Marginal propensity to save = 0.1.

15. Complete the following table:

Income	Saving	Marginal Propensity to Consume	Average Propensity to Save
20	–12		
40	–6	—	—
60	0	—	—
80	6	—	—

Sol.

Income (Y)	Saving (S)	Consumption (C) = Y – S	Marginal Propensity to Consume (MPC) = $\frac{\Delta C}{\Delta Y}$	Average Propensity to Save (APS) = $\frac{S}{Y}$
20	–12	32	—	$\frac{-12}{20} = -0.6$
40	–6	46	$\frac{14}{20} = 0.7$	$\frac{-6}{40} = -0.15$
60	0	60	$\frac{14}{20} = 0.7$	$\frac{0}{60} = 0$
80	6	74	$\frac{14}{20} = 0.7$	$\frac{6}{80} = 0.075$

16. Complete the following table:

Income	Marginal Propensity to Consume	Saving	Average Propensity to Save
0	—	–110	
100	0.6	—	—
200	0.6	—	—
300	0.6	—	—

Sol.

Income (Y)	Marginal Propensity to Consume (MPC)	Saving (S)	Average Propensity to Save (APS) = $\frac{S}{Y}$	Consumption (C)
0	—	–110	—	110
100	0.6	–70	$\frac{-70}{100} = -0.7$	110 + 60 = 170
200	0.6	–30	$\frac{-30}{200} = -0.15$	110 + 120 = 230
300	0.6	10	$\frac{10}{300} = 0.033$	110 + 180 = 290

[**Hint:** $C = \overline{C} + bY$; where, $\overline{C} = 110$ at Y = 0 and b = 0.6.]

17. Complete the following table:

Income	Saving	Average Propensity to Consume	Marginal Propensity to Consume
0	–45		
50	–30	—	—
100	–15	—	—
150	0	—	—

Sol.

Income (Y)	Saving (S)	Consumption (C) = Y – S	Average Propensity to Consume (APC) $= \frac{C}{Y}$	Marginal Propensity to Consume (MPC) $= \frac{\Delta C}{\Delta Y}$
0	–45	45	—	—
50	–30	80	$\frac{80}{50} = 1.6$	$\frac{35}{50} = 0.7$
100	–15	115	$\frac{115}{100} = 1.15$	$\frac{35}{50} = 0.7$
150	0	150	$\frac{150}{150} = 1.0$	$\frac{35}{50} = 0.7$

18. Find consumption expenditure from the following:

National income = ₹ 1,500.

Autonomous consumption = ₹ 175.

Marginal propensity to consume = 0.75.

Sol. We know that,

$$C = \bar{C} + MPC\,(Y)$$
$$= 175 + 0.75\,(1{,}500)$$
$$= 175 + 1{,}125 = 1{,}300$$

Consumption expenditure = ₹ 1,300.

19. Find investment expenditure from the following:

National income = ₹ 800.

Autonomous consumption = ₹ 200.

Marginal propensity to consume = 0.7.

Sol. We know that,

$$Y = C + I$$

Or,

$$Y = \bar{C} + MPC\,(Y) + I$$

Or,

$$I = Y - \bar{C} - MPC\,(Y)$$
$$= 800 - 200 - 0.7\,(800)$$
$$= 800 - 200 - 560$$
$$= 800 - 760 = 40$$

Investment expenditure = ₹ 40.

20. Find national income from the following:

Autonomous consumption = ₹ 200.

Marginal propensity to consume = 0.8.

Investment expenditure = ₹ 100.

Sol. We know that,

$$Y = C + I$$

Or,

$$Y = \bar{C} + MPC\,(Y) + I$$
$$Y = 200 + 0.8Y + 100$$
$$Y = 300 + 0.8Y$$
$$Y - 0.8Y = 300$$
$$0.2Y = 300$$
$$Y = \frac{300}{0.2} = 1{,}500$$

National income = ₹ 1,500.

21. An economy is in equilibrium. The economy's consumption function is C = 200 + 0.7Y where C is consumption expenditure and Y is national income. National income is ₹ 1,500. Find out investment expenditure in the economy.

Sol. Given, $C = 200 + 0.7Y$

National income $(Y) = 1{,}500$

At equilibrium, $Y = C + I$

Or,

$$\begin{aligned} I &= Y - C \\ &= 1{,}500 - 200 - 0.7Y \\ &= 1{,}500 - 200 - 0.7\,(1{,}500) \\ &= 1{,}500 - 200 - 1{,}050 \\ &= 1{,}500 - 1{,}250 = 250 \end{aligned}$$

Investment expenditure = ₹ 250.

22. In an economy C = 50 + 0.5Y is the consumption function (where C = consumption expenditure and Y = national income) and investment expenditure is ₹ 6,000. Calculate:

(*i*) Equilibrium level of national income.

(*ii*) Saving at equilibrium level of national income.

Sol. (*i*) Given, $C = 50 + 0.5Y$

Investment expenditure (I) = ₹ 6,000

At the equilibrium level,

$$Y = C + I$$

$$\Rightarrow \quad Y = 50 + 0.5Y + 6{,}000$$

$$Y = 6{,}050 + 0.5Y$$

$$Y - 0.5Y = 6{,}050$$

$$0.5Y = 6{,}050$$

$$Y = \frac{6{,}050}{0.5} = 12{,}100$$

(*ii*) At $Y = 12{,}100$

$$\begin{aligned} \text{Consumption, } C &= 50 + 0.5Y \\ &= 50 + 0.5\,(12{,}100) \\ &= 50 + 6{,}050 = 6{,}100 \end{aligned}$$

We know that, $Y = C + S$

Or, $S = Y - C$

$\Rightarrow \quad S = 12{,}100 - 6{,}100 = 6{,}000$

Alternative Method

At equilibrium level,

$$\text{Saving} = \text{Investment}$$

$$\therefore \quad \text{Saving} = 6{,}000$$

(*i*) Equilibrium level of national income = ₹ 12,100.

(*ii*) Saving at equilibrium level of national income = ₹ 6,000.

23. The saving function of an economy is S = –250 + 0.35Y. The economy is in equilibrium when income is equal to 5,000. Calculate:

(*i*) Investment expenditure at equilibrium level of income.

(*ii*) Autonomous consumption.

Sol. (*i*) Given, S = –250 + 0.35Y

Income (Y) = 5,000

At the equilibrium level, $S = I$

$\Rightarrow$ $-250 + 0.35Y = I$

$\Rightarrow$ $I = -250 + 0.35\,(5{,}000)$

$= -250 + 1{,}750$

$= 1{,}500$

(*ii*) At Y = 0, $S = -250 + 0.35\,(0)$

$= -250$

Consumption, $C = Y - S$

$= 0 - (-250)$

$= 250$

(*i*) Investment expenditure at equilibrium level of income = 1,500.

(*ii*) Autonomous consumption = 250.

24. In an economy, the saving function is S = –600 + 0.2Y where S is saving and Y is income. Calculate the equilibrium level of income and consumption expenditure when investment expenditure is 800.

Sol. Given, S = –600 + 0.2Y

Investment expenditure (I) = 800

At equilibrium, $S = I$

$-600 + 0.2Y = 800$

$0.2Y = 800 + 600$

$0.2Y = 1{,}400$

$$Y = \frac{1{,}400}{0.2} = 7{,}000$$

When Y = 7,000, $S = -600 + 0.2\,(7{,}000)$

$= -600 + 1{,}400$

$= 800$

We know that, Consumption (C) = Y – S

$\Rightarrow$ $= 7{,}000 - 800$

$= 6{,}200$

Equilibrium level of income = 7,000.

Equilibrium level of consumption expenditure = 6,200.

25. In an economy, the consumption function is C = 900 + 0.6Y where C is consumption expenditure and Y is income. Calculate the equilibrium level of income and saving when investment expenditure is ₹ 7,000.

Sol. Given, C = 900 + 0.6Y

Investment expenditure (I) = 7,000

At equilibrium, $Y = C + I$

$Y = 900 + 0.6Y + 7{,}000$

$Y = 7{,}900 + 0.6Y$

$Y - 0.6Y = 7{,}900$

$$0.4Y = 7,900$$

$$Y = \frac{7,900}{0.4} = 19,750$$

When Y = 19,750, $C = 900 + 0.6\,(19,750)$

$$= 900 + 11,850$$

$$= 12,750$$

We know that, $\text{Saving (S)} = Y - C$

$$= 19,750 - 12,750$$

$$= 7,000$$

Equilibrium level of income = ₹ 19,750.

Saving at equilibrium level of income = ₹ 7,000.

26. An increase in investment by ₹ 400 crore leads to increase in national income by ₹ 1,600 crore. Calculate marginal propensity to consume and marginal propensity to save.

Sol. Given, increase in investment (ΔI) = ₹ 400 crore

Increase in national income (ΔY) = ₹ 1,600 crore

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I}$$

$\Rightarrow$ $$K = \frac{1,600}{400} = 4$$

We know, $$K = \frac{1}{1 - MPC}$$

$$4 = \frac{1}{1 - MPC}$$

$$1 - MPC = \frac{1}{4}$$

$$1 - MPC = 0.25$$

$$MPC = 1 - 0.25$$

$$MPC = 0.75$$

We also know that,

$$MPC + MPS = 1$$

$$MPS = 1 - MPC$$

$$= 1 - 0.75 = 0.25$$

Marginal propensity to consume = 0.75.

Marginal propensity to save = 0.25.

27. Complete the following table:

Income	Consumption	Marginal Propensity to Save	Average Propensity to Save
0	40	—	—
50	70	—	—
100	100	—	—
150	120	—	—

Sol.

Income (Y)	Consumption (C)	Saving (S = Y – C)	Marginal Propensity to Save (MPS) = $\frac{\Delta S}{\Delta Y}$	Average Propensity to Save (APS) = $\frac{S}{Y}$
0	40	–40	—	—
50	70	–20	0.4	–0.4
100	100	0	0.4	0
150	120	30	0.6	0.2

28. From the following information about an economy, calculate (*i*) its equilibrium level of national income, and (*ii*) saving at equilibrium level of national income.

Consumption function: C = 200 + 0.9Y (where C = consumption expenditure and Y = national income).

Investment expenditure: I = 3,000.

Sol. (*i*) Given, C = 200 + 0.9Y

Investment expenditure (I) = 3,000

At the equilibrium level

$$Y = C + I$$
$$Y = 200 + 0.9Y + 3{,}000$$
$$Y = 3{,}200 + 0.9Y$$
$$Y - 0.9Y = 3{,}200$$
$$0.1Y = 3{,}200$$
$$\therefore \quad Y = \frac{3{,}200}{0.1} = 32{,}000$$

(*ii*) At Y = 32,000

$$\text{Consumption (C)} = 200 + 0.9Y$$
$$= 200 + 0.9\,(32{,}000)$$
$$= 200 + 28{,}800 = 29{,}000$$

Thus, $\quad \text{Saving (S)} = Y - C$

$$= 32{,}000 - 29{,}000 = 3{,}000$$

Equilibrium level of national income = 32,000.

Saving at equilibrium level of national income = 3,000.

29. C = 100 + 0.75Y is a consumption function (where C = consumption expenditure and Y= national income) and investment expenditure is 800. On the basis of this information calculate:

(*i*) equilibrium level of national income

(*ii*) saving at equilibrium level of national income.

Sol. (*i*) Given, C = 100 + 0.75

Investment expenditure (I) = 800

At the equilibrium level,

$$Y = C + I$$
$$Y = 100 + 0.75Y + 800$$
$$Y = 900 + 0.75Y$$
$$Y - 0.75Y = 900$$
$$0.25Y = 900$$
$$Y = \frac{900}{0.25} = 3{,}600$$

(*ii*) Consumption, $C = 100 + 0.75Y$

$= 100 + 0.75\ (3,600)$

$= 100 + 2,700 = 2,800$

We know that, $Y = C + S$

$\Rightarrow$ $S = Y - C$

$= 3,600 - 2,800 = 800$

Equilibrium level of national income = 3,600.

Saving at equilibrium level of national income = 800.

30. The saving function of an economy is S = –200 + 0.25Y. The economy is in equilibrium when income is equal to 2,000. Calculate:

(*i*) Investment expenditure at equilibrium level of income.

(*ii*) Autonomous consumption.

(*iii*) Investment multiplier.

Sol. (*i*) Given, $S = -200 + 0.25Y$

Income (Y) = 2,000

At the equilibrium level,

$$S = I$$

$$\Rightarrow \quad -200 + 0.25Y = I$$

$$\Rightarrow \quad I = -200 + 0.25\ (2,000)$$

$$I = -200 + 500$$

$$= 300$$

(*ii*) At Y = 0, $S = -200 + 0.25\ (0)$

$= -200$

Consumption, $C = Y - S$

$= 0 - (-200)$

$= 200$

(*iii*) Investment Multiplier (K) $= \dfrac{1}{1 - MPC} = \dfrac{1}{MPS}$

$= \dfrac{1}{0.25} = 4$ $\quad (\because MPS = 0.25)$

Investment expenditure at equilibrium level of income = 300.

Autonomous consumption = 200.

Investment multiplier = 4.

31. If in an economy:

(*a*) Consumption function is given by C = 100 + 0.75Y, and

(*b*) Autonomous investment is ₹150 crore.

Estimate (*i*) Equilibrium level of income, and (*ii*) Consumption and Savings at the equilibrium level of income. [*CBSE Sample Paper 2017*]

Sol. (*a*) Given, $C = 100 + 0.75Y$

Autonomous investment $(\bar{I})$ = ₹ 150 crore

At the equilibrium level,

$$Y = C + \bar{I}$$

$$Y = 100 + 0.75Y + 150$$

$$Y = 250 + 0.75Y$$
$$Y - 0.75Y = 250$$
$$0.25Y = 250$$
$$Y = \frac{250}{0.25} = 1{,}000$$

(*b*) At Y = 1,000

$$\text{Consumption, } C = 100 + 0.75Y$$
$$= 100 + 0.75\,(1{,}000)$$
$$= 100 + 750 = 850$$

We know that, $Y = C + S$

Or, $S = Y - C$

⇒ $S = 1{,}000 - 850$

$= 150$

(*i*) **Equilibrium level of income = ₹ 1,000 crore.**

(*ii*) **Consumption at equilibrium level of income = ₹ 850 crore.**

Savings at equilibrium level of income = ₹ 150 crore.

32. Estimate the value of ex-ante AD, when autonomous investment and consumption expenditure (A) is ₹ 50 crore, and MPS is 0.2 and level of income is ₹ 300 crore. *[CBSE Sample Paper 2018]*

Sol. Given, level of income (Y) = ₹ 300 crore

$\bar{I} + \bar{C}$ = ₹ 50 crore

Marginal propensity to save (MPS) = 0.2

We know that,

$I = \bar{I}$ (all investment is autonomous) and

$$C = \bar{C} + bY$$

where b = MPC = 1 – MPS = 1 – 0.2 = 0.8

Thus, $AD = \bar{I} + \bar{C} + bY$

Putting the given values, we get

$$AD = 50 + 0.8\,(300)$$
$$= 50 + 240 = 290$$

Ex-ante AD = ₹ 290 crore.

33. Calculate multiplier when MPC is $\frac{4}{5}$ and $\frac{1}{2}$. From the calculations establish the relation between size of multiplier and size of MPC. *[CBSE Sample Paper 2018]*

Sol. We know that,

$$\text{Multiplier (K)} = \frac{1}{1 - \text{MPC}}$$

When MPC = $\frac{4}{5}$, multiplier (K) will be:

$$K = \frac{1}{1 - \text{MPC}}$$
$$= \frac{1}{1 - \frac{4}{5}} = \frac{1}{\frac{1}{5}} = 5$$

When MPC = $\frac{1}{2}$, multiplier (K) will be:

$$K = \frac{1}{1 - MPC}$$

$$= \frac{1}{1-\frac{1}{2}} = \frac{1}{\frac{1}{2}} = 2$$

We find that higher the MPC, greater the value of multiplier.

34. Estimate the value of aggregate demand in an economy if:

(*a*) Autonomous investment ($\bar{I}$) = ₹ 100 crore.

(*b*) Marginal propensity to save (MPS) = 0.2.

(*c*) Level of income (Y) = ₹ 4,000 crore.

(*d*) Autonomous consumption expenditure ($\bar{C}$) = ₹ 50 crore. [*CBSE Sample Paper 2019*]

Sol. Given, autonomous investment ($\bar{I}$) = ₹ 100 crore

Marginal propensity to save (MPS) = 0.2

Level of income (Y) = ₹ 4,000 crore

Autonomous consumption expenditure ($\bar{C}$) = ₹ 50 crore

Marginal propensity to consume (MPC) = 1 – MPS

$= 1 - 0.2 = 0.8$

We know that,

$$AD = C + \bar{I}$$

Or,

$$AD = \bar{C} + MPC\,(Y) + I$$
$$= 50 + 0.8\,(4{,}000) + 100$$
$$= 50 + 3{,}200 + 100$$
$$= 3{,}350$$

Aggregate demand = ₹ 3,350 crore.

35. In an economy C = 200 + 0.5Y is the consumption function where C is the consumption expenditure and Y is the national income. Investment expenditure is ₹ 400 crore. Is the economy in equilibrium at an income level ₹ 1,500 crore? Justify your answer. [*CBSE Sample Paper 2019*]

Sol. Given, consumption function, C = 200 + 0.5Y

Investment expenditure = ₹ 400 crore

At the equilibrium level,

$$Y = C + I$$
$$Y = 200 + 0.5Y + 400$$
$$Y = 600 + 0.5Y$$
$$Y - 0.5Y = 600$$
$$0.5Y = 600$$
$$Y = \frac{600}{0.5} = 1{,}200$$

The economy is in equilibrium when the equilibrium level of income is ₹ 1,200 crore. Accordingly, if the equilibrium income = ₹ 1,500 crore, the economy is not in equilibrium.

Reason: Equilibrium is struck only when income = expenditure [= ₹ 1,200 crore as in the above solution].

GOVERNMENT BUDGET AND THE ECONOMY

4 UNIT

- Government Budget—Meaning and Objectives
- Receipts and Expenditure of the Government—Revenue and Capital
- Budgetary Deficit and its Estimation—Revenue Deficit, Fiscal Deficit and Primary Deficit

POWER POINTS

1. Government Budget—Meaning and Objectives

Government budget is a statement of the estimates of the government receipts and government expenditure during the period of the financial year. It unveils/reveals the fiscal policy (budgetary policy) of the government for the year to come.

Objectives of the Government Budget

(*i*) To accelerate GDP in terms of the flow of goods and services in the economy.

(*ii*) To promote the development of backward regions of the country with a view to minimising the regional disparities.

(*iii*) Reallocation of resources with a view to maximising social welfare.

(*iv*) Abundant provision of public goods (particularly in terms of law & order and defence), so that the people of the country live in a peaceful environment.

(*v*) Redistribution of income and wealth with a view to reducing the gulf between the rich and the poor.

(*vi*) Investment in public enterprises with a view to generating employment opportunities.

2. Receipts and Expenditure of the Government—Revenue and Capital

Revenue Receipts

These are those receipts (*i*) which do not cause any reduction in assets of the government, and (*ii*) which do not create any liability for the government (**Example:** Tax receipts of the government).

Capital Receipts

These are those receipts: (*i*) which create a corresponding liability for the government (**Example:** Loans by the government), and (*ii*) which cause reduction in assets of the government (**Example:** Disinvestment).

Revenue Expenditure

It is that expenditure of the government: (*i*) which does not cause increase in government assets, and (*ii*) which does not cause any reduction in government liability (**Example:** Expenditure on old-age pensions).

Capital Expenditure

It is that expenditure of the government: (*i*) which causes increase in government assets (**Example:** Expenditure on construction of roads), and (*ii*) which causes reduction in government liability (**Example:** Payment of loan by the government).

3. Budgetary Deficit and its Estimation— Revenue Deficit, Fiscal Deficit and Primary Deficit

(i) Revenue Deficit

It is the excess of revenue expenditure over revenue receipts.

Revenue Deficit = Revenue expenditure – Revenue receipts

(ii) Fiscal Deficit

Fiscal deficit is the excess of total expenditure (revenue + capital) over total receipts (revenue + capital other than borrowings).

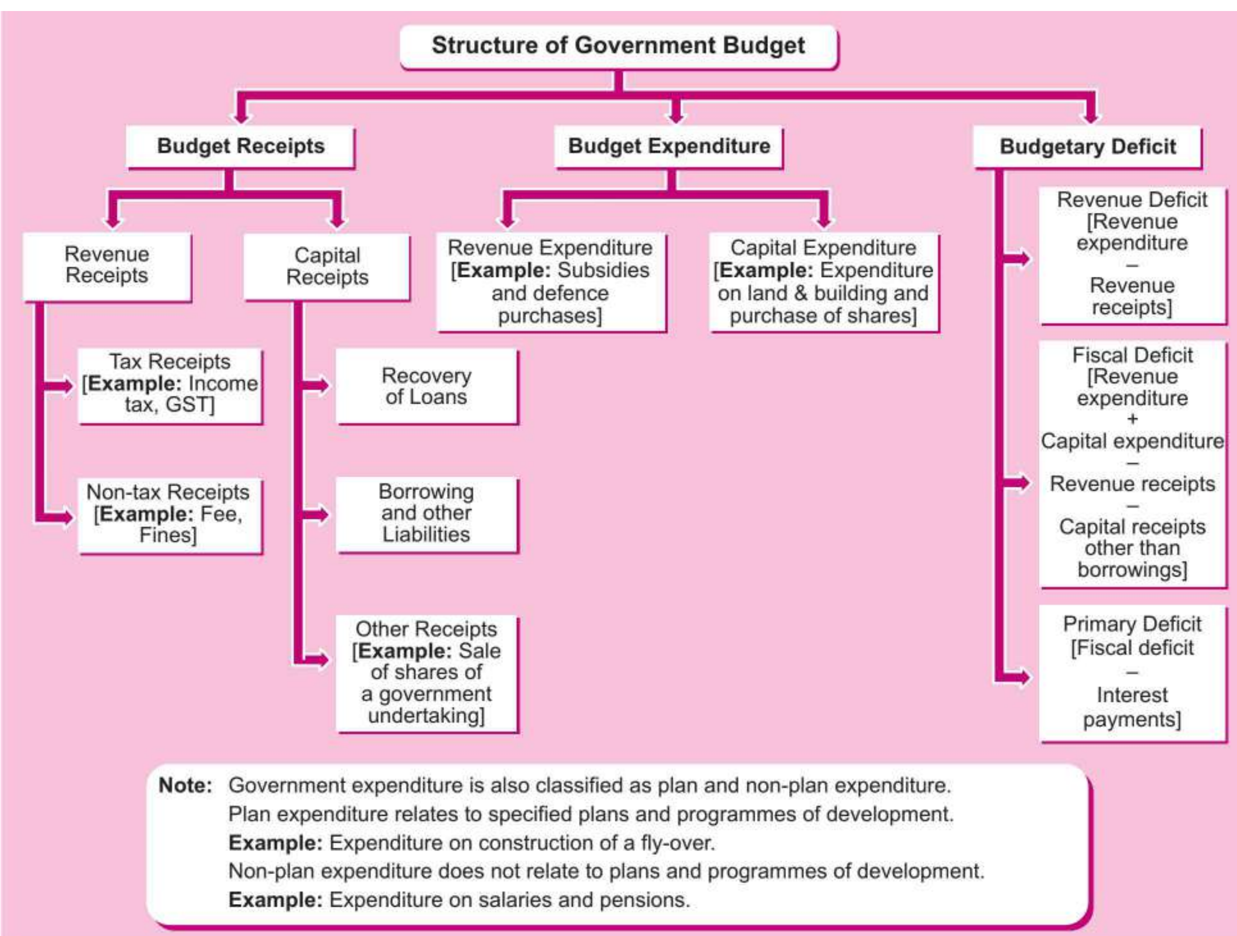
Fiscal Deficit = Total expenditure (Revenue expenditure + Capital expenditure) – Total receipts other than borrowings (Revenue receipts + Capital receipts other than borrowings)

(iii) Primary Deficit

It is the difference between fiscal deficit and interest payments.

Primary Deficit = Fiscal deficit – Interest payment

Note:
Deficit occurs when expenditure is greater than receipts of the government.



QUESTION-ANSWERS

GOVERNMENT BUDGET—MEANING AND OBJECTIVES

1. Very Short Questions (Remembering & Understanding)

A. Multiple Choice Questions

Choose the correct option:

1. **Government budget is a:**
   (*a*) statement of actual receipts of the government during a fiscal year
   (*b*) statement of actual annual expenditure of the government during a fiscal year
   (*c*) statement of estimated annual receipts and estimated annual expenditure of the government during a fiscal year
   (*d*) none of these
2. **Which of the following is the objective of a government budget?**
   (*a*) Provision of private goods
   (*b*) High rate of GDP growth
   (*c*) Maximisation of profits of public enterprises
   (*d*) Increasing revenue of the government
3. **Government budget shows estimated expenditure of the government in terms of:**
   (*a*) consumption expenditure (*b*) investment expenditure
   (*c*) transfer payments (*d*) all of these
4. **Public goods are those goods:**
   (*a*) which satisfy collective needs of the people
   (*b*) which satisfy needs of the government
   (*c*) which are available only to those people who are below poverty line
   (*d*) none of these
5. **Revenue budget includes:**
   (*a*) revenue receipts of the government (*b*) revenue expenditure of the government
   (*c*) capital receipts of the government (*d*) both (*a*) and (*b*)
6. **Law & order and defence of the country are the examples of:**
   (*a*) private goods (*b*) public goods
   (*c*) economic goods (*d*) non-economic goods
7. **The focus of government budget is:**
   (*a*) to maximise fiscal deficit (*b*) to minimise fiscal deficit
   (*c*) to maximise expenditure (*d*) to maximise revenue
8. **Subsidies are offered by the government:**
   (*a*) to encourage the production of certain goods
   (*b*) to discourage the production of certain goods
   (*c*) to encourage the consumption of certain goods
   (*d*) both (*a*) and (*c*)

Ans. **1.** (*c*) **2.** (*b*) **3.** (*d*) **4.** (*a*) **5.** (*d*) **6.** (*b*) **7.** (*b*) **8.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Government budget is a/an ________________ statement of revenue and expenditure of the government. (estimated/actual)
2. ________________ goods satisfy collective needs of the people. (Private/Public)
3. The programmes and policies of government presented in the budget are known as ________________. (fiscal policy/monetary policy)

Ans. **1.** estimated **2.** Public **3.** fiscal policy

C. True or False

State whether the following statements are True or False:

1. Budget unfolds the financial performance of the government over the past two years. (True/False)
2. Budget is presented by the Finance Minister for its approval by the parliament. (True/False)
3. A private good is non-rivalrous and excludable. (True/False)

Ans. **1.** False **2.** True **3.** False

D. Very Short Answer Questions

1. Define government budget.

Ans. Government budget is a statement of estimated receipts and expenditure of the government during a financial year.

2. What is meant by the fiscal year in India?

Ans. In India, fiscal year is the year which begins on April 1 and ends on March 31 of the following year.

3. Name the two parts of a government budget.

Ans. (*i*) Revenue budget, and (*ii*) Capital budget.

4. Define revenue budget.

Ans. Revenue budget is the statement of estimated revenue receipts and estimated revenue expenditure during a fiscal year.

5. Define capital budget.

Ans. Capital budget is the statement of estimated capital receipts and estimated capital expenditure during a fiscal year.

6. What is meant by balanced budget?

Ans. Balanced budget is that budget in which government receipts are equal to government expenditure.

7. What is meant by surplus budget?

Ans. Surplus budget is that budget in which government receipts are more than the government expenditure.

8. What is meant by deficit budget?

Ans. Deficit budget is that budget in which government receipts are less than government expenditure.

9. Define public goods.

Ans. Public goods are those goods which satisfy collective needs of the people. **Example:** Law & Order and Defence of the country.

10. What is meant by fiscal discipline?

Ans. Fiscal discipline refers to a situation when fiscal deficit is within the manageable limits and it does not lead to high rate of inflation in the country.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Government budget is a statement of actual receipts and actual expenditure of the government during the past year.**

Ans. False. Government budget is a statement of estimated receipts and estimated expenditure of the government during the next fiscal year.

2. **Government budget is presented only by the central government in India.**

Ans. False. Government budget is presented by the central government as well as the state governments in India.

3. **The budget reveals the financial performance of the government as well as financial programmes and policies of the government over the past one year.**

Ans. False. The budget reveals the financial performance of the government over the past one year, but the financial programmes and policies of the government for the next one year.

4. **Budget shows monetary policy of the government.**

Ans. False. Budget shows fiscal policy (or budgetary policy) of the government for the year to come.

5. **Budget is in surplus when the last year receipts of the government > last year expenditure of the government.**

Ans. False. Budget is in surplus when the estimated receipts of the government > estimated expenditure of the government for the next fiscal year.

6. **In India, the government budget does not relate itself to the problem of economic divide.**

Ans. False. In India, the government budget does relate itself to the problem of economic divide (the gulf between the rich and the poor). The problem is combated by the revenue and expenditure policy of the government. On the revenue side, the government offers tax exemption to poorer sections of the society. On the expenditure side, the government offers free education and healthcare to those who are below the poverty line.

7. **In India, SEZ promotes development of backward regions.**

Ans. True. In India, SEZ promotes development of backward regions because taxes are moderate in SEZ compared to other parts of the domestic economy. Moderate taxes along with infrastructural development make SEZ an attractive destination for investment. This contributes to balanced regional growth.

8. **Inclusive growth is not within the ambit of budgetary policy of the government.**

Ans. False. Inclusive growth implies that the benefits of growth accrue to all sections of the society. 'Taxes and subsidies' are an important element of budgetary policy, and these are meant to promote inclusive growth.

▶ RECEIPTS AND EXPENDITURE OF THE GOVERNMENT— REVENUE AND CAPITAL

1. Very Short Questions (Remembering & Understanding)

A. Multiple Choice Questions

Choose the correct option:

1. **Budget receipts refer to:**
   (*a*) actual money receipts of the government from all sources during a fiscal year
   (*b*) actual capital receipts of the government from all sources during a fiscal year
   (*c*) estimated money receipts of the government from all sources during a fiscal year
   (*d*) estimated capital receipts of the government from all sources during a fiscal year

2. **Those receipts which do not create any corresponding liability for the government are called:**
(*a*) revenue receipts
(*b*) capital receipts
(*c*) general receipts
(*d*) both (*a*) and (*b*)

3. **Capital receipts:**
(*a*) do not create any liability for the government
(*b*) do not cause any reduction in assets of the government
(*c*) cause reduction in assets of the government
(*d*) both (*a*) and (*b*)

4. **Borrowing by the government is a:**
(*a*) revenue receipt
(*b*) capital receipt
(*c*) revenue expenditure
(*d*) capital expenditure

5. **Tax is:**
(*a*) an optional payment
(*b*) a compulsory payment
(*c*) a legal payment
(*d*) both (*b*) and (*c*)

6. **In case of indirect taxes:**
(*a*) the final burden of the tax is borne by the person on whom it is imposed
(*b*) the burden of tax can be shifted to any other person
(*c*) the burden of tax cannot be shifted to any other person
(*d*) both (*a*) and (*c*)

7. **Those receipts which arise from sources other than taxes are called:**
(*a*) tax receipts
(*b*) non-tax receipts
(*c*) revenue receipts
(*d*) capital receipts

8. **In case of fees:**
(*a*) the payer receives some service from the government
(*b*) the payer does not receive some service from the government
(*c*) assets of the government are reduced
(*d*) none of these

9. **Gift tax is a:**
(*a*) wealth tax
(*b*) direct tax
(*c*) indirect tax
(*d*) none of these

10. **VAT is an example of:**
(*a*) direct tax
(*b*) indirect tax
(*c*) wealth tax
(*d*) none of these

11. **Progressive taxation:**
(*a*) reduces inequality
(*b*) increases equality
(*c*) relates to progress of GDP growth
(*d*) both (*a*) and (*b*)

12. **Disinvestment refers to:**
(*a*) addition to the existing stock of capital
(*b*) balancing the existing stock of capital
(*c*) withdrawal of existing investment
(*d*) none of these

13. **Budget expenditure is related to:**
(*a*) development as well as non-development programmes of the government
(*b*) either development or non-development programmes of the government
(*c*) neither development nor non-development programmes of the government
(*d*) none of these

14. Which of the following is correct in case of revenue expenditure?

(*a*) It reduces liability of the government
(*b*) It does not create any asset for the government
(*c*) It creates asset for the government
(*d*) None of these

15. Estimated expenditure of the government which causes a reduction in liabilities of the government is called:

(*a*) revenue expenditure
(*b*) capital expenditure
(*c*) plan expenditure
(*d*) non-plan expenditure

16. Which of the following is an item of revenue expenditure?

(*a*) Expenditure on land and building
(*b*) Construction of a school
(*c*) Interest payments
(*d*) Repayment of loan

17. Purchase of shares is related to:

(*a*) revenue receipts
(*b*) revenue expenditure
(*c*) capital receipts
(*d*) capital expenditure

18. Expenditure on salaries is an example of:

(*a*) plan expenditure
(*b*) non-plan expenditure
(*c*) both (*a*) and (*b*)
(*d*) none of these

Ans. **1.** (*c*) **2.** (*a*) **3.** (*c*) **4.** (*b*) **5.** (*d*) **6.** (*b*) **7.** (*b*) **8.** (*a*) **9.** (*b*) **10.** (*b*) **11.** (*d*) **12.** (*c*) **13.** (*a*) **14.** (*b*) **15.** (*b*) **16.** (*c*) **17.** (*d*) **18.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ receipts cause reduction in assets of the government. (Revenue/Capital)
2. In ________________ tax system, the rate of tax increases with an increase in income. (progressive/regressive)
3. GST is a/an ________________ tax. (direct/indirect)
4. Fees, licence and permit are ________________ revenue receipts. (tax/non-tax)
5. Selling shares of Maruti car Udyog by Government of India is called ________________. (disinvestment/investment)
6. ________________ does not create any asset for the government. (Revenue expenditure/Capital expenditure)
7. ________________ budget focuses on GDP growth by way of public investment. (Revenue/Capital)

Ans. **1.** Capital **2.** progressive **3.** indirect **4.** non-tax **5.** disinvestment **6.** Revenue expenditure **7.** Capital

C. True or False

State whether the following statements are True or False:

1. Revenue budget impacts asset-liability status of the government. (True/False)
2. Regressive tax system causes a greater real burden on the poor than the rich. (True/False)
3. Revenue receipts lead to liabilities of the government. (True/False)
4. Borrowing by the government is a capital receipt. (True/False)
5. Tax is not a legal payment. (True/False)

6. Non-plan expenditure is not related to budgetary expenditure of the government. (True/False)

7. Specific tax is not a value-added tax. (True/False)

Ans. **1.** False **2.** True **3.** False **4.** True **5.** False **6.** False **7.** True

D. Very Short Answer Questions

1. **Define revenue receipts.**

Ans. Revenue receipts are those receipts of the government which neither create a liability for the government nor lead to reduction in assets of the government.

2. **Define capital receipts.**

Ans. Capital receipts are those receipts of the government which either create a liability for the government or lead to reduction in assets of the government.

3. **What do you mean by tax receipts?**

Ans. Tax receipts are receipts of the government from all types of direct as well as indirect taxes levied by the government on the individuals, households, institutions or corporations.

4. **What do you mean non-tax receipts?**

Ans. Non-tax receipts are those receipts of the government which arise from sources other than taxes. These include receipts from fees, fines, interest, dividend, grants, donations, etc.

5. **Give two examples of tax revenue.**

Ans. (*i*) Income tax, and (*ii*) Gift tax.

6. **Give two examples of non-tax revenue.**

Ans. (*i*) Fees, and (*ii*) Fines.

7. **What is a tax?**

Ans. A tax is a compulsory payment made by an individual, household or a firm to the government without reference to anything in return.

8. **What are subsidies?**

Ans. Subsidies are the financial help provided by the government to the firms to produce the desired goods and sell them at a price lower than the equilibrium market price.

9. **Define direct tax.**

Ans. A direct tax is a tax the final burden of which falls on that very person who is liable to pay it to the government.

10. **Define indirect tax.**

Ans. Indirect tax is a tax on goods and services. Those who are liable to pay this tax need not bear the final burden of this tax. The burden of this tax can be shifted to others.

11. **Give two examples of direct tax.**

Ans. (*i*) Income tax, and (*ii*) corporation tax.

12. **Give two examples of indirect tax.**

Ans. (*i*) GST (Goods and Services Tax), and (*ii*) Excise duty.

13. **Why is income tax a direct tax?**

Ans. Income tax is a direct tax because the final burden of this tax cannot be shifted to others.

14. **What is value added tax?**

Ans. Value added tax is an indirect tax which is imposed on 'value added' at the various stages of production.

15. **What is a progressive tax?**

Ans. Progressive tax is a tax that causes relatively less real burden on the poor and more on the rich.

16. **Define regressive tax.**

Ans. Regressive tax is a tax that causes relatively more real burden on the poor and less on the rich.

17. What is a proportional tax?

Ans. Proportional tax is a tax in which the rate of taxation remains constant with increase or decrease in income.

18. Give two examples of capital receipts.

Ans. (*i*) Recovery of loans, and

(*ii*) Borrowings.

19. Classify public expenditure.

Ans. The public expenditure may be classified in three ways:

(*i*) Revenue expenditure and capital expenditure.

(*ii*) Plan expenditure and non-plan expenditure.

(*iii*) Development expenditure and non-development expenditure.

20. Define revenue expenditure.

Ans. Revenue expenditure refers to that expenditure which does not lead to asset creation or reduction in liability for the government.

21. Define capital expenditure.

Ans. Capital expenditure refers to that expenditure which leads to asset creation or reduction in liability for the government.

22. Give two examples of revenue expenditure.

Ans. (*i*) Expenditure on law and order.

(*ii*) Expenditure on old-age pensions.

23. Give two examples of capital expenditure.

Ans. (*i*) Expenditure on purchasing land.

(*ii*) Loans granted to state governments.

24. What is meant by plan expenditure?

Ans. Plan expenditure refers to that expenditure which relates to plans and programmes of development, as well as assistance of the central government to the state governments.

25. What is meant by non-plan expenditure?

Ans. Non-plan expenditure refers to that expenditure which does not relate to plans and programmes of development, or assistance of the central government to the state governments.

26. Give two examples of plan expenditure.

Ans. (*i*) Expenditure on the construction of canals for irrigation.

(*ii*) Expenditure on the construction of a hospital building.

27. Give two examples of non-plan expenditure.

Ans. (*i*) Expenditure as a relief to the earthquake victims.

(*ii*) Expenditure on subsidies.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Tax received by the government is a capital receipt.

Ans. False. Tax received by the government is not a capital receipt, it is a revenue receipt because it neither leads to creation of liability nor to reduction in assets.

2. Capital receipts do not reduce assets of the government.

Ans. False. Capital receipts are those receipts of the government which either create a liability for the government or cause a reduction in its assets.

3. Money received through disinvestment is treated as revenue receipt.

Ans. False. Money received through disinvestment is treated as capital receipt because it causes reduction in assets of the government.

4. Gift tax is a revenue receipt.

Ans. True. Gift tax is a revenue receipt because it does not involve any corresponding liability for the government.

5. Wealth tax is a direct tax.

Ans. True. Wealth tax is a direct tax because its burden cannot be shifted to other persons.

6. Recovery of loans is a revenue receipt.

Ans. False. Recovery of loans is a capital receipt because it leads to reduction in assets.

7. Borrowings by the government are capital receipts.

Ans. True. Borrowings by the government are capital receipts because they create a liability for the government.

8. When the rate of taxation increases with increase in income, it is called regressive tax.

Ans. False. When the rate of taxation increases with increase in income, it is called progressive tax.

9. When sales tax is imposed on a baker, he himself bears the final burden of it.

Ans. False. When sales tax is imposed on a baker, he does not bear the final burden of it. The baker charges this tax from the customers by adding it to the price of the goods sold. Thus, the impact of sales tax is finally borne by the customers, not the baker.

10. Revenue expenditure does not create assets for the government.

Ans. True. Revenue expenditure refers to that expenditure of the government which neither creates assets nor causes a reduction in liabilities for the government.

11. Shares purchased by the government is an example of revenue expenditure.

Ans. False. Shares purchased by the government is an example of capital expenditure because it creates assets for the government.

12. Expenditure on interest payment is a capital expenditure.

Ans. False. Expenditure on interest payment is a revenue expenditure because it neither creates assets nor causes a reduction in liabilities for the government.

13. Expenditure as a relief to the flood victims is a plan expenditure.

Ans. False. Expenditure as a relief to the flood victims is a non-plan expenditure because it is not related to plans and programmes of development.

14. Expenditure related to assistance of the central government to the state governments is a non-plan expenditure.

Ans. False. Expenditure related to assistance of the central government to the state governments is a plan expenditure.

▶ BUDGETARY DEFICIT AND ITS ESTIMATION— REVENUE DEFICIT, FISCAL DEFICIT AND PRIMARY DEFICIT

1. Very Short Questions (Remembering & Understanding)

A. Multiple Choice Questions

Choose the correct option:

1. In case of budget deficit:

(*a*) budget expenditure of the government = budget receipts of the government

(*b*) budget expenditure of the government > budget receipts of the government

(*c*) budget expenditure of the government < budget receipts of the government

(*d*) none of these

2. Excess of revenue expenditure over revenue receipts is called:

(*a*) revenue deficit (*b*) fiscal deficit

(*c*) primary deficit (*d*) none of these

3. Revenue deficit can be managed through:

(*a*) borrowing from RBI (*b*) borrowing from the general public

(*c*) disinvestment (*d*) all of these

4. Fiscal deficit is an estimate of:

(*a*) instability of the economy (*b*) growth of the economy

(*c*) borrowings by the government (*d*) all of these

5. Gross Fiscal Deficit =

(*a*) Borrowing from the government + Borrowing from abroad

(*b*) Borrowing from the government + Borrowing from abroad + Net borrowing at home

(*c*) Borrowing from the government + Borrowing from RBI + Borrowing from abroad

(*d*) Borrowing from RBI + Borrowing from abroad + Net borrowing at home

6. Greater fiscal deficit implies:

(*a*) greater borrowings by the government (*b*) fiscal indiscipline in the economy

(*c*) fiscal responsibility (*d*) both (*a*) and (*b*)

7. Fiscal Deficit =

(*a*) Total expenditure – Total receipts

(*b*) Total expenditure – Total receipts other than borrowings

(*c*) Total expenditure – Total receipts other than liabilities

(*d*) Total expenditure – Total receipts other than interest payments

8. Primary Deficit =

(*a*) Revenue deficit – Interest payment (*b*) Revenue deficit + Interest payment

(*c*) Fiscal deficit – Interest payment (*d*) Fiscal deficit + Interest payment

9. Primary deficit indicates:

(*a*) estimated borrowing of the government inclusive of interest payment

(*b*) actual borrowing of the government inclusive of interest payment

(*c*) borrowings on account of the excess of current year expenditure over current year revenue exclusive of interest payment on past loans

(*d*) borrowing by the government from the general public

10. Interest payments are included in:

(*a*) revenue deficit (*b*) fiscal deficit

(*c*) primary deficit (*d*) none of these

11. If revenue expenditure is ₹ 10,500 and revenue receipt is ₹ 9,300, then revenue deficit is:

(*a*) ₹ 1,200 (*b*) ₹ 9,300

(*c*) ₹ 10,500 (*d*) ₹ 19,800

12. In a government budget, revenue receipts = ₹ 14,200, revenue expenditure = ₹ 15,700, capital receipts net of borrowings = ₹ 5,000, capital expenditure = ₹ 18,300, and interest payments = ₹ 3,350, fiscal deficit will be:

(*a*) ₹ 1,500 (*b*) ₹ 11,450

(*c*) ₹ 14,800 (*d*) ₹ 18,150

Ans. **1.** (*b*) **2.** (*a*) **3.** (*d*) **4.** (*c*) **5.** (*d*) **6.** (*d*)
7. (*b*) **8.** (*c*) **9.** (*c*) **10.** (*b*) **11.** (*a*) **12.** (*c*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ is a budget in which government receipts are greater than government expenditures. (Surplus budget/Deficit budget)
2. ________________ deficit is inclusive of interest payment on the past loans. (Fiscal/Primary)
3. Primary deficit is the difference between ________________ and interest payment. (revenue deficit/fiscal deficit)

Ans. **1.** Surplus budget **2.** Fiscal **3.** fiscal deficit

C. True or False

State whether the following statements are True or False:

1. Fiscal deficit is an estimate of borrowings by the government. (True/False)
2. In a balanced budget, government receipts are greater than government expenditure. (True/False)
3. Revenue Deficit occurs when: Revenue Receipts < Revenue Expenditure. (True/False)

Ans. **1.** True **2.** False **3.** True

D. Very Short Answer Questions

1. Define budget deficit.

Ans. Budget deficit (or government deficit) is the excess of total expenditure over total receipts of the government.

2. Define revenue deficit.

Ans. Revenue deficit is the excess of total revenue expenditure over the total revenue receipts.

$$\text{Revenue Deficit} = \text{Revenue receipts} - \text{Revenue expenditure}$$

3. What does revenue deficit indicate?

Ans. Revenue deficit indicates that the current expenditure of the government is greater than its current receipts. It points to the need for borrowing.

4. What is the significance of revenue deficit?

Ans. Revenue deficit can be corrected only through borrowing or disinvestment. Accordingly, revenue deficit points to compulsions of the government either to borrow or to disinvest. While borrowing adds to liabilities of the government, disinvestment leads to reduction in assets. Thus, revenue deficit is a pointer to fiscal indiscipline in the country, particularly when the economy is in an inflationary spiral.

5. What are the two ways of reducing revenue deficit?

Ans. Two ways of reducing revenue deficit are the following:

(*i*) Borrowing from the general public, RBI or rest of the world.

(*ii*) Disinvestment by way of selling its shares of public enterprises.

6. Define fiscal deficit.

Ans. Fiscal deficit is the excess of total expenditure over the sum of revenue receipts and capital receipts excluding borrowing.

$$\text{Fiscal Deficit} = \text{Total expenditure} - (\text{Revenue receipts} + \text{Capital receipts} - \text{Borrowing})$$

7. What does gross fiscal deficit show?

Ans. Gross fiscal deficit shows estimated borrowing by the government during the financial year. It includes borrowing for the purpose of making revenue expenditure as well as capital expenditure. It also accounts for the payment of interest on the existing public debt.

8. What is the significance (or implications) of fiscal deficit?

Ans. Fiscal deficit measures borrowing requirement of the government. Higher fiscal deficit is a sign of fiscal indiscipline, particularly when there is inflationary spiral in the country. Higher fiscal deficit compounds the rate of inflation. High rate of inflation leads to high rate of interest, implying high cost of investment. Accordingly, inducement to invest is curbed and growth process is hindered.

9. What problems can the fiscal deficit create?

Ans. Fiscal deficit creates these problems:

(*i*) It leads to a rise in public debt.

(*ii*) It compounds the problem of interest payment on accumulated loans by the government.

(*iii*) Higher fiscal deficit leads to higher rate of inflation. Implying high cost of investment and therefore, low inducement to invest. Ultimately, it retards the process of growth.

10. Define primary deficit.

Ans. Primary deficit is the difference between fiscal deficit and interest payment.

$$\text{Primary Deficit} = \text{Fiscal deficit} - \text{Interest payment}$$

11. What does primary deficit indicate?

Ans. Primary deficit indicates borrowing requirement of the government owing to fiscal deficit net of interest payment.

12. What is the significance of primary deficit?

Ans. Primary deficit indicates borrowing requirement of the government on account of the excess of current year expenditure over current year receipts, when interest payments for the past loans are not accounted for. It thus highlights the need to borrow unmindful of that accumulated debt burden of the government.

13. What does zero primary deficit mean?

Ans. Zero primary deficit means the government resorts to borrowing only to clear the existing backlog of interest payments. It is a sign of fiscal discipline. High primary deficit, on the other hand, reflects fiscal irresponsibility of the government.

14. How can the gulf between capital expenditure and capital receipts be reduced without borrowing? Suggest two ways.

Ans. (*i*) The government can resort to disinvestment, by selling its stake in public sector enterprises.

(*ii*) The government can sell some of its land.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Budget deficit refers to a situation when revenue expenditures of the government are greater than the revenue receipts.

Ans. False. Budget deficit refers to a situation when budget expenditures of the government are greater than the budget receipts.

2. Revenue deficit includes capital receipts and capital expenditure.

Ans. False. Revenue deficit is related to revenue expenditure and revenue receipts of the government. This does not include items of capital receipts and capital expenditure.

3. Fiscal deficit is the difference between primary deficit and interest payment.

Ans. False. Fiscal deficit is the sum total of primary deficit and interest payment.

4. Fiscal Deficit = Total expenditure – Total receipts.

Ans. False. Fiscal Deficit = Total expenditure (revenue + capital) – Total receipts other than borrowings (revenue + capital other than borrowings).

5. Borrowing from the general public leads to increase in revenue deficit.

Ans. False. Borrowing from the general public leads to decrease in revenue deficit.

6. Fiscal deficit is measured in terms of disinvestment.

Ans. False. Fiscal deficit is measured in terms of borrowings.

7. Revenue deficit is met only through borrowings by the government

Ans. False. Revenue deficit is met through (*i*) borrowings by the government, and (*ii*) disinvestment.

8. Primary Deficit = Fiscal deficit + Interest payment.

Ans. False. Primary Deficit = Fiscal deficit – Interest payment.

9. When total expenditure = ₹ 42,350, total receipts = ₹ 36,600, revenue receipts = ₹ 12,350 and borrowing = ₹ 5,000, then fiscal deficit = ₹ 5,750.

Ans. False. Fiscal deficit is equal to borrowing = ₹ 5,000.

10. When total expenditure = ₹ 55 lakh, revenue receipts = ₹ 19 lakh, capital receipts = ₹ 36 lakh, capital receipts net of borrowings = ₹ 14 lakh, fiscal deficit will be ₹ 14 lakh.

Ans. False. Fiscal deficit will be ₹ 22 lakh.

Fiscal Deficit = Total expenditure – Revenue receipts – Capital receipts net of borrowings

= ₹ 55 lakh – ₹ 19 lakh – ₹ 14 lakh

= ₹ 22 lakh

Therefore, fiscal deficit will be ₹ 22 lakh.

3. HOTS & Applications

1. Can a huge budgetary deficit cause bankruptcy of the government?

Ans. No, the government never goes bankrupt, no matter how large are its liabilities.

2. Is deficit budget a sign of government inefficiency?

Ans. No, a deficit budget is not a sign of government inefficiency. Infact, budgetary deficit may be a planned strategy of the government during periods of depression when the government needs to increase expenditure. It is only when expenditure increases that there is an increase in AD which is required to combat depression.

3. It is said that fiscal deficit is a reflection of fiscal indiscipline. How?

Ans. Fiscal deficit is a reflection of fiscal indiscipline. It is particularly true when fiscal deficit is incurred on account of non-development expenditure (like expenditure on freebies to garner votes during elections). Such expenditures only contribute to inflationary spiral in the country, leading to economic instability.

4. Balanced budget is recommended as a useful policy instrument when the economy is close to the level of full employment. How?

Ans. Balanced budget causes a modest increase in the level of AD. Because: expenditure by the government raises AD by the same amount, while tax receipts reduce AD by 'MPC times' the tax receipts. A modest increase in AD would push the economy towards the point of full employment when it is marginally away from this point.

[**Note:** Balanced budget (additional revenue being equal to additional expenditure) is a good strategy during periods of modest recession when aggregate demand needs a modest rise.]

5. Explain the implications of fiscal deficit.

Ans. Two serious implications of fiscal deficit are as these:

(*i*) Fiscal deficit highlights the extent to which the government resorts to borrowing to cope with its expenditures. Higher borrowing implies higher burden of repayment of loans. As this burden cumulates year after year, net availability of resources (net of the accumulated past payments) for future generations tends to shrink. This retards the process of growth.

(*ii*) Inflation is the other serious implication of fiscal deficit. Rising fiscal deficit to finance rising expenditure (on non-productive activities) generally causes a greater stress of demand on the existing flow of goods and services. Inflation is the obvious consequence in such a situation. It is bad as it widens the gulf between the rich and the poor. Also, inflation leads to a rise in the rate of interest. Accordingly, investment is reduced and GDP growth is impeded.

6. "Governments across nations are too much worried about the term fiscal deficit". Do you think that fiscal deficit is necessarily inflationary in nature? Support your answer with valid reasons. *[CBSE Sample Paper 2016]*

Ans. Fiscal deficit indicates 'borrowings' by the government. Borrowing from RBI is an important component of government borrowing. This increases money supply in the economy. Increase in money supply leads to increase in the general price level. A persistent increase in the general price level (over a period of time) leads to inflationary spiral. It is like wage-price spiral: wages catch prices and prices catch wages. This hinders the process of growth as it raises (*i*) the cost of raw material, (*ii*) the cost of credit for investment (the rate of interest), and (*iii*) the cost of labour (wage rate).

However, fiscal deficit is not necessarily inflationary in nature.

Keynes recommends deficit budget (fiscal deficit) as a key instrument to correct the state of depression. According to him, depression is that phase of economic activity when the level of investment is low owing to the low level of AD. Consequently, the level of output (and therefore, the level of income) remains low, and resources remain under-utilised. Unemployment becomes a serious problem. It is in such situations that deficit budget can serve as a useful policy instrument. Deficit budget (fiscal deficit) raises the level of AD in two ways:

(*i*) Directly by way of high government expenditure, and

(*ii*) Indirectly by inducing greater (investment and consumption) expenditure by the people.

7. "Fiscal deficit is necessarily inflationary in nature." Do you agree? Support your answer with valid reasons. *[CBSE Sample Paper 2017]*

Ans. Fiscal deficit indicates 'borrowings' by the government. Borrowing from RBI is an important component of government borrowing. This increases money supply in the economy. Increase in money supply leads to increase in the general price level. A persistent increase in the general price level (over a period of time) leads to inflationary spiral. It is like wage-price spiral: wages catch prices and prices catch wages. This hinders the process of growth as it raises (*i*) the cost of raw material, (*ii*) the cost of credit for investment (the rate of interest), and (*iii*) the cost of labour (wage rate).

However, fiscal deficit is not necessarily inflationary in nature.

Keynes recommends deficit budget (fiscal deficit) as a key instrument to correct the state of depression. According to him, depression is that phase of economic activity when the level of investment is low owing to the low level of AD. Consequently, planned output is much lower than the full employment level of output. Unemployment becomes a national problem. Deficit budget (fiscal deficit) raises the level of AD in two ways:

(*i*) Directly by way of high government expenditure, and

(*ii*) Indirectly by inducing greater (investment and consumption) expenditure by the people.

4. Analysis & Evaluation

1. In an economy where additional tax revenue of the government is equal to additional expenditure by the government, would there be any impact on national income?

Ans. Additional expenditure by the government (say of ₹ 6 crore), would cause a multiplier effect in the economy, similar to the investment multiplier. Assuming multiplier = 2 (when MPS is assumed to be 0.5), additional income generated in the economy would be (2 × ₹ 6 crore) = ₹ 12 crore.

Additional tax revenue by the government of ₹ 6 crore does not cause reduction in expenditure by ₹ 6 crore. Expenditure is reduced by 0.5 × (6) = ₹ 3 crore (on the assumption that MPC = 0.5). Accordingly, multiplier being 2, the reverse multiplier effect would be to the tune of 2 × (3) = ₹ 6 crore (*i.e.*, income falls by ₹ 6 crore).

The net effect would be increase in income by ₹ 6 crore (= 12 – 6).

[**Note:** Balanced budget (additional revenue being equal to additional expenditure) is a good strategy during periods of modest recession when aggregate demand needs a modest rise.]

2. In the budget (2016), the government has hinted at lowering its expenditure on subsidies. Examine the economic value of this policy.

Ans. When subsidies are lowered, revenue expenditure of the government is reduced. Other things remaining constant, it leads to a cut in fiscal deficit of the government. Implying that, borrowings by the government are reduced. A cut in borrowings by the government enhances the availability of funds for private investors. It is conducive to growth and development of the country.

Also, when subsidies are lowered and accordingly government expenditure is reduced, it leads to a fall in AD. This is useful when the rate of inflation needs to be curbed.

3. How good is disinvestment as a means to tackle revenue deficit in India?

Ans. Disinvestment occurs when the government sells its stake/shares to the private entrepreneurs. This is a good means of tackling revenue deficit, provided the disinvestment is related to such government companies/corporations which are running into losses. To the extent, revenue deficit is funded through disinvestment, need for borrowing is reduced. Lesser borrowings are a sign of financial prudence (fiscal discipline) of the government which is good for growth and stability.

4. Is a cut in subsidies always good for the economy?

Ans. A cut in subsidies is good for the economy in one sense: It leads to a cut in government expenditure and therefore, a cut in fiscal deficit of the government. A cut in fiscal deficit is essential when the economy is reeling under inflation and therefore the GDP growth is suffering.

However, a cut in subsidies is not a good option if subsidies are related to the production and consumption of essential goods, like life-saving drugs. Or, when subsidies are meant to protect income of the small and marginal farmers in India.

CBSE QUESTIONS (2015–2019) & ANSWERS

1. Borrowing in government budget is: (choose the correct alternative) *[CBSE Delhi 2015]*

(*a*) revenue deficit (*b*) fiscal deficit

(*c*) primary deficit (*d*) deficit in taxes

Ans. (*b*)

2. The non-tax revenue in the following is: (choose the correct alternative) *[CBSE Delhi 2015]*

(*a*) export duty (*b*) import duty

(*c*) dividends (*d*) excise

Ans. (*c*)

3. Explain the role the government can play through the budget in influencing allocation of resources. *[CBSE Delhi 2015]*

Or

Explain how can government budget be useful in influencing allocation of resources in an economy. *[CBSE (F) 2017]*

Ans. Market economies are believed to achieve optimum allocation of resources, producing such goods and services which the consumers wish to buy. But the optimal allocation of resources achieved through the market forces of supply and demand does not necessarily mean an efficient allocation of resources in terms of social welfare. Social welfare often suffers as the market economies do not produce enough of public goods which satisfy collective needs of the society. Also, these economies fail to account for 'externalities' of production which often lead to loss of social welfare on account of environmental degradation (including environmental pollution and excessive exploitation of the non-renewable resources). Through its budgetary policy, the government makes sufficient provision for the supply of public goods (like law and order, defence, public administration). It also addresses environmental issues by offering subsidies on the use of cleaner energy (CNG, LPG, solar and wind energy).

4. Primary deficit in a government budget is: (choose the correct alternative) [CBSE (AI) 2015]

(*a*) Revenue expenditure – Revenue receipts (*b*) Total expenditure – Total receipts

(*c*) Revenue deficit – Interest payments (*d*) Fiscal deficit – Interest payments

Ans. (*d*)

5. Direct tax is called direct because it is collected directly from: (choose the correct alternative) [CBSE (AI) 2015]

(*a*) the producers on goods produced (*b*) the sellers on goods sold

(*c*) the buyers of goods (*d*) the income earners

Ans. (*d*)

6. Explain how the government can use the budgetary policy in reducing inequalities in incomes. [CBSE (AI) 2015]

Ans. The budgetary policy reduces inequalities of income through redistribution of income and wealth in the economy. To achieve this objective, government uses fiscal instruments of taxation and subsidies. By imposing taxes on rich and giving subsidies to the poor, the government redistributes income in favour of poorer sections of the society. Progressive taxation in India focuses on the equitable distribution of disposable income. Higher rate of taxation on higher incomes and lower rate of taxation on lower incomes reduces the gulf between disposable income of the rich and the poor. Subsidies are offered to the BPL (below poverty line) population with a view to enhancing purchasing power of their money income. Thus in India, BPL families are offered monthly quota of rice and wheat at a nominal price of 3 to 4 rupees per kg. Budgetary allocation to social welfare schemes such as MGNREGA is another budgetary initiative to combat inequality. Assured employment is offered for 100 days to the BPL population in rural areas. It is combating inequality by way of combating poverty.

7. Primary deficit in a government budget equals: (choose the correct alternative) [CBSE (F) 2015]

(*a*) interest payments (*b*) interest payments less borrowings

(*c*) borrowings less interest payments (*d*) none of the above

Ans. (*c*)

8. Which one of these is a revenue expenditure? [CBSE (F) 2015]

(*a*) Purchase of shares (*b*) Loans advanced

(*c*) Subsidies (*d*) Expenditure on acquisition of land

Ans. (*c*)

9. Explain the role of government budget in fighting inflationary and deflationary tendencies. [CBSE (F) 2015]

Ans. Government budget or budgetary policy of the government plays a significant role in fighting inflationary and deflationary tendencies in the country. To combat inflationary tendencies, fiscal deficit is reduced by lowering government expenditure and raising government receipts. Expenditure is lowered, particularly by cutting subsidies and receipts are raised particularly by increasing taxation.

Likewise, deflationary tendencies are combated by increasing government expenditure (both investment expenditure as well as consumption expenditure) and by lowering receipts particularly by way of moderate tax structure.

Briefly, to combat inflation, AD is lowered by lowering government expenditure and raising government revenue. And, to combat deflation, AD is raised by increasing government expenditure and lowering government revenue.

10. Fiscal deficit equals: (choose the correct alternative) *[CBSE Delhi 2016]*

(*a*) interest payments (*b*) borrowings

(*c*) interest payments less borrowing (*d*) borrowings less interest payments

Ans. (*b*)

11. What is revenue expenditure? *[CBSE Delhi 2016; (F) 2016]*

Ans. Revenue expenditure is an expenditure which does not lead to asset creation or reduction in liabilities.

12. What are revenue receipts in a government budget? *[CBSE Delhi 2016; (AI) 2016]*

Ans. Revenue receipts are those receipts which do not cause any reduction in assets of the government, and which do not create any liability for the government.

13. What is revenue deficit in government budget? *[CBSE Delhi 2016]*

Or

What is revenue deficit? *[CBSE Delhi 2017]*

Or

Define revenue deficit. *[CBSE (AI) 2017]*

Ans. Revenue deficit is equal to the excess of total revenue expenditure over the total revenue receipts. Revenue deficit occurs when:

Revenue Receipts < Revenue Expenditure

14. What is government budget? Explain how taxes and subsidies can be used to influence allocation of resources. *[CBSE Delhi 2016]*

Or

What is government budget? Explain the role of government budget in influencing allocation of resources in the economy. *[CBSE (F) 2016]*

Ans. A government budget is a statement showing estimated receipts and estimated expenditure of the government during a fiscal year.

The government influences the allocation of resources through its tax and subsidy policy. High taxes are levied on the production of luxury goods (meant for the rich) while subsidies are offered for the production of necessities of life (meant for the poor). Accordingly, production of goods (with higher tax) reduces, while the production of goods (with subsidy) increases. Implying reallocation of resources. The government seeks to reallocate resources with a view to maximising social welfare.

15. Define revenue receipts in a government budget. Explain how government budget can be used to bring in price stability in the economy. *[CBSE Delhi 2016]*

Or

What are revenue receipts? Explain the role of government budget in bringing stability in the economy? *[CBSE (F) 2016]*

Ans. See Q. 12 above for the first part.

Budgetary policy of the government is used as an important policy instrument to impart stability to the economy. During recession, investment can be boosted through tax-breaks and subsidies. Deficiency of demand can be tackled through increase in government expenditure. During inflation, on the other hand, government may enforce austerity drive, raise taxes and reduce subsidies.

16. Primary deficit equals: (choose the correct alternative) *[CBSE (AI) 2016]*

(*a*) borrowings (*b*) interest payments

(*c*) borrowings less interest payments (*d*) borrowings and interest payments both

Ans. (*c*)

17. What are capital receipts in a government budget? *[CBSE (AI) 2016]*

Or

What are capital receipts? *[CBSE (F) 2017]*

Ans. Capital receipts are those receipts which either create a liability for the government or lead to reduction in assets of the government.

18. Define fiscal deficit. *[CBSE (AI) 2016]*

Or

What is fiscal deficit? *[CBSE Delhi 2017]*

Or

What is meant by fiscal deficit? *[CBSE 2019 (58/1/1)]*

Ans. Fiscal deficit is the excess of total expenditure over total receipts (other than borrowings).

Fiscal Deficit

= Total expenditure (Revenue expenditure + Capital expenditure) – Total receipts other than borrowings (Revenue receipts + Capital receipts other than borrowings)

19. What is the difference between revenue expenditure and capital expenditure? Explain how taxes and government expenditure can be used to influence distribution of income in the society. *[CBSE (AI) 2016]*

Ans. Revenue expenditure is that expenditure of the government which neither creates assets for the government nor causes a reduction in liabilities of the government. **Example:** Payment of subsidies and scholarships.

Capital expenditure, on the other hand, is that expenditure of the government which either creates assets for the government or causes a reduction in government liability. **Example:** Purchase of shares (creation of assets), and repayment of loans (reduction in liabilities).

Distribution of income is significantly influenced by taxation and government expenditure. To correct inequality, the government pursues the policy of progressive taxation. It implies greater tax burden on the rich than the poor. In fact, those with very low incomes are exempted from the payment of tax. On the expenditure side, the government offers subsidies to the poor. Subsidies are offered to poorer sections of the society so that their real disposable income is raised. Also, essential food items are sold to the BPL families (below poverty line families) at subsidised rates.

20. What is the difference between direct tax and indirect tax? Explain the role of government budget in influencing allocation of resources. *[CBSE (AI) 2016]*

Ans. A direct tax is a tax the final burden of which falls on those on whom it is legally imposed and the impact of which cannot be shifted. For example, income tax (a direct tax) is imposed on the income of a person and he himself bears its burden.

On the other hand, indirect taxes are those taxes which are paid to the government by one person but their burden is borne by another person. For example, GST (an indirect tax) is paid by the shopkeepers to the government but the shopkeepers usually recover it from the customers (as a part of price of the commodity). So, impact of GST is ultimately shifted onto the customers.

See Q. 14, page 240 for the second part.

21. Disinvestment by government means: (choose the correct alternatives) *[CBSE (F) 2016]*

(*a*) selling of its fixed capital assets
(*b*) selling of shares of public enterprises held by it
(*c*) selling of its buildings
(*d*) all the above

Ans. (*b*)

22. What is capital expenditure? *[CBSE (F) 2016]*

Ans. Capital expenditure is an expenditure which leads to creation of assets or reduction in liabilities.

23. What is primary deficit? [CBSE Delhi 2017; (F) 2016]

Or

What is meant by primary deficit? [CBSE 2019 (58/1/1)]

Ans. Primary deficit is the difference between fiscal deficit and interest payment.

Primary Deficit = Fiscal deficit – Interest payment

24. Explain the basis of classifying taxes into direct and indirect tax. Give examples. [CBSE Delhi 2017]

Ans. See Q. 20, page 241.

25. Explain how government budget can be used to influence distribution of income. [CBSE Delhi 2017]

Ans. See Q. 19, page 241.

26. Define government budget. [CBSE (AI) 2017]

Ans. Government budget is a statement showing estimated receipts and estimated expenditure of the government during a fiscal year.

27. Distinguish between direct taxes and indirect taxes. Give an example of each. [CBSE (AI) 2017]

Ans. See Q. 20, page 241.

28. Explain how government budget can be helpful in bringing economic stabilisation in the economy. [CBSE (AI) 2017]

Ans. See Q. 15, page 240.

29. What are non-debt creating capital receipts? Give two examples of such receipts. [CBSE (AI) 2017]

Ans. Non-debt creating capital receipts are those receipts which do not create debt.

Examples: Recovery of loans, disinvestment.

Recovery of loans (by the government) does not create any debt for the government. It only clears debt of the borrower. Likewise, disinvestment by the government leads to capital receipts without causing any debt burden. These receipts arise because of the liquidation (sale) of past investments.

30. Giving reasons, classify the following into revenue receipts and capital receipts:

(*i*) Recovery of loans.

(*ii*) Profits of public sector undertakings.

(*iii*) Borrowings. [CBSE (F) 2017]

Ans. (*i*) Recovery of loans is a capital receipt because it leads to reduction in assets of the government.

(*ii*) Profits of public sector undertakings are revenue receipts because they neither create a liability for the government nor lead to reduction in assets of the government.

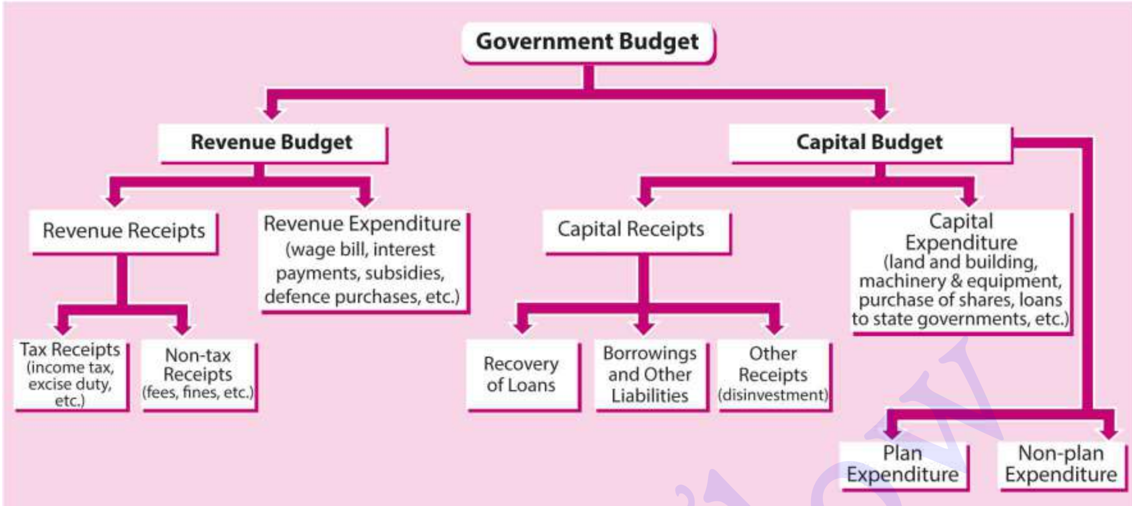
(*iii*) Borrowings are capital receipts because they create a liability for the government.

31. What is government budget? Explain its major components. [CBSE 2018]

Ans. See Q. 26 above for the first part.

Its two major components are: (*i*) Revenue budget, and (*ii*) Capital budget. Revenue budget, also called Revenue Account, includes 'revenue receipts' and 'revenue expenditure' of the government. Or, we can say that Revenue Account shows current receipts of the government and related expenditure. Capital budget, also called 'Capital Account' includes 'capital receipts' and 'capital expenditure' of the government. Or, we can say that Capital Account shows capital receipts of the government and related expenditure.

Following flow chart gives a comprehensive look of the principal components of government budget:



32. Explain (*a*) allocation of resources, and (*b*) economic stability as objectives of government budget. *[CBSE 2018]*

Ans. (*a*) See Q. 14, page 240.

(*b*) See Q. 15, page 240.

33. Define the term 'tax'. *[CBSE 2019 (58/1/1)]*

Ans. A tax is a compulsory payment made by an individual, household or a firm to the government without reference to anything in return.

34. How are capital receipts different from revenue receipts? Discuss briefly. *[CBSE 2019 (58/1/1)]*

Ans. Capital receipts are those receipts which either create a liability or lead to reduction in assets of the government. **Examples:** Borrowings (creation of liability), and disinvestment (reduction in assets).

On the other hand, revenue receipts are those receipts which do not create a liability or lead to reduction in assets of the government. **Examples:** Tax receipts, receipt of interest and dividend.

35. How are capital expenditure different from revenue expenditure? Discuss briefly. *[CBSE 2019 (58/1/2)]*

Ans. See Q. 19, page 241.

36. (*a*) How are tax receipts different from non-tax receipts? Discuss briefly.

(*b*) State any two items of revenue expenditure in a government budget. *[CBSE 2019 (58/1/3)]*

Ans. (*a*) Tax receipts are receipts of the government from all types of direct as well as indirect taxes levied by the government on the individuals, households, institutions or corporations. These include receipts from income tax, corporation tax, wealth tax, sales tax, excise duty, etc.

Non-tax receipts are those receipts of the government which arise from sources other than taxes. These include receipts from fees, fines, interest, dividend, grants, donations, etc.

(*b*) (*i*) Old-age pensions.

(*ii*) Salaries and scholarships.

37. Primary deficit in a government budget will be zero, when ______. (Choose the correct alternative) *[CBSE 2019 (58/2/1)]*

(*a*) revenue deficit is zero
(*b*) net interest payments are zero
(*c*) fiscal deficit is zero
(*d*) fiscal deficit is equal to interest payment

Ans. (*d*)

38. What do you mean by a direct tax? **[CBSE 2019 (58/2/1)]**

Ans. A direct tax is a tax the final burden of which falls on that very person who is liable to pay it to the government.

39. What do you mean by an indirect tax? **[CBSE 2019 (58/2/1)]**

Ans. Indirect tax is a tax on goods and services. Those who are liable to pay this tax need not bear the final burden of this tax. The burden of this tax can be shifted to others.

40. Classify the following statements as revenue receipts or capital receipts. Give valid reasons in support of your answer.

(*a*) Financial help from a multinational corporation for victims in a flood affected area.

(*b*) Sale of shares of a Public Sector Undertaking (PSU) to a private company, Y Ltd.

(*c*) Dividends paid to the Government by the State Bank of India.

(*d*) Borrowings from International Monetary Fund (IMF). **[CBSE 2019 (58/2/1)]**

Ans. (*a*) Financial help from a multinational corporation for victims in a flood affected area is a revenue receipt, as it does not add to liability or does not lead to reduction in assets.

(*b*) Sale of shares of a Public Sector Undertaking (PSU) to a private company, Y Ltd is a capital receipt, as it involves reduction in assets.

(*c*) Dividends paid to the government by the State Bank of India is a revenue receipt, as it does not add to liability or does not lead to reduction in assets.

(*d*) Borrowings from International Monetary Fund (IMF) are capital receipts because they create a liability.

41. (*a*) Distinguish between revenue receipts and capital receipts of the government.

(*b*) Do 'disinvestment' and 'loan proceeds from abroad' constitute revenue receipts of the government? Give reason. **[CBSE 2019 (58/3/1)]**

Ans. (*a*) See Q. 34, page 243.

(*b*) No, disinvestment is treated as capital receipt because it causes reduction in assets of the government.

No, loan proceeds from abroad is treated as capital receipt of the government because it creates a liability of the government.

42. Given the following data estimate the values of (*i*) Revenue Deficit, and (*ii*) Fiscal Deficit: **[CBSE 2019 (58/3/1)]**

	Items	**(₹ in crore)**
(*i*)	Tax revenue	1,000
(*ii*)	Non-tax revenue	150
(*iii*)	Net borrowings by government	780
(*iv*)	Disinvestment proceeds	50
(*v*)	Revenue expenditure	1,500
(*vi*)	Capital expenditure	480

Ans. (*i*) Revenue Deficit = Revenue expenditure – Revenue receipts (Tax revenue + Non-tax revenue)

= ₹ 1,500 crore – (₹ 1,000 crore + ₹ 150 crore)

= ₹ 1,500 crore – ₹ 1,150 crore

= ₹ 350 crore

(*ii*) Fiscal Deficit = Net borrowings by government

= ₹ 780 crore

Revenue deficit = ₹ 350 crore.

Fiscal deficit = ₹ 780 crore.

43. Dividends received from Public Sector Undertakings (PSUs) are a part of the government's ________. (Choose the correct alternative) *[CBSE 2019 (58/4/1)]*

(*a*) non-tax revenue receipts (*b*) tax receipts

(*c*) capital receipts (*d*) capital expenditure

Ans. (*a*)

44. State any two examples of non-tax revenue receipts of the government. *[CBSE 2019 (58/4/1)]*

Or

State any two examples of non-tax revenue. *[CBSE 2019 (58/5/1)]*

Ans. (*i*) Fees, and (*ii*) Fines.

45. Suppose you are a member of the "Advisory Committee to the Finance Minister of India". The Finance Minister is concerned about the rising Revenue Deficit in the budget.

Suggest any one measure to control the rising Revenue Deficit of the government. *[CBSE 2019 (58/4/1)]*

Ans. Cut in expenditure (subsidies in particular).

46. Explain how the government can use the budgetary policy in reducing inequality of income in the economy. *[CBSE 2019 (58/4/1)]*

Ans. See Q. 6, page 239.

47. Discuss briefly the role of the government budget in influencing "allocation of resources" in the economy. *[CBSE 2019 (58/4/1)]*

Ans. See Q. 14, page 240.

48. Which of the following is a capital receipt in the government budget? *[CBSE 2019 (58/5/1)]*

(*a*) Income tax

(*b*) Interest receipt

(*c*) Sale of shares of a Public Sector Undertaking (PSU) to X Limited (Private Company)

(*d*) Dividends from a Public Sector Undertaking (PSU)

Ans. (*c*)

49. If in an economy, the estimated receipts of the government during a year are lesser than the estimated expenditure, the budget would be called ________ budget. (Fill up the blank) *[CBSE 2019 (58/5/1)]*

Ans. deficit.

50. State whether the following statements are true or false. Support your answer with reason.

(*a*) Taxation is an effective tool to reduce the inequalities of income.

(*b*) Revenue deficit increases when government fails to recover loans forwarded to different nations. *[CBSE 2019 (58/5/1)]*

Ans. (*a*) True. To correct inequality of income, the government pursues the policy of progressive taxation. Progressive taxation in India focuses on the equitable distribution of disposable income. Higher rate of taxation on higher incomes and lower rate of taxation on lower incomes reduces the gulf between disposable income of the rich and the poor.

(*b*) False. Recovery of loans is a capital receipt because it leads to reduction in assets. It does not affect the revenue receipts.

NCERT & MISCELLANEOUS QUESTIONS

1. Distinguish between revenue expenditure and capital expenditure. *[NCERT]*

Ans. See Q. 19, page 241.

2. 'The fiscal deficit gives the borrowing requirement of the government'. Elucidate. *[NCERT]*

Ans. Fiscal deficit refers to excess of government expenditure over its receipts, exclusive of borrowings. Thus, fiscal deficit points to borrowing requirement of the government to cope with its expenditures of the year. Higher borrowing implies higher burden of repayment of loans and of interest on the future generations. As this burden mounts up, year after year, resource-base of the future generations tends to shrink. This will definitely retard the process of future growth, particularly when borrowings by the government are used for non-productive purposes.

3. Give the relationship between the revenue deficit and the fiscal deficit. *[NCERT]*

Ans. When current account expenditure is allowed to mount up (without a proportionate rise in current account receipts), revenue deficit tends to rise. The rising revenue deficit is reflected as a fiscal deficit (unless the government resorts to disinvestment). And when fiscal deficit is high, owing to high revenue deficit (implying high consumption expenditure), NOT owing to high investment expenditure, GDP growth receives a set-back. A set-back in GDP growth raises unemployment. Slow GDP growth and high unemployment lead to: (*i*) a cut in government revenue receipts, and (*ii*) a rise in government welfare expenditure. Implying a rise in revenue deficit. Thus, there is a vicious circle where revenue deficit and fiscal deficit start feeding each other and the economy is driven to a state of stagnation.

4. Elaborate 'economic growth' as objective of government budget. *[CBSE Sample Paper 2018]*

Ans. Economic growth means GDP growth. GDP growth is an important objective of government budget. The government tries to increase the rate of GDP growth through its revenue and expenditure policy (or budgetary policy). On the expenditure side, the government focuses on the creation of infrastructural facilities in the economy by making autonomous investment. Good infrastructure is expected to induce private investment. Accordingly, GDP growth is stimulated.

On the revenue side, the government offers tax-exemptions (tax holidays) to boost investment. The budget 2018, for example, offers 100% tax exemption to 'agricultural-produce-processing' industry. This is expected to increase investment in this industry, leading to GDP growth.

5. What are the components of revenue receipts of the government?

Ans. The main components of revenue receipts are:

(*i*) Tax Revenue Receipts: These are receipts from all types of direct and indirect taxes as income tax, corporation tax, wealth tax, sales tax, excise duty, etc.

(*ii*) Non-tax Revenue Receipts: These are receipts from interest, dividend, profit, external grants, etc.

6. What are the components of capital receipts of the government?

Ans. The main components of the capital receipts are:

(*i*) Recoveries of loans from state government, union territory government and other parties.

(*ii*) Borrowings from the market, Reserve Bank and other sources.

(*iii*) Other receipts like disinvestment.

7. Define a tax. Give two examples each of direct tax and indirect tax.

Ans. A tax is a compulsory payment imposed by the government on the people of a country.

Direct tax: It is a tax levied on income and wealth and its final burden cannot be shifted onto others.

Examples: (*i*) Income tax, and (*ii*) Wealth tax.

Indirect tax: It is a tax levied on goods and services and its final burden can be shifted on to others.

Examples: (*i*) Excise tax, and (*ii*) GST (Goods and Services Tax).

8. What are non-tax receipts? Give some examples.

Ans. Non-tax receipts are those receipts which are received from sources other than taxes. Some of the non-tax receipts are:

(*i*) Fees: A fee is a payment to the government for the services that it renders to the people. **Example:** Passport fees, land registration fees, etc.

(*ii*) Fines: Fines are those payments which are made by the law breakers to the government by way of economic punishment.

(*iii*) **Grants/Donations:** Grants received by the government are also a source of revenue. In the event of some natural calamities like earthquakes, flood or during wars, citizens of the country often make some donations and grants to the government.

9. Distinguish between direct tax and indirect tax.

Ans. The main differences between direct tax and indirect tax are as follows:

Direct Tax	Indirect Tax
(*i*) Direct taxes are those taxes the final burden of which falls on the person who is liable to pay the tax to the government.	(*i*) Indirect taxes are those taxes the final burden of which does not necessarily fall on the person who is liable to pay the tax to the government.
(*ii*) The final burden of direct taxes cannot be shifted to other persons.	(*ii*) The final burden of indirect taxes can be shifted to other persons.
(*iii*) Direct taxes are generally progressive in nature. Their real burden is more on the rich and less on the poor.	(*iii*) Indirect taxes are generally regressive in nature. Their real burden is more on the poor and less on the rich.
Example: A shopkeeper pays GST to the government but usually recovers it from the customers as a part of price of the commodity sold. So, impact of GST (an indirect tax) is ultimately shifted to the consumers. But the impact of income tax (a direct tax) is to be finally borne by the tax payer himself. He cannot shift its burden onto others.	

10. Giving reasons, categorise the following into direct and indirect tax:

(*i*) Wealth tax.

(*ii*) GST.

Ans. (*i*) Wealth tax is a direct tax, because the burden of this tax is borne by the person on whom it is imposed and he cannot shift the burden of this tax onto others.

(*ii*) GST is an indirect tax, because the initial burden of this tax is on one person but its final burden may be on another person. So the burden of GST can be shifted to other persons.

11. Differentiate between development and non-development expenditure.

Ans. Development expenditure is related to investment expenditure or productive expenditure which enhances production capacity in the economy. **Example:** Expenditure by the government on roads and bridges. Non-development expenditure is related to consumption expenditure by the government (also called unproductive expenditure). **Example:** Expenditure by the government on food security.

12. Why is payment of interest a revenue expenditure?

Ans. Payment of interest is a recurring annual expenditure and is treated as a revenue expenditure, because:

(*i*) it does not reduce liability of the payer, nor

(*ii*) it adds assets of the payer.

13. Why are subsidies treated as revenue expenditure?

Ans. Subsidies are treated as revenue expenditure by the government, because this expenditure:

(*i*) does not reduce liability of the government, nor

(*ii*) adds to assets of the government.

14. Government raises its expenditure on producing public goods. Explain the economic value it reflects.

Ans. When the government raises its expenditure on producing public goods, it has two implications in terms of its economic value. First, it raises the level of social welfare as the people are provided with more of roads, parks, besides better law & order and defence of the country.

Second, it is expected to generate employment, so that the growth process becomes inclusive. More and more people share the benefits of growth, as more and more people are involved in the process of growth.

15. Tax rates on higher income group have been increased. Explain the economic value it reflects.

Ans. Increasing the tax rates on higher income group implies that the government is following progressive tax policy. This would reduce the inequalities in the distribution of income. The purchasing power of higher income people would fall while it would remain the same for the low income people. This would reduce the gap between these two groups. Also, the revenue of government is likely to increase by increasing the tax on higher income people which can be used in developmental programs for the economy.

16. Government has started spending more on providing free services like education and health to the poor. Explain the economic value it reflects.

Ans. When the government spends more on free services like education and health to the poor, health and education levels are expected to rise. This leads to a rise in human capital formation. Consequently, efficiency and productivity levels are expected to rise. Improvement in physical health has a direct bearing on efficiency of the workers. On the other hand, improvement in education standards leads to skill formation. It facilitates research and innovations. Level of technology tends to scale up. Consequently, PPC tends to shift to the right. Higher level of output is achieved with the same level of inputs.

17. Explain the concept of 'primary deficit' in a government budget. What does it indicate?

Ans. Primary deficit is the difference between fiscal deficit and interest payment. It indicates estimated borrowing by the government on account of the excess of current year expenditures over current year receipts, exclusive of the burden of interest payment related to past debts. Primary deficit thus indicates the extent to which the government needs to borrow to implement its budgetary programmes and policies for the year ahead.

18. Explain the concept of 'fiscal deficit' in a government budget. What does it indicate?

Ans. Fiscal deficit is the excess of budgetary expenditure over the budgetary receipts of the government, excluding borrowing. It indicates borrowing requirement of the government to cope with the expenditures. Higher borrowing implies higher burden of repayment of loans and of interest on the future generations. Higher fiscal deficit points to the lack of financial discipline in the economy. Often, it triggers inflationary pressures in the economy and lowers credit-rating of the domestic economy in the international markets. Accordingly, investment process is hampered and GDP growth is challenged.

19. What are the implications of revenue deficit? State two measures to reduce this deficit.

Ans. Revenue deficit is related to revenue expenditure and revenue receipts of the government.

Since revenue receipts and revenue expenditures are related largely to recurring expenses of the government (as on administration and maintenance), high revenue deficit gives a warning to the government either to cut its expenditure or increase its tax/non-tax receipts.

In less developed countries like India, often the situation arises when the government is to incur huge expenditure on administration and maintenance (particularly on law & order and defence) and it is difficult to force the poor people to pay high taxes. In such situations, the government is compelled to cope with high revenue deficit through borrowings or disinvestment. While borrowing increases liability of the government, disinvestment reduces her assets. A well planned strategy is needed to strike a balance between assets and liabilities. Otherwise, the whole financial system in the economy may get destabilised.

20. Giving reasons, categorise the following into revenue receipts and capital receipts:

(*i*) Corporation tax.

(*ii*) Dividends on investment made by government.

(*iii*) Sale of public sector undertaking.

Ans. (*i*) Corporation tax is a revenue receipt, because it neither creates liability nor leads to reduction in assets.

(*ii*) Dividends on investment made by government is a revenue receipt, as it does not add to liability or reduction in assets.

(*iii*) Sale of public sector undertaking is a capital receipt, as it involves reduction in assets.

21. Giving reasons, categorise the following into revenue expenditure and capital expenditure:

(*i*) Grants given to state governments.

(*ii*) Repayment of loans.

(*iii*) Construction of school building.

Ans. (*i*) Grants given to state governments is a revenue expenditure, because it neither reduce liability nor adds to assets of government (by matter of convention all grants by centre to the state governments are treated as revenue expenditure, even when some grants may result in the creation of assets).

(*ii*) Repayment of loans is a capital expenditure, as it leads to reduction in liability.

(*iii*) Construction of school building is a capital expenditure, because it adds to the assets of government.

22. What is the importance of government budget?

Ans. The following is the importance of the government budget:

(*i*) It reflects fiscal policy (revenue and expenditure policy) of the government, giving a direction to the pace of growth and development of the country. It reflects how the government is going to influence the allocation of resources in the economy.

(*ii*) It reflects revenue deficit, fiscal deficit and primary deficit of the government budget. Together, these deficits point to the degree of fiscal discipline in the country. Higher these deficits, greater is the degree of economic instability in the economy.

(*iii*) Government budget is an important instrument of fiscal policy that is often used to correct the situations of inflationary/deflationary gap in the economy.

(*iv*) Government budget reflects efforts of the government to achieve equality in the distribution of income and wealth.

23. What is the difference between revenue budget and capital budget?

Ans. (*i*) Revenue budget shows only revenue receipts and revenue expenditures of the government. Capital budget, on the other hand, shows capital receipts and capital expenditure of the government.

(*ii*) Revenue budget does not reflect any asset and liability status of the government. Because, by definition, revenue receipts and revenue expenditure refer only to such receipts and expenditures which do not affect asset and liability status of the government. Capital budget, on the other hand, is a reflection on the asset and liability status of the government. Because, capital receipts and capital expenditures, by definition, refer to all such transactions of the government which affect its asset and liability status.

(*iii*) Revenue budget and capital budget should not be viewed as independent of each other. In fact, fiscal deficit and primary deficit (which are the two principal indicators of fiscal discipline in the economy) are measured by accounting for both the revenue as well as capital receipts and expenditures.

(*iv*) When revenue deficit mounts up (in the revenue budget), it is invariably reflected in terms of higher capital receipts (through borrowings or through the sale of government shares of public sector undertakings), causing increase in government liability or decrease in government assets.

NUMERICALS

1. Calculate Budgetary Deficit from the following data:

Items	(₹ in crore)
(*i*) Total expenditure	1,00,000
(*ii*) Total receipts	88,000

Sol. Budgetary Deficit = Total expenditure – Total receipts

= ₹ 1,00,000 crore – ₹ 88,000 crore = ₹ 12,000 crore

Budgetary deficit = ₹ 12,000 crore.

2. **Calculate Budgetary Deficit from following data:**

Items	**(₹ in crore)**
(*i*) Revenue expenditure	60,000
(*ii*) Capital expenditure	30,000
(*iii*) Revenue receipts	50,000
(*iv*) Capital receipts	25,000

Sol. Budgetary Deficit = Revenue expenditure + Capital expenditure – (Revenue receipts + Capital receipts)

= ₹ 60,000 crore + ₹ 30,000 crore – (₹ 50,000 crore + ₹ 25,000 crore)

= ₹ 90,000 crore – ₹ 75,000 crore = ₹ 15,000 crore

Budgetary deficit = ₹ 15,000 crore.

3. **Calculate Revenue Deficit from the following data:**

Items	**(₹ in crore)**
(*i*) Revenue receipts	50,000
(*ii*) Revenue expenditure	60,000

Sol. Revenue Deficit = Revenue expenditure –Revenue receipts

= ₹ 60,000 crore – ₹ 50,000 crore = ₹ 10,000 crore

Revenue deficit = ₹ 10,000 crore.

4. **Calculate Fiscal Deficit from the following data:**

Items	**(₹ in crore)**
(*i*) Total expenditure	80,000
(*ii*) Total receipts net of borrowings	72,000

Sol. Fiscal Deficit = Total expenditure – Total receipts net of borrowings

= ₹ 80,000 crore – ₹ 72,000 crore = ₹ 8,000 crore

Fiscal deficit = ₹ 8,000 crore.

5. **Calculate Fiscal Deficit from the following data:**

Items	**(₹ in crore)**
(*i*) Total expenditure	75,000
(*ii*) Revenue receipts	60,000
(*iii*) Non-debt capital receipts	5,000

Sol. Fiscal Deficit = Total expenditure – Revenue receipts – Non-debt capital receipts

= ₹ 75,000 crore – ₹ 60,000 crore – ₹ 5,000 crore

= ₹ 10,000 crore

Fiscal deficit = ₹ 10,000 crore.

6. **Calculate Fiscal Deficit from the following data:**

Items	**(₹ in crore)**
(*i*) Borrowings	9,000
(*ii*) Interest	300

Sol. Fiscal Deficit = ₹ 9,000 crore.

[Interest is not included in fiscal deficit.]

7. **Calculate Primary Deficit from the following data:**

Items	**(₹ in crore)**
(*i*) Fiscal deficit	9,000
(*ii*) Interest payment by the government	400

Sol. Primary Deficit = Fiscal deficit – Interest payment by the government

= ₹ 9,000 crore – ₹ 400 crore

= ₹ 8,600 crore

Primary deficit = ₹ 8,600 crore.

8. A government budget shows a primary deficit of ₹ 4,400 crore, expenditure on interest payment is ₹ 400 crore. How much is the fiscal deficit?

Sol. Fiscal Deficit = Primary deficit + Interest payment

= ₹ 4,400 crore + ₹ 400 crore = ₹ 4,800 crore

Fiscal deficit = ₹ 4,800 crore.

9. In a government budget, revenue deficit is ₹ 50,000 crore and borrowings are ₹ 75,000 crore. How much is the fiscal deficit?

Sol. Fiscal Deficit = Borrowings = ₹ 75,000 crore.

[Fiscal deficit point to borrowing by the government.]

10. From the following data, calculate Fiscal Deficit.

Items	**(₹ in billion)**
(*i*) Capital receipt	68
(*ii*) Revenue expenditure	160
(*iii*) Interest payment	20
(*iv*) Borrowings	32
(*v*) Tax revenue	50
(*vi*) Non-tax revenue	10

[CBSE Sample Paper 2018]

Sol. Fiscal Deficit = Borrowings

= ₹ 32 billion.

11. From the following data about a government budget, find out (*a*) Revenue Deficit, (*b*) Fiscal Deficit, and (*c*) Primary Deficit:

Items	**(₹ in lakh)**
(*i*) Capital receipts net of borrowing	115
(*ii*) Revenue expenditure	120
(*iii*) Interest payments	30
(*iv*) Revenue receipts	100
(*v*) Capital expenditure	130

Sol. (*a*) Revenue Deficit = Revenue expenditure – Revenue receipts

= ₹ 120 lakh – ₹ 100 lakh = ₹ 20 lakh

(*b*) Fiscal Deficit = Revenue expenditure + Capital expenditure – Revenue receipts – Capital receipts net of borrowings

= ₹ 120 lakh + ₹ 130 lakh – ₹ 100 lakh – ₹ 115 lakh

= ₹ 250 lakh – ₹ 215 lakh = ₹ 35 lakh

(*c*) Primary Deficit = Fiscal deficit – Interest payments

= ₹ 35 lakh – ₹ 30 lakh = ₹ 5 lakh

(*a*) Revenue deficit = ₹ 20 lakh.

(*b*) Fiscal deficit = ₹ 35 lakh.

(*c*) Primary deficit = ₹ 5 lakh.

12. From the following data about a government budget, find out (*a*) Revenue Deficit, (*b*) Fiscal Deficit, and (*c*) Primary Deficit:

Items	**(₹ in lakh)**
(*i*) Tax revenue	40
(*ii*) Capital receipts	27
(*iii*) Non-tax revenue	10
(*iv*) Borrowings	20
(*v*) Revenue expenditure	63
(*vi*) Interest payments	13

Sol. (*a*) Revenue Deficit = Revenue expenditure – Revenue receipts (Tax revenue + Non-tax revenue)

= ₹ 63 lakh – (₹ 40 lakh + ₹ 10 lakh)

= ₹ 63 lakh – ₹ 50 lakh

= ₹ 13 lakh

(*b*) Fiscal Deficit = Borrowings = ₹ 20 lakh

(*c*) Primary Deficit = Fiscal deficit – Interest payments

= ₹ 20 lakh – ₹ 13 lakh

= ₹ 7 lakh

(*a*) Revenue deficit = ₹ 13 lakh.

(*b*) Fiscal Deficit = ₹ 20 lakh.

(*c*) Primary deficit = ₹ 7 lakh.

13. From the following data about a government budget, find (*a*) Revenue Deficit, (*b*) Fiscal Deficit, and (*c*) Primary Deficit:

Items	**(₹ in crore)**
(*i*) Plan capital expenditure	13,000
(*ii*) Revenue expenditure	11,000
(*iii*) Non-plan capital expenditure	9,000
(*iv*) Revenue receipts	8,000
(*v*) Capital receipts net of borrowing	15,000
(*vi*) Interest payments	4,000

Sol. (*a*) Revenue Deficit = Revenue expenditure – Revenue receipts

= ₹ 11,000 crore – ₹ 8,000 crore

= ₹ 3,000 crore

(*b*) Fiscal Deficit = Revenue expenditure + Plan capital expenditure + Non-plan capital expenditure – Revenue receipts – Capital receipts net of borrowing

= ₹ 11,000 crore + ₹ 13,000 crore + ₹ 9,000 crore – ₹ 8,000 crore – ₹ 15,000 crore

= ₹ 33,000 crore – ₹ 23,000 crore

= ₹ 10,000 crore

(*c*) Primary Deficit = Fiscal deficit – Interest payments

= ₹ 10,000 crore – ₹ 4,000 crore

= ₹ 6,000 crore

(*a*) Revenue deficit = ₹ 3,000 crore.

(*b*) Fiscal deficit = ₹ 10,000 crore.

(*c*) Primary deficit = ₹ 6,000 crore.

EXCHANGE RATE AND BALANCE OF PAYMENTS

5
UNIT

- Exchange Rate: Meaning, Types and Determination
- Balance of Payments Account: Meaning, Components and BoP Deficit

POWER POINTS

1. Exchange Rate: Meaning, Types and Determination

Exchange rate refers to the rate at which one currency exchanges for the other in the international exchange market, also called international money market.

Example: One US dollar exchanges for sixty Indian rupees. Accordingly, the exchange rate = 1 : 60.

Types of Exchange Rate: Fixed and Variable

Fixed Exchange Rate is related to gold standard. If 1,000 Indian rupees buy a gram of gold and twenty US dollars buy a gram of gold, the exchange rate between dollar and rupees would be = 20 : 1,000 = 1 : 50.

Variable Exchange Rate depends on the supply and demand for different currencies in the international exchange market. It varies along with variations in supply and demand.

Determination of Exchange Rate

Determination of Fixed Exchange Rate

Fixed exchange rate is determined by the government of the country.

Determination of Flexible Exchange Rate

Flexible exchange rate is determined by the forces of demand and supply in the foreign exchange market.

Spot and Forward Markets of Foreign Exchange

Spot market relates to all such transactions in foreign exchange which are completed/fulfilled at the spot, and are not carried forward for any future date.

Forward market relates to all such transactions in foreign exchange which are committed at a point of time but are to be completed/fulfilled at some future date.

2. Balance of Payments Account: Meaning, Components and BoP Deficit

Balance of payments is a set of accounts which show receipts and payments of foreign exchange of a country on account of its economic transactions with the rest of the world.

Components of Balance of Payments Account

Broadly, there are two components of balance of payments account:

(*i*) Current Account Balance of Payments.

(*ii*) Capital Account Balance of Payments.

Current Account Balance of Payments includes:

(*i*) Merchandise (referring to export and import of goods).

(*ii*) Invisibles, including:

(*a*) non-factor services,

(*b*) income (arising out of factor services), and

(*c*) current transfers.

Capital Account Balance of Payments includes:

(*i*) Borrowing, including:

(*a*) External commercial borrowing, and

(*b*) External assistance,

(*ii*) Investments, including:

(*a*) portfolio investment, and

(*b*) FDI (Foreign Direct Investment).

(*iii*) NRI deposits,

(*iv*) Banking capital,

(*v*) Short-term debt, and

(*vi*) Other capital.

> **Visible and Invisible Items of International Trade**
>
> Visible items refer to the export/import of goods.
>
> Invisible items refer to the export/import of services (factor and non-factor services) as well as current transfers.

BoP Deficit

Balance of payments deficit refers to the excess of payments over and above the receipts of a country of foreign exchange on account of autonomous transactions with rest of the world.

Autonomous and Accommodating Items of BoP

Autonomous Items refer to such BoP transactions which are determined by considerations of profit. It is due to these transactions that BoP deficit/surplus arises.

Accommodating Items refer to such BoP transactions which are not determined by considerations of profit. It is due to these transactions that BoP deficit/surplus is corrected.

QUESTION-ANSWERS

▶ EXCHANGE RATE: MEANING, TYPES AND DETERMINATION

1. Very Short Questions (Remembering & Understanding)

A. Multiple Choice Questions

Choose the correct option:

1. **Foreign exchange rate refers to:**

(*a*) the price of one currency in terms of gold in the domestic market

(*b*) the price of one currency in relation to other currencies in the international money market

(*c*) the price of domestic currency in relation to foreign currency in the international money market

(*d*) both (*b*) and (*c*)

2. **Exchange rate is the price of a currency expressed in terms of:**

(*a*) gold (*b*) metal

(*c*) another currency (*d*) none of these

3. **Rate of exchange as determined by the government is called:**
   (*a*) fixed exchange rate (*b*) floating exchange rate
   (*c*) flexible exchange rate (*d*) none of these

4. **Under flexible exchange rate system, exchange rate is determined by the:**
   (*a*) demand for foreign exchange (*b*) supply of foreign exchange
   (*c*) supply-demand forces (*d*) government

5. **The exchange rate at which demand for foreign currency is equal to its supply is called:**
   (*a*) equilibrium exchange rate (*b*) floating exchange rate
   (*c*) par exchange rate (*d*) both (*a*) and (*c*)

6. **Demand curve for foreign exchange is:**
   (*a*) negatively related to the rate of exchange
   (*b*) positively related to the rate of exchange
   (*c*) proportionately related to the rate of exchange
   (*d*) not related to the rate of exchange

7. **The supply curve of foreign exchange is:**
   (*a*) negatively sloped from left to right (*b*) positively sloped from left to right
   (*c*) a straight line from left to right (*d*) a rectangular hyperbola curve

8. **When domestic currency loses its value in relation to a foreign currency in the international money market, it is a situation of:**
   (*a*) currency appreciation (*b*) currency depreciation
   (*c*) currency devaluation (*d*) none of these

9. **Currency appreciation takes place when:**
   (*a*) domestic currency loses its value in relation to a foreign currency
   (*b*) there is an increase in the price of a foreign currency in terms of the domestic currency
   (*c*) there is a decrease in the price of a foreign currency in terms of the domestic currency
   (*d*) none of these

10. **When US dollar exchanges for ₹ 50, instead of ₹ 55 earlier, the domestic currency shows:**
   (*a*) currency appreciation (*b*) currency depreciation
   (*c*) currency devaluation (*d*) none of these

11. **Which of the following is the source of demand for foreign exchange?**
   (*a*) Imports (*b*) Foreign investment
   (*c*) Income receipts (*d*) both (*a*) and (*b*)

12. **Which of the following is the merit of flexible exchange rate system?**
   (*a*) Optimum resource allocation (*b*) Market stability
   (*c*) External shocks (*d*) Stable monetary policy

13. **Which of the following is correct in case of managed floating?**
   (*a*) Under this exchange rate does not remain within the desired limits
   (*b*) Market exchange rate is influenced by the sale and purchase of foreign currency in the international money market
   (*c*) Government does not intervene to manage the exchange rate in this system
   (*d*) All of these

14. **Spot market deals in:**
(*a*) current transactions
(*b*) future transactions
(*c*) current as well as future transactions
(*d*) transactions meant for future delivery

15. **Forward exchange rate is the rate:**
(*a*) which happens to prevail in the future
(*b*) which happens to clear the current transactions
(*c*) at which market demand for foreign currency = market supply of foreign currency
(*d*) at which forward transactions are to be honoured

Ans. **1.** (*d*) **2.** (*c*) **3.** (*a*) **4.** (*c*) **5.** (*d*) **6.** (*a*) **7.** (*b*) **8.** (*b*) **9.** (*c*) **10.** (*a*) **11.** (*d*) **12.** (*a*) **13.** (*b*) **14.** (*a*) **15.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________________ is the price of the currency of one country in terms of the currency of another country. (Exchange rate/Managed floating)
2. The exchange rate at which demand for and supply of foreign currency are equal, is called ________________. (disequilibrium rate/par rate)
3. ________________ exchange rate is fixed by the government. (Fixed/Flexible)
4. According to Mint Par Parity Theory, exchange rate is determined by ________________ standard. (gold/paper currency)
5. When the value of the domestic currency is deliberately reduced by the government, it is called ________________. (devaluation/revaluation)
6. There is ________________ relationship between supply of foreign exchange and rate of exchange. (direct/indirect)
7. In case of ________________ of domestic currency, less rupees are needed to buy one US dollar. (depreciation/appreciation)
8. ________________ leads to a fall in demand for foreign currency in the international money market. (Devaluation/Revaluation)
9. ________________ is a source of demand for foreign exchange. (Investment in rest of the world/Investment from rest of the world)
10. Spot market handles ________________ transactions. (current/future)

Ans. **1.** Exchange rate **2.** par rate **3.** Fixed **4.** gold **5.** devaluation **6.** direct **7.** appreciation **8.** Devaluation **9.** Investment in rest of the world **10.** current

C. True or False

State whether the following statements are True or False:

1. Exchange rate is the rate at which domestic currency can be exchanged for a foreign currency. (True/False)
2. Gold standard system of exchange rate is an old variant of flexible exchange rate system. (True/False)
3. In case of depreciation of currency, the government plays no role whatsoever. (True/False)
4. Demand for foreign exchange implies borrowing from rest of the world. (True/False)
5. Flexible exchange rate is related to uncertainties of the market. (True/False)

6. Demand curve of foreign exchange slopes upwards. (True/False)
7. A fall in the value of domestic currency induces private foreign investment. (True/False)
8. Managed floating is the mixture of both flexible and fixed exchange rate systems. (True/False)
9. Spot exchange rate is that exchange rate at which forward transactions are to be honoured. (True/False)
10. Forward market allows hedging. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** False **5.** True **6.** False **7.** True **8.** True **9.** False **10.** True

D. Very Short Answer Questions

1. **Define foreign exchange.**

Ans. Foreign exchange refers to currencies of other countries.

2. **What is foreign exchange rate?**

Ans. The rate at which one currency exchanges for the other currency in the international money market is known as foreign exchange rate.

3. **What is meant by fixed exchange rate?**

Ans. Fixed exchange rate is a rate fixed and determined by the government of a country and the government alone changes it.

4. **What is meant by flexible exchange rate?**

Ans. Flexible exchange rate is that rate which is determined by the supply-demand forces in the foreign exchange market.

5. **What is 'float' rate of exchange?**

Ans. Float rate of exchange refers to flexible rate of exchange as determined by the demand and supply forces of foreign exchange in the international money market.

6. **What is meant by managed floating exchange rate?**

Ans. Managed floating is a tool employed by the central bank to restore the value of the country's currency (in relation to other currencies) within the desired limits, even when exchange rate is determined by the market forces of demand and supply.

7. **What is equilibrium rate of exchange?**

Ans. Equilibrium rate of exchange occurs where supply of and demand for foreign exchange are equal to each other.

8. **Why is flexible rate of exchange called free rate of exchange?**

Ans. Flexible rate of exchange is called free rate of exchange, as it is freely determined by the forces of supply and demand in the international money market.

9. **Give two sources of demand for foreign exchange.**

Ans. (*i*) Payments of international loans.

(*ii*) Gifts and grants to rest of the world.

10. **Give two sources of supply of foreign exchange.**

Ans. (*i*) Purchases of domestic goods by the foreigners.

(*ii*) Direct foreign investment as well as portfolio investment in home country.

11. **What is meant by currency appreciation?**

Ans. Currency appreciation refers to a situation when domestic currency appreciates in relation to a foreign currency.

12. **What is meant by currency depreciation?**

Ans. Currency depreciation refers to a situation when domestic currency depreciates in relation to a foreign currency.

13. Define devaluation.

Ans. Devaluation refers to planned fall in the value of domestic currency in relation to foreign currency when exchange rate is fixed by the government. The government declares a cut in the value of the domestic currency with a view to increasing exports and decreasing imports. So that, BoP deficit is corrected.

14. Define foreign exchange market.

Ans. Foreign exchange market is that market which handles supply and demand (and therefore, trade) of the currencies of different countries.

15. What is hedging?

Ans. Hedging means protection against the risk related to variations in foreign exchange rate. Exchange rate is locked for future supplies of foreign exchange.

16. Define spot market.

Ans. Spot market is that market which deals with current sale and purchase of foreign exchange.

17. Define forward market.

Ans. Forward market is that market which deals with such sale and purchase of foreign exchange which are contracted today but are honoured sometimes in the future.

18. What is meant by spot exchange rate?

Ans. Spot exchange rate (also known as current rate of exchange) is that rate of exchange which happens to prevail in the market at the time when transactions are incurred. It relates only to spot transactions in the international money market.

19. What is meant by forward exchange rate?

Ans. Forward exchange rate is that exchange rate at which forward transactions are to be honoured. It has nothing to do with spot transactions in the international money market.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Exchange rate expresses the ratio of commodity prices.

Ans. False. Exchange rate expresses the rate at which one currency exchanges for the other.

2. Fixed exchange rate is determined by the market forces.

Ans. False. Fixed exchange rate is not determined by the market forces. It is determined by the government of the country.

3. Float rate of exchange refers to flexible rate of exchange.

Ans. True. Float rate of exchange refers to flexible rate of exchange as it is determined by the demand and supply forces of foreign exchange in the international money market.

4. In a situation of excess demand, equilibrium exchange rate is automatically restored.

Ans. True. The free play of forces of supply and demand operate in such a manner that the excess demand is automatically eliminated and equilibrium exchange rate is automatically restored.

5. Equilibrium exchange rate rises when supply of foreign currency increases in the international money market.

Ans. False. When supply of foreign currency increases, equilibrium exchange rate falls in the international money market.

6. Decrease in demand for foreign currency leads to currency depreciation.

Ans. False. Decrease in demand for foreign currency leads to currency appreciation. Because, decrease in demand causes a fall in exchange rate.

7. In case of currency appreciation, less rupees are to be paid to buy one US dollar.

Ans. True. In case of currency appreciation, less rupees are to be paid to buy one US dollar. Because, domestic currency (rupee) gains its value in relation to US dollar.

8. **When in order to buy 1 US dollar ₹ 75 are needed instead of ₹ 70 earlier, domestic currency shows appreciation.**

Ans. False. Here, domestic currency shows depreciation because more rupees are to be paid to buy one US dollar. Depreciation of the domestic currency implies a fall in the value of domestic currency in relation to a foreign currency.

9. **Export of goods and services from India to US would mean outflow of foreign exchange to India.**

Ans. False. Export of goods and services from India to US would mean supply (inflow) of foreign exchange to India. Therefore, foreign exchange in terms of receipts for exports flows from US to India.

10. **Supply of foreign exchange is positively related to the price of foreign exchange.**

Ans. True. In the international money market, supply extends when the rate of exchange rises, and it contracts when the rate of exchange falls as indicated by an upward sloping supply curve of foreign exchange.

11. **Appreciation of foreign currency induces lower foreign direct investment from rest of the world.**

Ans. False. Appreciation of foreign currency induces greater foreign direct investment from rest of the world. Because, now one unit of the foreign currency exchanges for more units of the domestic currency.

12. **In order to restore the value of depreciating domestic currency, central bank buys the US dollars in the international money market.**

Ans. False. In order to restore the value of depreciating domestic currency, central bank sells the US dollars in the international money market. By selling the dollars, the bank expects to increase the supply of dollars in the market. Other things remaining constant, increase in supply is expected to reduce the price of dollar in relation to the domestic currency.

▶ BALANCE OF PAYMENTS ACCOUNT: MEANING, COMPONENTS AND BOP DEFICIT

1. Very Short Questions (Remembering & Understanding)

A. Multiple Choice Questions

Choose the correct option:

1. **Balance of payments is a set of accounts showing:**
   (*a*) all monetary transactions of a country with rest of the world
   (*b*) all economic transactions between residents of domestic country and residents of foreign countries
   (*c*) all autonomous transactions of a country with rest of the world
   (*d*) both (*a*) and (*b*)
2. **BoP accounts show:**
   (*a*) the export-import status of the foreign country
   (*b*) the performance of domestic economy in relation to rest of the world
   (*c*) growth potential of the foreign economy
   (*d*) all of these
3. **A strategy of growth that favours domestic production of goods which are imported from rest of the world is called:**
   (*a*) import substitution (*b*) export promotion
   (*c*) balanced growth (*d*) balance of trade
4. **The international monetary transactions occur due to:**
   (*a*) export and import of goods (*b*) domestic sale and purchase of real assets
   (*c*) international sale and purchase of real assets (*d*) both (*a*) and (*c*)

5. **Merchandise Balance =**
(*a*) Export of goods – Import of goods
(*b*) Export of services – Import of services
(*c*) Investment income + Compensation of employees
(*d*) none of these

6. **Invisibles are included in the:**
(*a*) balance of trade account BoP
(*b*) current account BoP
(*c*) capital account BoP
(*d*) none of these

7. **Current account BoP records:**
(*a*) export and import of goods
(*b*) export and import of services
(*c*) current transfers
(*d*) all of these

8. **Current Account Balance =**
(*a*) Trade balance + Goods and services balance
(*b*) Trade balance – Goods and services balance
(*c*) Trade balance + Invisibles balance
(*d*) Trade balance – Invisibles balance

9. **Capital account BoP records all such transactions which cause:**
(*a*) change in the ownership of assets between one country and rest of the world
(*b*) movement of goods between one country and rest of the world
(*c*) movement of services between one country and rest of the world
(*d*) none of these

10. **Export and import of capital goods between the countries is recorded in the:**
(*a*) balance of trade account BoP
(*b*) capital account BoP
(*c*) either (*a*) or (*b*)
(*d*) neither (*a*) nor (*b*)

11. **External commercial borrowing is available at the:**
(*a*) nominal rate of interest
(*b*) concessional rate of interest
(*c*) market rate of interest
(*d*) real rate of interest

12. **Decrease in Official Reserves Account =**
(*a*) Current account deficit + Capital account deficit
(*b*) Current account deficit – Capital account deficit
(*c*) Current account surplus + Capital account surplus
(*d*) Current account surplus – Capital account surplus

13. **Balance of payments is in equilibrium when:**
(*a*) Current account balance + Capital account balance > Zero
(*b*) Current account balance + Capital account balance < Zero
(*c*) Current account balance + Capital account balance = Zero
(*d*) all of these

14. **Accommodating items are:**
(*a*) meant to restore BoP balance
(*b*) the cause of BoP imbalance
(*c*) meant to correct BoP imbalance
(*d*) both (*a*) and (*c*)

15. **Autonomous items are classified as:**
(*a*) below the line items of BoP
(*b*) above the line items of BoP
(*c*) on the line items of BoP
(*d*) both (*a*) and (*c*)

Ans. **1.** (*d*) **2.** (*b*) **3.** (*a*) **4.** (*d*) **5.** (*a*) **6.** (*b*)
7. (*d*) **8.** (*c*) **9.** (*a*) **10.** (*a*) **11.** (*c*) **12.** (*a*)
13. (*c*) **14.** (*d*) **15.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Balance of payments of a country is a systematic record of all ______________ transactions between the residents of a country and the residents of another country. (financial/economic)
2. ______________ is concerned with visible items alone. (Balance of trade/Balance of payments)
3. ______________ transactions lead to future claims. (Current account/Capital account)
4. Autonomous items in balance of payments are usually called ______________. (above the line items/below the line items)
5. ______________ of goods and services cause flow of foreign exchange into the domestic economy. (Exports/Imports)
6. When value of exports is ______________ than value of imports, the balance of trade will be favourable. (more/less)
7. Equilibrium in balance of payments is achieved when the net balance of all receipts and payments is ______________. (zero/positive)
8. BoP deficit leads to a ______________ in official reserves. (increase/decrease)

Ans. **1.** economic **2.** Balance of trade **3.** Capital account **4.** above the line items **5.** Exports **6.** more **7.** zero **8.** decrease

C. True or False

State whether the following statements are True or False:

1. Export and import of services is called invisible trade. (True/False)
2. Export and import of capital goods is included in the capital account. (True/False)
3. In the BoP accounts, current transfers are treated as an element of visible. (True/False)
4. Insurance and banking are the examples of non-factor services. (True/False)
5. Balance of trade is the difference between visible exports and visible imports. (True/False)
6. Current account balance includes both the balance of trade as well as balance on invisibles. (True/False)
7. Accommodating items are meant to correct BoP imbalance. (True/False)
8. Foreign Direct Investment relates to ownership of enterprises in the domestic economy by rest of the world. (True/False)
9. Increase in the official reserves is a sign of BoP equilibrium. (True/False)
10. BoP always balances in the accounting sense. (True/False)

Ans. **1.** True **2.** False **3.** False **4.** True **5.** True **6.** True **7.** True **8.** True **9.** False **10.** True

D. Very Short Answer Questions

1. **Define balance of payments.**

Ans. Balance of payments refers to the statement of accounts recording all economic transactions of a country with rest of the world in an accounting year.

2. **What does balance of payments account show?**

Ans. Balance of payments account is a summary statement of all economic transactions between a country and rest of the world. Each country enters into economic transactions with other countries of the world. As a result of such transactions, it receives payments from and makes payments to other countries. The balance of payments is a statement of accounts of these receipts and payments.

3. **Name the two parts of the balance of payments account.**

Ans. Two parts of the balance of payments account are:

(*i*) Current account of balance of payments.

(*ii*) Capital account of balance of payments.

4. **Define balance of trade.**

Ans. Balance of trade is defined as the difference between the value of imports and exports of only physical goods or visible items.

5. **Which two transactions determine balance of trade?**

Ans. (*i*) Export of goods.
(*ii*) Import of goods.
[Both are visible items of trade.]

6. **What is the difference between the value of exports and value of imports called?**

Ans. The difference between the value of exports and value of imports is called balance of trade.

7. **What is meant by visible items of balance of payments?**

Ans. All such items of exports and imports which are material in nature are called visibles. These items can be seen crossing the borders. These are also called merchandise.

8. **What is meant by invisible items of balance of payments?**

Ans. Invisible items refer to all types of services which are rendered to rest of the world as exports or received from the rest of the world as imports as well as current transfers.

9. **Give two examples of invisible items.**

Ans. Examples of invisible items are: (*i*) export and import of shipping services, and (*ii*) export and import of banking services.

10. **Name three such items which are not included in balance of trade.**

Ans. Three items which are not included in balance of trade are:

(*i*) Export and import of services such as of shipping, insurance and banking.

(*ii*) Interest and dividend payments between the countries.

(*iii*) Expenditure by the tourists.

11. **When will balance of trade show a deficit?**

Or

What does deficit in balance of trade indicate?

Ans. Deficit in balance of trade occurs when:

Export of goods < Import of goods.

12. **When will balance of trade show a surplus?**

Ans. Surplus in balance of trade occurs when:

Export of goods > Import of goods.

13. **Define current account of balance of payments.**

Ans. Current account of balance of payments is that account which records export and import of goods, and invisibles. It is a statement of actual receipts and payments of a country on account of imports and exports of both visible and invisible items.

14. **Define capital account of balance of payments.**

Ans. Capital account of balance of payments is that account which records all such transactions between residents of a country and rest of the world which cause a change in ownership of assets. It is a statement of all capital inflows and outflows during the period of an accounting year.

15. **Define 'current account deficit' in the balance of payments.**

Ans. Current account includes receipts and payments of foreign exchange on account of all items of exports and imports (visibles as well as invisibles). Current account deficit occurs when the foreign exchange receipts are less than the foreign exchange payments on account of the export and import of visibles and invisibles.

16. Name two items each relating to current account BoP and capital account BoP.

Ans. (*i*) Current Account BoP includes:

(*a*) export and import of goods (called merchandise), and

(*b*) export and import of services (called invisibles).

(*ii*) Capital Account BoP includes:

(*a*) international sale and purchase of financial assets (like stocks and bonds), and

(*b*) international sale and purchase of real assets (like plant and machinery).

17. Define balance of payments equilibrium.

Ans. Balance of payments equilibrium is a situation when receipts and payments of a country on account of economic transactions with rest of the world are exactly equal to each other, and there is no movement of official reserves.

18. When will deficit in the balance of payments occur?

Ans. Deficit in the balance of payments occurs when payments of a country on account of economic transactions with rest of the world exceed its receipts and consequently, there is a decrease in official reserves.

19. When will surplus in the balance of payments occur?

Ans. Surplus in the balance of payments occurs when receipts of a country on account of economic transactions with rest of the world exceed its payments and consequently, there is increase in official reserves.

20. Define autonomous items.

Ans. Autonomous items are those transactions that are undertaken for certain economic or profit motive. These items are also known as above the line items. It is due to these items that there is surplus or deficit in the BoP account.

21. Define accommodating items.

Ans. Accommodating items are those transactions that are undertaken by the government with a view to correcting imbalances in the country's BoP account. These items are also known as below the line items.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Monetary transactions arise only due to international sale and purchase of financial assets.

Ans. False. Monetary transactions arise due to export and import of goods, export and import of services, international sale and purchase of financial assets as well as international sale and purchase of real assets.

2. If exports > imports, the level of aggregate demand tends to fall.

Ans. False. If exports > imports, the level of aggregate demand tends to rise. Because exports lead to a rise in AD, while imports are the opposite of exports.

3. BoP accounts reflect the growth potential of the economy.

Ans. True. BoP accounts reflect the growth potential of the economy in terms of demand for the domestically produced goods and services in rest of the world.

4. Balance of trade is the difference between export of services and import of services of a country.

Ans. False. Balance of trade is the difference between export of material goods and import of material goods of a country. It relates only to visible items of trade.

5. While estimating invisibles balance, we consider goods and non-factor services only.

Ans. False. While estimating invisibles balance, we consider (*i*) balance relating to non-factor services, (*ii*) balance relating to factor services, and (*iii*) balance on current transfers.

6. Current account is a part of balance of trade.

Ans. False. Balance of trade is a part of current account.

Balance on Current Account = Trade balance + Invisibles balance

7. Import of machinery is reflected in the capital account of balance of payments.

Ans. False. Import of machinery (which is a capital good) is reflected in the current account of balance of payments as an element of merchandise.

8. Portfolio investment relates to ownership of enterprises by the non-residents in the domestic economy.

Ans. False. Portfolio investment refers to investment by the non-residents in shares and bonds of the domestic companies.

9. When BoP is in equilibrium, there is movement of official reserves of the central bank.

Ans. False. When BoP is in equilibrium:

Current account balance + Capital account balance + Errors and omissions = Zero, and there is no movement of official reserves of the central bank.

10. BoP is in surplus when: Current account balance + Capital account balance is not equal to zero.

Ans. True. In case of surplus in BoP:

Current account balance + Capital account balance is some positive number, pointing to net inward flow of foreign exchange, and causing an increase in official reserves.

11. Accommodating items do not cause any movement of goods and services across the borders.

Ans. True. Accommodating items relate only to the movement of official reserves with a view to correcting BoP imbalances.

12. If balance of trade is showing a deficit of ₹ 20,000 and value of exports is ₹ 30,000, then the value of imports will be ₹ 10,000.

Ans. False. Value of imports in this case will be ₹ 50,000.

We know that,

Balance of Trade = Value of exports – Value of imports

Or, Value of Imports = Value of exports – Balance of trade

= ₹ 30,000 – (–) ₹ 20,000

= ₹ 30,000 + ₹ 20,000

= ₹ 50,000

Therefore, value of imports will be ₹ 50,000.

3. HOTS & Applications

1. Is a rise in reserves of India's foreign exchange a sign of our rising exports?

Ans. Not necessarily; in case of India it is certainly not. Our forex reserves have tended to rise largely because of remittances from abroad by the NRIs.

2. How can increase in foreign direct investment affect the price of foreign exchange?

Ans. Increase in foreign direct investment increases the supply of foreign exchange. Implying decrease in price of foreign exchange.

3. How can Reserve Bank of India help in bringing down the foreign exchange rate which is very high?

Ans. By selling foreign exchange in the international money market from its reserves, Reserve bank can increase its supply. This is expected to bring down the foreign exchange rate.

4. The country needs a huge amount of imports for developmental programmes. Name one step which the central bank can take to make imports cheaper using the foreign exchange market.

Ans. By selling foreign exchange in the international money market from its reserves, central bank can increase the supply of foreign exchange, leading to a fall in the foreign exchange rate or appreciation of the domestic currency. This will make imports cheaper.

5. How does 'export/import' component affect the circular flow of income in a country?

Ans. Exports reflect expenditure on the domestic product by the rest of the world. It leads to increase in AD and works as an 'injection' into the circular flow of income. It stimulates the flow of income by way of 'multiplier effect'. Imports, on the other hand, is a 'withdrawal' from the circular flow of income. It depresses the flow of income by way of negative multiplier effect.

6. **Balance of payments always balances. Does it mean a situation of zero net financial obligation for a country?**

Ans. It is only in the accounting sense that balance of payment always balances. From the practical point of view, it should not be interpreted as a situation of zero net financial obligation for a country. A negative balance on the current account is equated with positive balance in the capital account. But the positive balance in capital account may have been achieved through loans from rest of the world. All loans are financial obligations to rest of the world.

7. **How does balance of payments reflect supply, demand status of foreign exchange for a country?**

Ans. Unfavourable balance of payments of a country (like India) shows that our financial obligations vis-a-vis rest of the world are greater than our financial claims. It reflects that: (*a*) availability (supply) of forex reserves is low, and (*b*) demand for forex reserves is high. Implying a net rise in the demand for foreign exchange.

This leads to a rise in the price of 'forex' (the rate at which we can buy a dollar or a pound). Thus, exchange rate becomes unfavourable.

8. **How is the rising demand for the Indian goods in the US market likely to impact the exchange rate between the Indian rupee and US dollar?**

Ans. Rising demand for the Indian goods in the US market imply that our exports are tending to rise. Consequently, supply of foreign exchange (US dollar) tends to rise. Other things remaining constant, it would lead to a fall in foreign exchange rate. Implying that the domestic currency (Indian rupee) will start appreciating in relation to the US dollar.

4. Analysis & Evaluation

1. **Is improvement in exchange rate of the country's currency always beneficial?**

Ans. Improvement in the exchange rate of a country's currency (say Indian rupee vis-a-vis US dollar) implies that less rupees are to be paid for a dollar than before. It points to the relative strength of the Indian rupee in the international market. However, for a developing country like India it is not also always desired. It would mean that US now can buy less Indian goods for a dollar, than before, which might cut US demand for the Indian goods. Accordingly, our exports might suffer which a developing country like India can least afford. However, it may be mentioned that when the Indian rupee becomes stronger in relation to US dollar, our import bill (on account of essential imports like crude oil) tends to fall. Accordingly, our CAD (Current Account Deficit) is reduced, lowering the need for borrowing in the international money market. In case CAD mounts up, our credit rating takes a hit which sends a wrong signal to the international investors in the Indian markets.

2. **Explain the economic value of inflow of foreign exchange relating to capital account of BoP.**

Ans. Two important uses of capital account inflow of foreign exchange are: (*i*) it may be used to correct CAD (current account deficit), and (*ii*) it may be used as investment in the domestic economy. Reduction in CAD improves our credit rating in the international money market. Likewise, increase in investment leads to increase in GDP growth. However, there is a flip side as well. Capital account inflow of foreign exchange relates mainly to: (*i*) borrowing, and (*ii*) FDI. Borrowing increases our liability against rest of the world. It raises financial liability of the future generations. Likewise, FDI leads to foreign ownership of assets in the domestic economy. So that the control of production activity in the domestic economy starts slipping from the resident producers to the non-resident producers.

3. **How are NRI deposits significant for us?**

Ans. NRI deposits in India are reflected as capital receipts in the BoP accounts. These add to the supply of foreign exchange for the Indian economy. This foreign exchange can be used to offset the current account deficit which usually remains high. In the event of low NRI deposits, we have to depend on commercial borrowings from the rest of the world which lead to high burden of interest payments.

Also, constant supply of foreign exchange (by way of NRI deposits) keeps the exchange rate under check. This facilitates the import of essential goods like crude oil.

4. Would you always justify depreciation of the Indian currency as it leads to a rise in exports?

Ans. Of course, depreciation of the currency leads to a rise in exports. Because a unit of foreign currency (say US dollar) now exchanges for more rupees. But it does not mean that continuous depreciation of our currency is always good. The reason is this: continuous depreciation of the currency would make imports costlier over time. There are certain essential imports (like of crude oil) which cannot be cut to any significant extent. Accordingly, continuous depreciation of the currency would lead to higher and higher import bill. May be that, what we earn by way of additional export receipts are lower than what we lose by way of additional import payments (when there is currency depreciation). Thus, stability of exchange rate is always better than the swings in it.

CBSE QUESTIONS (2015–2019) & ANSWERS

1. Other things remaining unchanged, when in a country the price of foreign currency rises, national income is: (choose the correct alternative) *[CBSE Delhi 2015]*

(*a*) likely to rise (*b*) likely to fall

(*c*) likely to rise and fall both (*d*) not affected

Ans. (*d*)

[**Note:** Rise or fall in the price of foreign currency has **no direct impact** on national income of a country. Exchange rate (price of foreign currency) changes everyday and several times in a day. It does not mean that national income would change accordingly.

Indirect Impact: When exchange rate rises, foreign currency becomes expensive. Imports tend to fall and exports tend to rise. Accordingly, AD tends to rise. A rise in AD may **lead to a rise** in national income.]

2. Where will sale of machinery to abroad be recorded in the balance of payments accounts? Give reasons. *[CBSE Delhi 2015]*

Ans. Sale of machinery to abroad is accounted under trade balance or current account BoP. Because sale/purchase of machinery is a part of the merchandise, and all merchandise is recorded as a trade balance in the current account BoP.

3. Name the broad categories of transactions recorded in the 'current account' of the balance of payments accounts. *[CBSE Delhi 2015]*

Ans. The broad categories of transactions recorded in the current account of the balance of payments accounts are as under:

(*i*) Merchandise (referring to export and import of goods).

(*ii*) Invisibles, including:

(*a*) non-factor services (referring to export and import of services),

(*b*) income (arising out of factor services), and

(*c*) current transfers.

4. Name the broad categories of transactions recorded in the 'capital account' of the balance of payments accounts. *[CBSE Delhi 2015]*

Ans. The broad categories of transactions recorded in the capital account of the balance of payments accounts are as under:

(*i*) Borrowing, including:

(*a*) External commercial borrowing, and (*b*) External assistance,

(*ii*) Investments, including:

(*a*) FDI (Foreign Direct Investment), and (*b*) portfolio investment,

(*iii*) NRI deposits,

(*iv*) Banking capital,

(*v*) Short-term debt, and

(*vi*) Other capital.

5. Other things remaining the same, when in a country the market price of foreign currency falls, national income is likely: (choose the correct alternative) *[CBSE (AI) 2015]*

(*a*) to rise (*b*) to fall

(*c*) to rise or to fall (*d*) to remain unaffected

Ans. (*d*)

[**Note:** Rise or fall in the price of foreign currency has **no direct impact** on national income of a country. Exchange rate (price of foreign currency) changes everyday and several times in a day. It does not mean that national income would change accordingly.

Indirect Impact: When exchange rate falls, foreign currency becomes cheaper. Imports tend to rise and exports tend to fall. Accordingly, AD tends to fall. A fall in AD may **lead to a fall** in national income.]

6. What are fixed and flexible exchange rates? *[CBSE (AI) 2015]*

Ans. Fixed exchange rate is that exchange rate which is not determined by the forces of demand and supply in the market. Instead, it is fixed or declared officially by the government of the country concerned.

Flexible exchange rate is that exchange rate which is determined by the demand for and supply of different currencies in the foreign exchange market.

7. Explain the meaning of managed floating exchange rate. *[CBSE (AI) 2015]*

Ans. Managed floating is a tool employed by the central bank to restore the value of the country's currency (in relation to other currencies) within the desired limits, even when exchange rate is determined by the market forces of demand and supply.

It is also called 'dirty floating'. The RBI would start buying US dollars in the international money market when it desires to raise the value of dollar in relation to the Indian rupee. It is done when exports are to be raised. Most countries practice 'dirty floating' with a view to raising their exports.

8. Where is 'borrowings from abroad' recorded in the balance of payments accounts? Give reasons. *[CBSE (AI) 2015]*

Ans. 'Borrowings from abroad' is recorded in the capital account of the balance of payments accounts. It is reflected in the capital account, as it impacts change in the ownership of assets abroad. It does not involve movement of goods and services across the borders. Also, borrowing is recorded with a +sign in the BoP accounts. This is because it leads to the receipt of foreign exchange from rest of the world.

9. Other things remaining the same, when foreign currency becomes cheaper, the effect on national income is likely to be: (choose the correct alternative) *[CBSE (F) 2015]*

(*a*) positive (*b*) negative

(*c*) positive and negative both (*d*) no effect

Ans. (*d*)

See Note, Q. 5, above.

10. Giving reasons explain where charity to foreign countries is recorded in the balance of payments accounts. *[CBSE (F) 2015]*

Ans. Charity to foreign countries is recorded under invisibles current account BoP. Because charity to foreign countries is a part of the current transfers, and all current transfers are recorded as a invisible balance in the current account BoP.

11. Give the meanings of balance of trade and balance on current account of balance of payments accounts. *[CBSE (F) 2015]*

Ans. Balance on trade account includes only merchanised or material goods of trade. It is defined as the difference between export of material goods and import of material goods.

Balance on trade account = Export of material goods – Imports of material goods

Current Account Balance = Trade balance + Balance on account of invisibles.

Invisibles include factor and non-factor services as well as current transfers.

12. Give the meanings of 'autonomous' transactions and 'accommodating' transactions in the balance of payments accounts. *[CBSE (F) 2015]*

Ans. Autonomous transactions refer to such BoP transactions which are undertaken with a view to making profits. These items are also known as above the line items in BoP accounts. When autonomous receipts are less than autonomous payments, the BoP turns into deficit. This leads to a fall in official reserves of foreign exchange.

Accommodating transactions refer to such BoP transactions which are undertaken by the official authorities (the central bank in India) with a view to restoring BoP equilibrium. These items are also known as below the line items in BoP accounts.

13. Foreign exchange transactions dependent on other foreign exchange transactions are called: (choose the correct alternative) *[CBSE Delhi 2016]*

(*a*) current account transactions
(*b*) capital account transactions
(*c*) autonomous transactions
(*d*) accommodating transactions

Ans. (*d*)

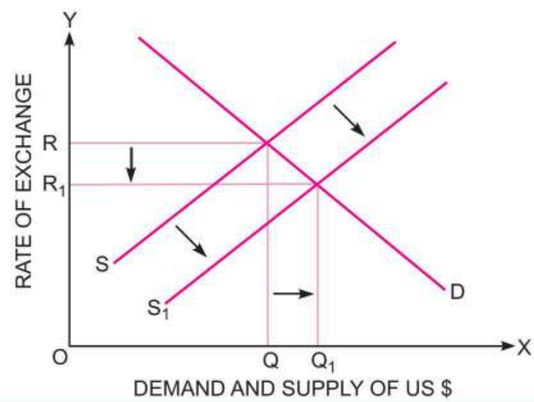
14. (*i*) In which sub-account and on which side of balance of payments account will foreign investments in India be recorded? Give reasons.

(*ii*) What will be the effect of foreign investments in India on exchange rate? Explain. *[CBSE Delhi 2016]*

Ans. (*i*) Foreign investments in India will be recorded in the capital account of the balance of payments account. It is reflected in the capital account, as it impacts change in the ownership of assets. It does not involve movement of goods and services across the borders. Also, foreign investments in India will be recorded with a +sign (credit side) in the BoP accounts because it leads to the receipt of foreign exchange from rest of the world.

(*ii*) As a result of foreign investments in India, supply of foreign currency increases. Accordingly, supply curve shifts to the right from S to S_1, as in **Fig. 1**. This causes a fall in equilibrium exchange rate from OR to OR_1. Now one US dollar is available for less Indian rupees. This is a situation of appreciation of the domestic currency.

FIGURE 1



15. Foreign exchange transactions which are independent of other transactions in the balance of payments account are called: (choose the correct alternative) *[CBSE (AI) 2016]*

(*a*) current transactions
(*b*) capital transactions
(*c*) autonomous transactions
(*d*) accommodating transactions

Ans. (*c*)

16. Indian investors lend abroad. Answer the following questions: *[CBSE (AI) 2016]*

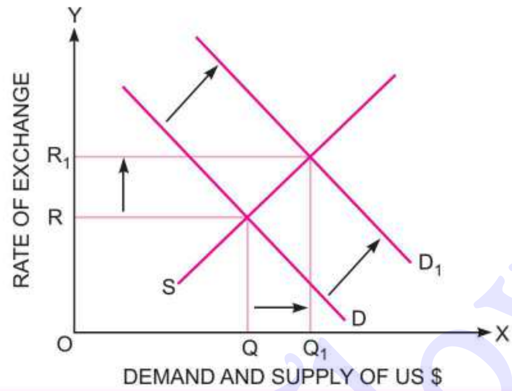
(*a*) In which sub-account and on which side of the balance of payments account such lending is recorded? Give reasons.

(*b*) Explain the impact of this lending on market exchange rate.

Ans. (*a*) 'Indians lending to abroad' is recorded in the capital account of the balance of payments accounts. It is reflected in the capital account, as it impacts change in the ownership of assets. It does not involve movement of goods and services across the borders. Also, lending abroad is recorded with a –sign (debit side) in the BoP account. This is because it leads to the payment of foreign exchange to rest of the world.

(*b*) As a result of lending to abroad, demand for foreign currency increases. Accordingly, demand curve shifts to the right from D to D_1, as in **Fig. 2**. This causes a rise in equilibrium exchange rate from OR to OR_1. Now, more Indian rupees are to be paid for one US dollar. This is a situation of depreciation of the domestic currency.

FIGURE 2



17. **Balance of payments 'deficit' is the excess of: (choose the correct alternative)** [*CBSE (F) 2016*]

(*a*) current account payments over current account receipts

(*b*) capital account payments over capital account receipts

(*c*) autonomous payments over autonomous receipts

(*d*) accommodating payments over a accommodating receipts

Ans. (*c*)

18. **Indian investors borrow from abroad. Answer the following:** [*CBSE (F) 2016*]

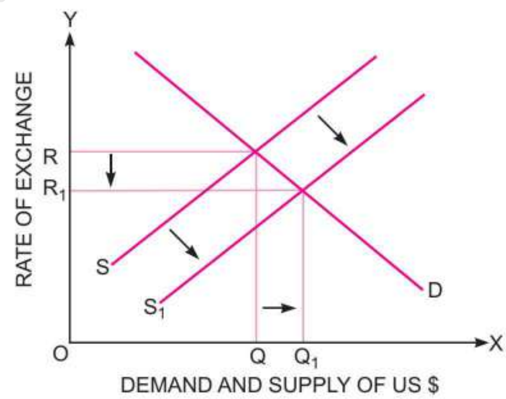
(*a*) In which sub-account and on which side of the Balance of Payments Account will this borrowing be recorded? Give reason.

(*b*) Explain what is the impact of this borrowing on exchange rate.

Ans. (*a*) 'Borrowing from abroad' will be recorded in the capital account of the balance of payments account. It is reflected in the capital account, as it impacts change in the ownership of assets. It does not involve movement of goods and services across the borders. Also, borrowing from abroad will be recorded with a +sign (credit side) in the BoP account. This is because it leads to the receipt of foreign exchange from rest of the world.

(*b*) As a result of borrowing from abroad, supply of foreign currency increases. Accordingly, supply curve shifts to the right from S to S_1, as in **Fig. 3**. This causes a fall in equilibrium exchange rate from OR to OR_1. Now one US dollar is available for less Indian rupees. This is a situation of appreciation of domestic currency.

FIGURE 3



19. Give the meaning of balance of payments. [CBSE Delhi 2017]

Ans. Balance of payments is a statement of accounts recording all economic transactions of a country with rest of the world in an accounting year.

20. Why does the demand for foreign currency fall and supply rises when its price rises? Explain. [CBSE Delhi 2017]

Ans. When price of foreign currency rises, more Indian rupees are needed to get one unit of the foreign currency. This leads to a fall in demand for the foreign currency. It may be explained in terms of the following factors:

(*i*) With a rise in the price of foreign currency, imports tend to fall, leading to a fall in demand for foreign currency.

(*ii*) A rise in price of foreign currency makes travelling to rest of the world more expensive. Accordingly, demand for foreign currency falls.

(*iii*) Investment in rest of the world becomes more expensive, leading to a fall in demand for foreign currency.

(*iv*) Opportunity cost of holding foreign currency (in terms of domestic currency) tends to rise. Accordingly, demand for foreign currency tends to shrink.

Rise in price of a foreign currency (or appreciation of foreign currency) leads to a rise in supply of foreign currency owing to the following factors:

(*i*) Appreciation of foreign currency induces greater FDI (foreign direct investment).

(*ii*) Appreciation of foreign currency induces greater exports from the domestic economy.

(*iii*) Appreciation of foreign currency induces FII (foreign institutional investment—investment related to purchase of shares) in the domestic economy.

(*iv*) Appreciation of foreign currency increases direct purchases by the non-residents in the domestic economy.

(*v*) Appreciation of foreign currency increases remittances from abroad.

21. What is meant by depreciation of domestic currency? [CBSE (AI) 2017]

Ans. Depreciation of domestic currency implies a fall in the value of domestic currency in relation to the foreign currency.

22. Distinguish (*a*) between current account and capital account, and (*b*) between autonomous transactions and accommodating transactions of balance of payments account. [CBSE (AI) 2017]

Ans. (*a*) The basic difference between the current account and the capital account of balance of payments is this: Current account includes receipts and payments of foreign exchange on account of all items of exports and imports (visibles as well as invisibles). Capital account includes receipts and payments of foreign exchange only on account of borrowing and change in ownership of assets across the borders. Capital account does not involve trading of goods and services across the borders.

(*b*) (*i*) The basic difference between autonomous and accommodating items is that while deficit or surplus in BoP occurs due to autonomous items (as determined by economic motive), the accommodating items are meant to restore the BoP identity. BoP always balances because of the accommodating items.

(*ii*) Autonomous items are also known as above the line items. Whereas accommodating items are known as below the line items.

23. What is meant by trade deficit? [CBSE (F) 2017]

Ans. Trade deficit occurs when: Export of goods < Import of goods.

24. Explain the distinction between the flexible exchange rate and the managed floating exchange rate. [CBSE (F) 2017]

Ans. Flexible exchange rate is that rate which is determined by the supply-demand forces in the foreign exchange market.

Managed floating exchange rate is essentially the floating exchange rate. But, it is manipulated or managed by the RBI, which is called 'Dirty Floating'. The central bank tries to restore the value of the country's currency (in relation to other currencies) within the desired limits through sale and purchase of foreign exchange in the international money market. When the exchange rate is found to be unfavourable (or when the rupee is depreciating to the undesired limits) the RBI plans to sell forex in the international money market. It increases supply of forex, leading to a fall in its value in relation to the domestic currency. Or that, the value of the domestic currency tends to rise, as desired. On the other hand, if domestic currency is found to be appreciating beyond limits, the RBI intervenes by raising its demand for forex in the international money market. It would lead to appreciation of the foreign currency or depreciation of the domestic currency.

It may be noted that appreciation of the domestic currency is desired when the government wants to make imports cheaper. On the other hand, depreciation of the domestic currency is desired when the government wants to make exports lucrative for rest of the world.

25. Explain by giving examples, the distinction between depreciation and devaluation of domestic currency. *[CBSE (F) 2017]*

Ans. Depreciation is the fall in the value of domestic currency in relation to foreign currency in a situation when exchange rate is determined by the forces of supply and demand in the international money market. For example, if a US dollar exchanges for ₹ 60, instead of ₹ 55 earlier, the domestic currency shows depreciation, owing to the free play of supply and demand forces in the international money market.

Devaluation, on the other hand, is the fall in the value of domestic currency in relation to foreign currency as planned by the government in a situation when exchange rate is not determined by the forces of supply and demand but is fixed by the government of different countries. Devaluation was recurring phenomenon when the gold standard prevailed or when the exchange rate was fixed (and varied) by the government. Now, most economies have adopted the float rate of exchange where devaluation exists only as a theoretical possibility. Its example can be traced only as a past history. Like, India did devaluation of the rupee in the year 1991.

26. Discuss briefly the meaning of:

(*a*) Fixed exchange rate.

(*b*) Flexible exchange rate.

(*c*) Managed floating exchange rate. *[CBSE 2018]*

Ans. (*a*) Fixed exchange rate is that exchange rate which is not determined by the forces of demand and supply in the market. Instead, it is fixed or declared officially by the government of the country and the government alone changes it. Fixed exchange rate has two variants:

(*i*) Gold Standard System of Exchange Rate, and

(*ii*) Adjustable Peg System of Exchange Rate.

In the gold standard system of exchange rate, gold was taken as the common unit of parity between currencies of different countries. It did not allow any adjustment in the exchange rate. Adjustable peg system of exchange rate, on the other hand, allowed some adjustments in the parity value of the different currencies by IMF (International Monetary Fund).

(*b*) Flexible exchange rate is that exchange rate which is determined by the demand for and supply of different currencies in the foreign exchange market. It is also called 'free rate of exchange', as it is free from government control or regulations.

Shift in demand and supply parameters in the foreign exchange market lead to changes in the exchange rate. In turn, these changes lead to an impact on export and import of different countries in the international goods market.

Since international money market is now ruled by the flexible exchange rate, element of instability has risen across different economies in the world.

(*c*) See Q. 7, page 267.

27. (a) Define "Trade Surplus". How is it different from "Current Account Surplus"?

(b) "Indian Rupee (₹) plunged to all time low of ₹ 74.48 against the US Dollar ($)."

—The Economic Times

In the light of the above report, discuss the impact of the situation on Indian imports.

[CBSE 2019 (58/1/1)]

Ans. (a) Trade surplus refers to excess of value of export of visibles (goods) over value of import of visibles (goods) in the balance of payments of a country.

Trade Surplus: Export of goods > Import of goods

Current account includes receipts and payments of foreign exchange on account of all items of exports and imports (visibles as well as invisibles). Current account surplus occurs when the foreign exchange receipts are in excess of the foreign exchange payments relating to visible as well as invisible items of trade.

(b) This is a situation of depreciation of Indian Rupee.

Depreciation of Indian Rupee is the fall in the value of Indian currency (rupee) in relation to foreign currency (US dollar) in a situation when exchange rate is determined by the forces of supply and demand in the international money market. It implies that more rupees are now required to buy a unit of foreign currency (say one US dollar) Or, one US dollar now exchanges for more rupees. More rupees are now required to buy goods worth one US dollar in the US market. As a result, imports are likely to fall.

28. (a) Define "Trade Surplus" and "Trade Deficit".

(b) Discuss briefly the concept of managed floating system of foreign exchange rate determination. *[CBSE 2019 (58/2/1)]*

Ans. (a) Trade surplus refers to excess of value of export of visibles (goods) over value of import of visibles (goods) in the balance of payments of a country.

Trade Surplus: Export of goods > Import of goods

Trade deficit refers to excess of value of import of visibles (goods) over value of export of visibles (goods) in the balance of payments of a country.

Trade Deficit: Export of goods < Import of goods

(b) Managed floating is a tool employed by the central bank to restore the value of the country's currency (in relation to other currencies) within the desired limits, even when exchange rate is determined by the market forces of supply and demand in the international money market. But (at times) the government (central bank) intervenes to place some influence on the exchange rate so that it remains within the desired limits. It is done through the sale and purchase of foreign currency in the international money market.

29. (a) Distinguish between appreciation of home currency and depreciation of home currency.

(b) What is meant by "current account surplus"?

(c) State any one source of supply of foreign currency for a country. *[CBSE 2019 (58/2/2)]*

Ans. (a) The main differences between appreciation of home currency and depreciation of home currency are as under:

(i) Appreciation of home currency refers to a situation when home (domestic) currency appreciates in relation to a foreign currency. On the other hand, depreciation of home currency refers to a situation when home (domestic) currency depreciates in relation to a foreign currency.

(ii) In case of appreciation of home currency, less rupees are to be paid to buy one US dollar. Because, domestic currency (rupee) gains its value in relation to US dollar. On the other hand, in case of depreciation of home currency, more rupees are to be paid to buy one US dollar. Because, domestic currency (rupee) loses its value in relation to US dollar.

(b) Current account surplus occurs when receipt of foreign exchange on account of the export of visible and invisible items of trade is greater than the payment of foreign exchange on account of the import of these items.

(c) Purchases of domestic goods by the foreigners.

30. **(*a*) Distinguish between 'Trade Deficit' and 'Current Account Deficit'.**

(*b*) Discuss briefly the concept of flexible exchange rate system of foreign exchange rate determination. [*CBSE 2019 (58/2/3)*]

Ans. (*a*) Trade deficit refers to excess of value of import of visibles (goods) over value of export of visibles (goods) in the balance of payments of a country.

Trade Deficit: Export of goods $<$ Import of goods

Current account includes receipts and payments of foreign exchange on account of all items of exports and imports (visibles as well as invisibles). Current account deficit occurs when the foreign exchange receipts fall short of the foreign exchange payments relating to visible and invisible items of trade.

(*b*) Flexible exchange rate is determined by the forces of demand and supply in the foreign exchange market. It is also called free exchange rate, as it is freely determined by the forces of demand and supply in the international market. Thus, the theory of determination of rate of exchange is the demand and supply theory. According to this theory, the rate of exchange of a country's currency is determined by the demand for and supply of foreign exchange. If the demand for foreign exchange rises, its value will also rise and if demand for foreign exchange falls, its value will also fall. Similarly, supply of foreign exchange also influences the exchange rate. Greater the supply, lower the rate of exchange and *vice versa*.

31. **Name any two sources of demand for foreign exchange by households in an economy.** [*CBSE 2019 (58/3/1)*]

Ans. (*a*) Demand for foreign exchange for direct purchases abroad as well as imports from rest of the world.

(*b*) Demand for foreign exchange for travel abroad.

32. **Define autonomous transactions in balance of payments of an economy.** [*CBSE 2019 (58/3/1)*]

Ans. Autonomous transactions refer to such BoP transactions which are determined by considerations of profit. It is due to these transactions that BoP deficit/surplus arises.

33. **Define accommodating transactions in balance of payments of an economy.** [*CBSE 2019 (58/3/1)*]

Ans. Accommodating transactions refer to such BoP transactions which are not determined by considerations of profit. It is due to these transactions that BoP deficit/surplus is corrected.

34. **In recent times the Indian Rupee (₹) depreciated to an all time low against the US dollar ($). Discuss its impact on India's imports.** [*CBSE 2019 (58/3/1)*]

Ans. See Q. 27, point (*b*), page 272.

35. **"A country with trade deficit cannot have current account surplus in its Balance of Payments." Do you agree with the given statement? Discuss with reason.** [*CBSE 2019 (58/3/1)*]

Ans. No, trade deficit occurs when the value of import of visibles (goods) is more than the value of export of visibles (goods) in the balance of payments of a country.

Trade Deficit: Export of goods $<$ Import of goods

In the given situation, surplus in current account will arise when the deficit on trade account is less than the surplus on account of invisibles.

36. **(*a*) State any two factors responsible for inflow of foreign currency.**

(*b*) State on which side of capital account/current account will the following transactions be recorded and why:

(*i*) Interest on loan received from Nepal.

(*ii*) Import of mobile phones from China. [*CBSE 2019 (58/4/1)*]

Ans. (*a*) Following two factors are responsible for inflow of the foreign currency:

(*i*) Purchases of domestic goods by the foreigners.

(*ii*) Direct foreign investment as well as portfolio investment in home country.

(*b*) (*i*) Interest on loan received from Nepal will be recorded in the credit side of current account as it causes inflow of the foreign currency to the home country.

(*ii*) Import of mobile phones from China will be recorded in the debit side of current account as it causes outflow of the foreign currency through visible imports.

37. (*a*) Distinguish between autonomous and accommodating transactions of balance of payments account.

(*b*) Distinguish between depreciation of a currency and devaluation of a currency.

[CBSE 2019 (58/4/1)]

Ans. (*a*) See Q. 22, point (*b*), page 270.

(*b*) Depreciation is the fall in the value of domestic currency in relation to foreign currency in a situation when exchange rate is determined by the forces of supply and demand in the international money market. Devaluation, on the other hand, is the fall in the value of domestic currency in relation to foreign currency as planned by the government in a situation when exchange rate is not determined by the forces of supply and demand but is fixed by the government of different countries. Both depreciation and devaluation result in fall in the value of domestic currency in terms of foreign currency. Consequently, domestic goods become cheaper in terms of foreign currency. Accordingly, exports tend to rise while imports are discouraged.

38. State the meaning of the following:

(*i*) Fixed foreign exchange rate.

(*ii*) Trade surplus.

(*iii*) Accommodating transactions. ***[CBSE 2019 (58/5/1)]***

Ans. **(*i*) Fixed Foreign Exchange Rate:** See Q. 26, point (*a*), page 271.

(*ii*) Trade Surplus: Trade surplus occurs when export of goods (merchandise) is in excess of import of goods (merchandise).

Trade Surplus: Export of goods > Import of goods.

(*iii*) Accommodating Transactions: Accommodating transactions refer to such BoP transactions which are not determined by considerations of profit. It is due to these transactions that the BoP deficit/surplus is corrected. These transactions are also known as below the line items.

NCERT & MISCELLANEOUS QUESTIONS

1. Distinguish between the nominal exchange rate and the real exchange rate. If you were to decide whether to buy domestic goods or foreign goods, which rate would be more relevant? Explain.

[NCERT]

Ans. Nominal exchange rate is that type of exchange rate which does not account for changes in the price level while measuring average strength of one currency in relation to the others. Real exchange rate is that type of exchange rate which accounts for changes in the price level across different countries of the world. It is an exchange rate that is based upon constant prices. To buy domestic goods or foreign goods at a point of time, nominal exchange rate is more relevant.

2. How is the exchange rate determined under a flexible exchange rate regime? ***[NCERT]***

Ans. Under flexible exchange rate regime, exchange rate is determined by the forces of supply and demand in the international market. While demand for foreign exchange is inversely related to its own price, supply of foreign exchange is positively related to its own price.

3. Differentiate between devaluation and depreciation. ***[NCERT]***

Ans. See Q. 37, point (*b*), above.

4. **Are the concepts of demand for domestic goods and domestic demand for goods the same?** *[NCERT]*

Ans. Demand for domestic goods and domestic demand for goods are different concepts. Demand for domestic goods includes demand for goods by the domestic consumers and by the foreigners. Domestic demand for goods is the demand for goods produced domestically as well as those produced abroad.

Demand for domestic goods = C + I + G + (X – M).

Domestic demand for goods = C + I + G.

So that, Demand for domestic goods = Domestic demand for goods + (X – M).

5. **Differentiate between balance of trade and current account balance.** *[NCERT]*

Ans. See Q. 11, page 267.

6. **What is a parity value?**

Ans. In the context of exchange rate in foreign exchange market, parity value refers to the value of one currency in terms of the other for a given basket of goods and services. If a US dollar buys 50 times the goods and services in India, compared to a rupee, the parity value of a dollar should be 50 : 1. Accordingly, the exchange rate between rupee and a dollar ought to be ₹ 50 : $1. Any change in the parity value would imply a corresponding change in the exchange rate.

7. **What is dirty floating?**

Ans. Dirty floating is a concept related to 'managed floating' system of exchange rate. It refers to a situation when managed floating is exercised without caring for rules and regulations of the international money market and without respecting the authority of the international body that allows managed floating. More specifically, dirty floating occurs when one country manipulates the exchange rate to foster its own interest unmindful of the interest of other countries.

8. **Why is foreign exchange demanded?**

Ans. Following factors contribute to the demand for foreign currency in the country:

(*i*) Payments of international loans.

(*ii*) Investment in rest of the world.

(*iii*) Direct purchases abroad as well as imports from rest of the world.

9. **What are the sources of supply of foreign exchange?**

Ans. Following factors contribute to the flow of foreign exchange into the country:

(*i*) Purchases of domestic goods by the foreigners.

(*ii*) Direct foreign investment as well as portfolio investment in home country.

(*iii*) Speculative purchases of foreign exchange.

(*iv*) Transfer of foreign exchange by the residents of the country abroad.

10. **Explain the main functions of the foreign exchange market.**

Ans. The main functions of the foreign exchange market are:

(*i*) Foreign exchange market facilitates transfer of purchasing power across different countries of the world. This is called transfer function.

(*ii*) Foreign exchange market facilitates credit for international trade. This is called credit function of the market.

(*iii*) Foreign exchange market facilitates protection against risks of foreign exchange. This is called hedging function of the market.

11. **How is fixed rate of exchange determined?**

Ans. Fixed rate of exchange is not determined by the forces of demand and supply in the market. Instead, it is fixed or declared officially by the government of the country concerned.

Such a rate of exchange has been associated with Gold Standard System during 1880-1914. According to this system, value of every currency is determined in terms of gold. Accordingly, ratio between gold value of the two currencies was fixed as exchange rate between those currencies.

Illustration: Value of one dollar = 20g of gold.

Value of a rupee = 5g of gold [Hypothetical figures]

Then, 1 dollar = $\frac{20}{5}$ = ₹ 4

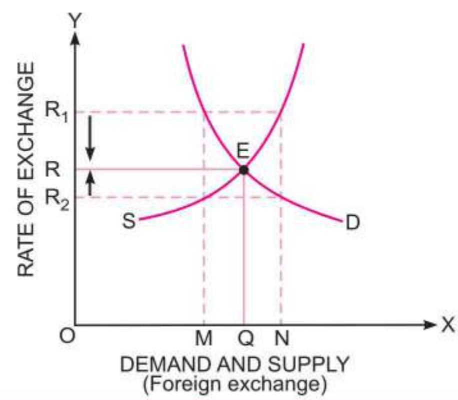
12. How is flexible rate of exchange determined?

Ans. See Q. 30, point (*b*), page 273.

13. How is foreign exchange rate determined in the foreign exchange market?

Ans. Exchange rate is determined by the forces of supply and demand relating to foreign exchange. Equilibrium exchange rate occurs where demand for and supply of foreign exchange are equal to each other. **Fig. 4** illustrates this situation.

FIGURE 4



In **Fig. 4**, demand and supply are measured on the X-axis and exchange rate on the Y-axis. D is the demand and S is the supply curve of foreign exchange. Both these curves intersect at point E. It is an equilibrium point and OR is the equilibrium rate of exchange. If the rate of exchange rises to OR_1, then supply of foreign currency (ON) will exceed its demand (OM) by an amount equal to MN. Supply being more than demand, rate of exchange will come down to OR. On the contrary, if the rate of exchange falls to OR_2, then demand for foreign currency (ON) will be more than its supply (OM) by MN. Demand being more than supply, rate of exchange will again rise to OR. Rate of exchange will, therefore, be determined at a point where demand for and supply of foreign currency are equal.

14. Recently the Government of India has increased import duty on gold. Explain its impact on foreign exchange rate.

Ans. With increase of the import duty, the commodity is set to cost more. Since most of the demand for gold is met by imports, with the increased import duty the import of gold is likely to fall. This will reduce the demand for foreign exchange. Other things remaining constant, a reduction in the demand for foreign exchange will lead to a fall in foreign exchange rate.

15. How does giving incentives for exports influence foreign exchange rate?

Ans. Exports incentives are given for the promotion of exports of a country. With the increase in the exports of an economy, the inflow of foreign exchange is expected to increase. This implies an increase in the supply of foreign exchange. Demand remaining constant, increase in supply of foreign exchange will lead to a fall in foreign exchange rate.

16. When foreign exchange rate in a country is on the rise, what impact is it likely to have on exports and imports?

Ans. A unit of the domestic currency will now buy less goods from rest of the world while a unit of foreign currency can now buy more goods and services in the domestic economy. Goods produced in the domestic economy become cheaper to the buyers in foreign countries while foreign goods become relatively expensive to the domestic buyers. As a result, exports are likely to rise while imports are expected to fall.

17. Explain the effect of depreciation of domestic currency on exports and imports.

Ans. Depreciation is the fall in the value of domestic currency in relation to the foreign currency. When domestic currency depreciates, value of domestic currency in terms of foreign currency falls. It implies that more rupees are now required to buy a unit of foreign currency (say one US dollar). Or, one US dollar now exchanges for more rupees. Thus, domestic goods become cheaper in terms of foreign currency. Accordingly, exports to foreign country would rise. On the other hand, our imports would decline.

18. Explain the effect of appreciation of domestic currency on exports and imports.

Ans. Appreciation is the rise in the value of domestic currency in relation to the foreign currency. When domestic currency appreciates, value of domestic currency in terms of foreign currency rises. It implies that less rupees are now required to buy a unit of foreign currency (say one US dollar), which means that a dollar can now buy lesser amount of goods and services in the domestic economy. Accordingly, exports of the country are likely to fall.

Similarly, less rupees are now required to buy goods worth one US dollar in the US market. As a result, imports are likely to rise.

19. Explain the reason for inverse relationship between price of a foreign currency and its demand.

Ans. There is an inverse relationship between price of a foreign currency and its demand. The reasons for this inverse relationship are as under:

(*i*) When foreign currency (say US dollar) becomes cheaper (in relation to the domestic exchange), we get more dollar per unit of our currency. Accordingly, imports become lucrative. This raises demand for foreign currency.

(*ii*) When foreign currency becomes cheaper and purchasing power of domestic currency increases in the international money market, domestic investors will be induced to make greater investment in rest of the world. Accordingly, demand for foreign currency rises.

(*iii*) When foreign currency becomes cheaper, Indians will find it less expensive to travel abroad. Accordingly, demand for foreign currency will rise.

The opposite will happen in case foreign currency becomes expensive.

20. Explain the relation between the rise in price of a foreign currency and its demand. Give two examples.

Ans. When price of the foreign currency rises, more Indian rupees are needed to buy a unit of foreign currency (say US dollar). It leads to a fall in demand for foreign goods and services. Accordingly, demand for foreign currency must fall.

Two examples of a fall in demand for foreign goods and services (leading to a fall in demand for foreign currency) are as these:

(*i*) A rise in the price of a foreign currency causes a rise in the price of education in the foreign universities. Now, less number of students will go abroad for education. Accordingly, demand for foreign currency will fall.

(*ii*) A rise in the price of a foreign currency leads to a rise in the cost of investment in rest of the world. Accordingly, demand for foreign currency (for purpose of investment abroad) will fall.

21. Explain the relation between the fall in price of a foreign currency and its demand. Give two examples.

Ans. Fall in the price of a foreign currency is a situation when less Indian rupees are needed to buy a unit of foreign currency. It leads to a rise in demand for foreign goods and services. Accordingly, demand for foreign currency tends to rise.

Two examples of a rise in demand for foreign goods and services (leading to a rise in demand for foreign currency) are as these:

(*i*) When the price of foreign currency falls, it becomes cheaper to go abroad for higher education. Number of students going abroad will rise, leading to a rise in demand for foreign currency.

(*ii*) When the price of foreign currency falls, it becomes cheaper to go abroad for medical treatment. Number of patients going abroad for medical treatment will rise, leading to a rise in demand for foreign currency.

22. When price of a foreign currency rises, its demand falls. Why?

Ans. When price of foreign currency rises, more Indian rupees are needed to get one unit of the foreign currency. This leads to a fall in demand for the foreign currency. The various components of a fall in demand for foreign currency (in response to a rise in its price) are as under:

See Q. 20, page 270.

23. When price of a foreign currency falls, its demand rises. Why?

Ans. When price of a foreign currency falls, less Indian rupees are needed to get one unit of the foreign currency. Accordingly, demand for goods and services for which payments are to be made in terms of foreign currency tends to rise. This leads to a rise in demand for the foreign currency. The various components of a rise in demand for foreign currency (in response to a fall in its price) are as these:

(*i*) With a fall in the price of foreign currency, imports tends to rise, leading to a rise in demand for foreign currency.

(*ii*) A fall in the price of foreign currency makes travelling to rest of the world less expensive. Accordingly, demand for foreign currency rises.

(*iii*) Investment in rest of the world becomes less expensive, leading to a rise in demand for foreign currency.

(*iv*) Opportunity cost of holding foreign currency (in terms of the domestic currency) tends to fall. Accordingly, demand for foreign currency tends to expand.

24. Supply of a foreign currency rises in response to a rise in its exchange rate. Explain why.

Ans. Rise in exchange rate of a foreign currency refers to appreciation of foreign currency in relation to domestic currency. It causes a rise in supply of foreign currency owing to the following situations:

See Q. 20, page 270.

25. When price of a foreign currency falls, the supply of that foreign currency also falls. Why?

Ans. Fall in the price of a foreign currency causes a fall in its supply, owing to the following reasons:

(*i*) Now domestic currency becomes dearer in relation to the foreign currency. Accordingly, foreign investors will make lesser investment in the domestic economy. Both FDI and FII will fall. Implying, a fall in the influx of foreign currency from rest of the world.

(*ii*) Now domestic exports will fall because one unit of the foreign currency buys less goods in the domestic market. Accordingly, supply of foreign currency (or influx of foreign currency into domestic economy) will fall.

(*iii*) Fall in the price of a foreign currency (say US dollar) would mean less Indian rupees per US dollar. Accordingly, NRIs would make less transfers to their home country. Implying, a fall in the supply of foreign currency into the domestic economy.

(*iv*) Fall in the price of a foreign currency would lead to lesser purchases by the non-residents in the domestic market. Accordingly, supply of foreign currency will fall.

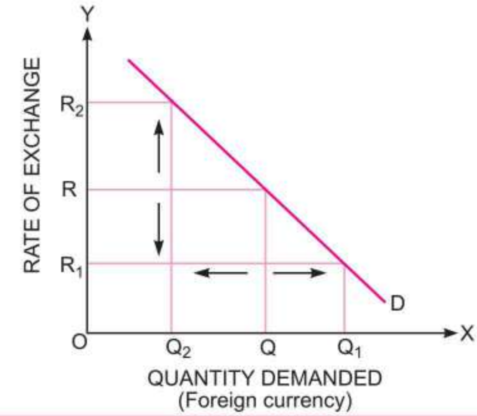
26. Supply of a foreign currency falls in response to a fall in its exchange rate. Explain why?

Ans. See Q. 25, above.

27. Giving reason, explain the relation between foreign exchange rate and demand for foreign exchange.

Ans. Foreign exchange rate and demand for foreign exchange are inversely related to other. When the price of foreign currency falls (or the availability of foreign exchange becomes cheaper than before) we get more dollar per unit of our currency. Accordingly, domestic traders would tend to buy more goods in the international market. This raises demand for foreign currency from OQ to OQ_1 when exchange rate falls from OR to OR_1 in **Fig. 5**.

FIGURE 5

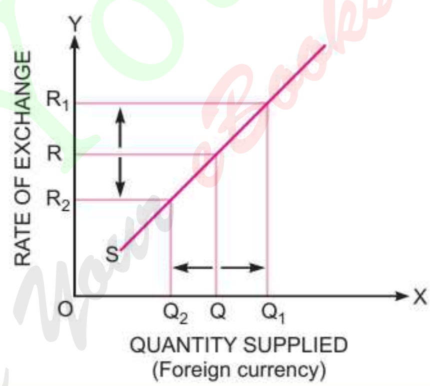


Similarly, when the price of foreign currency rises, we get less dollar per unit of our currency. Accordingly, domestic traders would be able to buy less goods in the international market. As a result, demand for foreign currency will fall from OQ to OQ_2 when exchange rate rises from OR to OR_2 in **Fig. 5**.

28. Giving reason, explain the relation between foreign exchange rate and supply of foreign exchange.

Ans. Ordinarily, foreign exchange rate and supply of foreign exchange are positively related. Suppose, when the price of foreign currency falls (in relation to domestic currency), purchasing power of foreign currency in the domestic economy tends to reduce. This causes reduction in export from the domestic economy. Accordingly, supply of foreign currency reduces from OQ to OQ_2 when exchange rate falls from OR to OR_2 as shown in **Fig. 6**.

FIGURE 6



Similarly, when the price of foreign currency rises (in relation to domestic currency), purchasing power of foreign currency in the domestic economy tends to increase. This causes increase in export from the domestic economy. Accordingly, supply of foreign currency increases from OQ to OQ_1 when exchange rate rises from OR to OR_1 as shown in **Fig. 6**.

29. How is external commercial borrowing different from external assistance?

Ans. External commercial borrowing refers to loans received from or given to rest of the world at the market rate of interest. External assistance refers to loans received from or given to rest of the world at the concessional rate of interest.

30. How is FDI different from portfolio investment?

Ans. FDI refers to the purchase of asset in rest of the world which allows control over the asset. Portfolio investment, on the other hand, refers to investment in bonds and in shares of foreign countries devoid of any legal control of those companies.

31. Distinguish between balance of trade and current account balance of payments.

Ans.

Balance of Trade	Current Account Balance of Payments
(*i*) Balance of trade is that account which records imports and exports of goods only.	(*i*) Current account balance of payments is that account which records (*a*) import and export of goods, (*b*) import and export of services, and (*c*) current transfers.
(*ii*) It is the difference between visible exports and visible imports.	(*ii*) It is the sum total of trade balance and invisibles balance. Invisibles balance includes (*a*) balance on non-factor services, (*b*) balance on income arising out of factor services, and (*c*) balance on transfers.
(*iii*) It involves international transactions relating to physical goods only which can be seen crossing the borders.	(*iii*) It involves international transactions relating to physical goods (which can be seen crossing the borders) as well as transactions relating to services which cannot be seen crossing the borders.

32. Distinguish between autonomous items and accommodating items.

Ans.

Autonomous Items	Accommodating Items
(*i*) Autonomous items refer to such BoP transactions which are undertaken for considerations of profit.	(*i*) Accommodating items refer to such BoP transactions which are free from the considerations of profit.
(*ii*) Autonomous items are the cause of BoP imbalance (BoP surplus or BoP deficit).	(*ii*) Accommodating items are meant to restore BoP balance.
(*iii*) Autonomous items are classified as 'above the line' items of BoP.	(*iii*) Accommodating items are classified as 'below the line' items of BoP.

33. Give the meaning of favourable balance of payments.

Ans. Balance of payments is favourable when in order to balance the receipts and payments, a country receives gold from abroad or it gives short-term loans. In a state of favourable balance of payments, receipts (on account of autonomous items) are more than payments (on account of autonomous items) and the equality between the two is restored (generally) through loans to rest of the world.

34. Give the meaning of unfavourable balance of payments.

Ans. Balance of payments is unfavourable when to balance its receipts and payments, a country has either to give gold or indulge in short-term borrowing from abroad. In a state of unfavourable balance of payments, receipts (on account of autonomous items) are less than the payments (on account of autonomous items) and the equality between the two is restored (generally) through borrowing from rest of the world.

35. How is balance of payment 'deficit' measured? Explain.

Ans. BoP deficit is measured as the excess of payments to rest of the world over and above the receipts from rest of the world on account of the autonomous items, relating to current as well as capital account BoP. It leads to a decrease in official reserves of foreign exchange.

36. Balance of payments always balances. Explain.

Ans. BoP surplus or BoP deficit occurs on account of the difference in receipts and payments of a country relating to autonomous transactions. In the event of a surplus or a deficit, accommodating transactions are introduced in the BoP account. These transactions are meant only to make such adjustments in the BoP account which eliminate the BoP surplus or deficit. Accordingly, BoP account is always in a state of balance.

37. What is meant by disequilibrium of balance of payments? What are its different types?

Ans. Disequilibrium in the BoP refers to a situation of either a surplus or a deficit in the BoP account. There are two types of disequilibrium:

(i) Surplus BoP: When the payments (debit) of the country are less than its receipts (credit), the BoP is said to be in surplus. It is a situation of favourable balance of payments (See Q. 33, page 280 for further details).

(ii) Deficit BoP: When the payments (debit) of the country are more than its receipts (credit), then it is called deficit BoP. It is a situation of unfavourable balance of payments (See Q. 34, page 280 for further details).

38. (a) 'Devaluation and Depreciation of currency are one and the same thing'. Do you agree? How do they affect the exports of a country?

(b) What is meant by 'official reserve transactions'? Discuss their importance in balance of payments. *[CBSE Sample Paper 2018]*

Ans. (a) Devaluation and depreciation are different terms.

Devaluation is the fall in the value of domestic currency in relation to foreign currency as planned by the government. It happens in situations when exchange rate is not determined by the forces of supply and demand, but is fixed by the government of different countries.

Depreciation, on the other hand, is the fall in the value of domestic currency in relation to foreign currency when exchange rate is determined by the forces of supply and demand in the international money market.

However, both devaluation and depreciation lead to a fall in the value of domestic currency in relation to the foreign currency. Consequently, domestic goods become cheaper in terms of foreign currency. Accordingly, exports tend to rise (while imports are discouraged).

(b) Transactions that cause changes in the official reserves of the central bank are known as official reserve transactions.

When current account balance and capital account balance is not equal to zero, there is movement of official reserves of the central bank.

When current account balance and capital account balance is equal to zero, there is no movement of official reserves of the central bank.

Accommodating items in the balance of payments relate only to the movement of official reserves with a view to correcting BoP imbalance.

Thus, official reserves are reduced when there is BoP deficit and are increased when there is BoP surplus.

Briefly, official reserves are used to eliminate the situations of surplus and deficit BoP.

39. 'Devaluation and depreciation of currency are one and the same thing'. Do you agree? How do they affect the exports of a country? *[CBSE Sample Paper 2016]*

Ans. See Q. 38, point (a), above.

40. What is meant by 'official reserve transactions'? Discuss their importance in balance of payments. *[CBSE Sample Paper 2016]*

Ans. See Q. 38, point (b), above.

41. Explain the components of current account of balance of payments.

Or

Briefly describe the items of current account BoP.

Ans. Two principal components (or items) of current account of balance of payments are:

(i) Merchandise: It refers to all such items of exports and imports which are material in nature and are, therefore, called visibles. Current account showing export and import of visibles is often referred to as balance of trade account.

(ii) Invisibles: It refers to all such items of export and import which are non-material and are, therefore, called invisibles. Invisibles in India's balance of payments include the following sub-components:

(*a*) **Non-factor Services:** This includes payment in terms of revenue on account of services such as shipping, insurance and banking.

Services rendered to rest of the world are treated like exports and services received from rest of the world are treated like imports.

(*b*) **Income:** It refers to payment in terms of income (investment income + compensation of employees) arising out of factor services by way of rent, interest and profit. Income earned by our country from rest of the world is shown as 'receipt' while income earned by rest of the world from our country is shown as 'payment' in the current account balance of payments.

(*c*) **Current Transfers:** It refers to unilateral transfers by way of gifts, grants and workers' remittances (residents settled abroad sending money to their relatives in the home country).

42. Explain the components of capital account of balance of payments.

Or

Briefly describe the items of capital account BoP.

Ans. The principal components (or items) of capital account of balance of payments are as follows:

(*i*) **Borrowing:** It includes external commercial borrowing and external assistance. External assistance is recorded as the net of receipts while commercial borrowing is recorded as the net of borrowing in the capital account of India's BoP.

(*ii*) **Foreign Investment:** It includes FDI (Foreign Direct Investment) and portfolio investment. Investment by our residents in rest of the world is recorded under 'debit items', while investment by non-residents in our country is recorded under 'credit items' in current account BoP.

(*iii*) **NRI Deposits:** NRI (Non-resident) deposits refer to the transfer of funds by the non-resident Indians from rest of the world. Net value of these transfers is recorded which is estimated as the difference between NRI deposits and NRI withdrawals.

(*iv*) **Banking Capital:** It refers to foreign asset holding of the commercial banks. Owing to drawdown of foreign assets of the commercial banks, banking capital inflow into the domestic economy tends to rise.

(*v*) **Short-term Trade Credit:** Inflow of foreign exchange on account of short-term trade credit is recorded in the 'credit side' of capital account of balance of payments.

NUMERICALS

1. Find the balance of trade when value of imports = ₹ 580 crore and value of exports = ₹ 650 crore.

Sol. Given, value of imports = ₹ 580 crore

Value of exports = ₹ 650 crore

Balance of trade = Value of exports – Value of imports

= ₹ 650 crore – ₹ 580 crore

= ₹ 70 crore

Balance of trade shows a surplus of ₹ 70 crore.

2. The balance of trade shows a deficit of ₹ 5,000 crore and the value of imports is ₹ 9,000 crore. What is the value of exports?

Sol. Given, balance of trade = (–) ₹ 5,000 crore

Value of imports = ₹ 9,000 crore

Balance of Trade = Value of exports – Value of imports

Or, Value of exports = Balance of trade (Deficit) + Value of imports

= (–) ₹ 5,000 crore + ₹ 9,000 crore

= ₹ 4,000 crore

Value of exports = ₹ 4,000 crore.

3. The balance of trade shows a deficit of ₹ 300 crore. The value of exports is ₹ 500 crore. What is the value of imports?

Sol. Given, balance of trade = (–) ₹ 300 crore

Value of exports = ₹ 500 crore

Balance of trade = Value of exports – Value of imports

Or, Value of imports = Value of exports – Balance of trade (Deficit)

= ₹ 500 crore – (–) ₹ 300 crore

= ₹ 500 crore + ₹ 300 crore

= ₹ 800 crore

Value of imports = ₹ 800 crore.

4. Find current account balance from the following data:

Items	**(₹ in lakh)**
(*i*) Balance of invisible trade	12,500
(*ii*) Export of goods	10,000
(*iii*) Import of goods	4,500

Sol. Current Account Balance

= Balance of visible trade (Export of goods – Import of goods) + Balance of invisible trade

= ₹ 10,000 lakh – ₹ 4,500 lakh + ₹ 12,500 lakh

= ₹ 22,500 lakh – ₹ 4,500 lakh

= ₹ 18,000 lakh

Current account balance = ₹ 18,000 lakh.

5. Find the balance on non-factor services from the following information:

Items	**(₹ in lakh)**
(*i*) Export	800
(*ii*) Import	400
(*iii*) Income	300
(*iv*) Transfers	200
(*v*) Current account balance	1,200

Sol. Balance on Non-factor Services

= Current account balance – Trade balance (Export – Import) – Balance on income – Balance on transfers

= ₹ 1,200 lakh – (₹ 800 lakh – ₹ 400 lakh) – ₹ 300 lakh – ₹ 200 lakh

= ₹ 1,200 lakh – ₹ 400 lakh – ₹ 300 lakh – ₹ 200 lakh

= ₹ 300 lakh

Balance on non-factor services = ₹ 300 lakh.

6. Find the current account balance from the following data:

Items	**(₹ in crore)**
(*i*) Exports	250
(*ii*) Imports	300
(*iii*) Non-factor services	200
(*iv*) Unilateral transfers	150
(*v*) Income	100

Sol. Trade Balance = Exports – Imports

= ₹ 250 crore – ₹ 300 crore

= (–) ₹ 50 crore

Invisibles Balance

= Balance on non-factor services + Balance on income + Balance on unilateral transfers

= ₹ 200 crore + ₹ 100 crore + ₹ 150 crore

= ₹ 450 crore

Current Account Balance

= Trade balance + Invisibles balance

= (–) ₹ 50 crore + ₹ 450 crore

= ₹ 400 crore

Current account balance = ₹ 400 crore.

7. The balance of trade shows a deficit of ₹ 20,000 crore and the exports of merchandise are one-third of the imports of merchandise. Find the values of imports and exports.

Sol. Suppose the value of imports = X.

Given, balance of trade = (–) ₹ 20,000 crore

$$\text{Exports} = \frac{1}{3} \text{ of (Imports)} = \frac{1}{3}(X)$$

We know, Balance of Trade = Exports – Imports

$$= \frac{1}{3}(X) - X$$

$$= \frac{X}{3} - X = \frac{X - 3X}{3}$$

$$\Rightarrow \quad (-)\ 20{,}000 = \frac{-2X}{3}$$

$$\Rightarrow \quad 20{,}000 = \frac{2X}{3}$$

$$\Rightarrow \quad 2X = 60{,}000$$

$$\Rightarrow \quad X = \frac{60{,}000}{2}$$

$$\Rightarrow \quad X = 30{,}000$$

$$\text{Exports} = \frac{1}{3} \text{ of (Imports)}$$

$$= \frac{1}{3} \times 30{,}000 = 10{,}000$$

Value of imports = ₹ 30,000 crore.

Value of exports = ₹ 10,000 crore.

PART—B

INDIAN ECONOMIC DEVELOPMENT

- DEVELOPMENT EXPERIENCE (1947-1990)
  AND
  ECONOMIC REFORMS (SINCE 1991)
- CURRENT CHALLENGES FACING INDIAN ECONOMY
- DEVELOPMENT EXPERIENCE OF INDIA, PAKISTAN AND CHINA
  —A COMPARATIVE STUDY

DEVELOPMENT EXPERIENCE (1947-1990) AND ECONOMIC REFORMS (SINCE 1991)

1 UNIT

POWER POINTS

1. Indian Economy on the Eve of Independence

- State of Agriculture on the Eve of Independence
- State of Industry on the Eve of Independence
- State of Foreign Trade on the Eve of Independence
- Features of the Indian Economy on the Eve of Independence

State of Agriculture on the Eve of Independence—Principal Observations

- Low production (total output) and productivity (output per hectare of land).
- High degree of uncertainty of output owing to heavy dependence on rainfall.
- Dominance of subsistence farming.
- A big 'economic divide' between owners of the soil and tillers of the soil.
- Small and fragmented holdings.
- Land Revenue System which led to exploitation of the farmers.
- Forced commercialisation of agriculture based on advance payments to the farmers (to grow specific crops).

State of Industry on the Eve of Independence—Principal Observations

- Discriminatory tariff policy of the state (British government) which led to decay of Indian industry.
- Disappearance of princely courts which used to encourage the production of Indian handicrafts.
- Competition from machine-made products which led to the fall in demand for the Indian handicrafts.
- New patterns of demand which further contributed to the fall in demand for the Indian handicrafts.
- Introduction of railways in India which led to spread of market (and therefore rise in demand) for the British products in India.
- Bleak (Notional) growth of modern industry in the domestic economy.

State of Foreign Trade on the Eve of Independence: Principal Observations

- Indian economy was the net exporter of primary products and importer of finished goods.
- Monopoly control of India's foreign trade by the British Government.
- Surplus trade, but only to benefit the British Government.

Features of the Indian Economy on the Eve of Independence

- A stagnant economy, showing insignificant rise in GDP.
- A backward economy, showing dominance of primary sector, and neglect of secondary and tertiary sectors.
- Agricultural backwardness, as indicated by low productivity.
- Industrial backwardness, as indicated by the lack of (the then) modern industry.
- Rampant poverty as reflected by low quality of life.
- Poor economic and social infrastructure which inhibited the process of growth.
- Heavy dependence on imports indicating low level of domestic output.
- Limited urbanisation indicating dependence on agriculture as the principal source of livelihood.
- Semi-feudal economy indicating concentration of economic power in fewer hands.
- Colonial economy indicating rampant exploitation of the national resources.

2. Five Years Plans in India: Goals and Achievements

- Long Period Goals
- Short Period Goals
- Features of Economic Policy pursued under Planning till 1991
- Success (Achievement) of Planning
- Failures of Planning

Long Period Goals

- GDP growth.
- Full employment.
- Equitable distribution or equity.
- Modernisation.
- Self-sufficiency.

Short Period Goals

- First Plan: Higher agricultural production.
- Second Plan: Increase in industrial production.
- Third Plan: Need for self-sufficiency in foodgrain production.
- Fourth Plan: Price stability and fuller utilisation of manpower.
- Fifth & Sixth Plans: Alleviation of poverty.
- Seventh Plan: Need for greater employment opportunities.
- Eighth Plan: Full employment and universalisation of education.
- Ninth Plan: Growth, price stability and environmental sustainability.
- Tenth Plan: Need for better quality of life.
- Eleventh Plan: Poverty reduction, job creation and protection of environment.
- Twelfth Plan: Need for sustainable as well as inclusive growth.

Features of Economic Policy pursued under Planning till 1991

- Heavy reliance on public sector for GDP growth.
- Regulated development of private sector to avoid concentration of economic power.
- Protection of small-scale industry and regulation of large-scale industry with a view to maximising the opportunities of employment.
- Development of heavy industry of strategic significance.
- Focus on saving and investment so that the growth process becomes self-reliant.
- Protection from foreign competition so that the domestic industry does not lose the domestic market.
- Focus on import substitution so that the demand for foreign exchange is minimised.
- Restriction on foreign capital so that the external debts are minimised.
- Centralised planning with a view to monitoring the process of growth and development.

Success (Achievement) of Planning—Principal Observations

- Increase in national income.
- Increase in per capita income.
- Rise in savings and investment.
- Institutional and technical change in agriculture.
- Growth and diversification of industry.
- Expansion of economic and social infrastructure.
- Wider opportunities of employment.
- Expansion of International trade.

Failures of Planning—Principal Observations

- Abject poverty continued to characterise the Indian economy.
- High rate of inflation leading to fall in real income of the people.
- Unemployment crises continued to exist even opportunities of employment tended to rise. Explosive rise in population has been the principal cause.
- Inadequate economic and social infrastructure.
- Skewed distribution of income and wealth, leading to a huge divide between rich and the poor.

3. Performance of Agriculture, Industry and Foreign Trade During 1947-1990

A. Agriculture

- Importance of Agriculture in the Indian Economy
- Features of Indian Agriculture
- Agrarian Reforms
- Achievement of Agrarian Reforms

Importance of Agriculture in the Indian Economy—Principal Observations

- Substantial contribution to GDP.
- Agriculture as the principal source of the supply of wage goods.
- Agriculture as the principal sector of employment.
- Agriculture as the principal source of the supply of raw material.

- Agriculture as the principal source of demand for the industrial goods.
- Substantial contribution to international trade.
- Significant contribution to domestic trade.
- Support to the transport industry by offering goods of bulk transport.
- Agriculture as a significant source of wealth of the nation.

Features of Indian Agriculture

- Low productivity (output per hectare of land).
- Disguised unemployment: more persons are employed than what is optimally required.
- Dependence on rainfall, owing to the deficiency of permanent means of irrigation.
- Subsistence farming: production for self-consumption by the marginal farmers.
- Deficient use of modern inputs, owing to poverty of the small holders.
- Small holdings, so that the use of mechanised equipment becomes economically un-viable.
- Landlord-tenant conflict, as tenants (in most cases) are not the owners of the soil.
- Backward technology, as bulk of the holdings are small.

Agrarian Reforms

- **Technical Reforms:** (*i*) Use of HYV seeds, (*ii*) Use of chemical fertilizers, (*iii*) Use of insecticides and pesticides for crop protection, (*iv*) Scientific farm management practices, (*v*) Mechanised means of cultivation.
- **Land Reforms (also called institutional reforms):** (*i*) Abolition of intermediaries, (*ii*) Regulation of rent, (*iii*) Consolidation of holdings, (*iv*) Ceiling on land holdings, (*v*) Cooperative farming.
- **General Reforms:** (*i*) Expansion of irrigation facilities, (*ii*) Provision of credit, (*iii*) Regulated markets and cooperative marketing societies, (*iv*) Price support policy.

Achievement of Agrarian Reforms

- Spurt in crop productivity.
- Substantial rise in acreage (area under cultivation).
- Shift from subsistence farming to commercial farming.
- Change in farmers' outlook: price related production decisions.
- Self-sufficiency in foodgrain production.

B. Industry

> - Importance of Industry in the context of Economic Growth
> - Importance of Public Sector in the context of Industrial Development
> - Industrial Policy Resolution—1956
> - Significance of SSI (Small-Scale Industry)

Importance of Industry in the context of Economic Growth

- Industry is an epicentre of economic growth.
- An emerging source of employment.
- Source of mechanised means of farming.
- Industry imparts dynamism to growth process.
- Industrial growth leads to growth of civilisation.
- Industrial growth leads to infrastructural growth.

Importance of Public Sector in the context of Industrial Development

- Lack of capital in the private sector: this leads to an obvious reliance on the public sector.

- Low inducement to invest in the private sector owing to deficiency of demand: yet another factor pointing to the importance of public sector.
- Growth with social justice: only public sector (not the private sector) ensures growth with social justice.

Industrial Policy Resolution–1956—Principal Elements

- **Three-fold classification of industries:**
  (*i*) exclusively public sector enterprises.
  (*ii*) industries which could be developed both as public and private sector enterprises.
  (*iii*) all private sector enterprises [other than category (*i*) and (*ii*)].
- **Industrial licensing** with a view to regulating industrial establishments in the private sector.
- **Industrial concessions** with a view to promoting industrial establishments in the backward regions.

Significance of SSI (Small-Scale Industry)

- SSI is labour-intensive and therefore employment friendly
- SSI shows locational flexibility and is therefore equality-oriented (referring to inter-regional equality)
- SSI needs small investment and is therefore equity-oriented (referring to equality across different sections of the society)

C. Foreign Trade

- India's Foreign Trade at the time of Independence
- India's Foreign Trade after Independence
- Inward Looking Trade Strategy [Strategy of Import Substitution]

India's Foreign Trade at the time of Independence—Principal Observations

- Trade related to colonial exploitation:
  — export of raw material.
  — import of finished goods.
- Favourable balance of trade (exports > imports).
- Direction of trade was restricted, being largely between England and India.
- Volume of trade was very small.

India's Foreign Trade after Independence—Principal Observations

- India's exports and imports have tended to rise, but percentage share in international trade has tended to shrink.
- Decline in percentage share of agricultural exports, and the rise in percentage share of manufactured goods.
- Direction of trade has become diversified: UAE and China emerging as our important trading partners.
- Shift in trade strategy from 'inward looking' (based on import substitution) to 'outward looking' (based on export promotion).

Inward Looking Trade Strategy [Strategy of Import Substitution]

- It is a policy of reliance on 'import substitution' and protection to the domestic industry through import restrictions and import duties in the area of international trade.
- **Good Impact of Inward Looking Trade Strategy:**
  (*i*) High rate of industrial growth with structural transformation, (*ii*) Diversification of industrial growth, (*iii*) New opportunities of investment.
- **Bad Impact of Inward Looking Trade Strategy:**
  (*i*) Growth of inefficient public monopolies, (*ii*) Lack of competition implied lack of modernisation, (*iii*) Indiscriminate spread of public sector enterprises, (*iv*) Growth of economically unviable state enterprises.

4. Economic Reforms Since 1991: New Economic Policy (NEP)

- Need for NEP
- Elements of NEP
- Appraisal of NEP

Need for NEP [Factors prompting (necessitating) NEP]

- High fiscal deficit.
- BoP crises.
- Fall in foreign exchange reserves.
- Inflationary spiral (rise in prices).
- Poor performance of PSUs (public sector undertakings).

Elements of NEP

- **Liberalisation:** Freedom of private enterprises from controls imposed by the government.
- **Privatisation:** Partial or full ownership and management of public sector enterprises by the private sector.
- **Globalisation:** A process associated with increasing openness, growing economic interdependence and deepening economic integration in the global economy.

NOTE: Introduced in 2016 and 2018 respectively, Demonetisation and GST may be noted as another set of post-1991 economic reforms.

Appraisal of NEP

- **Merits of LPG Policies:** (*i*) Vibrant economy, (*ii*) Stimulant to industrial production, (*iii*) A check on fiscal deficit, (*iv*) A check on inflation, (*v*) Spread of consumer's sovereignty, (*vi*) A substantial increase in foreign exchange reserves, (*vii*) Flow of private foreign investment, (*viii*) Recognition of India as an emerging economic power, (*ix*) A shift from monopoly market to competitive market.
- **Demerits of LPG Policies:** (*i*) Neglect of agriculture, (*ii*) Urban concentration of growth process, (*iii*) Economic colonialism, (*iv*) Spread of consumerism, (*v*) Lopsided growth process, (*vi*) Cultural erosion.

QUESTION-ANSWERS

INDIAN ECONOMY ON THE EVE OF INDEPENDENCE

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Which of the following was the main feature of Indian economy on the eve of independence?**
   (*a*) Semi-feudal economy (*b*) Urbanised economy
   (*c*) Industrial economy (*d*) All of these

2. **On the eve of independence, the proportion of population was engaged in industrial sector was:**
   (*a*) approx. 10% (*b*) approx. 15%
   (*c*) approx. 20% (*d*) approx. 26%

3. **Backward economy is the one which shows:**
(*a*) high growth in income
(*b*) low level of productivity
(*c*) slow growth in income
(*d*) both (*b*) and (*c*)

4. **Per Capita Income =**
(*a*) $\frac{\text{National Income}}{\text{Population}}$
(*b*) $\frac{\text{National Income}}{\text{Population}} \times 100$
(*c*) $\frac{\text{Gross Domestic Product}}{\text{National Income}}$
(*d*) $\frac{\text{Gross Domestic Product}}{\text{National Income}} \times 100$

5. **Economic infrastructure includes:**
(*a*) communication
(*b*) banking
(*c*) power
(*d*) all of these

6. **Distribution of working population among different sectors of the economy is called:**
(*a*) occupational structure
(*b*) output structure
(*c*) population structure
(*d*) gender structure

7. **The principal cause of backwardness of the Indian economy on the eve of independence was:**
(*a*) British Raj
(*b*) Colonisation
(*c*) both (*a*) and (*b*)
(*d*) none of these

8. **Per capita income refers to:**
(*a*) income per head of total population in the country
(*b*) income per head of total labour force in the country
(*c*) income per head of total work force in the country
(*d*) none of these

9. **On the eve of independence, India was net importer of:**
(*a*) primary products
(*b*) industrial products
(*c*) finished goods
(*d*) agricultural goods

10. **During colonial period, India's demographic profile showed:**
(*a*) High birth rate
(*b*) High death rate
(*c*) High infant mortality
(*d*) All of these

Ans. **1.** (*a*) **2.** (*a*) **3.** (*d*) **4.** (*a*) **5.** (*d*) **6.** (*a*) **7.** (*c*) **8.** (*a*) **9.** (*c*) **10.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Indian economy at the time of independence was a/an ____________ economy. (agricultural/industrial)
2. ____________ refers to distribution of working population across primary, secondary and tertiary sectors of the economy. (Industrialisation/Occupational structure)
3. Mining as a production activity, belongs to ____________ sector of the economy. (primary/secondary)
4. On the eve of independence, ____________ was the principal occupation of the people and it recorded the highest percentage contribution to the country's GDP compared to other sectors of the economy. (mining/agriculture)
5. ____________ were developed by the British Raj to enlarge the size of market for the British goods. (Railways/Roadways)

6. ______________ mode of production leads to low productivity. (Feudalistic/Capitalist)
7. At the time of independence, bulk of the workforce was engaged in ______________. (agriculture/industry)

Ans. **1.** agricultural **2.** Occupational structure **3.** primary **4.** agriculture **5.** Railways **6.** Feudalistic **7.** agriculture

C. True or False

State whether the following statements are True or False:

1. On the eve of independence, only heavy and basic industries were developed in the Indian economy. (True/False)
2. Less than 20 per cent population was literate in 1948. (True/False)
3. Growth rate of population before independence was far less than what it is now. (True/False)
4. Year 1921 is regarded as the 'year of great divide' with regard to population growth in the country. (True/False)
5. Development is always accompanied with structural changes in the economy, though growth may occur without them. (True/False)
6. On the eve of independence, Indian economy was a mixed economy. (True/False)
7. Opening of Suez Canal significantly increased the cost of transportation of goods between Britain and India. (True/False)

Ans. **1.** False **2.** True **3.** True **4.** True **5.** True **6.** True **7.** False

D. Very Short Answer Questions

1. Define a stagnant economy.

Ans. A stagnant economy is an economy in which there is little or no scope of growth in income.

2. What is meant by land productivity?

Ans. Land productivity refers to output per hectare of land.

3. What is meant by conspicuous consumption?

Ans. Conspicuous consumption refers to consumption of non-essential goods and services.

4. What is meant by subsistence agriculture?

Ans. Subsistence agriculture is a form of farming in which production is meant largely for self-consumption of the farming families.

5. What do you mean by commercialisation of agriculture?

Ans. Commercialisation of agriculture means the production of crops for sale in the market.

6. What do you understand by *zamindari* system of land revenue?

Ans. *Zamindari* system of land revenue is that system under which land is owned by a *zamindar* and tiller of the soil is not the owner of the soil.

7. What was discriminatory tariff policy under the British rule in India?

Ans. Discriminatory tariff policy under the British rule in India allowed duty-free export of raw material from India to Britain and duty-free import of British final products into India.

8. What do you mean by De-industrialisation under the British rule in India?

Ans. Under the British rule, de-industrialisation meant destruction of Indian handicraft industry.

9. Define colonial exploitation.

Ans. Colonial exploitation refers to exploitation of the economy by the British government.

10. Define occupational structure.

Ans. Occupational structure implies distribution of workforce among different sectors, *viz.*, primary, secondary and tertiary sectors of the economy.

11. What is meant by infrastructure?

Ans. Infrastructure refers to the elements of economic and social change which serve as a foundation for economic growth and development of a country.

12. What is infant mortality rate?

Ans. Infant mortality rate is the number of infants (below the age of one) who die every year per thousand infants.

13. What is life expectancy?

Ans. Life expectancy refers to the average or expected number of years that a person is expected to live.

14. Define literacy rate.

Ans. Literacy rate refers to the percentage of people who can read, write and understand.

15. Define per capita income.

Ans. Per capita income is equal to national income divided by the total population of a country.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Low level of productivity was the principal characteristic of Indian agriculture on the eve of independence.

Ans. True. It was because of the use of primitive technology and small-sized holdings.

2. Under the British rule, Indian agriculture was stable in terms of output and productivity.

Ans. False. It was because of heavy dependence on rainfall.

3. Under the British rule, the tillers of the soil were also the owners of the soil.

Ans. False. Under the British rule, the *zamindari* system conferred ownership rights only on the *zamindars* who themselves were not the tillers of the soil.

4. *Zamindari* system of land revenue was introduced by the British government in India to stabilise its income from agriculture.

Ans. True. The British government introduced the *zamindari* revenue system, so that they could get a fixed amount of revenue from the agriculture sector.

5. Commercialisation of agriculture (under the British rule) was encouraged to benefit the farmers.

Ans. False. Commercialisation of agriculture was encouraged to benefit the British government. Because, commercial products (like indigo) were required by the British textile industry.

6. Under the British Raj, discriminatory tariff policy was pursued with a view to protecting the Indian industry.

Ans. False. Under the British Raj, discriminatory tariff policy was pursued to get an access to the Indian markets for the British industrial products.

7. Railways in India were introduced by the British government to enlarge size of the market for the domestic products.

Ans. False. Railways in India were introduced by the British government in order to enlarge size of the market for the British goods.

8. During the British rule, Indian economy achieved comparative advantage in the export of industrial goods.

Ans. False. India achieved the comparative advantage in the export of primary goods, not in the industrial goods.

9. Foreign trade of India was governed by the discriminatory tariff policy of the British government in India.

Ans. True. It was due to discriminatory tariff policy of the British government that India became a net exporter of raw material and net importer of finished products.

10. Infrastructural development during the British period aimed at colonial exploitation of the Indian economy.

Ans. True. The motive behind the infrastructural development was growth and development of the British economy through colonial exploitation of the Indian economy.

FIVE YEARS PLANS IN INDIA: GOALS AND ACHIEVEMENTS

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. In which year was Planning Commission abolished?

(*a*) 2014 (*b*) 2015
(*c*) 2016 (*d*) 2017

2. An economy in which there is private as well as public ownership of the means of production is called:

(*a*) capitalist economy (*b*) socialist economy
(*c*) mixed economy (*d*) none of these

3. Which of the following statements is correct regarding directive planning?

(*a*) It is pursued in socialist economies as well as mixed economies
(*b*) It is pursued in capitalist economies
(*c*) There is no direct participation of the state in the process of growth
(*d*) Both (*b*) and (*c*)

4. Comprehensive planning is pursued under:

(*a*) capitalist economy (*b*) socialist economy
(*c*) mixed economy (*d*) both (*b*) and (*c*)

5. Which of the following is long period objective/s of five year plans in India?

(*a*) Increase in national income and per capita income
(*b*) Full employment
(*c*) Equitable distribution
(*d*) All of these

6. New base year for the estimation of national income and growth rate is:

(*a*) 2004-05 (*b*) 2011-12
(*c*) 2015-16 (*d*) 2017-18

7. **The period of the Eighth Five Year Plan was:**
(*a*) 1980-1985 (*b*) 1987-1992
(*c*) 1990-1995 (*d*) 1992-1997

8. **In Industrial Policy of 1956, ______ industries were exclusively reserved for public sector.**
(*a*) 2 (*b*) 7
(*c*) 15 (*d*) 17

9. **After which Five Year Plan, there were two annual plans?**
(*a*) Fifth Five Year Plan (*b*) Sixth Five Year Plan
(*c*) Seventh Five Year Plan (*d*) Eighth Five Year Plan

10. **Which of the following is not correct about the planning in India?**
(*a*) Mixed economy has been the framework of planning in India
(*b*) The duration of the Twelfth Five Year Plan was 2012-17
(*c*) Equality has not been an objective of the planning in India
(*d*) Planning in India started with a heavy reliance on the public sector

11. **An economy in which means of production are used in a manner such that profits are maximised is called:**
(*a*) mixed economy (*b*) capitalist economy
(*c*) socialist economy (*d*) none of these

Ans. **1.** (*b*) **2.** (*c*) **3.** (*d*) **4.** (*d*) **5.** (*d*) **6.** (*b*) **7.** (*d*)
8. (*d*) **9.** (*c*) **10.** (*c*) **11.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ______ economy was the basic framework of planning in India. (Market/Mixed)
2. Full employment and equitable distribution of income and wealth were the ______ objectives of planning in India. (short period/long period)
3. Economic growth combined with ______ was the principal goal of planning in India. (social justice/environmental protection)
4. Planning Commission was established under the chairmanship of ______. (Prof. Mahalanobis/Dr. V.K.R.V. Rao)
5. Protection of environment was the focus area of the ______ Plan. (Eleventh/Twelfth)
6. Maximisation of ______ is the principal objective under capitalist economy. (profit/social welfare)
7. ______ economy focuses on equality in the distribution of income. (Capitalist/Socialist)
8. ______ is the principal element of social spheres of planning. (Education/International trade)

Ans. **1.** Mixed **2.** long period **3.** social justice **4.** Prof. Mahalanobis **5.** Eleventh
6. profit **7.** Socialist **8.** Education

C. True or False

State whether the following statements are True or False:

1. Fourth Five Year Plan was launched in 1969. (True/False)
2. The time duration of the Eleventh Five Year Plan was 2006-2011. (True/False)
3. First Plan was, by and large, an agricultural plan . (True/False)
4. Planning in India started with a heavy reliance on the public sector. (True/False)
5. Planning Commission in India has been replaced by NITI Aayog (Policy Commission). (True/False)
6. In India, planning covers only economic areas of activity. (True/False)
7. Mixed economy is the basic framework of planning in India. (True/False)
8. Short period objectives of planning are plan-specific. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** True **5.** True **6.** False **7.** True **8.** True

D. Very Short Answer Questions

1. State the principal focus of economic planning.

Ans. Economic planning focuses on the utilisation of country's resources in a manner such that the GDP growth is maximised along with maximisation of social welfare.

2. Define directive planning.

Ans. Directive planning refers to a system in which planning is meant simply to direct the forces of supply and demand so that the growth process remains stable.

3. Define comprehensive planning.

Ans. Comprehensive planning refers to a system in which government herself participates in the process of growth and development.

4. What is meant by capitalist economy?

Ans. Capitalist economy refers to an economy in which means of production are owned by the individuals and they are free to take their economic decisions. Maximisation of profit is the principal objective.

5. What is meant by socialist economy?

Ans. Socialist economy refers to an economy in which means of production are collectively owned by the society as a whole and economic decisions are taken by some Central Authority of the government. Maximisation of social welfare is the principal objective.

6. What is meant by mixed economy?

Ans. Mixed economy refers to an economy in which there is private as well as public ownership of the means of production. However, there are government controls as well as regulations with a view to maximising social welfare.

7. Define economic growth.

Ans. Economic growth refers to a consistent rise in GDP or a consistent rise in the flow of goods and services in the economy over a long period of time.

8. Define economic development.

Ans. Economic development refers to a consistent rise in GDP alongwith structural changes in the economy that makes the process of growth inclusive in nature.

9. What is equitable distribution?

Ans. Equitable distribution occurs when the distribution of income is in accordance with the abilities and efficiency of the people.

10. What is meant by modernisation?

Ans. Modernisation refers to the adoption of new technology and updating the technical know-how in the growth process.

11. What is meant by self-sufficiency?

Ans. Self-sufficiency means dependence on the domestically produced goods and services

12. Define full employment.

Ans. Full employment is a situation when all those who are able to work and are willing to work (at the existing wage rate) are getting work.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. After independence, growth and development of the Indian economy was left to the free play of the market forces.

Ans. False. After independence, mixed economic system was pursued under which both private and public sectors play their role in the process of economic growth. While in the private sector production decisions are determined by the free play of the market forces, in the public sector these are dictated by the consideration of social welfare.

2. Under capitalist economy, decisions regarding what to produce, how to produce and for whom to produce are collectively taken by the capitalists.

Ans. False. Under capitalist economy, decisions regarding what to produce, how to produce and for whom to produce are left to the free play of the market forces.

3. Market value of goods produced in the economy can increase even when volume of output remains constant.

Ans. True. Market value of goods produced in the economy can increase owing to increase in the current prices even when volume of output remains constant.

4. Economic planning rules out the free play of market forces.

Ans. False. Economic planning does not rule out the free play of market forces. It depends on the model of economic planning. It is only in centralised planned economies or fully socialist economies that the free play of the market forces is ruled out.

5. Growth of GDP is always associated with equitable distribution of income.

Ans. False. Growth of GDP is seldom associated with equitable distribution of income in the capitalist economies.

6. Growth and development are identical concepts.

Ans. False. Growth and development are not identical concepts. Growth refers to the increased flow of goods and services in the economy. Development, on the other hand, refers to growth with equity as well as structural change in the economy.

7. Full employment does not mean a situation of zero unemployment in the economy.

Ans. True. Because, there is always some natural rate of unemployment in the economy even at the full employment level, which is due to some structural changes in the economy.

8. After 68 years of comprehensive planning, there is nothing like absolute poverty in the country.

Ans. False. After 68 years of comprehensive planning, absolute poverty has only reduced, not vanished.

9. Growth is achieved when there is a rise in real GDP over a period of time.

Ans. True. Growth is achieved when there is a rise in real GDP over a period of time. It implies a consistent increase in the flow of goods and services in the economy.

10. Economic growth does not necessarily imply economic development.

Ans. True. Economic growth is different from economic development. Economic growth refers to increased flow of goods and services in the economy. Economic development, on the other hand, refers to growth with equity along with structural change in the economy.

PERFORMANCE OF AGRICULTURE, INDUSTRY AND FOREIGN TRADE DURING 1947-1990

A. AGRICULTURE

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. What is the contribution of agriculture and allied sector in India's GDP?

(*a*) Less than 20 per cent (b) More than 20 per cent

(*c*) Equal to 20 per cent (d) None of these

2. Which of the following is not a reason for the backwardness of agriculture in India?

(*a*) Small size of farm (*b*) Deficiency of finance

(*c*) Commercial farming (*d*) Deficient irrigation

3. Small size of a farmer's land under cultivation is known as:

(*a*) subsistence farming (*b*) small holding

(*c*) consolidation of holding (*d*) none of these

4. In which of the following sectors disguised unemployment is found the most?

(*a*) Agriculture (*b*) Industry

(*c*) Services (*d*) None of these

5. Which of the following is not a feature of agricultural sector in India?

(*a*) Disguised unemployment (*b*) Seasonal unemployment

(*c*) Dependence on rainfall (*d*) Commercial farming

6. Which of the following is the biggest institutional source of agricultural credit?

(*a*) Cooperative credit societies (*b*) Commercial banks

(*c*) Regional rural banks (*d*) None of these

7. Green Revolution started happening in India in the year:

(*a*) 1961-62 (*b*) 1967-68

(*c*) 1980-81 (*d*) 1991-92

8. The maximum size of cultivable land holding that an individual can own is known as:

(*a*) subsistence farming (*b*) small holding

(*c*) consolidation of holding (*d*) ceiling on holding

9. NABARD was established in:

(*a*) 1969 (*b*) 1975

(*c*) 1977 (*d*) 1982

10. **Which of the following statements is correct about agricultural sector in India?**

(*a*) It is a significant source of wage goods

(*b*) It is a source of raw material for the industry.

(*c*) In India, agriculture is the main source of employment

(*d*) All of these

Ans. **1.** (*a*) **2.** (*c*) **3.** (*b*) **4.** (*a*) **5.** (*d*) **6.** (*b*) **7.** (*b*) **8.** (*d*) **9.** (*d*) **10.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. ________ is an apex bank of the country with regard to agricultural credit. (SBI/NABARD)

2. ________ is an automatic solution to fragmentation and sub-division of holdings. (Cooperative farming/Ceiling on land holding)

3. Use of HYV technology in India has led to ________. (Golden Revolution/Green Revolution)

4. For the small farmers in India, farming is ________. (subsistence-oriented/trade-oriented)

5. Integrated Rural Development Programme has been launched to speed up the process of growth in ________ areas. (urban/rural)

6. Regulation of rent is related to ________ reform in agriculture. (institutional/technical)

7. Disguised unemployment indicates a situation of ________ productivity. (high/low)

8. Land productivity is ________ when holdings are small. (high/low)

Ans. **1.** NABARD **2.** Cooperative farming **3.** Green Revolution **4.** subsistence-oriented **5.** rural **6.** institutional **7.** low **8.** low

C. True or False

State whether the following statements are True or False:

1. Institutional reforms refer to land reforms. (True/False)

2. High productivity of land is a unique feature of Indian agriculture. (True/False)

3. Converting many small and fragmented fields into one or two big farms is called consolidation of holdings. (True/False)

4. Indian agriculture is heavily dependent on rainfall. (True/False)

5. Commercialisation of agriculture in India has led to loss of productivity. (True/False)

6. Fallowing leads to loss of soil fertility. (True/False)

7. Marketable Surplus of Wheat = Output of Wheat – On Farm Consumption of Wheat. (True/False)

8. Owing to White Revolution, there was a significant rise in milk production. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** True **5.** False **6.** False **7.** True **8.** True

D. Very Short Answer Questions

1. What is subsistence farming?

Ans. Subsistence farming means production of crops for self-consumption rather than for sale in the market.

2. What are wage goods?

Ans. Wage goods are those necessities of life which are consumed by the masses of a country.

3. What is meant by disguised unemployment in agriculture?

Ans. Disguised unemployment refers to hidden unemployment. It is a situation when more persons are engaged in farming than what is required to get the maximum output from a given piece of land.

4. What are land reforms?

Ans. Land reforms refer to reforms or changes in agriculture (brought about by the government) relating to:

(*i*) ownership of holdings.

(*ii*) landlord-tenant relationship.

(*iii*) land revenue.

(*iv*) consolidation of holdings.

5. What are small and scattered holdings?

Ans. Small and scattered holdings are those holdings which are small in size and located at different places.

6. Define consolidation of holdings.

Ans. Consolidation of holdings means allotment of land to the farmer at one place, in lieu of his scattered pieces of land at several places.

7. Define ceiling on land holdings.

Ans. Ceiling on land holdings refers to fixation of the maximum holding-size for an individual farmer.

8. What is cooperative farming?

Ans. Cooperative farming is a system wherein farmers voluntarily pool their resources for cultivating the soil. Also, they sell their output collectively. The idea is to minimise cost and maximise profit.

9. What is meant by support price?

Ans. Support price refers to the price at which the government is prepared to buy surplus output of the farmers.

10. What are agrarian relations?

Ans. Agrarian relations refer to the business relations between the landlords and the tenants.

11. What are regulated markets?

Ans. Regulated markets are those markets which are controlled by the government with a view to protecting the farmers from their exploitation by the middlemen.

12. Define fallowing in agriculture.

Ans. Fallowing is a practice of leaving land free of cultivation (for some time) so that it regains its fertility.

13. What is marketable surplus?

Ans. Marketable surplus refers to surplus of farmer's output over and above his 'on-farm consumption'.

14. What is Green Revolution?

Ans. Green Revolution occurs when there is a significant rise in agricultural production and productivity.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Contribution of agricultural sector to GDP in India has tended to decline over time.**

Ans. True. Contribution of agricultural sector to GDP has declined over time (from 51 per cent in the year 1950-51 to 14.4 per cent in the year 2018-19). This is owing to expansion of the secondary and tertiary sectors in the economy.

2. **Crop productivity in India is now as high as in advanced countries of the world.**

Ans. False. Crop productivity in India is extremely low as compared to advanced countries of the world. Use of backward technology on the small holdings is the principal reason.

3. **Indian agriculture continues to be rainfed, and therefore highly volatile.**

Ans. True. Even now Indian agriculture is dependent on rainfall to a great extent. Good rainfall means good crop and bad rainfall means bad crop. It is owing to the lack of permanent means of irrigation.

4. **Small holdings are a characteristic feature of Indian agriculture, inhibiting the use of modern inputs.**

Ans. True. Small holdings or small size of a farmer's land under cultivation is a characteristic feature of Indian agriculture. This is owing to a tremendous pressure of population on agriculture.

5. **Green Revolution solved food problem in India.**

Ans. True. India no longer had to import foodgrains for the survival of its residents.

6. **Agricultural sector in India is infested with disguised unemployment.**

Ans. True. Agriculture sector in India is infested with disguised unemployment. Because of the joint family system, more workers are engaged on a farm than are actually required.

7. **A rise in GDP level in India has been associated with a gradual shift from subsistence agriculture to commercial agriculture even when share of agriculture in GDP has tended to fall.**

Ans. True. As a result of commercialisation of agriculture, disposable income of the farmers increases which means a rise in GDP level in India even when share of agriculture in GDP has tended to fall (owing to expansion of the secondary and tertiary sectors).

8. **Lack of organised marketing system in India has been a major roadblock in prosperity of the Indian farmers, even when farm production has recorded a revolutionary rise over time.**

Ans. True. Because regulated marketing system offers remunerative price to the farmers and protects them against exploitation by the middlemen. In the absence of this system, farmers are often exploited.

9. **Use of HYV technology has reduced the need for fallowing, implying a rise in gross area under cultivation.**

Ans. True. Fallowing is a practice of leaving land as uncultivated for some time in order to regain fertility. But the use of HYV technology has eliminated the need for fallowing as HYV technology focuses on high crop yield.

10. **Owing to Green Revolution, India has emerged as self-sufficient in food production, implying that no longer there are starvation deaths in the country.**

Ans. False. In spite of Green Revolution, there are starvation deaths in the country due to inequality in the distribution of income and ineffective public distribution system.

B. INDUSTRY

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Which of the following signifies the importance of industries in India?**
   (*a*) Source of employment (*b*) Growth of civilisation
   (*c*) Development of agriculture (*d*) All of these
2. **Private sector enterprises are driven largely by considerations of:**
   (*a*) profit (*b*) social welfare
   (*c*) either (*a*) or (*b*) (*d*) none of these
3. **In small-scale industries, investment limit is:**
   (*a*) upto ₹25 lakh (*b*) upto ₹5 crore
   (*c*) upto ₹6 crore (*d*) none of these
4. **_______________ enterprises are controlled and run by the private individuals.**
   (*a*) Public sector (*b*) Private sector
   (*c*) Partial private sector (*d*) none of these
5. **Which of the following is a reason for the direct participation of the state in industrial development?**
   (*a*) Lack of capital (*b*) Growth with social justice
   (*c*) Low inducement to invest (*d*) All of these

Ans. **1.** (*d*) **2.** (*a*) **3.** (*b*) **4.** (*b*) **5.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Diversification of growth process can be achieved only through _______________ development. (industrial/agricultural)
2. _______________ serves as the epicentre of economic growth. (Industry/Agriculture)
3. Government controlled enterprises are run in the _______________ sector. (public/private)
4. _______________ scale industry is labour-intensive. (Small/Large)
5. In 1950, our economic policy focused on _______________. (import substitution/export promotion)
6. Licensing policy of the government was to promote _______________ equality. (income/regional)
7. Foreign trade policy focused on _______________. (import substitution/export promotion)

Ans. **1.** industrial **2.** Industry **3.** public **4.** Small
5. import substitution **6.** regional **7.** import substitution

C. True or False

State whether the following statements are True or False:

1. Development of industry reduces burden of employment on agriculture. (True/False)
2. Small-scale industry shows locational flexibility. (True/False)
3. In initial years of planning, large-scale industry was developed to achieve the objectives of employment and equity. (True/False)
4. Strategy of growth after independence focused on the socialistic pattern of society. (True/False)
5. According to Industrial Policy Resolution (1956), public sector was to play a key role in the process of industrial development. (True/False)
6. Development of industry is essential for the development of agriculture. (True/False)
7. Commanding heights of the economy refers to industries of strategic significance. (True/False)

Ans. **1.** True **2.** True **3.** False **4.** True **5.** True **6.** True **7.** True

D. Very Short Answer Questions

1. **What is structural transformation?**

Ans. Structural transformation refers to the changes in the structure of the economy with reference to technology, demand, outlook, productivity, etc.

2. **Define small-scale industry.**

Ans. Small scale industry is defined as a unit having fixed investment of up to ₹ 5 crore.

3. **What are public monopolies?**

Ans. Public monopolies refer to monopolies of the government, which are state-owned enterprises with no close competitors in the market. **Example:** Indian railways.

4. **Define the policy of import substitution.**

Ans. It refers to the policy of domestic production of goods which the country is importing from rest of the world. It focuses on saving foreign exchange (rather than earning foreign exchange).

5. **Define the policy of export promotion.**

Ans. It refers to the policy of exploring foreign demand for the domestically produced goods and services. It focuses on earning foreign exchange.

6. **What is meant by commanding heights?**

Ans. Commanding heights of the economy refers to industries of strategic significance.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Industrial development brings about structural transformation in the economy.**

Ans. True. Industrial development brings structural transformation in the economy. Industrial goods show higher income elasticity of demand than the agricultural goods. In order to fulfill the demand potential, the epicentre of growth and development shifts from agriculture to industry.

2. **Low inducement to invest is related to low level of income.**

Ans. True. Inducement to invest is low because of low level of demand and level of demand is low because of low level of income.

3. **Licensing policy is pursued primarily with a view to promoting regional equality.**

Ans. True. Licensing policy is pursued to establish industry in the backward regions of the country to promote regional equality.

4. **Small-scale industry shows locational flexibility and therefore, conducive to balanced regional growth.**

Ans. True. Small-scale industries show locational flexibility, contributing to equality of growth and development across different regions of the country.

5. **Emergence of public sector monopolies in India eventually turned to be a 'dead social weight'.**

Ans. True. Emergence of public sector monopolies in India eventually turned out to be a dead social weight as it led to inefficiency, corruption, leakage and pilferage.

6. **Policy of protection aims at stimulating the pace of growth of domestic industry.**

Ans. True. Policy of protection aims at accelerating the pace of growth of domestic industries through heavy duty on import and fixation of import quotas.

7. **Policy of import substitution is pursued to earn foreign exchange.**

Ans. False. Policy of import substitution is pursued to save foreign exchange and to protect domestic industry from foreign competition.

C. FOREIGN TRADE

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Export and import of goods and services cross different countries is known as:**
   (*a*) domestic trade (*b*) international trade
   (*c*) internal trade (*d*) none of these
2. **Composition of trade refers to:**
   (*a*) items of exports and imports (*b*) types of goods and services we export and import
   (*c*) quantum of export and import (*d*) both (*a*) and (*b*)
3. **Surplus Output =**
   (*a*) Domestic production – Domestic consumption
   (*b*) Domestic production + Domestic consumption
   (*c*) Domestic production × Domestic consumption
   (*d*) Domestic production ÷ Domestic consumption
4. **The difference between exports and imports of a country is called:**
   (*a*) balance of trade (*b*) current account balance
   (*c*) balance of payments (*d*) none of these
5. **Balance of trade is favourable when:**
   (*a*) exports = imports (*b*) exports < imports
   (*c*) exports > imports (*d*) none of these
6. **At the time of independence, India's direction of foreign trade was mainly confined to:**
   (*a*) China (*b*) UAE
   (*c*) Hong Kong (*d*) Britain
7. **An agrarian economy is the one:**
   (*a*) which depends on agricultural sector
   (*b*) which depends on industrial sector

(c) where major factor of production is the agricultural land
(d) both (a) and (c)

8. Latent resources refer to:
(a) actual resources (b) potential resources
(c) both actual and potential resources (d) none of these

Ans. **1.** (b) **2.** (d) **3.** (a) **4.** (a) **5.** (c) **6.** (d) **7.** (d) **8.** (b)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. _______________ of trade refers to the quantum of export and import of a country. (Volume/Direction)
2. International trade _______________ size of the market of domestic goods. (increases/decreases)
3. _______________ is India's highest exporting category of goods. (Petroleum products/Foodgrain)
4. Tariffs are levied to promote _______________ for the domestic industry. (protection/competition)
5. _______________ industry was called 'Sunrise Industry'. (Electronic/Jute)
6. Inward looking trade strategy refers to the policy of _______________. (import substitution/export promotion)
7. International specialisation is largely based on the principle of _______________ cost advantage. (absolute/comparative)

Ans. **1.** Volume **2.** increases **3.** Petroleum products **4.** protection **5.** Electronic **6.** import substitution **7.** comparative

C. True or False

State whether the following statements are True or False:

1. Before independence, India's major export items included cotton textile, jute and tea. (True/False)
2. On the eve of independence, India's balance of trade was in deficit. (True/False)
3. One of the important reasons for deficit in India's foreign trade is huge import of petroleum products. (True/False)
4. Now, India's major export items are engineering goods, readymade garments, gems and jewellery. (True/False)
5. The percentage share of foodgrains in total imports has risen over time. (True/False)
6. On the eve of independence, our balance of trade was unfavourable. (True/False)
7. Import tariffs are meant to decrease the price of goods from rest of the world. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** True **5.** False **6.** False **7.** False

D. Very Short Answer Questions

1. Define domestic trade.

Ans. Domestic trade refers to the sale and purchase of goods and services in the domestic market of a country.

2. Define international trade.

Ans. International trade refers to the sale and purchase of goods and services across different countries of the world.

3. Define gains of trade.

Ans. Gains of trade refer to the benefits of trade arising out of export and import of goods and services.

4. What is meant by volume of trade?

Ans. Volume of trade refers to the quantum (or value) of export and import of a country.

5. What is meant by composition of trade?

Ans. Composition of trade refers to items of exports and imports.

6. What is meant by direction of trade?

Ans. Direction of trade refers to the countries to which a country exports its goods and services and the countries from which it imports.

7. What is trade surplus?

Ans. Trade surplus occurs when export > import.

8. What is trade deficit?

Ans. Trade deficit occurs when export < import.

9. What is import substitution?

Ans. Import substitution is a strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from rest of the world.

10. What is export promotion?

Ans. Export promotion is a strategy to earn foreign exchange by promoting domestic exports and making domestic industry competitive in the international market.

11. Define the concept of 'protection' in the context of international trade.

Ans. It refers to the policy of protecting domestic industry from international competition in the domestic market. Domestic market for the foreign goods is restricted through high import duty.

12. What are latent resources?

Ans. Latent resources refer to the potential resources of the country.

2. Reason-based Questions

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. After independence and owing to planned development programmes, share of agriculture in India's exports has tended to rise.

Ans. False. After independence and owing to planned development programmes, share of agriculture in India's exports has tended to fall because of (*i*) rise in domestic demand for the agricultural products, and (*ii*) rise in industrial production for exports.

2. Policy of import substitution is pursued to promote self-sufficiency.

Ans. False. Policy of import substitution is pursued to save foreign exchange and protect domestic industry from foreign competition.

3. Policy of protection aims at stimulating the pace of growth of domestic industry.

Ans. True. Policy of protection aims at accelerating the pace of growth of domestic industries through heavy duty on import and fixation of import quotas.

4. 'Inward looking trade strategy' relies on export promotion.

Ans. False. 'Inward looking trade strategy' relies on the policy of import substitution.

5. **Inward looking trade policy (after independence) stimulated the pace of growth of domestic industry.**

Ans. True. By protecting the domestic industry from international competition, inward looking trade policy stimulated the pace of growth of domestic industry.

6. **Policy of permits for exports and imports (pursued after independence) accelerated GDP growth.**

Ans. False. Policy of permits for exports and imports was primarily meant to regulate international trade such that its composition moves in the desired direction.

7. **India relied on the strategy of export promotion after independence.**

Ans. False. After independence, India relied basically on the strategy of import substitution.

8. **Import substitution is a strategy to save foreign exchange, while export promotion is a strategy to earn foreign exchange.**

Ans. True. Import substitution is a strategy to save foreign exchange by protecting domestic industry through import restrictions and import duties, while export promotion is a strategy to earn foreign exchange by encouraging exports and making domestic industry competitive in the international market.

9. **'Inward Looking Trade Strategy' offered protection to the domestic industry which, accordingly started diversifying.**

Ans. True. As a result of inward looking trade strategy in India, there started diversification of the industries. If the protection was not granted to the industries they would have failed to face competition from the international industry.

10. **India's Foreign Trade Policy (after independence and prior to 1991) focused on enhancing competition in the domestic market.**

Ans. True. India's foreign trade policy pursued with a focus on enhancing competition in the domestic market.

ECONOMIC REFORMS SINCE 1991: NEW ECONOMIC POLICY [NEP]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **LPG policy focused on:**
   (*a*) liberalisation (*b*) privatisation
   (*c*) gobalisation (*d*) all of these

2. **Which of the following was the reason for initiation of economic reforms in 1991?**
   (*a*) Increase in fiscal deficit (*b*) BoP crises
   (*c*) Fall in foreign exchange reserves (*d*) All of these

3. **Fiscal Deficit =**
   (*a*) Total expenditure of the government – Total receipts
   (*b*) Total expenditure of the government – Total receipts (other than borrowings)
   (*c*) Revenue expenditure of the government – Revenue receipts
   (*d*) None of these

4. **Which of the following was NOT the reason for initiation of economic reforms in 1991?**
   (*a*) Poor performance of PSUs (*b*) Fall in foreign exchange reserves
   (*c*) Mounting fiscal deficit (*d*) High growth rate of population

5. **Liberalisation implies:**
(*a*) reduction in government's control over economy
(*b*) encouragement to public sector
(*c*) nationalisation
(*d*) none of these

6. **Which Act has been enacted in place of MRTP Act?**
(*a*) Competition Act (*b*) Monopoly Act
(*c*) Licensing Act (*d*) Foreign Exchange Act

7. **Laissez-faire policy is that policy in which:**
(*a*) there is intervention by the government in the functioning of an economy
(*b*) there is intervention by the state in the functioning of an economy
(*c*) there is no intervention by the state in the functioning of an economy
(*d*) none of these

8. **Privatisation means:**
(*a*) allowing the private sector to set up industries which were previously reserved for the public sector
(*b*) existing enterprises of the public sector are either wholly or partially sold to private sector
(*c*) both (*a*) and (*b*)
(*d*) none of these

9. **Which of the following is the example of direct tax?**
(*a*) Income tax (*b*) Wealth tax
(*c*) Goods and services tax (*d*) Both (*a*) and (*b*)

10. **Integrating the economy of a country with the economies of other countries is known as:**
(*a*) liberalisation (*b*) globalisation
(*c*) privatisation (*d*) none of these

Ans. **1.** (*d*) **2.** (*d*) **3.** (*b*) **4.** (*d*) **5.** (*a*) **6.** (*a*) **7.** (*c*)
8. (*c*) **9.** (*d*) **10.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Freedom of the producing units from physical controls imposed by the government is called ______________. (liberalisation/privatisation)
2. After liberalisation, red-tapism in the government administrative departments has ______________. (increased/decreased)
3. Licensing (as in the case of liquor) is necessary for the ______________ of the industry. (regulation/promotion)
4. GST is a/an ______________ tax. (direct/indirect)
5. ______________ industries are elevated to the status of Navratna. (Nine/Sixteen)
6. Foreign ______________ investment refers to investment in Indian companies by the foreign banking and non-banking institutions. (direct/institutional)
7. Expansion of production capacity is a measure of ______________. (liberalisation/globalisation)

8. In India, financial sector is regulated and controlled by the ______________. (RBI/Commercial Bank)

9. ______________ implied a substantial shift in the role of the RBI from 'a regulator' to 'a facilitator' of the financial sector. (Liberalisation/Privatisation)

10. ______________ barriers refer to barriers on imports through high import duty. (Tariff /Non-tariff)

Ans. **1.** liberalisation **2.** decreased **3.** regulation **4.** indirect **5.** Sixteen
6. institutional **7.** liberalisation **8.** RBI **9.** Liberalisation **10.** Tariff

C. True or False

State whether the following statements are True or False:

1. Economic Policy of 1991 implied a U-turn of the then existing economic policy of the government. (True/False)
2. New Economic Policy implied replacement of LQP by LPG. (True/False)
3. Liberalisation means a system of laissez-faire. (True/False)
4. Disinvestment policy is an important part of the new economic policy in India. (True/False)
5. Liberalisation and privatisation are the core components of India's new economic policy, but globalisation is not. (True/False)
6. Privatisation allows greater degree of commercialisation of production activity. (True/False)
7. Fiscal policy refers to revenue and expenditure policy of the government. (True/False)
8. Multilateral trade agreements are the agreements relating to trade across different countries of the world. (True/False)
9. Partial convertibility refers to restricted freedom for the conversion of domestic currency into foreign currency, and *vice versa*. (True/False)
10. Financial sector includes only banking institutions in the country. (True/False)

Ans. **1.** True **2.** True **3.** False **4.** True **5.** False **6.** True **7.** True
8. True **9.** True **10.** False

D. Very Short Answer Questions

1. Define economic reforms.

Ans. Economic reforms refer to a set of economic policies directed to accelerate the GDP growth.

2. What is meant by fiscal deficit?

Ans. Fiscal deficit refers to borrowing by the government owing to the excess of its expenditure over receipts during a year.

3. What do you mean by liberalisation?

Ans. Liberalisation means freedom of private enterprises from controls imposed by the government.

4. What do you mean by privatisation?

Ans. Privatisation means partial or full ownership and management of public sector enterprises by the private sector.

5. What do you mean by globalisation?

Ans. Globalisation means integrating or linking the economy of a country with the economies of other countries by means of free trade, free mobility of capital and labour across borders.

6. Define fiscal reforms.

Ans. Fiscal reforms refer to increasing the revenue of the government and lowering the expenditure in a way that it causes no adverse effect on production and economic welfare.

7. Define financial reforms.

Ans. Financial reforms refer to the reforms in country's monetary and banking policies.

8. Define external sector reforms.

Ans. External sector reforms refer to abolition of import quotas, abolition of import licensing, reduction of import duty and withdrawal of export duty.

9. What is meant by devaluation?

Ans. Devaluation is the fall in the value of domestic currency in relation to foreign currency as planned by the government in a situation when exchange rate is not determined by the forces of demand and supply but is fixed by the government officials.

10. What is Laissez faire system?

Ans. It is that system which is entirely driven by the market forces of supply and demand, and the government act merely as a night watchman of the country.

11. What is disinvestment?

Ans. Disinvestment refers to selling off share capital of PSUs (public sector undertakings) to the private entrepreneurs.

12. What is outsourcing?

Ans. It refers to a system of hiring business services (like call centres, transcription, clinical advice, teaching/coaching, etc.) from the outside world.

13. What is meant by Foreign Direct Investment (FDI)?

Ans. Foreign Direct Investment (FDI) means investment made by foreign companies in another country in order to establish wholly owned and managed companies.

14. What is meant by Foreign Institutional Investment (FII)?

Ans. Foreign Institutional Investment (FII) means investment made by foreign banking and non-banking institutions in Indian companies.

15. Define divestment.

Ans. This term is the same as disinvestment—Selling public sector equity to the private entrepreneurs.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. NEP (New Economic Policy) introduced in 1991 was a complete U-turn of the then existing policy of LQP (Licensing, Quotas & Permits).

Ans. True. NEP (New Economic Policy) introduced in 1991 was a complete U-turn of the then existing policy of LPQ (Licensing, Quotas & Permits) to pull the economy out of economic crises and to put it on a rapid and steady growth path.

2. NEP became essential owing to the fact that public sector enterprises had become the breeding centres of corruption and bloating inefficiencies.

Ans. True. Performance of public sector enterprises was unsatisfactory owing to their inefficiencies and corruption. Accordingly, NEP became essential.

3. Policy of liberalisation (1991) implied freedom of private industry from direct government controls.

Ans. True. Liberalisation means freedom of private industry from direct control of the government. This was to check inefficiencies in production decisions.

4. Mounting fiscal deficit was the principal cause behind NEP of 1991.

Ans. True. Fiscal deficit indicates borrowing requirements of the government. It increases due to the continuous increase in non-development expenditure like expenditure on defence and subsidies. No doubt that the mounting fiscal deficit was one of the principal reasons leading to NEP.

5. Prior to 1991, physical controls were imposed by the government with a view to increasing tax revenue.

Ans. False. Prior to 1991, government had imposed layers of physical control on private enterprises in the domestic economy with a view to checking the growth of private monopolies.

6. Policy of liberalisation implied abolition of industrial licensing.

Ans. True. Policy of liberalisation implied abolition of industrial licensing except for the following five industries: (*a*) liquor, (*b*) cigarette, (*c*) defence equipments, (*d*) industrial explosives, and (*e*) dangerous chemicals.

7. Policy of liberalisation implied a shift in the role of RBI from 'a regulator' to 'a facilitator' of the financial sector.

Ans. True. As a facilitator (after liberalisation) the RBI would only facilitate the free play of the market forces and leave it to the commercial banks to decide their interest rate structure. Now market forces (rather than controls) decide the interest rate structure, volume and the pattern of investment.

8. Poor performance of public sector enterprises was the principal factor that compelled the government for New Economic Policy in 1991.

Ans. True. Poor performance of public sector enterprises (as indicated by huge losses) compelled the government for new economic policy in 1991.

9. Policy of privatisation implies the policy of disinvestment.

Ans. False. Disinvestment is only a variant of privatisation.

10. Devaluation is expected to trigger the flow of foreign exchange into the domestic economy.

Ans. True. Devaluation is the fall in the domestic currency in relation to foreign currency. Implying that a foreign currency can now buy more goods in the Indian market. This accelerates the flow of foreign currency into the domestic economy by way of higher exports to rest of the world.

11. 'Privatisation' and 'socialistic pattern of society' are complementary to each other.

Ans. False. Privatisation and socialistic pattern of society are not complementary to each other but are divergent concepts.

12. Globalisation reduces dependence of the domestic economy upon rest of the world.

Ans. False. Globalisation increases the dependence of the domestic economy upon rest of the world.

13. Reduction of tariff and non-tariff barriers reduces international trade.

Ans. True. Reduction of tariff and non-tariff barriers imposed on imports and exports reduces international trade, as these barriers tend to reduce global competition.

14. There is no difference between FDI and FII.

Ans. False. FDI is different from FII. Foreign institutional investment (FII) means investment made by foreign banking and non-banking institutions in Indian companies. Whereas, foreign direct investment (FDI) means investment made by foreign companies in another country in order to establish wholly owned and managed companies.

15. Outsourcing is an off-shoot of globalisation.

Ans. True. Outsourcing refers to a system of hiring business services like call centres, transport, clinical advice from the outside world. It is obviously linked with globalisation.

3. HOTS & Applications

1. **Spread of Railway network during colonial times helped prevent the occurrence of famines in the country. How?**

Ans. Railways facilitated the movement of foodgrains from the surplus zones or from the government warehouses (Godowns) to the areas afflicted with famines.

2. **The destruction of handicraft industry in India coincided with the industrial revolution in Britain. Was it a mere coincidence?**

Ans. The destruction of the Indian handicrafts was systematically planned by the British government to coincide with the industrial revolution in Great Britain. The success of industrial revolution depended on (i) growth of Indian market for the British products, and (ii) export of raw material from India to Britain. Achievement of both these objectives (largely through discriminatory trade policy) led to the destruction of Indian handicrafts. Thus, the destruction of handicraft industry in India and the industrial revolution in Britain was not a mere coincidence.

3. **How will the growth of food processing industry help solve the problem of disguised unemployment in Indian agriculture?**

Ans. The problem of disguised unemployment is rampant in rural sector of the Indian economy.

Lack of jobs outside agriculture is the root cause of this problem. This is further compounded by the fact that the level of productivity has tended to rise, owing to mechanisation of agriculture, leading to a fall in the requirement of labour. Growth of food processing industry will create job opportunities outside crop-farming. Surplus labour in agricultural sector will be induced to move to non-farming occupations hoping to get higher wages and permanent employment. Farm-output will not suffer, because more workers are already engaged in farming than required.

Food processing and rise in agricultural production will increase the amount of work that needs to be done in farms.

4. **Why was there a need for state-led industrial development in the country on the eve of independence? Discuss.**

Ans. After independence, the industrial development of the country could not be left to the market forces of supply and demand. It needed direct participation of the government. Because:

(*i*) the industrial development needed a big push of investment, which the private entrepreneurs could not afford,

(*ii*) there was low inducement to invest, owing to limited size of the market, and

(*iii*) the growth process placed high priority on socialistic pattern of the society (growth with social justice). The government realised that this objective could be achieved only through direct participation of the state in the process of industrialisation.

5. **What were the reasons behind the adoption of inward-looking strategy by India post-independence?**

Ans. Inward looking trade strategy refers to the policy of reliance on import substitution and protection to the domestic industry through import restrictions and import duties in the area of international trade. The policy of protection (in the form of import substitution) is based on the notion that industries of developing countries, like India, are not in a position to compete against the goods produced by more developed economies. Therefore, there was a need for protection and hence import substitution. Also, restriction on imports was necessary because of the risk of drain of foreign exchange reserves on the import of luxury goods.

6. **Liberalisation of the economy heralded a paradigm shift in the approach towards management of the economy. Discuss.**

Ans. Liberalisation meant removal of entry and growth restrictions on the private sector. In the pre-reforms period, the economy was characterised by a command and control economy working under a Licence-Permit-Quota-Raj framework. With the onset of economic reforms of July 1991, the controls were dismantled and the economy witnessed the policy of liberalisation in place of licencing for the industries and trade. The economy was opened to foreign investment and trade along with the emergence of private sector on the horizon.

4. Analysis & Evaluation

1. The gains of Green Revolution were significant, but with its own set of limitations. Comment.

Ans. With the onset of Green Revolution in the country, foodgrain production received a big boost, both in terms of production and productivity. Moreover, Green Revolution led to a significant rise in gross area under cultivation.

Owing to Green Revolution, there was a significant rise in crop productivity. The country achieved self-sufficiency in foodgrain production. But, there were certain limitations, as under:

(*i*) **Limited Crops:** Revolutionary rise in output was confined mainly to the production of foodgrains (wheat and rice). No similar rise in production of pulses and commercial crops.

(*ii*) **Un-even Spread:** Spread of Green Revolution was not uniform across all regions of the country.

(*iii*) **Limited Farming Population:** The bulk of farming population in India consists of small and marginal farmers. The gains of Green Revolution eluded these farmers. Green Revolution requires expensive inputs such as HYV seeds, fertilizers which were beyond the reach of small and marginal farmers.

2. Why do we need second Green Revolution? State the key issues that India needs to focus upon for the second Green Revolution.

Ans. The need for second Green Revolution arises primarily from the fact that the impact of first green revolution is tapering off. Rise in crop-yield is slowing down, while the demand for food grains is constantly rising owing to an unabated growth of population. Once again the country is facing a challenge to self-sufficiency in foodgrain production.

The key issues that India needs to focus upon for the second Green Revolution are as under:

(*i*) Better use of resources, particularly by way of soil conservation and water harvesting. Conservation of water requires extensive use of 'drip-irrigation' technology.

(*ii*) Development of agro-processing industry along with a constant rise in crop yield, so that income from farming is stabilised.

(*iii*) Product diversification with a view to achieving higher and higher degree of commercialisation of agriculture.

(*iv*) Change in the mindset of the farmers, shifting their focus from subsistence farming to commercial farming.

(*v*) Enhancement of storage facilities so that the farmers are not compelled for a distress-sale and food grain is not wasted.

3. While discussing the merits of the LPG reforms in India, bring out the challenge that lies ahead for the Indian economy.

Ans. Economic reforms of 1991 (LPG reforms) created mixed reactions at different levels. The economy witnessed significant gains in terms of increase in rate of economic growth, inflows of foreign investment, rise in foreign exchange reserves, rise in exports, control on inflation, recognition of India as an emerging economic power and a shift from state monopoly to competitive market.

However, the LPG policies have had its own set of challenges, in terms of growing unemployment, neglect of agriculture, urban concentration of growth process, spread of consumption, lopsided pattern of growth, unbalanced growth among others.

Infact, pursual of LPG policies was to a great extent a matter of economic compulsion rather than a matter of choice. What is to be recommended is that LPG policies are pursued with guarded precautions. These precautions include: (*i*) a watch against big players (MNCs) in the international market and the need to safeguard the economic interests of our domestic producers, and (*ii*) channelisation of foreign investments (FDI) more into areas of infrastructure.

MISCELLANEOUS QUESTIONS

A. Short Answer Questions–I [3 marks]

1. Do you agree with the view that *zamindari* system brought stability to cultivation during the British rule in India? Give reason for your answer.

Ans. The *zamindari* system during the British rule did not bring stability. Instead, it brought instability to Indian cultivation due to the following reasons:

(*i*) This system led to frequent ejection of the tillers of the soil. They lost their permanent rights of cultivation, and accordingly, lost permanent interest in cultivation.

(*ii*) Under *zamindari* system, the tillers of the soil lacked ownership rights. As a result, they had no interest in improving the agriculture.

2. Explain any three causes of the backwardness of Indian economy at the time of independence.

Ans. The causes of backwardness of Indian economy at the time of independence are:

(*i*) Low production and low productivity in agriculture.

(*ii*) High degree of uncertainty of output, because agriculture was excessively dependent upon rainfall.

(*iii*) Dominance of subsistence farming.

3. State three features of India's demographic profile during the British rule.

Ans. Following are the features of India's demographic profile during the British rule:

(*i*) High birth rate and death rate.

(*ii*) High infant mortality rate (death rate of children below the age of one year).

(*iii*) Low life expectancy (average life of a person).

4. Write an observation each for agricultural and industrial sectors, suggesting colonial exploitation of these sectors under the British rule.

Ans. **In Agriculture:** The farmers were forced to produce commercial crops in place of conventional crops.

In Industry: Introduction of railways in India by the Britishers led to expansion of the market for the low-cost British products. This resulted in the decay of Indian handicrafts.

5. Why did agricultural sector in pre-independence India remained stagnant? Write three reasons.

Ans. Agricultural sector in pre-independence India continue to experience stagnation owing to the following factors:

(*i*) Gulf between the owners of the soil and the tillers of the soil,

(*ii*) Land Revenue System under the British Raj leading to exploitation of the tillers of the soil.

(*iii*) Forced commercialisation of agriculture leading to uncertainties of farm income.

6. Why should plans have goals? Write your principal observation.

Ans. Plans must have goals. Without goals, there is no planning. In fact, planning is defined as a strategy that defines how to allocate the country's scarce resources to different uses with a view to achieving a given set of goals. These goals often relate to growth and social justice.

7. State the principal features of capitalist economy.

Ans. The principal features of a capitalist economy are as under:

(*i*) There is a private ownership of the means of production.

(*ii*) Means of production are used in a manner such that the profits are maximised.

(*iii*) The role of the government is largely confined to the maintenance of law & order and defence of the country.

8. Distinguish between equal distribution and equitable distribution.

Ans. Equal distribution means every individual in the society gets the same share in the country's national income.

Equitable distribution, on the other hand, refers to a situation when differences in income are allowed but only within socially justifiable limits.

Example: When a doctor gets ₹ 50,000 to perform a surgery (lasting for 1 hour) while, on the other hand, a factory worker gets ₹ 50,000 for the entire year (working 8 hours a day), the difference in income is too large to be socially justified. Such differences (which are socially unwarranted) must be corrected.

9. State three components of technical reforms in Indian agriculture.

Ans. The three components of technical reforms in Indian agriculture are as under:

(*i*) Use of high yielding variety seeds.

(*ii*) Use of insecticides and pesticides for crop protection.

(*iii*) Mechanisation of farming.

10. State three components of institutional reforms in Indian agriculture.

Ans. The three main components of institutional reforms in Indian agriculture are as under:

(*i*) To put an end to excessive and illegal extortions from the cultivators, rents have been fixed.

(*ii*) With a view to reducing fragmentation, steps have been initiated for the consolidation of holdings.

(*iii*) With a view to promoting equality in the distribution of land, ceiling has been imposed on the holding-size.

11. State three components of general reforms in Indian agriculture.

Ans. The three main components of general reforms in Indian agriculture are as under:

(*i*) Expansion of irrigation facilities to promote and stabilise productivity.

(*ii*) Provision of credit to the farmers at low rate of interest.

(*iii*) Price support policy to assure minimum price to the farmers for his produce.

12. It is often claimed by the economists that agriculture sustains the national economy. Write three observations to substantiate this claim.

Ans. Following observations substantiate the claim that agriculture sustains the national economy:

(*i*) Agriculture supplies foodgrains to the millions of countrymen. Dependence on other countries for foodgrains would render our economy vulnerable to foreign supplies. Implying that agriculture must be developed for a balanced growth of the economy.

(***ii***) Agriculture sector is an important source of demand for the industrial output. Demand for agricultural machinery will rise only when this sector is in a state of prosperity.

(*iii*) Industry needs an uninterrupted supply of labour for its growth and development Agricultural sector supplies labour to the industrial sector. But only when productivity in agricultural sector rises and labour becomes surplus on fields and farms.

Briefly, prosperity of agricultural sector is the key to the prosperity of economy as a whole.

13. Industrialisation leads to structural shift in the economy. Comment.

Ans. It is true that industrialisation leads to structural shift in the economy. The epicentre of growth shifts from agriculture to industry. This is because the spread of growth requires the spread of demand. The demand potential is higher in case of industry (than agriculture). Because industrial goods show higher income elasticity of demand than the agricultural goods.

14. Explain the characteristics of small-scale industries.

Ans. The characteristics of small-scale industry is as follows:

(*i*) Small-scale industry is labour-intensive and therefore, employment friendly.

(*ii*) Small-scale industry shows locational flexibility and is therefore, equality-oriented (referring to inter-regional equality).

(*iii*) Small-scale industry needs small investment and is therefore, equity-oriented (referring to equality across different sections of the society).

15. Why was public sector given the flagship role in the process of growth and development after independence?

Ans. Public sector was given the flagship role in the process of growth and development after independence due to the following factors:

(*i*) Lack of Capital: Industrial development needed a big push. Implying a large amount of capital expenditure which was far beyond the capacity of the established industrial houses.

(*ii*) Low Inducement to Invest: The private investors lacked inducement to invest. Only a big push of public investment could break the vicious circle of poverty.

(*iii*) Growth with Social Justice: Because this objective requires investment that generates employment rather than investment that maximises profit. Therefore, direct participation of the public sector in the process of industrialisation was essential.

16. Write three observations on the volume of India's foreign trade during the period 1950-1990.

Ans. Following observations highlight the volume of India's foreign trade during the period 1950-1990:

(*i*) Percentage rise in exports of India.

(*ii*) Percentage rise in imports of India.

(*iii*) A modest rise in India's share in the world trade.

17. Write three observations on the composition of India's foreign trade during the period 1950-1990.

Ans. Following observations highlight the composition of India's foreign trade during the period 1950-1990:

(*i*) Decline in percentage share of agriculture exports.

(*ii*) Decline in percentage share of conventional items.

(*iii*) Increase in percentage share of manufactured goods.

18. Write three observations indicating changes in India's foreign trade during the period 1950-1990.

Ans. Following observations highlight changes in India's foreign trade during the period 1950-1990:

(*i*) India's exports and imports have tended to rise during this period, but percentage share in international trade has tended to shrink.

(*ii*) Direction of trade has become diversified: UAE and China emerging as our important trading partners.

(*iii*) India's foreign trade has witnessed a shift in trade strategy from 'inward looking' (based on import substitution) to 'outward looking' (based on export promotion).

19. What are the three principal elements of NEP?

Ans. (*i*) **Liberalisation:** It implies freedom of the producing units from direct or physical controls imposed by the government. Under it, greater reliance was to be placed on market forces (of supply and demand) rather than checks and controls.

(*ii*) **Privatisation:** It is the process of involving the private sector in the ownership or operation of a state owned enterprise. It implies gradual withdrawal of government ownership/ management from the public sector enterprises.

(*iii*) **Globalisation:** It is a process associated with increasing openness, growing economic interdependence and deepening economic integration in the global economy.

20. What is meant by economic reforms? Explain in brief measures adopted for privatisation.

Ans. Economic reforms refer to a set of economic policies directed to accelerate the pace of growth and development.

Measures of Privatisation:

(*i*) Outright sale of the government enterprises to the private entrepreneurs.

(*ii*) Withdrawal of the government ownership and management.

21. What constitute financial sector? State any two reforms undertaken by the Government of India in the financial sector under new economic policy.

Ans. Three principal constituents of financial sector are: (*i*) banking and non-banking financial institutions, (*ii*) stock exchange market, and (*iii*) foreign exchange market.

The two main reforms undertaken by the Government of India are as under:

(*i*) A shift in the role of the RBI from 'a regulator' to 'a facilitator' of the financial sector.

(*ii*) Investment in Indian financial markets.

22. What is outsourcing? Do you think outsourcing is good for India? Why are developed countries opposing it?

Ans. Outsourcing refers to a system of hiring business services (like call centres, transcription, clinical advice, teaching/coaching, etc.) from the outside world.

Outsourcing is good for India as it generates employment opportunities in the domestic economy. Developed countries oppose it. Because, their job opportunities are driven outside their domestic economies.

23. Would you favour the idea of offering protection to the domestic industry? Discuss your opinion in the light of NEP.

Ans. Prior to NEP domestic industry was offered protection from the foreign competition. This led to:

(*i*) lack of innovative technology.

(*ii*) lack of diversification

(*iii*) low efficiency.

It is in view of these deficiencies that NEP favoured withdrawal of protection to the domestic industry.

24. Write three observations distinguishing liberalisation from a Laissez-Faire System.

Ans. (*i*) Liberalisation refers to a situation in which economy is free from direct or physical controls imposed by the government. Laissez-faire, on the other hand, refers to a system in which there is no government intervention in the functioning of an economy.

(*ii*) Under liberalisation, direct participation of the government (in the country's growth process) is not ruled out. But under laissez-faire, the government plays no role in the growth process.

(*iii*) Under laissez-faire, there is a free play of the market forces of supply and demand. Liberalisation, on the other hand, does not rule out regulation of the market forces by the government.

25. Define disinvestment. Write three observations highlighting the need and significance of disinvestment.

Ans. Disinvestment occurs when the government sells off its share capital of PSUs (public sector undertakings) to the private investors.

Need and Significance of Disinvestment:

(*i*) It is a remedial measure to improve production and managerial efficiency as production decisions are driven by profit motive.

(*ii*) It facilitates modernisation through competition.

(*iii*) It serves as a means to manage fiscal deficit by the government.

26. Write any four observations on the policy strategy promoting globalisation of the Indian economy.

Ans. Following are the four main observations on the policy strategy promoting globalisation of the Indian economy:

(*i*) Increase in equity limit of foreign investment.

(*ii*) Partial convertibility of Indian rupee.

(*iii*) Long-term trade policy.

(*iv*) Reduction in tariffs.

27. What is outsourcing? State two possible factors explaining why India is emerging as favoured destination for outsourcing.

Ans. See Q. 22, page 319 for first part.

India is emerging as favoured destination for outsourcing due to the following reasons:

(*i*) Availability of cheap labour.

(*ii*) Revolutionary growth of IT industry in India.

28. Write three observations suggesting benefits of WTO to the Indian economy.

Ans. (*i*) India's share in world trade is expected to improve.

(*ii*) WTO along with free trade policy is expected to generate opportunities of employment in the domestic economy.

(*iii*) India's exports of agricultural products are likely to rise as agricultural prices would rise with reduction in subsidies.

29. What is demonetisation? How is demonetisation linked with financial inclusion?

Ans. Demonetisation refers to withdrawal of the status of 'legal tender' to the currency in circulation.

Demonetisation policy carried a provision that the people could deposit their banned notes in the banks. Accordingly, millions of people (who were alien to banking) opened their bank accounts to deposit their cash. This led to financial inclusion, as those who were not used to banking, started participating in organised financial system of the country.

30. Has demonetisation really eradicated corruption in India?

Ans. After demonetisation, high value currency notes (₹ 1,000 and ₹ 500) were withdrawn from circulation. It amounted to withdrawal of nearly 80% of the currency in circulation. It struck at the very root of corruption, as the stock of unaccounted money was reduced to a trash and people were scared of making black money transactions. In fact, demonetisation led to a big blow to cash transactions, which implied a big blow to black money transactions, because black money transactions are conducted largely in cash. However, it would be too much to conclude that demonetisation has eradicated corruption.

31. Define the concept of GST. How is GST a common man friendly tax?

Ans. Broadly speaking, GST (Goods and Service Tax) is one tax replacing all indirect taxes in the economy. Also, it is a uniform tax across all parts of the country. 'One tax, one nation, one market' is the core characteristic of GST.

GST is a common man friendly, because:

(*i*) Common items of consumption (like fresh fruits and vegetables) are tax free, and

(*ii*) Only a moderate tax (of 5%) is levied on items of mass consumption like tea and coffee.

B. Short Answer Questions–II [4 marks]

1. State four principal factors which contributed to backwardness of Indian agriculture on the eve of independence.

Or

Discuss in brief the four causes of the backwardness of Indian economy at the time of independence.

Ans. Backwardness of Indian agriculture on the eve of independence is explained in terms of the following factors:

(*i*) Low production and low productivity in agriculture.

(*ii*) High degree of uncertainty of output, because agriculture was excessively dependent upon rainfall.

(*iii*) Dominance of subsistence farming.

(*iv*) Small and fragmented holdings.

2. How discriminatory tariff policy led to colonial exploitation of India's foreign trade during the British regime? Write two observations.

Ans. (*i*) Under the discriminatory tariff policy, duty-free export of raw material (which was used by the Britishers) from India and duty-free import of British industrial products into India was allowed.

(*ii*) Heavy duty on the export of final products from India was imposed, leading to loss of market for the domestically produced final goods in rest of the world.

3. How did British rule in India contribute to the decay of Indian handicrafts? State the possible factors.

Ans. Following factors explain how the British rule in India contributed to the decay of Indian handicrafts:

(*i*) Discriminatory tariff policy of the state.

(*ii*) Disappearance of princely courts (implying loss of domestic market for the Indian handicrafts).

(*iii*) Competition from machine-made products.

(*iv*) New patterns of demand (favouring machine-made goods).

(*v*) Introduction of railways in India which led to expansion of the domestic market for the British goods in India.

4. Explain the difference between objectives of planning and the objectives of plans.

Ans. Long Period Goals are common to all the Five Year Plans and are therefore, generally studied as common goals of five year plans or objectives of planning.

Short Period Goals are plan-specific and are therefore, generally studied as objectives of plans.

It must be noted that objectives of plans (referring to specific short period objectives of each plan) and objectives of planning (referring to long period objectives of planning) are not to contradict but complement each other.

Thus, short period objectives refer to 'plan-to-plan strategy' with a view to achieving the long period objectives of planning, or the common goals of Five Year Plans.

5. State the principal features of economic policy pursued in India till 1991.

Ans. The principal features of economic policy pursued in India till 1991 are as follows:

(*i*) Heavy reliance on the public sector for the country's growth and development.

(*ii*) Development of heavy industries of strategic significance.

(*iii*) Protection of small scale industry to generate the opportunities of employment.

(*iv*) Protection of the domestic industry from foreign competition.

(*v*) To promote domestic saving and investment. So that the reliance on foreign investment is reduced.

6. Define socialist economy. What are the principal features of a socialist economy?

Ans. A socialist economy is the one in which there is a social (collective/public) ownership of the means of production. Maximisation of social welfare is the principal objective.

The salient features of a socialist economy are as these:

(*i*) There is a public ownership of the means of production.

(*ii*) Means of production are used in a manner such that social welfare is maximised.

(*iii*) There is a direct participation of the government in the process of production.

7. Define mixed economy. Write its merits.

Ans. Mixed economy is the one in which means of production are owned by the private entrepreneurs as well as the government.

Its main merits are as follows:

(*i*) It combines the merits of capitalist as well as a socialist economy.

(*ii*) GDP growth is encouraged because private entrepreneurs are free to focus on 'profit maximisation'

(*iii*) 'Social justice' or equality is promoted because the government sector places high priority on the maximisation of social welfare.

8. Explain the features of Indian agriculture.

Or

Write the features of Indian agriculture highlighting its backwardness.

Ans. Following are the principal features of Indian agriculture:

(*i*) Low level of productivity as compared to advanced nations in the world.

(*ii*) Disguised unemployment leading to low productivity.

(*iii*) Heavy dependence on rainfall.

(*iv*) Subsistence-oriented farming.

(*v*) Reliance on traditional farm practices.

9. State any four components of agrarian reforms carried out after independence.

Ans. The four main components of agrarian reforms carried out after independence are as under:

(*i*) Use of high yielding variety seeds have replaced the conventional varieties.

(*ii*) Chemical fertilisers are being increasingly used to enhance productivity.

(*iii*) Intermediaries (between the state and the actual tiller of the soil), popularly known as *zamindars* have been abolished.

(*iv*) With a view to raising productivity in agriculture, irrigation facilities have been expanded.

10. Write any four components of general reforms in Indian agriculture.

Ans. The four main components of general reforms in Indian agriculture are as under:

(*i*) Expansion of Irrigation Facilities: With a view to raising productivity in agriculture, irrigation facilities have been expanded.

(*ii*) **Provision of Credit:** Cooperative credit societies have been set-up to provide credit to the farmers at low rate of interest.

(*iii*) **Regulated Markets and Cooperative Marketing Societies:** With a view to offering remunerative price to the farmers and protect them against exploitation by the middlemen, regulated markets have been established across all parts of the country.

(*iv*) **Price Support Policy:** In order to protect the farmers against uncertainties of the market, government assures a minimum support price (MSP) to the farmer for his produce.

11. What were the features of the industrial policy of 1956?

Ans. Following were the principal features of the industrial policy of 1956:

(*i*) **Three-fold Classification of Industries:** Industries were classified into three categories. According to industrial policy of 1956, the state was to spearhead (sponsor) the process of industrialisation in the economy.

(*ii*) **Industrial Licensing:** Industries in the private sector could be established only through a licence from the government.

(*iii*) **Industrial Concessions:** The private entrepreneurs were offered following types of industrial concessions for establishing industry in the backward regions of the country:

(*a*) tax holiday (freedom from the payment of tax for sometime), and

(*b*) subsidised power supply.

12. Define small scale industries. How do they help in promoting rural development?

Ans. A small-scale industry is defined as the one whose investment does not exceed ₹ 5 crore.

Small-scale industries help in promoting rural development in the following ways:

(*i*) SSI generate opportunities of employment in the rural areas.

(*ii*) SSI serve as a source of supplementary farm income.

(*iii*) SSI promote integrated rural development.

(*iv*) SSI in rural areas help check migration from rural to the urban areas in search of jobs. Accordingly, problems related to urbanisation are reduced.

13. Discuss the relative importance of large-scale industries in the growth process of the Indian economy.

Ans. The importance of large-scale industry is as follow:

(*i*) It generates infrastructural base in the economy.

(*ii*) Large-scale industry induces the growth of small-scale industry. (**Example:** Mobile industry leads to the growth of small-scale industry making small components for the mobile.)

(*iii*) Large-scale industry promotes high-end technology which raises efficiency (productivity).

(*iv*) Large-scale industry generates economies of scale (large-scale production leading to lower cost of production).

14. What do you understand by the term 'import substitution'? Explain the role of tariffs and quotas in India to achieve import substitution.

Ans. Import substitution is a strategy to save foreign exchange by encouraging domestic production of such goods which the country has been importing from rest of the world. Domestic industry is offered protection from foreign competition through import restrictions and import duties.

Role of Tariffs and Quotas in India:

(*i*) Import tariffs are raised to protect the domestic industry, focusing on the domestic production of the goods which otherwise need to be imported.

(*ii*) Import quotas are fixed for the domestic producers with a view to minimising imports and encouraging production of import substitutes.

15. State the good impacts of inward looking trade strategy.

Ans. Following points highlight the good impacts of inward looking trade strategy:

(*i*) **High Rate of Industrial Growth with Structural Transformation:** Despite Green Revolution, the percentage contribution of industrial sector to GDP has increased. Rising share of industrial sector in GDP is a sign of economic growth based on structural transformation in the economy.

(*ii*) **Diversification of Industrial Growth:** The period 1950-1990 saw diversification of industrial growth.

(*iii*) **Opportunities of Investment:** Protection to small-scale industry opened new opportunities of investment for those who did not have much capital.

16. State the bad impacts of inward looking trade strategy.

Ans. Following points highlight the bad impacts of inward looking trade strategy:

(*i*) Protection of public sector industry (in the wake of inward looking trade strategy) led to the growth of inefficient state monopolies.

(*ii*) Lack of competition implied lack of modernisation of the domestic industry.

(*iii*) Excessive reliance on the domestic industry led to indiscriminate spread of public sector enterprises.

(*iv*) Excessive protection of the domestic industry led to the emergence of economically unviable enterprises.

17. Discuss in brief industrial sector reforms introduced under the new economic policy.

Ans. The industrial sector reforms introduced under the new economic policy are as follows:

(*i*) **Abolition of Industrial Licensing:** New industrial policy of 1991 had abolished the requirement of licensing except for the following five industries: (*a*) liquor, (*b*) cigarette, (*c*) defence equipments, (*d*) industrial explosives, and (*e*) dangerous chemicals.

(*ii*) **Contraction of Public Sector:** Under the new industrial policy, number of industries reserved for public sector was reduced from 17 to 8 to 2.

(*iii*) **De-reservation of Production Areas:** Many production areas which earlier were reserved for SSI (small-scale industries) were de-reserved.

(*iv*) **Expansion of Production Capacity:** Freedom from licensing implied freedom from capacity constraints. All decisions related to production were now a matter of producer's choice depending on market conditions.

(*v*) **Freedom to Import Capital Goods:** Liberalisation also implied freedom for the industrialists to import capital goods with a view to upgrading their technology.

18. How is 'inward looking trade policy' different from 'outward looking trade policy'? Which of the two would you evaluate as a better option in the context of globalisation of the world economies?

Ans. Inward looking trade policy refers to the policy of import substitution and protection to the domestic industry through import restrictions and import duties.

Contrary to it, outward looking trade policy refers to the policy of export promotion through competitive production environment in the domestic economy.

Owing to globalisation, different economies of the world are getting closely interlinked with each other. It is difficult for an economy to achieve high GDP growth without exploiting global markets for the procurement of inputs as well as for the sale of their output. Accordingly, outward looking trade policy is certainly the better option.

19. Write four observations pointing to salient features of trade policy after liberalisation.

Ans. Following observations highlight the salient features of trade policy after liberalisation:

(*i*) Import quotas have been done away with.

(*ii*) Policy of import licensing (except in case of goods which are not environment-friendly and are hazardous) has almost been scrapped.

(*iii*) There is a comprehensive reduction of import duty to enhance competitiveness in the domestic market.

(*iv*) Export duty has been withdrawn to enhance competitiveness of Indian goods in the international market.

20. Write any four gains of privatisation.

Ans. The four main gains of privatisation are as follows:

(*i*) Privatisation implies supremacy of 'self-interest' over 'social interest'. It is expected to lead to higher productivity.

(*ii*) Under privatisation, enterprises work in a competitive environment. Competition induces upgradation and modernisation.

(*iii*) Privatisation promotes diversification of production.

(*iv*) Privatisation promotes consumers' sovereignty. Higher degree of consumers' sovereignty implies wider choice and better quality of life.

21. Was demonetisation a good policy decision? Give your opinion.

Ans. Demonetisation carried its pros and cons. It was a good move as it unearthed the stock of black money in the economy. It was a good move also because it induced (or compelled) people to shift to the digital mode of transactions. Further, it improved the degree of financial inclusion in the economy and significantly raised the liquid assets of the banks. But, demonetisation was not free from demerits. It led to a severe cash crunch in our cash-sensitive economy, implying a significant fall in production activity, causing a dent in GDP growth. Opportunities of employment were also deeply hurt.

In view of both the merits and demerits of demonetisation, it becomes rather difficult to either support or denounce it as a policy decision. However, it is a hard fact that we have failed to sustain the good impact of demonetisation over a longer period of time. Demonetisation was a one big blow to corruption, but never led to the end of it.

22. Give a brief description of the structure of GST.

Ans. GST is a multi-tier taxation across different goods and services. Its structure includes four categories of goods and services attracting different rate of taxation. This is besides one 'exemption' category attracting zero taxation. Details are as under:

(*i*) 0% GST (or GST exempt) category. It includes items of common man consumption. These are like sanitary napkins, foodgrains, fresh fruits and vegetables.

(*ii*) 5% GST category. This includes items of mass consumption, such as sugar, tea and medicines as well as transport services.

(*iii*) 12% GST category. This includes items like cell-phones, ayurvedic medicines and spectacles.

(*iv*) 18% GST category. Pasta, pastries and cakes, detergents are the items of this category.

(*v*) 28% GST category. This is the highest GST slab and includes items like automobiles, dishwasher and vending machines.

23. Give your evaluation of GST in India.

Ans. GST in India would undoubtedly improve tax compliance. It would enhance tax-GDP ratio. It would raise government revenue and therefore, lower fiscal deficit. But, its introduction and its compliance is not free from obstructions. It is not so very easy to convert the tax evaders into tax compliers. Also, it is not so very easy to finally settle the GST rates which would promote production activity rather than impede it. As of now, GST seems to have led to a slowdown in production activity, as GDP growth rate has hit the lowest ever during the past three years. Full scale compliance of GST would need tax-friendly environment and procedural simplifications. Conducive environment rather than harsh enforcement by the government is perhaps the need of the hour.

C. Long Answer Questions [6 marks]

1. State six points suggesting positive impact of the British rule in India.

Ans. Following factors describe the positive impact of the British rule in India:

(*i*) Commercialisation of agriculture. It refers to a shift from cultivation for self-consumption to cultivation for the market. It led to a gradual change in outlook of the farmers.

(*ii*) Spread of railways and roadways opened up new opportunities of employment.

(*iii*) Rapid means of transport facilitated rapid movement of foodgrain to the famine-affected areas. Accordingly, famines were controlled.

(*iv*) Shift from barter system to monetary system of exchange.

(*v*) The British government in India left a legacy of an efficient system of administration.

(*vi*) Post and telegraphs were developed to enhance administrative efficiency.

2. Explain how there was a reversal of growth process under the British raj in India.

Ans. Prior to the Colonial rule in India:

(*i*) Agriculture was the principal source of livelihood and the cultivators enjoyed the ownership rights and were to pay a reasonable amount of land revenue directly to the king.

(*ii*) There were no middlemen, and therefore, no exploitation.

(*iii*) Industry was dominated by handicrafts, but it enjoyed worldwide reputation of producing quality products like 'Dacca Muslin'.

(*iv*) Exports consisted largely of finished products and imports were largely of bullion (gold and silver).

Colonial policies of the British government almost reversed the composition, or structure of output, as well as the composition of exports and imports. This led to reversal of the growth process. Consequently, the pace of growth was severely hit.

3. State the features of Indian economy at the time of independence.

Ans. Following were the main features of the Indian economy at the time of independence:

(i) **Stagnant Economy:** On the eve of independence, Indian economy was a stagnant economy, showing little or no growth in income.

(ii) **Backward Economy:** On the eve of independence, Indian economy was a backward economy, showing low income per capita.

(iii) **Poor Infrastructure:** Infrastructural development (including means of communication and transport, generation of power) was extremely low.

(iv) **Heavy Dependence on Imports:** The country had to depend on imports for machinery and other equipments of production

(v) **Semi-feudal Economy:** Indian economy was a semi-feudal economy, showing characteristics of both feudalistic and capitalist modes of production.

(vi) **Colonial Economy:** Indian economy was a colony of British government. The British exploited it for their own benefit.

4. Explain the long period objectives of planning as pursued in India.

Ans. The long period objectives of planning as pursued in India are as under:

(*i*) GDP growth or increase in GDP.

(*ii*) Full employment in the economy.

(*iii*) Equitable distribution of income in the economy.

(*iv*) Updating the technical know-how and adoption of new technology briefly called modernisation.

(*v*) Achieving self-sufficiency particularly in foodgrain production.

5. Write the principal observations pointing to achievement of planning in India.

Ans. Following are the principal observations pointing to the achievements of planning in India:

(*i*) Increase in national income.

(*ii*) Increase in per capita income.

(*iii*) Increase in savings and investment.

(*iv*) Growth and diversification of industries.

(*v*) Growth of economic and social infrastructure.

(*vi*) Increase in employment opportunities.

(*vii*) Increase in international trade.

6. Write the principal observations pointing to failure of planning in India.

Ans. Following are the principal observations pointing to the failures of planning in India:

(*i*) Widespread poverty in the country.

(*ii*) Mounting inflation in the economy.

(*iii*) Unemployment crises in the economy.

(*iv*) Inadequate infrastructure inhibiting the pace of growth.

(*v*) Skewed or unequal distribution of income.

7. What do you understand by economic planning? Explain the achievements of economic planning.

Ans. Economic planning means utilising the country's resources in a planned manner such that objectives of growth and development can be achieved in a given time period.

See Q. 5, above for the second part.

8. Describe the features of economic planning in India.

Ans. The main features of economic planning in India are as under:

(*i*) Central Planning Authority: Under economic planning, there is a Central Planning Authority appointed by the State. All central economic decisions are taken by it.

(*ii*) Set Objectives: Economic planning has some set objectives, like full employment, modernisation, self-sufficiency, etc. Generally, the main objective of economic planning is to maximise national and per capita income.

(*iii*) Government Control: Economic planning is under the direction of the government. Planning Authority prepares the Plan and presents the same to the government.

(*iv*) Formulation of Programme: Before putting economic planning into practice, each programme is discussed in detail. A comprehensive draft of each sector of production is prepared. Outlay on each project and capital-output ratio are determined well in advance.

(*v*) Comprehensive Development: All sectors are sought to be developed through economic planning. Since all sectors are inter-dependent, balanced growth is achieved by developing each one.

(*vi*) Time Bound Achievement: Each plan is to ensure time bound achievement.

9. Explain the importance of agriculture in the Indian economy.

Ans. The importance of agriculture in the Indian economy is highlighted through the following observations:

(*i*) It makes a significant contribution to GDP in India.

(*ii*) It provides wage goods to about 121 crore of people in India.

(*iii*) It is a significant source of employment.

(*iv*) It supplies raw material to industries.

(*v*) It is an important source of demand for the industrial goods, particularly the capital goods.

(*vi*) It makes a significant contribution to India's international trade.

10. State the principal problems of agricultural sector in India.

Ans. The principal problems of agricultural sector in India are as follow:

(*i*) Lack of permanent means of irrigation.

(*ii*) Deficiency of finance for the farmers.

(*iii*) Conventional outlook towards farming.

(*iv*) Small and scattered holdings. (Small holdings do not allow the use of modern technology. Scattered holdings increase the cost of management.)

(*v*) Exploitative agrarian relations (business relations between the landlords and the tenants).

(*vi*) Lack of organised marketing system.

11. Explain the type of land reforms implemented in the agriculture sector.

Ans. Following types of land reforms have been implemented in the agriculture sector:

(*i*) Abolition of Intermediaries: Intermediaries, popularly known as *zamindars* have been abolished. This has been done with a view to stopping exploitation of the cultivators by the *zamindars*.

(*ii*) Regulation of Rent: To put an end to excessive and illegal extortions from the cultivators, rents have been fixed.

(*iii*) Consolidation of Holdings: With a view to reducing fragmentation, steps have been initiated for the consolidation of holdings.

(*iv*) Ceiling on Land Holdings: With a view to promoting equality in the distribution of land, ceiling has been imposed on the holding-size.

(*v*) Cooperative Farming: Cooperative farming is encouraged to enhance bargaining power of the small holders. Together they can buy inputs at a lower price and sell their produce at a higher price.

12. Write the observations highlighting achievements of agrarian reforms in India.

Ans. Following points highlight the achievements of agrarian reforms in India:

(*i*) Rise in crop productivity.

(*ii*) Rise in area under cultivation.

(*iii*) A noticeable shift from subsistence farming to commercial farming.

(*iv*) Change in farmers' outlook (greater reliance on market forces than the conventional wisdom).

(*v*) Self-sufficiency in foodgrain production.

13. State the limitations of Green Revolution.

Ans. Following points highlight the limitations of Green Revolution:

(*i*) HYV technology is not widely spread across all crops.

(*ii*) Un-even spread of HYV technology across different regions.

(*iii*) Adoption of HYV technology only by a limited farming population.

(*iv*) Economic divide across small and big cultivators has substantially risen over time.

14. Explain the role of agriculture in Indian economy.

Ans. See Q. 9, page 327.

15. What stopped Green Revolution to be still more revolutionary in India?

Ans. Following factors stopped Green Revolution to be still more revolutionary in India:

(*i*) Insufficient focus on the problem of dependence of the agriculture on rainfall.

(*ii*) Insufficient focus on matching "soil to seed".

(*iii*) Insufficient focus on matching "product to market".

(*iv*) The problem of wastage of water remained untargeted.

(*v*) Not all the agricultural produce could meet international cleanliness standards.

(*vi*) Land reforms (particularly in terms of size and consolidation of holdings) were not implemented up to their targeted level.

16. Write six observations highlighting the importance of industry in the Indian economy.

Ans. Following points highlight the importance of industry in the Indian economy:

(*i*) Structural transformation in the economy.

(*ii*) An important source of employment.

(*iii*) A source of mechanised means of transport.

(*iv*) Imparts dynamism to growth process.

(*v*) Urbanisation (in the wake of industrialisation) has led to the growth of civilisation.

(*vi*) Industrialisation has led to infrastructural growth in the economy.

17. Write your observations highlighting salient features of the strategy of industrial growth during the period 1950-1990.

Ans. The salient features of the strategy of industrial growth during the period 1950-1990 were as under:

(*i*) Public enterprises were to play a central role in the process of industrialisation.

(*ii*) Private enterprises were to play only a secondary role in the process of industrialisation and that too under Permit-Licence Raj.

(*iii*) Process of industrialisation focused on 'import substitution'. Implying that the production of such goods was to be accorded a high priority which were imported from rest of the world. The idea was to achieve self-reliance as well as to economise the use of foreign exchange.

(*iv*) Domestic industry was to be protected from foreign competition. Protection was to be offered through: (*a*) heavy duty on imports, and (*b*) fixation of import quotas.

(*v*) Large-scale industry was to be developed with a view to building an infrastructural base in the country.

(*vi*) Small-scale industry was to be developed with a view to achieving the objectives of employment and equity.

18. Write three observations suggesting good and bad effects each of the strategy of industrialisation during the period 1950-1990.

Ans. **Good Effects:**

The strategy of industrialisation during the period 1950-1990 yielded the following good effects:

(*i*) Economic growth got a big push. Industrial output recorded a significant rise.

(*ii*) Growth of large-scale industry (like Rourkela and Bhilai Steel Plants) projected an infrastructural shift in the Indian economy.

(*iii*) Growth of SSI made a substantial contribution in achieving the objectives of growth with social justice.

Bad Effects:

The strategy of industrialisation during the period 1950-1990 yielded the following bad effects:

(*i*) Public sector monopolies gradually turned out to be a 'dead social weight'.

(*ii*) Protection of domestic industry led to the lack of international standards of product-quality.

(*iii*) Saving foreign exchange through import substitution proved to be an inefficient policy instrument.

19. Critically examine the strategy of industrialisation during the period 1950-1990.

Ans. See Q. 18, page 329 for good and bad effects of the strategy of industrialisation.

Overtime, bad effects of the strategy of industrialisation started overshadowing its good effects. Accordingly, entire strategy of economic growth was revisited in the year 1991. It marked the beginning of NEP (New Economic Policy).

20. How would you explain the importance of industry for the Indian economy?

Ans. See Q. 16, page 329.

21. Write three observations highlighting good and bad effects each of inward looking trade strategy of the period 1950-1990.

Ans. **Good Impacts:**

See Q. 15, page 324 for good impacts of inward looking trade strategy.

Bad Impacts:

See Q. 16, page 324 for bad impacts of inward looking trade strategy.

22. Explain the gains of international trade.

Ans. Following are the gains of international trade:

(*i*) International trade facilitates international specialisation, international specialisation is based on the principle of comparative cost advantage.

(*ii*) International trade helps finding foreign markets for surplus domestic output.

(*iii*) International trade facilitates import of essential goods and services which cannot be competitively produced in the domestic economy.

(*iv*) International trade promotes quality of life of the people of the trading countries. Because people get a variety of goods and services at the internationally competitive rates.

(*v*) International trade enhances opportunities of investment through expansion of the market.

(*vi*) International trade serves as the engine of growth: it accelerates the pace of GDP growth.

23. Critically examine the inward looking trade strategy of the period 1950-1990.

Ans. See Q. 15 & 16, page 324 for good and bad impacts of inward looking trade strategy.

Overtime, bad impacts of inward looking trade strategy started overshadowing its good impacts. Accordingly, it marked the beginning of NEP (New Economic Policy).

24. What is meant by liberalisation? Explain its measures.

Ans. Liberalisation implies freedom of private enterprises from government controls.

The principal elements of liberalisation are as follow:

(*i*) Under the new industrial policy, number of industries reserved for public sector was reduced from 17 to 8 to 2.

(*ii*) A shift in the role of the RBI from 'a regulator' to 'a facilitator' of the financial sector.

(*iii*) Tax structure has been simplified and moderated. This has raised tax compliance and therefore tax revenue of the government.

(*iv*) Free float of the Indian currency in the international money market.

(*v*) Moderation of tariffs, promoting free trade in the global market.

25. What do you understand by globalisation? State its main elements.

Ans. Globalisation is a process associated with increasing openness, growing economic interdependence and deepening economic integration in the world economy.

Its principal elements are as under:

(*i*) **Increase in Equity Limit of Foreign Investment:** Equity limit of foreign capital investment has been raised. It now ranges between 51 to 100 per cent.

(*ii*) **Partial Convertibility:** It refers to restricted freedom for the conversion of domestic currency into foreign currency, and *vice versa*.

(*iii*) **Long-term Trade Policy:** Foreign trade policy is enforced for a longer duration. Restrictions and controls on foreign trade are gradually withdrawn, and competition is encouraged.

(*iv*) **Reduction in Tariffs:** In order to encourage competitiveness, tariffs have been moderated.

(*v*) **Withdrawal of Quantitative Restrictions:** Since 2001, the quantitative restrictions on all import items have been totally withdrawn.

26. Explain the merits of LPG policies.

Ans. Following observations highlight the merits of LPG policies:

(*i*) **Vibrant Economy:** Indian economy has definitely become a more vibrant economy. Overall level of economic activity has trended up as indicated by GDP growth.

(*ii*) **Stimulant to Industrial Production:** LPG policies have worked as a great stimulant to industrial production in the Indian economy.

(*iii*) **A Check on Fiscal Deficit:** Fiscal deficit has been better managed.

(*iv*) **A Check on Inflation:** Owing to a greater flow of goods and services in the economy, rate of inflation has been lowered.

(*v*) **A Substantial Increase in Foreign Exchange Reserves:** Owing to LPG policies, forex reserves of the country have increased.

(*vi*) **Flow of Private Foreign Investment:** Private foreign investment has taken a quantum jump after the adoption of LPG policies.

27. Explain the demerits of LPG policies.

Ans. Following observations highlight the demerits of LPG policies:

(*i*) **Neglect of Agriculture:** Growth of GDP has primarily been owing to a growth of secondary and tertiary sectors. Agricultural sector has suffered a serious neglect and its growth rate has dipped to an alarmingly low level.

(*ii*) **Urban Concentration of Growth Process:** LPG policies have resulted in the concentration of growth process in urban areas.

(*iii*) **Economic Colonialism** With the expansion of economic control of MNCs, we might suffer a sort of economic colonialism.

(*iv*) **Spread of Consumerism:** Spread of MNCs in the country as a consequence of LPG policies has resulted in a large-scale spread of consumerism.

(*v*) **Lopsided Growth Process:** LPG has accelerated the growth process of the Indian economy, but it is lopsided. It is not an inclusive growth process.

(*vi*) **Cultural Erosion:** Globalisation has also led to cultural erosion in the Indian society.

28. Discuss the main achievements of new economic policy.

Ans. See Q. 26, above.

29. Write five observations suggesting positive impact of LPG policies on the Indian economy.

Ans. See Q. 26, above.

30. Write five observations suggesting negative impact of LPG policies on the Indian economy.

Ans. See Q. 27, above.

NCERT QUESTIONS

1. What was the focus of the economic policies pursued by the colonial government in India? What were the impacts of these policies?

Ans. The focus of the economic policies pursued by the British government was to exploit the Indian economy as much as they could do to foster the growth process of the British economy. The colonial policies changed the nature and structure of the Indian economy. It was rendered as a supplier of raw materials and net importer of finished industrial products from Britain.

2. Name some notable economists who estimated India's per capita income during the colonial period.

Ans. Dadabhai Naoroji, William Digby, Findlay Shirras, V.K.R.V. Rao and R.C. Desai.

3. What were the main causes of India's agricultural stagnation during the colonial period?

Ans. Following were the principal causes of India's agricultural stagnation during the colonial period:

(*i*) Tillers of the soil were not the owners of the soil.

(*ii*) Land Revenue System under the British Raj focused on exploitation of the farmer.

(*iii*) Forced commercialisation of agriculture which led to uncertainty of farm income.

4. Name some modern industries which were in operation in our country at the time of independence.

Ans. (*i*) Cotton Textile Industries,

(*ii*) Jute Textile Industries,

(*iii*) Iron and Steel Industries,

(*iv*) Sugar Industries,

(*v*) Cement Industries,

(*vi*) Paper Industries, etc.

5. What was the two-fold motive behind the systematic deindustrialisation effected by the British in pre-independent India?

Ans. (*i*) To exploit India's wealth of raw material and primary products like cotton and jute.

(*ii*) To exploit India as a potential market for the industrial products of Britain.

6. The traditional handicraft-industries were ruined under the British rule. Do you agree with this view? Give reasons in support of your answer.

Ans. Yes, the traditional handicraft industries were ruined under the British rule. The reasons are as follow:

(*i*) Discriminatory tariff policy of the state.

(*ii*) Disappearance of princely courts.

(*iii*) Competition from machine-made products.

(*iv*) New patterns of demand (favouring machine-made goods).

(*v*) Introduction of railways in India which led to the spread of Indian market for the British industrial goods.

7. What objectives did the British intend to achieve through their policies of infrastructure development in India?

Ans. The British intends to achieve the following objectives through their policies of infrastructure development in India:

(*i*) Expansion of the Indian market for the British products through the expansion of railways.

(ii) To handle export of raw material to Britain and import of finished goods from Britain through the development of ports.

(iii) To enhance administrative efficiency through the development of post and telegraphs.

(iv) To facilitate transportation of raw material from different parts of the country to the ports through the development of roads.

8. Critically appraise some of the shortfalls of the industrial policy pursued by the British colonial administration.

Ans. Industrial policy pursued by the British colonial administration was to foster the process of industrial growth in Britain. In India, capital goods industry was developed only to the extent that it aided the development of industry in Britain. The contribution of the industrial sector was insignificant. The public sector recorded a very dismal growth.

9. What do you understand by the drain of Indian wealth during the colonial period?

Ans. Huge administrative expenses were incurred by the British government to manage their colonial rule in India. Also, huge expenses were incurred by the British government to fight wars in pursuit of their policy of imperialism. All these expenses were borne by the Indian Exchequer. This implied a drain of India's wealth.

10. Which is regarded as the defining year to mark the demographic transition from its first to the second decisive stage?

Ans. The year 1921 is regarded as the defining year to mark the demographic transition from its first to the second decisive stage. 1921 is also known as the year of great divide.

11. Give a quantitative appraisal of India's demographic profile during the colonial period.

Ans. India's demographic profile showed the following features:

(i) High birth rate and death rate.

(ii) High infant mortality rate.

(iii) Low life expectancy.

(iv) Low female literacy rate indicating high degree of gender-bias in the society.

12. Highlight the salient features of India's pre-independence occupational structure.

Ans. The agricultural sector accounted for the largest share of workforce (70-75%). The manufacturing and the services sectors accounted for only 10% and 15-20% share, respectively.

13. Underscore some of India's most crucial economic challenges at the time of independence.

Ans. (i) Agricultural sector of the economy was backward, stagnant and non-vibrant. It was a crucial economic challenge.

(ii) There was an urgent need of modernisation, diversification, capacity building and increased public investment in industrial sector.

(iii) Infrastructure facilities, including the famed railway network needed up-gradation and expansion.

(iv) Prevalence of rampant poverty and unemployment required welfare-orientation of the economic policies.

14. When was India's first official census operation undertaken?

Ans. 1881.

15. Were there any positive contributions made by the British in India? Discuss.

Ans. Following points highlight positive contributions made by the British in India:

(i) Commercial outlook of the farmers started replacing subsistence-based production decisions of the farmers.

(ii) Opportunities of employment were generated through infrastructural growth.

(*iii*) Famines were effectively controlled through the development of rapid means of transport.

(*iv*) There was a significant shift from barter system of exchange to monetary system of exchange.

(*v*) Efficient system of administration emerged as a sine-qua-non of growth.

16. Define a plan.

Ans. Plan (or planning) is defined as a strategy allocating country's scarce resources to different uses in a manner such that a given set of goals are achieved with in the specified period of time.

17. Why did India opt for planning?

Ans. A big push of investment (supported by the government) was needed in the Indian economy to break the vicious circle of economic backwardness. Indian economy, at the time of independence, was not only backward but stagnant as well. It was backward as the level of output and productivity were low. And, it was stagnant as the GDP growth was extremely low. Such an economy could not be left to the market forces of supply and demand. Hence, the recourse to economic planning.

18. Why should plans have goals?

Ans. Without goals, there is no planning. In fact, planning is defined as a strategy that defines how to allocate the country's scarce resources to different uses with a view to achieving a given set of goals. These goals often relate to growth and social justice.

19. Explain 'growth with equity' as a planning objective.

Ans. Economic growth (in terms of GDP growth) would become a meaningless exercise if the benefits of it accrue to only a handful of people in the society. Benefits of growth must spread across larger sections of the society, so that the distribution of income becomes equitable. 'Equity' (in terms of equitable distribution of income) implies social justice, and economic growth must be combined with social justice. That is why, planning in India, focuses not merely on economic growth, but on 'growth with social justice'.

20. Does modernisation as a planning objective create contradiction in the light of employment generation? Explain.

Ans. No, modernisation as a planning objective does not create contradiction in the light of employment generation. In fact both (modernisation and employment generation) as goals of planning are complementary, not contradictory to each other. Note the following observations in this regard:

(*i*) Modernisation (in terms of adoption of new technology) implies increase in productivity. Implying lesser requirement of labour per unit of output.

(*ii*) With increase in productivity, level of production activity and the level of income tend to rise. Rising income implies a rising demand for goods and services.

(*iii*) In order to fulfill the rising demand, the producers plan for higher levels of output. Implying a rise in demand for inputs including labour.

Thus, as growth progresses (based on increase in productivity), opportunities of employment tend to rise. Accordingly, a positive correlation between modernisation and employment generation.

21. Why was it necessary for a developing country like India to follow self-reliance as a planning objective?

Ans. Self-reliance means reliance on the domestically available resources for the growth and development of the economy.

More specifically it means non-reliance on foreign investment and/or foreign aid. It was considered essential to minimise our dependence on foreign aid/investment as it often leads to political interference by the donor countries.

Aid is often tied to the projects and policies as dictated by the donor countries. **Example:** Aid from US would generally mean that we buy our defence equipment only from US even when we get a better deal from other countries. Hence, the focus on self-reliance.

22. What are High Yielding Variety (HYV) seeds?

Ans. HYV seeds are called miracle seeds as these seeds led to a revolutionary rise in productivity per hectare.

23. What is marketable surplus?

Ans. Marketable surplus refers to surplus of farmer's output over and above his 'on-farm consumption'. This surplus is available to the farmer for sale in the market. Hence, called marketable surplus.

Marketable Surplus of Wheat = Output of wheat – On farm consumption of wheat (or expected consumption of wheat by the farmer's family during the year)

24. Explain the need and type of land reforms implemented in the agriculture sector.

Ans. With a view to tackling the problems of Indian agriculture, the government has taken a series of land reforms which include the following measures:

(*i*) Abolition of intermediaries.

(*ii*) Regulation of rent.

(*iii*) Consolidation of holdings.

(*iv*) Ceiling on land holdings.

(*v*) Cooperative farming.

25. What is Green Revolution? Why was it implemented and how did it benefit the farmers? Explain in brief.

Ans. Green Revolution refers to a spurt in farm output during mid 60's, consequent upon the use of HYV seeds, chemical fertilizers and increase in crop productivity.

Green Revolution focused on solving food problem in India. Besides, it was expected to raise the level of farm productivity, farm output and income from farming.

Green Revolution benefited the farmers in the following ways:

(*i*) There has been a substantial jump in crop productivity.

(*ii*) There has been a substantial rise in gross area under cultivation.

(*iii*) Farmers have been prompted to gradually shift from subsistence farming to commercial farming because substantial rise in output (owing to increase in productivity and increase in acreage) has started generating marketable surplus.

(*iv*) Commercialisation of agriculture has led to a change in outlook of the farmers. Now, farming is considered as a commercial venture, yielding profits rather than (merely) food for subsistence.

26. Explain the statement that Green Revolution enabled the government to procure sufficient foodgrains to build its stocks that could be used during times of shortage.

Ans. With the use of High Yielding Variety (HYV) seeds, the farmers were able to produce large quantity of foodgrains which were far more than their requirement for self-consumption. Those surplus quantities were purchased by the government to maintain the buffer stock to be used at times of food shortage due to natural calamities or due to war. Therefore, the Green Revolution enabled the government to procure sufficient foodgrains to build its stocks that could be used during times of shortage.

27. While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in the light of this fact.

Ans. —It is true that subsidies have facilitated the use of HYV technology leading to Green Revolution in India.

—In the absence of subsidies, it would have been impossible for the farmers (particularly the small farmers) to buy expensive inputs related to HYV technology.

—However, it is equally true that subsidies have caused a huge financial burden on the government.

—It is not only direct subsidies, but also the MSP (Minimum Support Price) which is a form of indirect subsidy which has mounted the government expenditure on agriculture.

—In fact, the financial burden on the government is further compounded when it is compelled to cope with 'loan waivers' for the farmers.

—Briefly, subsidies are useful when these are based on economic considerations of helping the 'small holders'. But these lead to a drain of wealth when based on political considerations, and when the rich farmers tend to benefit more than the poor.

28. Why, despite the implementation of Green Revolution, 65 per cent of our population continued to be engaged in the agriculture sector till 1990?

Ans. 65 per cent of our population continued to be engaged in the agriculture sector till 1990 because the industrial sector and the service sector failed to absorb the surplus labour in the agricultural sector.

29. Why was public sector given a leading role in industrial development during the planning period?

Ans. After independence, the industrial development of the country could not be left to the market forces of supply and demand. Instead public sector was accorded the leading role, laying stress on social welfare rather than profit maximisation. Following observations explain the need for it:

(*i*) The industrial development needed a big push of investment, which the private entrepreneurs could not afford.

(*ii*) There was low inducement to invest, owing to limited size of the market. Accordingly, private entrepreneurs were reluctant to come forward for the projects needing bulk investment.

(*iii*) The growth process placed high priority on socialistic pattern of the society (growth with social justice). This contradicted with the primary objectives of profit maximisation of the private entrepreneurs.

30. Though public sector is very essential for industries, many public sector undertakings incur huge losses and are a drain on the economy's resources. Discuss the usefulness of public sector undertakings in the light of this fact.

Ans. Many public sector enterprises incurred huge losses but continued to function because it is very difficult, almost impossible, to close a government undertaking even if it is a drain on the nation's limited resources. This does not mean that private firms always remain profitable (indeed, quite a few of the public sector firms were originally private firms which were on the verge of closure due to losses; they were then nationalised to protect the jobs of the workers).

31. Why and how was private sector regulated under the IPR-1956?

Ans. It was to promote socialistic pattern of society that the private sector was regulated under the IPR-1956. The private sector was kept under state control through a system of licenses.

32. Explain how import substitution can protect domestic industry.

Ans. Import substitution policy aims at replacing or substituting imports with domestic production. For example, instead of importing vehicles made in a foreign country, industries would be encouraged to produce them in the country itself. This policy restricts imports and, therefore, protects the domestic firms from foreign competition.

33. Why were reforms introduced in India?

Ans. Because: foreign exchange reserves were dwindling and fiscal deficit was mounting. Also, the rate of inflation was rising to alarming limits. Further, public sector undertakings were facing bloating inefficiency.

34. **How many countries are members of the WTO?**

Ans. 164 (July 2016).

35. **Why did RBI have to change its role from controller to facilitator of financial sector in India?**

Ans. It was in the wake of economic reforms (LPG policy 1991) that the RBI was expected to shift its role from being a regulator to a facilitator of the financial sector. It was a step towards free play of the market forces so as to revitalise the financial sector: making it more vibrant and efficient. Significantly, the commercial banks were now allowed to decide their own interest-rate structure. This led to a substantial rise in institutional funding of the production units in the economy.

36. **How is RBI controlling the commercial banks?**

Ans. CRR, SLR, Repo rate, Open market operations, etc.

37. **What do you understand by devaluation of rupee?**

Ans. Devaluation of rupee refers to the fall in the value of domestic currency (*i.e.*, rupee) in relation to foreign currency as planned by the government in a situation when exchange rate is not determined by the forces of supply and demand but is fixed by the government.

38. **Distinguish between the following**

(*i*) **Strategic and Minority sale.**

(*ii*) **Bilateral and Multilateral trade.**

(*iii*) **Tariff and Non-tariff barriers.**

Ans. (*i*) **Strategic and Minority Sale:** A strategic sale is generally the privatisation process, wherein the majority stake, *i.e.*, at least 51 per cent or more share in a government organisation is sold off to the highest bidder, thereby handing over the management of the organisation to the private or autonomous body. Whereas, in minority sale, the government sells a minority stake (retaining at least 51 per cent of the shares along with full management control). Minority sale does not disturb the public sector character of the companies.

(*ii*) **Bilateral and Multilateral Trade:** Bilateral trade agreements refer to trade agreements between the two trading countries. Multilateral trade agreements, on the other hand, refer to agreements among many countries of the world.

(*iii*) **Tariff and Non-tariff Barriers:** Tariff barriers refer to barriers on imports through high import duty. Whereas, non-tariff barriers generally refer to quota-barriers, implying quantitative restrictions on imports (or restrictions on the quantum of imports).

39. **Why are tariffs imposed?**

Ans. Tariffs are imposed to protect domestic industry and to restrict imports. It is also imposed to generate revenue for the government.

40. **What is the meaning of quantitative restrictions?**

Ans. Quantitative restrictions are specific limits imposed by countries on the quantity or value of goods that can be imported or exported.

41. **Do you think outsourcing is good for India? Why are developed countries opposing it?**

Ans. See Q. 22, page 319.

Developed countries oppose it as it leads to loss of jobs in their domestic economies.

42. **India has certain advantages which makes it a favourite outsourcing destination. What are these advantages?**

Ans. India has the following advantages which makes it a favourite outsourcing destination:

(*i*) India offers an abundant supply of labour at a low wage rate, and (*ii*) India has achieved a revolutionary breakthrough in the IT industry, which is the basic ingredient of outsourcing.

43. Agriculture sector appears to be adversely affected by the reform process. Why?

Ans. Investment in agriculture sector, particularly in infrastructure (including irrigation, power, roads, etc.), has fallen in the reform period. The withdrawal of fertiliser subsidy has led to increase in the cost of production, which has severely affected the small and marginal farmers. The agriculture sector has been experiencing a number of policy changes such as reduction in import duties on agricultural products, removal of minimum support price, lifting of quantitative restrictions on agricultural products, etc. These have adversely affected Indian farmers as they now have to face increased international competition.

CURRENT CHALLENGES FACING INDIAN ECONOMY

UNIT 2

- POVERTY
- HUMAN CAPITAL FORMATION
- RURAL DEVELOPMENT
- EMPLOYMENT AND UNEMPLOYMENT
- INFRASTRUCTURE
- ENVIRONMENT AND SUSTAINABLE ECONOMIC DEVELOPMENT

POWER POINTS

1. Poverty [Challenge 1]

- Relative and Absolute Poverty
- Poverty Line
- Causes of Poverty
- How Poverty can be Combated
- Steps taken by the Government to Combat Poverty

Relative and Absolute Poverty

- **Relative poverty** refers to poverty of one set of people in relation to the other.
- **Absolute poverty** refers to those who are living below poverty line.

Poverty Line

- Poverty line refers to that line which indicates per capita average monthly expenditure required to satisfy minimum needs of the households.

Causes of Poverty

(i) **Emergence of Poverty:** (a) Low level of national product, (b) Low rate of growth, (c) Heavy pressure of population, (d) Inflationary spiral, (e) Chronic unemployment and underemployment, (f) Capital deficiency, (g) Lack of able and efficient entrepreneurs, (h) Outdated social institutions, (i) Lack of infrastructure.

(ii) **Perpetuation of Poverty:** Concentration of income and wealth.

How Poverty can be Combated

- Combating poverty through GDP growth.
- Combating poverty by improving the distribution of income (through fiscal and legislative measures).
- Combating poverty through population control.
- **Other Measures enhancing Quality of Life of the Poor:** (*i*) Development of agriculture, (*ii*) Stability in the price level, (*iii*) Eradication of unemployment, (*iv*) Labour-intensive technique of production, (*v*) Provision for minimum needs of the poor, (*vi*) Special focus on backward regions, (*vii*) Opportunities for self-employment, (*viii*) Effective public distribution system.

Steps taken by the Government to Combat Poverty

- Swarnajayanti Gram Swarozgar Yojana (SGSY).
- National Rural Livelihood Mission (NRLM).
- Sampoorna Gramin Rozgar Yojana (SGRY).
- Pradhan Mantri Gramodaya Yojana (PGY).
- Jai Prakash Rozgar Guarantee Yojana (JPRGY).
- Swarna Jayanti Shahri Rozgar Yojana (SJSRY).
- Prime Minister's Rozgar Yojana (PMRY).
- Development of Small and Cottage Industries.
- Minimum Needs Programme.
- Twenty-point Programme.
- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- Micro Units Development Refinance Agency Bank (MUDRA Bank).

2. Human Capital Formation [Challenge 2]

- Concept (Definition) of Human Capital Formation
- Sources of Human Capital Formation [what leads to Human Resource Development]
- Human Capital Formation and Economic Growth
- Problems of Human Capital Formation in India
- Education as an Essential Element of Human Capital Formation

Concept (Definition) of Human Capital Formation

- Human Capital Formation (also called Human Resource Development) refers to the process of adding to the stock of human capital over time.

Sources of Human Capital Formation [what leads to Human Resource Development]

- Expenditure on education.
- Expenditure on health.
- On-the-job training.
- Study programmes for adults.
- Migration.
- Expenditure on information.

Human Capital Formation and Economic Growth

Human capital formation leads to economic growth by way of:

- Change in emotional and material environment of growth.
- Higher productivity of physical capital.

- Generation of innovative skills.
- Higher rate of participation and equality.

Problems of Human Capital Formation in India

- Rising population compelling huge expenditure on maintenance rather than growth.
- Brain-drain.
- Deficient manpower planning.
- Insufficient on-the-job training in primary sector.
- Low academic standards.

Education as an Essential Element of Human Capital Formation

- **Importance and Objectives of Education:** (*i*) Produces good citizens, (*ii*) Develops science and technology, (*iii*) Facilitates use of resources in the country, (*iv*) Expands mental horizon of the people, (*v*) Helps in economic development through greater participation of the people in the process of growth and development, (*vi*) Promotes cultural standard of the citizens, (*vii*) Develops human personality.
- **Growth of Education Sector in India:** (*i*) Expansion of general education, (*ii*) Elementary education, (*iii*) Secondary and senior secondary education, (*iv*) Higher education, (*v*) Vocationalisation of secondary education, (*vi*) Technical, medical and agricultural education, (*vii*) Rural education, (*viii*) Adult and female education, (*ix*) Total literacy campaign.
- **Problems Relating to Development of Education in India:** (*i*) Large number of illiterates, (*ii*) Inadequate vocationalisation, (*iii*) Gender bias, (*iv*) Low rural access level, (*v*) Privatisation, (*vi*) Low government expenditure on education.

3. Rural Development [Challenge 3]

- Lingering and Emerging Challenges
- The Challenge of Rural Credit
- The Challenge of Agricultural Marketing
- The Challenge of Employment Outside Agriculture
- The Challenge of Organic Farming and Sustainable Development

Lingering and Emerging Challenges

Lingering Challenges

(*i*) Challenge of rural credit
(*ii*) Challenge of rural/agricultural marketing

Emerging Challenges

(*i*) Exploring options of sustainable livelihood, other than farming
(*ii*) Challenge of organic farming

The Challenge of Rural Credit

- **Credit Needs of the Farmers:** (*i*) Short-term Credit, (*ii*) Medium-term Credit, (*iii*) Long-term Credit.
- **Sources of Rural Credit: (*i*) Non-institutional Credit Sources:** Traders, moneylenders and commission agents, and others. **(*ii*) Institutional Credit Sources:** Cooperative Credit Societies, State Bank of India, Commercial Banks, Regional Rural Banks and Land Development Banks, NABARD.

The Challenge of Agricultural Marketing

It includes gathering the produce after harvesting, processing the produce, grading the produce according to its quality, packaging the produce according to buyers' preferences, storing the produce for future sale, and selling the produce when price is lucrative.

- **Measures Adopted by the Government to Improve Marketing System:** (*i*) Regulated markets, (*ii*) Cooperative agricultural marketing societies, (*iii*) Provision of warehousing facilities, (*iv*) Subsidised transport, (*v*) Dissemination of marketing information, (*vi*) MSP (minimum support price) policy.

The Challenge of Employment Outside Agriculture

Employment outside agriculture relates to:

- Animal husbandry.
- Fisheries.
- Horticulture.
- Cottage and household industry.
- Information technology.

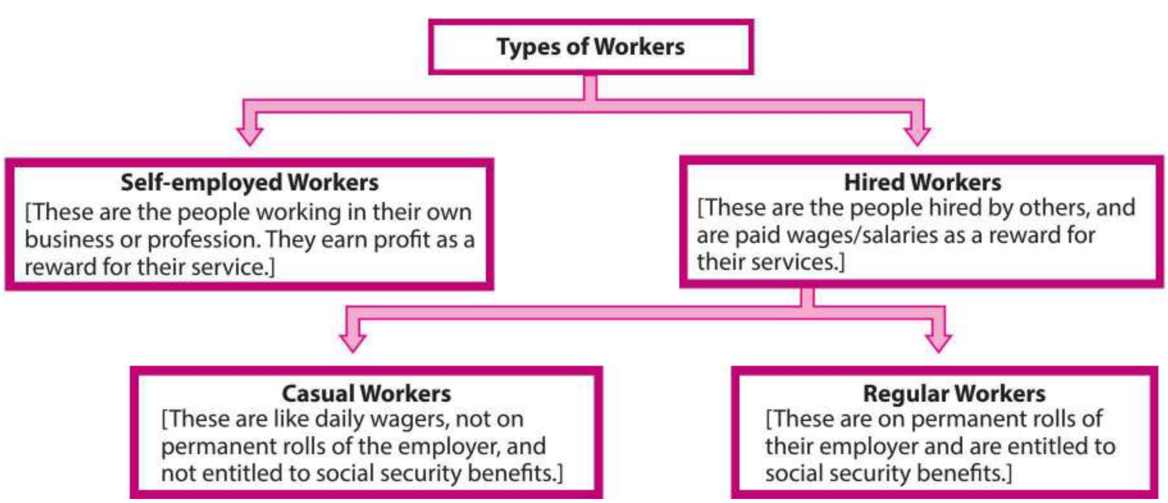
The Challenge of Organic Farming and Sustainable Development

Organic farming is basically a system of farming that relies upon the use of organic inputs for cultivation. It discards the use of chemical inputs. Animal manures and composts are the basic organic inputs.

- **Merits of Organic Farming:** (*i*) Discards the use of non-renewable resources, (*ii*) Environment-friendly, (*iii*) Sustains soil fertility, (*iv*) Healthier and tastier food, (*v*) Inexpensive technology for the small and marginal farmers.

4. Employment and Unemployment [Challenge 4]

- Types of Workers
  - —Self-employed Workers
  - —Hired Workers
- Labour Supply, Labour Force and Workforce
- Rate of Participation
- Occupational Structure or Distribution of Workforce by Industry
- Jobless Growth
- Casualisation and Informalisation of Workforce
- Types of Unemployment in India
- Causes of High Unemployment in India
- Solution to the Problem of Unemployment



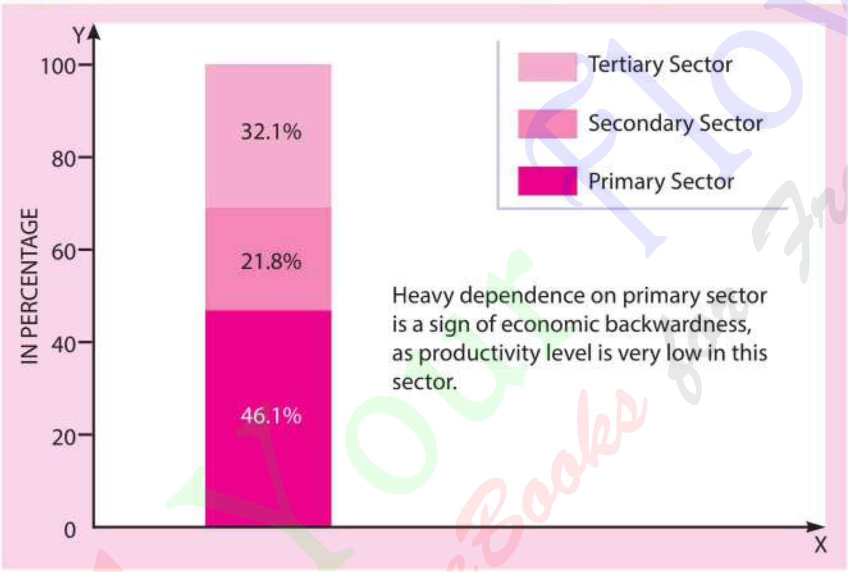
- **Labour Supply, Labour Force and Workforce**
  - **Labour supply** refers to supply of labour corresponding to different wage rates.
  - **Labour force** refers to the number of workers actually working or willing to work.
  - **Workforce** refers to the number of persons actually working, and does not account for those who are willing to work (but not working).

- **Rate of Participation** $= \frac{\text{Total Workforce}}{\text{Total Population}} \times 100$

- **Occupational Structure or Distribution of Workforce by Industry**

  Occupational structure refers to the distribution of our workforce across primary, secondary and tertiary sectors of the economy.

Percentage Distribution of Workforce across Primary, Secondary and Tertiary Sectors



- **Jobless Growth**

  It refers to a situation when GDP grows faster than the opportunities of employment, resulting in unemployment.

- **Casualisation and Informalisation of Workforce**
  - **Casualisation of workforce** refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time.
  - **Informalisation of workforce** is defined as a situation where percentage of workforce in the formal sector tends to decline and that in the informal sector tends to rise.

- **Types of Unemployment in India**
  - Open unemployment (that occurs when a worker is willing to work, and is able to work, but he does not get work).
  - Structural unemployment (that occurs owing to structural changes in the economy).
  - Underemployment (that occurs when a worker does not get a full time job).
  - Frictional unemployment (that occurs due to imperfections in the mobility of labour across different occupations).
  - Cyclical unemployment (that occurs owing to cyclical fluctuations in the economy).

- **Causes of High Unemployment in India**
  - Slow economic growth.
  - Rapid growth of population.
  - Agriculture—A seasonal occupation.
  - Lack of irrigation facilities.

- Joint family system.
- Decay of cottage and small industries.
- Low savings and investment.
- Limited mobility of labour.

Solution to the Problem of Unemployment

- Increase in production.
- Increase in productivity.
- High rate of capital formation.
- Help to self-employed persons.
- Educational reforms making education as employment-friendly.
- Upgradation of technology.
- Cooperative industries.
- Priority to employment programmes in government policies.

5. Infrastructure [Challenge 5]

- **Economic and Social Infrastructure**
- **Infrastructure and Economic Growth**
- **Energy [Key Component of Economic Infrastructure]**
  - —Commercial and Non-Commercial Sources of Energy
  - —Conventional and Non-Conventional Sources of Energy
  - —Primary and Final Sources of Energy
  - —Emerging Challenges in Power Generation
  - —Coping with the Challenge of Power Generation
- **Health (Key Component to Social Infrastructure)**
  - —Indicators of Development of Health Services after Independence
  - —Health as an Emerging Challenge: Some Important Observations

Economic and Social Infrastructure

- **Economic Infrastructure** refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.
- **Social Infrastructure** refers to such elements of support system (like schools, colleges and hospitals) which serve as a driving force for social development of the country.

Infrastructure and Economic Growth

- Infrastructure promotes productivity across different sectors of the economy, *viz.*, primary, secondary and tertiary sectors.
- Infrastructure induces investment.
- Infrastructure generates linkages in production.
- Infrastructure enhances size of the market.
- Infrastructure enhances ability to work.
- Infrastructure facilitates outsourcing.
- Infrastructure induces FDI.

Energy [Key Component of Economic Infrastructure]

Commercial and Non-Commercial Sources of Energy

— Coal, petroleum products, natural gas and electricity are the important sources of commercial energy, as these goods are largely used for commercial purposes in the factories and farms. They have an established market of sale and purchase.

— Firewood, agricultural waste (straw, etc.) and animal waste (cow dung) are the important sources of non-commercial energy, as these goods are generally used in the rural households as consumer goods.

Conventional and Non-Conventional Sources of Energy

— **Conventional sources** of energy are those which have a long history of their knowledge and use. **Example:** Coal, petroleum, natural gas and electricity.

— **Non-conventional sources** of energy are those sources which have been discovered or explored only in the recent past and which are yet to gain popularity for their use. **Example:** Solar energy, wind energy, biomass, etc.

Primary and Final Sources of Energy

— **Primary sources** of energy are available as free gifts of nature. **Example:** Coal, Lignite, Petroleum and Gas.

— **Final sources** of energy are not available as free gifts of nature. These are obtained by converting input into output. **Example:** Electricity. It is obtained by using coal as an input.

Emerging Challenges in Power Generation: How Generation of Electricity is a Serious Challenge (Bottleneck) in the Process of Growth

— Inadequate generation of electricity.

— Less capacity utilisation.

— Transmission and distribution losses.

— Mounting losses of electricity boards.

Coping with the Challenge of Power Generation

— Increase production capacity.

— Improve plant load factor.

— Minimise the transmission and distribution losses.

— Improve supply of inputs to power plants.

— Encourage privatisation and FDI in power generation.

Health [Key Component of Social Infrastructure]

Indicators of Development of Health Services after Independence

— Decline in death rate.

— Reduction in infant mortality rate.

— Rise in expectancy of life.

— Control over deadly diseases.

— Decline in under-five mortality rate.

Health as an Emerging Challenge—Some Important Observations

— Unequal distribution of healthcare services.

— Rising Communicable diseases (like AIDS, HIV and SARS).

— Poor management of healthcare services.

— Increasing privatisation of health services.

— Poor upkeep and maintenance.

— Poor sanitation level.

6. Environment and Sustainable Economic Development [Challenge 6]

- ➤ Concept of Environment
- ➤ Two Basic Problems related to Environment
- ➤ Causes of Environmental Degradation
- ➤ How to Protect Environment?
- ➤ Concept and Features of Sustainable Development
- ➤ Strategies for Sustainable Development

Concept of Environment

It is defined as all those conditions and their effects which influence human life. It includes: biotic components, viz., plants and animals, and abiotic components, viz., trees, water, and air.

Two Basic Problems related to Environment

(*i*) Problem of Pollution, and

(*ii*) Problem of Excessive Exploitation of Natural Resources (or Natural Capital).

Pollution includes: (*i*) Air pollution, (*ii*) Water pollution, (*iii*) Noise pollution.

Excessive Exploitation of Natural Resources includes:

(*i*) Deforestation.

(*ii*) Degradation of land.

Causes of Environmental Degradation

- Population explosion.
- Widespread poverty.
- Increasing urbanisation.
- Increasing use of insecticides, pesticides and chemical fertilisers.
- Rapid industrialisation.
- Multiplicity of transport vehicles.
- Disregard to the civic norms.

How to Protect Environment?

- Social awareness.
- Population control.
- Enforcement of Environment Conservation Act.
- Afforestation campaign.
- Control over industrial and agricultural pollution.
- Water management.
- Management of solid waste.
- Improvement in housing.

Concept and Features of Sustainable Development

- **Concept:** A process of development that does not cause environment degradation and therefore, does not reduce production capacity of future generations.
- **Features:** (*i*) Sustained rise in real per capita income and economic welfare, (*ii*) Rational use of natural resources, (*iii*) Ability of future generations to fulfil their needs not to be impaired, (*iv*) Check on Pollution.

Strategies for Sustainable Development

- Input-efficient technology.

- Use of environment-friendly sources of energy.
- Integrated rural development.
- Convert sunlight into solar energy and solar energy into electricity.
- Shift to organic farming.
- Manage the wastes.
- Stringent laws on the disposal of chemical effluents.
- Awareness to conserve natural assets for inter-generational equity.
- Public means of transport.

QUESTION-ANSWERS

POVERTY [CHALLENGE 1]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Poverty implies:**
   (*a*) people fail to fulfill the minimum consumption needs
   (*b*) people are poorer in comparison to others
   (*c*) people are living below poverty line
   (*d*) all of these
2. **Which of the following is a reason of poverty in India?**
   (*a*) Rising prices (*b*) Rising population
   (*c*) Low level of GDP (*d*) All of these
3. **Poverty line cut-off is determined in terms of:**
   (*a*) income (*b*) expenditure
   (*c*) consumption (*d*) both (*a*) and (*c*)
4. **In India, absolute poverty is measured with reference to:**
   (*a*) poverty line (*b*) GDP
   (*c*) per capita income (*d*) unemployment
5. **The people who never move above the poverty line are called:**
   (*a*) chronic poor (*b*) non-poor
   (*c*) both (*a*) and (*b*) (*d*) none of these
6. **Poverty can exist even when:**
   (*a*) nominal GDP is rising (*b*) real GDP is rising
   (*c*) GDP per capita is rising (*d*) all of these
7. **As components of private consumption expenditure, we consider:**
   (*a*) Food items (*b*) non-food items
   (*c*) Both (*a*) and (*b*) (*d*) none of these
8. **Fiscal measures refer to the policy of:**
   (*a*) taxation (*b*) subsidies
   (*c*) wages (*d*) both (*a*) and (*b*)

9. **Swarna Jayanti Shahari Rojgar Yojana was started in:**
(*a*) 1997 (*b*) 2000
(*c*) 1990 (*d*) 2001

10. **Under MGNREGA, work is offered for minimum period of:**
(*a*) 100 days (*b*) 150 days
(*c*) 180 days (*d*) 200 days

Ans. **1.** (*d*) **2.** (*d*) **3.** (*a*) **4.** (*a*) **5.** (*a*) **6.** (*d*) **7.** (*c*)
8. (*d*) **9.** (*a*) **10.** (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Poverty line is used to measure ______________ poverty. (relative/absolute)
2. Poverty line cut-off is determined in terms of ______________. (income/expenditure)
3. ______________ is an important reason of poverty in India. (Population explosion/Illiteracy)
4. Minimum Wages Act is a ______________ measure for improving the distribution of income. (fiscal/legislative)
5. Under Mahatma Gandhi National Rural Employment Guarantee Act, work is offered for a minimum period of ______________ days. (100/150)
6. Poverty line refers to the cut-off point that divides people as ______________. (rich and poor/poor and non-poor)
7. Poverty is a refection of ______________. (unemployment/illiteracy)
8. ______________ refers to the stipulated minimum price that must be offered to the farmers for the purchase of their output. (Price floor/Price ceiling)
9. India is a country sustaining ______________ unemployment. (Chronic/Cyclical)
10. Sampoorna Gramin Rozgar Yojana was launched on 1st September, ______________. (1991/ 2001)

Ans. **1.** absolute **2.** income **3.** Population explosion **4.** legislative **5.** 100
6. poor and non-poor **7.** unemployment **8.** Price floor **9.** Chronic **10.** 2001

C. True or False

State whether the following statements are True or False:

1. Relative poverty is defined with reference to minimum requirements of life. (True/False)
2. Poverty line is defined with reference to income per capita. (True/False)
3. Unequal distribution of income always reflects absolute poverty. (True/False)
4. Prime Minister's Rozgar Yojana is for providing employment to educated unemployed. (True/False)
5. Poverty is tackled if opportunities of employment are generated. (True/False)
6. To a large extent, urban poverty is a spillover of rural poverty. (True/False)
7. Poverty line cut-off in terms of calorie requirement is higher in the rural areas than the urban areas. (True/False)
8. Incidence of poverty is higher in a command economy than a free economy. (True/False)

9. A Minimum Wages Act is a fiscal measure for improving the distribution of income. (True/False)

10. Poverty reduces if the rate of participation increases. (True/False)

Ans. **1.** False **2.** False **3.** False **4.** True **5.** True **6.** True **7.** True **8.** False **9.** False **10.** True

D. Very Short Answer Questions

1. **Define poverty.**

Ans. Poverty is the inability to fulfil the minimum requirements of life. The minimum requirements include food, clothing, housing, education and health facilities.

2. **Define relative poverty.**

Ans. Relative poverty refers to poverty in relation to different classes, regions or countries.

3. **Define absolute poverty.**

Ans. Absolute poverty refers to the total number of persons living below the poverty line.

4. **What is meant by poverty line?**

Ans. Poverty line refers to the cut-off point (in terms of the level of income) that divides people of a region as poor and non-poor.

5. **What is Head Count Ratio (in the context of measurement of poverty)?**

Ans. Head count ratio implies the measurement of poverty in terms of the number of persons living below the poverty line.

6. **What are income generating assets?**

Ans. Income generating assets are those assets which generate or yield income in the economy. **Example:** Land, capital, etc.

7. **Define jobless growth.**

Ans. Jobless growth is a situation in which flow of goods and services increases faster than the opportunities of employment resulting in unemployment in the country.

8. **Define PDS (Public Distribution System).**

Ans. Public distribution system is a system under which government distributes foodgrains and other essentials of life to the below poverty line population at subsidised rates through the fair price shops.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Economic growth is converted into economic development only if poverty is eliminated.**

Ans. True. Economic growth is converted into economic development when people do not suffer hunger, dearth, they enjoy the minimum requirements of life, *i.e.*, when poverty is eliminated.

2. **Poverty impairs efficiency.**

Ans. True. Poverty is the inability to fulfil the minimum requirements of life. In the absence of minimum requirements of life, efficiency level decreases.

3. **Average calorie requirement is lower in rural areas compared to urban areas in India.**

Ans. False. Average calorie requirement is higher in rural areas compared to urban areas in India because hard-working male population is found to be higher in rural areas.

4. **The percentage of population below poverty line is equally high across all states of the country.**

Ans. False. The percentage of population living below poverty line is different across all states of the country. It is a statistical fact.

5. **Low growth rate of GDP is the principal factor behind high percentage of population below poverty line in India.**

Ans. False. 'Jobless GDP growth' is the principal factor behind high percentage of population below poverty line in India.

6. **Poverty in India can be effectively combated if population growth is checked.**

Ans. True. It is owing to rapidly rising population that per capita availability of goods and services remains low and unemployment becomes a persistent phenomenon.

7. **Price stability is crucial in combating poverty in India.**

Ans. True. Because if the prices continue to rise, the poor continue to suffer the most.

8. **Low capital formation implies low production capacity and hence poverty.**

Ans. True. Low capital formation implies low investment and hence low production capacity. It leads to low level of GDP and hence poverty.

9. **Poverty is the cause of poverty.**

Ans. True. When a person is unable to fulfil the minimum requirements of life like food, clothing, shelter, etc., there is a loss of health and efficiency. It leads to a fall in productivity and consequently a fall in wages. Thus, poverty breeds itself or multiplies itself.

10. **Rapidly rising population is the prime cause of widespread poverty in India.**

Ans. Yes. Rapidly rising population is the prime cause of widespread poverty in India as it adds to dependency burden, implying greater poverty over time.

11. **Minimum Wages Act is an instrument of eradicating poverty.**

Ans. True. Under the Minimum Wages Act, it is mandatory for the employers to offer the stipulated minimum wage to the employees. It helps combat poverty.

12. **Poverty is reduced if growth process is employment-oriented.**

Ans. True. Because when the pace of growth is accelerated along with higher opportunities of employment, distribution of income is improved and poverty is reduced.

▶ HUMAN CAPITAL FORMATION [CHALLENGE 2]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. **Human capital**

   (*a*) is the sum total of skill and expertise of engineers in the country

   (*b*) is the stock of 'skill and expertise' of a nation at a point of time

   (*c*) is the process of adding to the stock of human capital over time

   (*d*) All of these

2. **Physical capital refers to:**

   (*a*) the produced means of production (*b*) education

   (*c*) health (*d*) none of these

3. **Human capital formation includes investment on:**

   (*a*) education (*b*) improvement of health

   (*c*) training of the workers (*d*) all of these

4. **Which of the following is not a problem of human capital formation in India?**
   (*a*) Low academic standards (*b*) Low savings
   (*c*) Rising population (*d*) Deficient manpower planning

5. **Migration facilitates:**
   (*a*) utilisation of inactive skills of the people (*b*) skill formation
   (*c*) fuller utilisation of the skills (*d*) all of these

6. **Which of the following is correct about human capital formation?**
   (*a*) It brings about a change in the total environment of the underdeveloped countries
   (*b*) Economy will change from a traditional society to a modern society
   (*c*) It helps in creating the necessary skills
   (*d*) All of these

7. **Which of the following may be adopted to raise the rate of human capital formation?**
   (*a*) Reducing the rate of population growth (*b*) Proper manpower planning
   (*c*) Proper educational planning (*d*) All of these

8. **As per Census 2011, literacy rate in India is about:**
   (*a*) 74 per cent (*b*) 56 per cent
   (*c*) 65 per cent (*d*) 60 per cent

9. **Which of the following is the objective of education in India?**
   (*a*) Education develops human personality
   (*b*) Education promotes cultural standard of the citizens
   (*c*) Education leads to growth of science and technology
   (*d*) All of these

10. **Which of the following organisations enforces rules and regulations regarding technical/ engineering education in the country?**
   (*a*) UGC (*b*) AICTE
   (*c*) ICMR (*d*) NCERT

Ans. **1.** (*b*) **2.** (*a*) **3.** (*d*) **4.** (*b*) **5.** (*d*) **6.** (*d*) **7.** (*d*)
8. (*a*) **9.** (*d*) **10.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Human capital refers to the stock of ______________ of a nation at a point of time. (skill/production)
2. ______________ capital refers to the stock of produced means of production. (Physical/Financial)
3. ______________ develops human personality. (Education/Wealth)
4. ______________ is primarily the funding authority for university education. (UGC/AICTE)
5. National Literacy Mission was launched to promote ______________ education. (female/primary)
6. Right to Education Act was passed in the year ______________. (1999/2009)
7. Gains of migration are ______________ than the cost of migration. (greater/lower)
8. Human ______________ is an end itself. (capital/development)

9. _______________ refers to the ability to read and write. (Literacy/Education)

10. The enrolment ratio is relatively low for the _______________ candidates. (male/female)

Ans. **1.** skill **2.** Physical **3.** Education **4.** UGC **5.** female **6.** 2009 **7.** greater **8.** development **9.** Literacy **10.** female

C. True or False

State whether the following statements are True or False:

1. Elementary education covers both primary and middle education. (True/False)
2. In 1988, the central government launched a plan to vocationalise secondary education. (True/False)
3. UGC controls and guides technical education in the country. (True/False)
4. Brain-drain is a major problem of human capital formation in India. (True/False)
5. Education, migration and expenditure on information are the sources of human capital formation (True/False)
6. Literacy leads to human capital formation, while education does not. (True/False)
7. Human capital is a part of physical capital. (True/False)
8. Stock of financial capital measures production capacity of a nation. (True/False)
9. Education is a much wider concept than literacy. (True/False)
10. Social and economic poverty is the principal cause of educational backwardness. (True/False)

Ans. **1.** True **2.** True **3.** False **4.** True **5.** True **6.** False **7.** False **8.** False **9.** True **10.** True

D. Very Short Answer Questions

1. What is meant by human capital?

Ans. Human capital refers to the stock of 'skill and expertise' of a nation at a point of time.

2. What is meant by human capital formation?

Ans. Human capital formation refers to the process of adding to the stock of human capital over time.

3. What are the sources of human capital formation?

Ans. Sources of human capital formation are: (*i*) Expenditure on education, (*ii*) Expenditure on health, (*iii*) On-the-job training, (*iv*) Study programmes for adults, (*v*) Migration, and (*vi*) Expenditure on information.

4. Define human development.

Ans. Human development refers to development of the individuals as valuable personalities by acquiring good education and attaining good health.

5. What is meant by physical capital?

Ans. Physical capital refers to stock of produced means of production.

6. What is meant by financial capital?

Ans. Financial capital refers to paper claims against physical capital.

7. What is 'on-the-job training'?

Ans. On-the-job training is a form of training taking place in a normal working situation.

8. What is meant by migration?

Ans. Migration refers to movement of people across different areas (like from rural to urban areas) of the country in search of job opportunities.

9. **What is meant by brain-drain?**

Ans. Migration of highly qualified persons such as Scientists, Physicians, Engineers, etc., to the developed countries of the world is called brain-drain.

10. **Define gross enrolment ratio.**

Ans. Gross Enrolment Ratio for Elementary Education

$$= \frac{\text{Number of Students Enrolled for Elementary Education}}{\text{Total Number of Students in the Age Group of 6 - 14 years}}$$

11. **What is vocationalisation of education?**

Ans. Vocationalisation of education refers to job-oriented education.

12. **What is Right to Education?**

Ans. In the year 2009, the Government of India has passed an Act, called RTE (Right to Education). It makes education a matter of right to all children in the age group of 6-14 years.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Human capital of a nation is raised when skill and expertise of the people rises.**

Ans. True. Human capital is the stock of skill and expertise of a nation at a point of time. When skill and expertise of the people rise, human capital of a nation is raised.

2. **Physical capital includes human capital.**

Ans. False. Physical capital does not include human capital. In fact, human capital is the cause behind physical capital.

3. **Financial capital measures production capacity of a nation.**

Ans. False. Physical capital measures production capacity of a nation. Financial capital are only paper claims against physical capital.

4. **Expenditure on health contributes to human capital formation.**

Ans. True. Expenditure on health increases the efficiency and productivity level of a person and therefore, contributes to human capital formation.

5. **Migration facilitates utilisation of human capital.**

Ans. True. Migration facilitates fuller/better utilisation of inactive skills of the people and hence leads to human capital formation.

6. **Rising population is an impediment to the process of human capital formation in India.**

Ans. True. Rising population reduces the quality of life and capacity to acquire knowledge and specialised skills.

7. **Education is an essential element of human resource development.**

Ans. True. Education is an essential element of human resource development, as it improves knowledge and develops skills.

8. **Education and literacy are identical terms.**

Ans. False. Education and literacy are not identical terms. Education is a much wider concept than literacy (which is merely an ability to read and write).

9. **Vocationalisation of education is an essential ingredient of human capital formation.**

Ans. True. Because vocationalisation imparts skill and expertise to the potential workforce.

10. **Human capital and human development are identical concepts.**

Ans. False. Human capital and human development are distinct, though related concepts. Human capital consists of know-how, abilities and expertise used as inputs in the production process. Human development refers to development of the individuals as distinct personality by acquiring good education and health.

11. Human capital formation causes higher rate of participation.

Ans. True. Human capital formation leads to greater job opportunities by enhancing productive capacities of the labour force. This increase the rate of participation.

12. Rising population is a serious roadblock in the process of human capital formation in India.

Ans. True. Rising population is a serious roadblock in the process of human capital formation in India because it reduces the quality of life and capacities to acquire knowledge and specialised skills.

▶ RURAL DEVELOPMENT [CHALLENGE 3]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. Which of the following is the institutional source of credit?

(*a*) Landlords (*b*) Government

(*c*) Moneylenders (*d*) Village traders

2. The duration of medium-term loans is:

(*a*) 6 to 12 months (*b*) 12 months to 3 years

(*c*) 12 months to 5 years (*d*) 2 to 7 years

3. Long period credit is needed for:

(*a*) construction of fences (*b* purchase of land

(*c*) purchase of seeds and manures (*d*) purchase of machinery

4. In which year was nationalisation of commercial banks started?

(*a*) 1969 (*b*) 1979

(*c*) 1980 (*d*) 1991

5. SHG means:

(*a*) Small Help Group (*b*) Self Help Group

(*c*) both (*a*) and (*b*) (*d*) none of these

6. Which of the following is the source of non-institutional credit?

(*a*) Landlords (*b*) Village traders

(*c*) Moneylenders (*d*) All of these

7. The basic objective of the cooperative credit societies is:

(*a*) to ensure timely flow of credit to the farmers

(*b*) to eliminate the moneylenders from the rural scene

(*c*) to make available credit facilities to all the regions

(*d*) all of these

8. Institutional sources of rural credit include:

(*a*) Cooperative societies (*b*) Commercial banks

(*c*) Regional rural banks (*d*) All of these

9. Which of the following is an option of employment outside agriculture?

(*a*) Animal husbandry (*b*) Horticulture

(*c*) Fisheries (*d*) All of these

10. **Which of the following is the advantage of organic farming?**
(*a*) Environment-friendly (*b*) Sustains soil fertility
(*c*) Healthier and tastier food (*d*) All of these

Ans. **1.** (*b*) **2.** (*c*) **3.** (*b*) **4.** (*a*) **5.** (*b*) **6.** (*d*) **7.** (*d*)
8. (*d*) **9.** (*d*) **10.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Organic farming is a ______________ farming system. (sustainable/unsustainable)
2. In agriculture ______________ loans are raised generally for a period ranging between 6 to 12 months. (Short-term/Long-term)
3. ______________ is an apex institution of rural credit. (Cooperative Society/NABARD)
4. ______________ leads to a shift from subsistence farming to commercial farming. (Diversification/Marketing)
5. In ______________, fisheries is an important source of livelihood. (Gujarat/Punjab)
6. Livestock farming in India is an important source of employment for the ______________. (men/women)
7. PDS implies distribution of food grains through ______________ at subsidised rates. (fair price shops/cooperative marketing)
8. The productive requirement of credit relates to ______________ activity. (production/consumption)
9. ______________ sources of fishing include rivers, lakes, ponds and streams. (Inland/Marine)
10. ______________ discards the use of chemical inputs. (Organic farming/Animal husbandry)

Ans. **1.** sustainable **2.** Short-term **3.** NABARD **4.** Diversification
5. Gujarat **6.** women **7.** fair price shops
8. production **9.** Inland **10.** Organic farming

C. True or False

State whether the following statements are True or False:

1. 'Money lenders' constitute an institutional source of agricultural credit. (True/False)
2. The main function of regional rural banks is to provide financial assistance to big farmers. (True/False)
3. NABARD was established in 1982. (True/False)
4. Credit is the lifeline of farming activity in rural areas. (True/False)
5. Regulated markets were first established in Punjab. (True/False)
6. Food Corporation of India is the principal government agency storing foodgrains. (True/False)
7. Diversification helps stabilisation of farm income by lowering the market risk. (True/False)
8. Chemical fertilizers sustain soil fertility. (True/False)
9. Long-term loans are generally availed by the landless farmers. (True/False)
10. Horticulture is emerging as an important means of sustainable living in the rural areas. (True/False)

Ans. **1.** False **2.** False **3.** True **4.** True **5.** False **6.** True **7.** True
8. False **9.** False **10.** True

D. Very Short Answer Questions

1. What do you mean by rural development?

Ans. Rural development means an 'action-plan' for the social and economic growth of the rural areas.

2. What are the institutional sources of rural credit?

Ans. Government, cooperatives, commercial banks and regional rural banks are called the institutional sources of rural credit.

3. What are the non-institutional sources of rural credit?

Ans. Landlords, village traders, and moneylenders are called the non-institutional sources of rural credit.

4. What are micro credit programmes?

Ans. Micro credit programmes refer to the credit provisions made by the self-help groups.

5. What is distress sale?

Ans. Distress sale refers to the forced sale of the crops by the farmers to the moneylenders at a very low price in order to repay their debt.

6. What do you mean by buffer stocks?

Ans. Buffer stocks refer to the stocks meant to be used during period of deficient output in relation to demand.

7. What do you mean by diversification of crop production?

Ans. Diversification of crops production implies production of multiple crops rather than one specialised crop.

8. What do you mean by diversification of production activity?

Ans. Diversification of production activity implies a shift from crop farming to other areas of production activity. It raises income as well as stabilises it.

9. What is operation flood?

Ans. Operation flood is a system under which the member farmers are required to pool their produce of milk for collective sale in the market.

10. What is organic farming?

Ans. Organic farming is a system of farming that relies upon the use of organic inputs for cultivation.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Non-institutional sources of rural credit are simple and therefore, more attractive in India.

Ans. True. Non-institutional sources of rural credit are simple and therefore, more attractive in India. Hassle-free loans are granted simply on personal relations.

2. Institutional sources of rural credit are less accessible to small and marginal holders in India.

Ans. True. Because collaterals have to be provided to the banks which the small and marginal farmers are not able to afford.

3. Owing to lack of institutional credit, farmers in India are highly vulnerable to desperate sales.

Ans. True. Owing to lack of institutional credit, farmers take loans from the moneylenders. In order to pay off their debts, the farmers have to make a distress sale to the moneylenders themselves.

4. MSP Policy (Minimum Support Price Policy) assures minimum income to the farmers, irrespective of their sales.

Ans. False. MSP policy focuses on minimum income to the farmers only by way of support price.

5. Diversification of crop production minimises market risks due to price fluctuations.

Ans. True. Diversification of crop production minimises market risks due to price fluctuations because the farmers can choose the cropping pattern in accordance with the relative price structure in the market.

6. Livestock farming is found to be flourishing in areas where there are permanent means of irrigation.

Ans. False. Livestock farming tends to increase as we move from irrigated to non-irrigated arid areas.

7. Organic farming is not environment-friendly.

Ans. False. Organic farming is environment-friendly because under this system we use only organic inputs for cultivation and discard the use of chemical fertilizers.

8. Credit is the life-line of farming activity in India.

Ans. True. Credit is the life-line of farming activity in India because most farming families in India are small and marginal holders and they seldom have enough funds for the diverse farming operations.

9. Landlords, village traders and moneylenders are the three elements of institutional rural credit in India.

Ans. False. Landlords, village traders and moneylenders are the three elements of non-institutional rural credit in India.

10. It was with nationalisation of commercial banks in 1969 that the concept of social banking was put into practice in India.

Ans. True. With the nationalisation of commercial banks in 1969, the concept of social banking was put into practice in India. It focused on the credit needs of the farmers in the context of rural development programmes.

11. MSP Policy (Minimum Support Price Policy) is an important step towards improving the agricultural marketing system in India.

Ans. True. Because under MSP policy, an assurance is given to the farmers that their produce would be purchased by the government at the specified price.

12. Organic farming promotes sustainable development.

Ans. True. Because organic farming focuses on maintaining soil health for the future generations.

▶ EMPLOYMENT AND UNEMPLOYMENT [CHALLENGE 4]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. Supply of labour corresponding to different wage rates is referred as:

(*a*) labour supply (*b*) labour force

(*c*) participation rate (*d*) workforce

2. Work force refers to that part of:

(*a*) labour force which is employed (*b*) population which is unemployed

(*c*) population which is forced to work (*d*) labour force which is unemployed

3. Participation Rate =

(a) $\dfrac{\text{Total population}}{\text{Total workforce}} \times 100$ (b) $\dfrac{\text{Total workforce}}{\text{Total population}} \times 100$

(c) $\dfrac{\text{Total population}}{\text{Total workforce}}$ (d) $\dfrac{\text{Total workforce}}{\text{Total population}}$

4. Hired workers are those:

(a) who work for others (b) who are not self-employed

(c) who are engaged in their own business (d) both (a) and (b)

5. Those workers who do not get any pension or gratuity benefits are known as:

(a) self-employed workers (b) casual workers

(c) regular workers (d none of these

6. A situation wherein although the worker is willing to work and he has the necessary ability to work yet he does not get work is known as:

(a) disguised unemployment (b) frictional unemployment

(c) open unemployment (d) underemployment

7. A situation wherein a worker does not get a full time job, is known as:

(a) disguised unemployment (b) frictional unemployment

(c) open unemployment (d) underemployment

8. Unemployment that occurs due to imperfections in the mobility of labour across different occupations is known as:

(a) Disguised unemployment (b) Frictional unemployment

(c) Open unemployment (d) Underemployment

9. In which type of unemployment do the marginal productivity of the workers is zero?

(a) Disguised unemployment (b) Involuntary unemployment

(c) Seasonal unemployment (d) Structural unemployment

10. Which of the following is not a social consequence of unemployment?

(a) Social unrest (b) Loss of output

(c) Low quality of life (d) Class struggle

11. Which of the following is not an economic consequence of unemployment?

(a) Social unrest (b) Loss of output

(c) Low productivity (d) Non-utilisation of manpower

12. Which of the following is the main source of employment for majority of workers in India?

(a) Primary sector (b) Secondary sector

(c) Tertiary sector (d) All of these

13. Casualisation of workforce refers to a situation:

(a) when the percentage of self-employed workers in the total workforce tends to rise over time

(b) when the percentage of casually-hired workers in the total workforce tends to rise over time

(c) when the percentage of regularly-hired workers in the total workforce tends to rise over time

(d) none of these

14. Jobless growth leads to unemployment because:

(a) labour refuses to migrate (b) labour is very expensive

(c) GDP growth is slow (d) growth is driven by technology

15. **A situation where percentage of workforce in the formal sector tends to decline and that in the informal sector tends to rise is known as:**
(*a*) informalisation (*b*) casualisation
(*c*) jobless growth (*d*) none of these

Ans. **1.** (*a*) **2.** (*a*) **3.** (*b*) **4.** (*d*) **5.** (*b*) **6.** (*c*) **7.** (*d*)
8. (*b*) **9.** (*a*) **10.** (*b*) **11.** (*a*) **12.** (*a*) **13.** (*b*) **14.** (*d*)
15. (*a*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Unemployed Persons = ________ – Workforce. (Population/Labour Force)
2. Cyclical unemployment is a ________ unemployment. (frictional/chronic)
3. Deficiency of demand is the root cause of ________ unemployment. (disguised/cyclical)
4. ________ unemployment occurs due to change in the composition of demand or due to change in technology. (Structural/Frictional)
5. A worker is an individual who is engaged in some ________ activity. (production/consumption)
6. ________ workers work for others. (Self-employed/Hired)
7. ________ workers are the daily wagers. (Casual/Regular)
8. In case of underemployment, people work ________ than the standard hours of work in a day. (less/more)
9. Among women, ________ is a more significant source of livelihood than among men. (wage-employment/self-employment)
10. ________ sector refers to organised sector of the economy. (Formal/informal)

Ans. **1.** Labour Force **2.** frictional **3.** cyclical **4.** Structural **5.** production
6. Hired **7.** Casual **8.** less **9.** wage-employment **10.** Formal

C. True or False

State whether the following statements are True or False:

1. Seasonal unemployment is not related to agriculture. (True/False)
2. Labour force refers to the number of persons actually working or willing to work. (True/False)
3. Workforce is a part of labour force. (True/False)
4. Disguised unemployment is not found in agricultural sector. (True/False)
5. Industrial unemployment is related to urban unemployment. (True/False)
6. Regular workers are on permanent pay-roll of their employers. (True/False)
7. Rate of participation for women is higher in urban areas compared with rural areas. (True/False)
8. Supply of labour can increase or decrease even when the number of workers remains constant. (True/False)

9. Workers in the informal sector can form trade unions. (True/False)

10. Participation rate refers to the percentage of population actually working. (True/False)

Ans. **1.** False **2.** True **3.** True **4.** False **5.** True **6.** True **7.** False **8.** True **9.** False **10.** True

D. Very Short Answer Questions

1. **What is unemployment?**

Ans. Unemployment refers to a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.

2. **Who is a worker?**

Ans. A worker is an individual who is engaged in some production activity.

3. **Define economic activity.**

Ans. Economic activity is that activity which is based on or is related to the use of scarce resources for the satisfaction of human wants.

4. **Define production activity.**

Ans. Production activity is that activity which is related to 'value-addition', for the purpose of generating factor income.

5. **Who are self-employed workers?**

Ans. Self-employed workers are those workers who are engaged in their own business or own profession. **Example:** A farmer working on his own farm.

6. **Who are hired workers?**

Ans. Hired workers are those workers who work for others and get wages and salaries as a reward for their services. **Example:** A peon working in a office.

7. **Who are casual workers?**

Ans. Casual workers are like daily wagers, not on permanent rolls of the employer, and not entitled to social security benefits.

8. **Who are regular workers?**

Ans. Regular workers are hired on regular basis and are on permanent pay-roll of their employees and are entitled to social security benefits.

9. **What is meant by labour supply?**

Ans. Labour supply refers to the amount of labour that the workers are willing to offer corresponding to different wage rates.

10. **What is meant by labour force?**

Ans. Labour force refers to the number of persons actually working or willing to work at the existing wage rate.

11. **Define workforce.**

Ans. Workforce refers to the number of persons actually working, and does not account for those who are willing to work (but not working).

12. **Define jobless growth.**

Ans. Jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any perceptible rise in the level of employment.

13. **What is meant by casualisation of workforce?**

Ans. Casualisation of workforce refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time.

14. What is meant by informalisation of workforce?

Ans. Informalisation refers to a situation when people tend to find employment more in unorganised (or informal) sector of the economy, and less in organised (or formal) sector of the economy.

15. What is meant by disguised unemployment?

Ans. Disguised unemployment refers to a situation in which more people are engaged in a given job than are actually needed.

16. Define underemployment.

Ans. Underemployment refers to that situation in which a worker gets work for less time than the time he can work. He remains unemployed for some months in a year or some hours everyday.

17. What is meant by seasonal unemployment?

Ans. Seasonal unemployment refers to unemployment during off-season related to a particular production activity. **Example:** In agriculture, people find employment during sowing and harvesting seasons only. They remain unemployed during rest of the year.

18. What is meant by open unemployment?

Ans. Open unemployment is a situation wherein a worker is willing to work, and has the necessary ability to work, yet he does not get work.

19. What is meant by structural unemployment?

Ans. Structural unemployment occurs due to the technological changes or change in the demand pattern of goods in the economy.

20. What is meant by frictional unemployment?

Ans. Frictional unemployment arises due to imperfections in the mobility of labour across different occupations. It is of temporary nature.

21. What is meant by cyclical unemployment?

Ans. Cyclical unemployment occurs owing to cyclical fluctuations in the economy.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Nation is developed only when it achieves a high rate of employment.

Ans. True. A nation is developed only when it achieves a high rate of employment. It is only then that gains of growth are distributed across wider sections of the society.

2. Self-employed are different from hired workers.

Ans. True. Self-employed workers are those workers who are engaged in their own business or profession while hired workers are those workers who work for others and get wages and salaries in return.

3. Casual workers are not different from regular workers.

Ans. False. Casual workers are different from regular workers. Casual workers are the daily wagers while regular workers are not the daily wagers; they are hired by their employers on regular basis.

4. Labour supply and labour force are identical concepts.

Ans. False. Labour supply refers to the supply of labour corresponding to different wage rates. While labour force refers to the number of workers actually working or willing to work.

5. There is no difference between labour force and workforce.

Ans. False. Labour force is different from workforce. Labour force refers to the number of people who are able to work and willing to work at the existing wage rate. Workforce, on the other hand, refers to the number of people actually engaged in employment.

6. Difference between labour force and workforce measures the number of persons who are unemployed.

Ans. True. Number of Persons Unemployed = Labour Force – Workforce.

7. Higher employment among women in rural areas (compared with urban areas) only points to widespread rural poverty in India.

Ans. True. Because poverty forces women to avoid education and find opportunities of employment in the rural areas.

8. Lower employment among women in India points to our economic and social backwardness.

Ans. True. Lower employment among women in India points to our economic and social backwardness. It leads to economic backwardness, because the economy fails to generate enough jobs. It leads social backwardness, because job work for the women is considered as a social taboo.

9. In India, high dependence on primary sector (for employment) is a sign of backwardness of the economy.

Ans. True. Because productivity level is very low in primary sector, and accordingly, structure of wage rate is not much beyond the subsistence levels of life.

10. Persistent unemployment may continue to exist even when there is a rise in GDP.

Ans. True. This happens in a situation of jobless growth, when rise in GDP is attributed to innovative technology.

11. In a situation of disguised unemployment, marginal productivity of labour is zero or even negative.

Ans. True. In a situation of disguised unemployment, marginal productivity of labour is zero or even negative because more than the required number of persons are working on a particular farm.

12. There is no difference between visible underemployment and invisible underemployment.

Ans. False. Visible underemployment is different from invisible underemployment. In case of visible underemployment, people got work for less than the normal hours of work and in case of invisible underemployment, people work full time but their income is not proportionate to their abilities.

13. Cyclical unemployment is not permanent in nature while structural and frictional unemployment is.

Ans. True. Cyclical unemployment appears and disappears in accordance with the cyclical phases of economic activity while structural and frictional unemployment persists in the economy even in the state of full employment.

14. Unemployment compounds the problem of inequality.

Ans. True. Higher the degree of unemployment, greater is the extent of inequality in the distribution of income and wealth.

15. Higher employment among women in rural areas (compared to urban areas) suggests higher rural wage rate in India.

Ans. False. The bulk of female workers in rural areas are engaged in low wage and less productive jobs just to make a living for their families.

16. Expansion of production capacity need not necessarily solve the problem of unemployment in India.

Ans. False. Production capacity is directly related to the employment opportunities. Greater production capacity leads to higher demand for labour, particularly when labour-intensive technology is used.

17. In rural areas, higher percentage of female workforce (compared with male workforce) is engaged in primary sector.

Ans. True. In rural areas, higher percentage of female workforce is engaged in primary sector owing to their economic and social constraints.

18. GDP may increase even when employment does not.

Ans. True. GDP may increase even when employment opportunities do not. This type of growth is called jobless growth and it occurs when growth is driven by technology rather than employment.

19. Disguised unemployment refers to seasonal unemployment.

Ans. False. Disguised unemployment refers to a situation wherein the number of workers engaged in a job is much more than are actually needed.

20. In India, casualisation of workforce has tended to rise over time.

Ans. True. Casualisation of workforce has tended to rise over time owing to massive unemployment across all sectors of the economy.

▶ INFRASTRUCTURE [CHALLENGE 5]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. Which of the following serve as a driving force for production activity in the economy?

(*a*) Population (*b*) Economic infrastructure
(*c*) Literacy (*d*) None of these

2. Which of the following is not a component of social infrastructure?

(*a*) Road (*b*) Communication
(*c*) Electricity (*d*) All of these

3. Which of the following is not a component of economic infrastructure?

(a) Health (*b*) Power
(c) Communication (*d*) Transport

4. Which of the following is an example of non-commercial energy?

(*a*) Firewood (*b*) Agricultural waste
(*c*) Cow-dung (*d*) All of these

5. Which of the following is a conventional source of energy?

(*a*) Solar energy (*b*) Wind energy
(*c*) Natural gas (*d*) Biomass

6. Which of the following is not a non-conventional source of energy?

(*a*) Solar energy (*b*) Wind energy
(*c*) Petroleum (*d*) Biomass

7. The principal consumers of coal are:

(*a*) Thermal power stations (*b*) Steel plants
(*c*) Cement factories (*d*) All of these

8. Which of the following is a component of social infrastructure?

(*a*) Health (*b*) Sanitation
(*c*) Both (*a*) and (*b*) (*d*) None of these

9. **Which of the following is a challenge in Power Generation sector?**
(*a*) Inadequate generation (*b*) Losses of electricity boards
(*c*) Less capacity utilisation (*d*) All of these

10. **Plant Load Factor =**
(*a*) Electricity generated × Production capacity
(*b*) Electricity generated ÷ Production capacity
(*c*) Electricity generated + Production capacity
(*d*) Electricity generated – Production capacity

Ans. **1.** (*b*) **2.** (*d*) **3.** (*a*) **4.** (*d*) **5.** (*c*) **6.** (*c*) **7.** (*d*)
8. (*c*) **9.** (*d*) **10.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Coal is a ________________ source of energy. (commercial/non-commercial)
2. Reserves of natural gas are largely found in . (Rajasthan/Madhya Pradesh)
3. ________________ is a source of producing energy through plants and trees. (Biogas/Biomass)
4. There is a complete eradication of from India. (smallpox/TB)
5. social infrastructure accelerates the process of human development. (Economic/Social)
6. Electricity is the most useful source of energy in India. (conventional/non-conventional)
7. is the most important component of economic infrastructure. (Energy/Education)
8. sources of energy do not need any transformation. (Primary/Final)

Ans. **1.** commercial **2.** Rajasthan **3.** Biomass **4.** smallpox **5.** Social
6. conventional **7.** Energy **8.** Primary

C. True or False

State whether the following statements are True or False:

1. There are six recognised systems of Indian medicine. (True/False)
2. Agricultural sector is the biggest user of electricity in India. (True/False)
3. Electricity is distributed by State Electricity Boards (SEBs). (True/False)
4. Consumption of electricity in agricultural sector has declined overtime. (True/False)
5. Life expectancy in India has reduced over time. (True/False)
6. Natural gas is used as a raw material in fertiliser and petroleum products. (True/False)
7. Presently, coal is the principal source of commercial energy in India. (True/False)
8. Non-conventional sources of energy are environment-friendly. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** False **5.** False **6.** True **7.** True
8. True

D. Very Short Answer Questions

1. **What is meant by infrastructure?**

Ans. Infrastructure refers to support system of economic and social development of a country.

2. **What is meant by economic infrastructure?**

Ans. Economic infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.

3. **What is meant by social infrastructure?**

Ans. Social infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for social development of a country.

4. **What are commercial sources of energy?**

Ans. Coal, petroleum products, natural gas, electricity are the important sources of commercial energy. These goods have a market and command a price.

5. **What are non-commercial sources of energy?**

Ans. Firewood, animal waste, agricultural waste are the important sources of non-commercial energy. These goods do not have any recognised market.

6. **What are conventional sources of energy?**

Ans. Conventional sources of energy are those which have a long history of their knowledge and use. **Example:** Coal, petroleum, natural gas and electricity.

7. **What are non-conventional sources of energy?**

Ans. Non-conventional sources of energy are those sources which have been discovered only in the recent past and which are yet to gain popularity for their use. **Example:** Solar energy, wind energy and biomass.

8. **What are primary sources of energy?**

Ans. Primary sources of energy are those sources which are available to us as free gifts of nature and which do not need any transformation. **Example:** Coal, Lignite, Petroleum and Gas.

9. **What are final sources of energy?**

Ans. Final sources of energy are those sources which are not available as free gifts of nature. These are obtained by converting input into output. **Example:** Electricity.

10. **What is bio energy?**

Ans. Bio energy is a kind of energy which is obtained from organism or organic matter.

11. **What is meant by pattern of energy consumption?**

Ans. Pattern of energy consumption refers to the percentage use of different sources of energy.

12. **What are Transmission and Distribution Losses (of electricity)?**

Ans. Transmission and Distribution Losses refer to theft and loss of electricity during the course of production and distribution.

13. **Define outsourcing in the context of infrastructure.**

Ans. Outsourcing refers to obtain some goods and services from outside the enterprise in order to run the enterprise successfully and in cost effective manner.

14. **What is medical tourism?**

Ans. Medical tourism is travelling outside your country for medical services.

15. **What are Indian Systems of Medicine?**

Ans. Indian systems of medicine are the systems of medicine which are considered to be Indian in origin or which have come to India from outside and got assimilated into Indian culture.

16. What are primary healthcare centres in India?

Ans. Primary healthcare centres are small hospitals set-up mostly in small towns and rural areas and managed by a single doctor.

17. What are secondary healthcare centres in India?

Ans. Secondary healthcare centres are upgraded healthcare centres (compared to PHC) and have facilities for surgery, ECG and X-rays. They are located in big towns and district headquarters.

18. What are tertiary healthcare institutions in India?

Ans. Tertiary healthcare institutions are high-end and fully equipped medical centres, offering specialised medical facilities.

19. What is rural-urban divide?

Ans. Rural-urban divide refers to the disparity between rural and urban areas of the country.

20. What is rich-poor divide?

Ans. Rich-poor divide refers to the disparity (relating to the level of income) between rich and the poor people of a region or the country as a whole.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. Economic and social infrastructure are not complementary to each other.

Ans. False. Economic and social infrastructure are complementary to each other, one reinforces the impact of the other.

2. Infrastructure induces investment.

Ans. True. Infrastructure induces investment, because it represents an essential.

3. Infrastructure enhances size of the market.

Ans. True. It is owing to support system for investment and infrastructural facilities (transport and communication & others) that the size of the market tends to expand.

4. Infrastructure facilitates outsourcing.

Ans. True. Infrastructure facilitates outsourcing. It is because of infrastructural facilities that India has emerged as destination for outsourcing.

5. There is no difference between commercial and non-commercial energy.

Ans. False. Goods of commercial energy are largely used for commercial purposes in the factories and farms. Whereas, goods of non-commercial energy are generally used in the rural households as consumer goods.

6. There is no difference between conventional and non-conventional sources of energy.

Ans. False. Conventional sources of energy are known to us and are in use since a long time. Whereas, non-conventional sources of energy have been discovered only in the recent past.

7. There is no difference between renewable resources and non-renewable resources.

Ans. False. Renewable resources are different from non-renewable resources. Renewable resources are those which are not likely to get exhausted or depleted on use. Whereas, non-renewable resources, on the other hand, are those which are likely to be exhausted or depleted on use.

8. Child mortality rate and infant mortality rate are identical concepts.

Ans. False. Child mortality rate is different from infant mortality rate. Child mortality rate refers to death of the children up to 4 years of age whereas infant mortality rate refers to death of the infants up to 1 year of age.

9. Poor people spend higher percentage of their income on healthcare.

Ans. True. Because poor people suffer from health diseases more than the rich (due to the inability to get healthier and nutritious food) while their income level is extremely low.

10. Low use of commercial energy points to low level of productivity in agricultural sector of our economy.

Ans. True. Because low use of commercial energy in agricultural sector points to a high degree of dependence on manual labour. Implying lower degree of mechanisation and in turn low level of productivity.

11. Conventional sources of energy include solar energy and wind energy.

Ans. False. Conventional sources of energy include coal, petroleum and electricity.

12. Infrastructure serves as a support system to all production activity in the economy.

Ans. True. Infrastructure refers to such core elements of economic and social change which serve as a support system to all production activities in the economy.

ENVIRONMENT AND SUSTAINABLE ECONOMIC DEVELOPMENT [CHALLENGE 6]

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. Environment includes:

(*a*) biotic elements only (*b*) abiotic elements only

(*c*) both biotic and abiotic elements (*d*) none of these

2. When was the Environment (Protection) Act passed?

(*a*) 1984 (*b*) 1986

(*c*) 1988 (*d*) 1990

3. Which of the following is a biotic component of environment?

(*a*) Plant (*b*) Soil

(*c*) Water (*d*) Light

4. Which of the following is an abiotic component of environment?

(*a*) Bacteria (*b*) Animal

(*c*) Humans (*d*) Minerals

5. Which of the following is an example of natural resources?

(*a*) Water (*b*) Minerals

(*c*) Air (*d*) All of these

6. Non-renewable resources are those resources which:

(*a*) are exhausted after use (*b*) are not exhausted after use

(*c*) have unlimited supply (*d*) none of these

7. Economic development includes:

(*a*) economic growth (*b*) economic welfare

(*c*) both (*a*) and (*b*) (*d*) none of these

8. Which of the following is the main feature of sustainable development?

(*a*) Sustained rise in per capita income (*b*) No increase in pollution

(*c*) Rational use of natural resources (*d* All of these

9. __________ **lays special emphasis on environmental protection.**
   (*a*) Economic growth (*b*) Economic development
   (*c*) Sustainable development (*d*) None of these

10. **Which of the following is the strategy of sustainable development?**
   (*a*) Shift to organic farming (*b*) Input-efficient technology
   (*c*) Manage the wastes (*d*) All of these

Ans. **1.** (*c*) **2.** (*b*) **3.** (*a*) **4.** (*d*) **5.** (*d*) **6.** (*a*) **7.** (*c*)
8. (*d*) **9.** (*c*) **10.** (*d*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. Environment (Protection) Act was passed in the year __________. (1986/1987)
2. Hepatitis disease occurs due to __________ pollution. (water/air)
3. Environmental degradation is an __________ opportunity cost of development. (avoidable/unavoidable)
4. __________ is a cleaner domestic fuel than the firewood. (LPG/Petrol)
5. Organic farming increases the __________ health. (soil/plant)
6. __________ ignores distribution of income. (GDP growth/Economic development)
7. __________ resources are available to us as a free gift of nature. (Natural/Man-made)
8. Over-utilisation of natural resources leads to __________ of environment. (loss/gain)
9. Air carries __________ which is an essential element of life. (oxygen/nitrogen)
10. __________ is linked to environmental protection. (Economic growth/Sustainable development)

Ans. **1.** 1986 **2.** water **3.** avoidable **4.** LPG **5.** soil **6.** GDP growth
7. Natural **8.** loss **9.** oxygen **10.** Sustainable development

C. True or False

State whether the following statements are True or False:

1. Environment includes both living and non-living elements. (True/False)
2. Sustainable development only refers to increase in per capita income for the present generation. (True/False)
3. Rational use of natural resources is an important feature of sustainable development. (True/False)
4. Air pollution occurs only in the urban areas. (True/False)
5. Rapid industrialisation is one of the causes of environmental degradation. (True/False)
6. Soil erosion is caused by industrial wastes. (True/False)
7. Deforestation leads to soil erosion. (True/False)
8. Smoke emitted by the industries leads to environmental pollution. (True/False)
9. Renewable resources are those which cannot be replenished. (True/False)
10. Opportunity cost is the cost in terms of foregone opportunities of doing a thing. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** False **5.** True **6.** False **7.** True
8. True **9.** False **10.** True

D. Very Short Answer Questions

1. **Define environment.**

Ans. Environment is defined as all those conditions and their effects which influence human life.

2. **What are biotic elements of environment?**

Ans. Biotic or living elements of environment include all kinds of living creatures like plants and animals which impact human life.

3. **What are abiotic elements of environment?**

Ans. Abiotic or physical elements of environment include land, water, climate, mountains, minerals and all other resources which nature has provided to us as a free gift.

4. **Define pollution.**

Ans. Pollution refers to those activities of production and consumption which challenge purity of air and water and thereby pollute the environment.

5. **Define deforestation.**

Ans. Deforestation occurs when trees are felled to meet the growing demand for wood and other forest products.

6. **What is social forestry?**

Ans. Social forestry refers to the protection of the forests through by collective efforts of the people of an area.

7. **What is degradation of land?**

Ans. Degradation of land implies loss of fertility of land due to soil erosion and alkalinity and salinity of soil.

8. **What is afforestation campaign?**

Ans. Afforestation campaign is an attempt to lift the morale of the people for afforestation or for growing more and more forests.

9. **What is global warming?**

Ans. Global warming refers to a gradual, but consistent rise in atmospheric temperature.

10. **What is ozone depletion?**

Ans. This refers to reduction in ozone (a protective layer) in the atmosphere. This occurs owing to the excessive use of cooling substances in air conditioners and refrigerators.

11. **What is economic growth?**

Ans. Economic growth refers to long-term increase in real per capita income.

12. **What is economic development?**

Ans. Economic development refers to long-term increase in real per capita income along with the equitable distribution of income and wealth.

13. **What is sustainable development?**

Ans. Sustainable development is a process of development that does not cause environment degradation and therefore, does not reduce production capacity of future generations.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **Environmental degradation is an avoidable opportunity cost of development.**

Ans. True. Environmental degradation occurs due to production activity without caring for environmental protection. This is certainly an avoidable opportunity cost.

2. **Environmental degradation owes a great deal to supply-demand reversal of resources over time.**

Ans. True. Because it is the supply-demand reversal of resources (in terms of escalating demand and dwindling supplies) that the natural resources are excessively exploited, leading to environmental degradation.

3. **In India, population control can go a long way in combating environmental degradation.**

Ans. True. Because excessive pressure on land has led to massive deforestation.

4. **Environment not only saves life, it also enhances the quality of life.**

Ans. True. Environment saves life as it is a source of sustenance for life. It enhances the quality of life as biotic and abiotic components of environment are a source of joy and pleasure.

5. **Deforestation is a direct consequence of industrialisation.**

Ans. True. Industrialisation leads to urbanisation and urbanisation causes deforestation.

6. **Civilisation rises with urbanisation but environment suffers degradation.**

Ans. True. Civilisation rises with urbanisation but environment suffers degradation because with urbanisation, forest land has been converted into townships.

7. **Population explosion is the principal cause of environmental degradation.**

Ans. True. Due to the excessive pressure of population, resources are being excessively exploited and irrationally utilised without caring for the social opportunity cost.

8. **Global warming is a wake-up call to save environment.**

Ans. True. Global warming is a wake-up call to save environment because it causes consistent increase in global temperature leading to a huge of biotic and abiotic components of environment.

9. **We cannot sustain the process of economic growth indefinitely in case environmental degradation is not combated.**

Ans. True. Because environmental degradation reduces production capacity of future generations.

10. **Sustainable development requires that resources are rationally used keeping in mind the needs and means of future generations.**

Ans. True. Sustainable development is that process which fulfills the needs of the present generation without reducing the ability of the future generations to fulfil their needs.

11. **Spread of public means of transport can go a long way in combating environmental degradation in India.**

Ans. True. Spread of public means of transportation like Metro-Rail, will cut private traffic in and around the metro cities. Accordingly, air and noise pollution is expected to fall.

12. **Sustainable development requires the use of input-efficient technology**

Ans. True. Sustainable development requires the use of input-efficient technology so that exploitation of resources is reduced to meet the emerging needs.

3. HOTS & Applications

1. **It is possible that poverty may persist despite rapid growth in GDP. Comment.**

Ans. Yes, it is possible that poverty may persist despite rapid growth in GDP. This happens when:

(*i*) increase in GDP is pocketed by the rich in terms of high profits, and the poor continue to get low wages, and

(*ii*) increase in GDP is not linked with increase in employment.

2. **How 'Brain-Drain' can be a problem for human capital formation in India?**

Ans. Brain-Drain (migration of person born, educated and trained in India to developed countries) is a serious threat to the process of human capital formation in the country. Those who migrate are persons of high calibre such as scientists, doctors, engineers, etc. This slows down the process of capital formation in the domestic economy.

3. Diversification of crop production is the need of the hour for Indian agriculture. Comment

Ans. Diversification of crop production involves a shift from single-cropping system to multi-cropping system. It involves a shift in cropping pattern from foodgrain to cash crops. In India, agriculture is still dominated by subsistence farming and farmers give prime importance to cereals in the cropping system. Multi-cropping system reduces the dependence of farmers on one or two crops as they are engaged in growing variety of crops.

To augment farmers' income and to minimise their risks, there is a need to resort to crop diversification.

4. Discuss the concept of jobless growth with reference to the Indian economy.

Ans. Jobless growth is a situation where the level of output in the economy tends to rise owing to innovative technology, without any perceptional rise in the level of employment. In labour-surplus countries like India where there is a problem of staggering unemployment, economic growth becomes meaningful only when it is associated with greater opportunities of employment. Unfortunately, Indian economy is experiencing GDP growth more through technology than through the employment of labour. It is a situation of jobless growth.

5. Justify why is it necessary to synchronize traffic lights or use public transport instead of private transport and develop solar panels for household consumption?

Ans. This is necessary to save on energy. If all main traffic lights are synchronized then the fuel wasted by vehicles waiting on the traffic lights can be reduced. Similarly, if we consciously use public transport in place of private vehicles (like scooter, motor cycles and cars) then it saves fuel. Further, if solar panels are installed to fulfil domestic needs of energy (heating, washing and cooling) we can save a lot of fossil fuels used to generate electricity.

4. Analysis & Evaluation

1. Growth in GDP has not been very effective in taking the problem of poverty in India, as has been observed. What measures do you suggest to overcome the problem?

Ans. Eradication of poverty through GDP growth is a long period approach to combat poverty. It focuses on the generation of employment opportunities through higher and higher investment across secondary and tertiary sectors of the economy. According to this approach, poverty is combated by way of 'trickle-down' effect of growth.

Instead, what is required is this: GDP growth should be combined with higher social spending that enhances the quality of life of the poor people by offering them (*i*) free education, (*ii*) free healthcare, (*iii*) subsidised food among others.

Thus, in case of India, where population growth has resulted in a very low growth in per capita income and the benefits of economic growth have not trickle-down to the poor, there is need for the government to undertake higher social spending. Accordingly, the government has undertaken a number of poverty alleviation programmes to combat poverty.

2. Why education is still a challenging proposition in India?

Ans. Although, there has been a significant increase in the number of school goers in the country, concerns relating to the quality of education and provisioning of school infrastructure still remain. Moreover, the problems of large number of illiterates, inadequate vocationalisation of education and low rural access level still persist. Most importantly, growing trend towards privatisation of school education presents a worrying picture for the poorer sections of the society. Moreover, the Indian education pyramid is steep indicating lesser and lesser number of people reaching the higher education level. Surprisingly, the level of unemployment among the educated youth is the highest.

The above facts present a dismal picture of eduction in the country and this convey that education is still a challenging proposition in the country.

3. "Lately, the country has witnessed increased instances of farm loan waivers (farmers' loans being written off)."

Do you think it is economically viable? What should be the consideration for such write-offs?

Ans. More than fifty per cent of the population in India is directly or indirectly dependent on agriculture for his source of living. There are approximately 12.56 crore small and marginal farmers in the country. Agriculture in India is yet to modernise to the extent required. Given the distress in the agriculture sector and the deteriorating conditions of farmers in the country, there are repeated instances of farm loan waivers in the country. Inspite of their welfare motive, farm loan waivers are a drain on state finances. If this practice of farm loan waiver continues unabated, it will be harmful for the economy with its limited financial resources.

Instead, the government should analyse the reasons behind the non-payment of farm loans and address them accordingly. Loan waivers should not be motivated by political reasons. These should be related to economic hardships of the farmers arising out of such factors as crop-failure due to droughts, floods or other natural calamities.

4. In the last decade of Indian economy, we have been witnessing the phenomenon of educated unemployment. How do you explain?

Ans. When an educated person is unable to find a suitable job, there emerges a situation of educated unemployment. Following are the principal causes leading to educated unemployment in India:

(*i*) On account of rapid expansion of educational institutions, *viz.*, universities, colleges and schools, the number of educated persons has increased tremendously.

(*ii*) Education system in India is largely degree-oriented, instead of job-oriented.

(*iii*) Growth process in the country is not preceding according to the needs and means of the country. Instead, it is being driven by labour-saving innovative technology.

5. "Both economic and social infrastructure are crucial for economic development of a country." Do you agree? Give reasons in the support of your answer.

Ans. Yes, both economic and social infrastructure are crucial for economic development of a country. Infrastructure refers to the support system for the economic and social development of a country without which economic growth and social development would lag behind. Infrastructure is broadly categorised as economic infrastructure and social infrastructure.

Economic infrastructure includes sources of energy, better means of transport and communication, efficient system of banking and finance among others. All these elements of economic infrastructure are essential prerequisite for economic growth. However, these elements (of economic infrastructure) would not be of any use if population of a country continues to be illiterate and suffers from disease and sickness. This points to the significance of social infrastructure, which includes such elements of support system (like schools, colleges, hospitals, etc.) which are essential for the social development of a country.

Thus, while economic infrastructure accelerates the process of growth, social infrastructure accelerates the process of human development. Only when the elements of social infrastructure join the elements of economic infrastructure that the process of growth and development would be a dynamic process.

MISCELLANEOUS QUESTIONS

A. Short Answer Questions–I [3 marks]

1. Distinguish between relative poverty and absolute poverty.

Ans. **Relative Poverty:** Relative poverty refers to poverty across different classes or regions of a country. The region or class of people whose level of living is low is treated as poor or relatively poor in comparison to the region or class of people having high level of living. Relative poverty is also interpreted in terms of inequality of income within the country.

Absolute Poverty: Those below poverty line are deemed as absolutely poor. In India, the concept of poverty line is used as a measure of absolute poverty. Poverty line refers to that line which divides the people as poor and non-poor depending on the level of income.

2. Write an observation each on combating poverty through (*i*) legislative measures, and (*ii*) fiscal measures.

Ans. (*i*) Legislative measures basically refer to Minimum Wages Act, making it mandatory for the employers to offer the stipulated minimum wage to the employees. These measures also include such policies as of 'Price Floor' for the purchase of farm outputs. Price floor refers to the stipulated minimum price that must be offered to the farmers for the purchase of their output.

(*ii*) Fiscal measures refer to the policy of taxation and subsidies. It implies a high rate of income tax on the rich, while the poor are granted exemption. Tax receipts of the government are used to subsidise purchases by poorer sections of the society. Subsidy is offered on items like coarse cloth and coarse grains, the basic needs of the poor.

3. Write three observations suggesting the need to combat population growth as a pre-condition to combat poverty.

Ans. Three observations suggesting the need to combat population growth as pre-condition to combat poverty are as under:

(*i*) Increase in national income fails to be reflected in quality of life of the people, owing to a rapid rise in population. Per capita income (National income/Population) continues to be low, because population is rising to neutralise the rise in national income.

(*ii*) Because of overpopulation, India is burdened with massive unemployment. In such a situation, growth of population would only compound the problem of unemployment.

(*iii*) Owing to rapid growth of population, family size of the poor people is so high that the availability of goods and services to the poor remains low. Reduction in population growth is a necessary condition for the reduction in poverty.

4. Define poverty line. Should the poverty line cut-off be determined in terms of income or in terms of consumption?

Ans. Poverty line refers to the cut-off point (in terms of the level of income or the level of consumption) that divides people of a region as poor and non-poor.

Between the two, income or consumption, poverty line cut-off should preferably be determined in terms of consumption. Because:

Consumption reflects actual use of the goods and services by an individual, as well as the type of goods actually used, while income only shows the capacity to purchase.

5. Write two observations suggesting areas of concern in higher education.

Ans. The areas of concern in higher education are as under:

(*i*) Expansion is largely confined to general education, without adequate focus on vocationalisation.

(*ii*) With higher education, gulf between supply of the job-seekers and their demand increases. Accordingly, the problem of unemployment is assuming alarming proportions.

6. Whom do you call literate? How is literacy different from education?

Ans. A literate person is the one who has the ability to read and write.

Literacy and education both are different terms. In fact, education is a much wider concept than literacy.

Education implies the process of teaching, training and learning (especially in schools or colleges). It improves knowledge and develops skills.

Education encompasses three parameters, *viz.*, primary education, secondary education and tertiary or higher education.

While all educated people are literate, all literate people are not necessarily educated.

7. Why government intervention is necessary in education and health?

Ans. Need for government intervention in education and health is necessary on account of the following facts:

(*i*) These sectors need huge investment with a very high fixed expenditure.

(*ii*) It is difficult to expect private investors to invest in health and education unless they are allowed to recover their huge costs through high price of these services.

(*iii*) People in a poor country like ours cannot afford high price for education and health.

8. Distress sale of the small and marginal holders points to deficiency of marketing infrastructure in India. Comment.

Ans. Distress sale refers to a situation when the farmers are compelled to sell their produce immediately after the harvest, no matter how low the market price is. It happens when institutional credit funding is lacking. In India, credit funding is controlled by the moneylenders, traders and commission agents. Credit is easily available through these sources. But, often it is tied with the sale of crops to the lenders. Distress sale thus becomes unavoidable.

9. Does the diversification of crop production and diversification of production activity are identical concepts?

Ans. No, both are different terms. Diversification of crop production implies production of a diverse variety of crops rather than one specialised crop. It implies a shift from single-cropping system to multi-cropping system. Whereas, diversification of production activity implies a shift from crop farming to non-farm areas of production activity. It raises income as well as stabilises it. Finding sustainable livelihood away from crop farming becomes all the more significant in view of the fact that crop farming sector is overburdened.

10. Discuss the credit needs of the farmers.

Ans. Credit needs of the farmers are categorised in three categories:

(*i*) Short-term Credit: Short-term credit is basically required for the (a) purchase of inputs like seeds, fertilisers, pesticides and insecticides, besides making (*b*) payments of electricity bills. The period of such loans ranges between 6 to 12 months.

(*ii*) Medium-term Credit: Medium-term credit is required for (*a*) the purchase of machinery, (*b*) construction fences, and (*c*) digging the wells. The period of such loans ranges between 12 months to 5 years.

(*iii*) Long-term Credit: Long-term credit is required for (*a*) the purchase of additional land or (*b*) for carrying out permanent improvements on the existing land. The period of such loans ranges between 5 to 20 years.

11. What are the main deficiencies of rural banking system?

Ans. The main deficiencies of rural banking system are as these:

(*i*) Banking credit or institutional credit has invariably been tied to collateral, because of which a large section of small and marginal holders are often left out.

(*ii*) Owing to political populism, the government has often shown laxity (lack of strictness) in the recovery of loans. As a result, default rate has tend to swell over time.

(*iii*) Apart from commercial banks, most financial institutions have failed to promote mobilisation of deposits from the farming families. Accordingly, participation of the farmers in the provision of institutional credit continues to be dismal.

12. Why is the percentage of female workers low and lower still in urban areas?

Ans. Percentage of female workers is low and lower still in urban areas because of the following reasons:

(*i*) Female education in India is still a far cry, implying low opportunities of job.

(*ii*) Among most families in urban areas, job work for women is still governed by family decisions rather than the individual's own decision. Implying that even the available opportunities are not actually utilised.

(*iii*) Higher employment among women in rural areas is owing to widespread rural poverty. The bulk of female workers in rural areas are engaged in low paid and less productive jobs just to make a living for their families.

13. Why do people work?

Ans. People work because of the following three reasons:

(*i*) People work to earn a living.

(*ii*) Employment/Work infuses a sense of self-esteem, and brings to the fore our sense of self-worth.

(*iii*) Employment contributes to GDP of the nation, implying growth of the nation.

14. Why is a very high percentage of female workforce in rural areas engaged in primary sector compared with male workforce?

Ans. This is because of the following reasons:

(*i*) Owing to their family as well as social constraints, female workers in the rural areas are unwilling to migrate for jobs outside their villages.

(*ii*) Constraints of migration compels them to work in the area of their residence even for a low wage.

15. How poverty leads to low wages?

Ans. In rural areas, poverty compels the people (particularly the female workers) to accept 'low-wage jobs'. The compulsion arises on account of the following facts:

(*i*) Owing to social constraints, female workers in the rural areas are unwilling to migrate to the urban areas for better jobs opportunities.

(*ii*) Poverty is a compelling force for the woman in rural areas to supplement their family income even when they are to accept low-wage jobs.

16. How economic activity is different from production activity?

Ans. Economic activity is that activity which relates to the use of scarce resources for the satisfaction of human wants. It includes: (*i*) production activity, (*ii*) consumption activity, (*iii*) activity of investment, and (*iv*) activity of exchange.

Production activity is that activity which is related to 'value-addition' for the purpose of generating factor income.

Thus, production activity is only an element of economic activity. In other words, while all production activities are economic activities, all economic activities are not production activities.

17. Write three principal features of occupational structures in India.

Ans. The three principal features of occupational structures in India are as these:

(*i*) Heavy dependence of a large segment of population on the primary sector to make a living.

(*ii*) People living in urban areas are engaged largely in secondary and tertiary sectors.

(*iii*) Tertiary sector is taking a lead over secondary sector as a source of employment in urban areas.

18. Economic infrastructure is also called social infrastructure. Do you agree?

Ans. No. Economic infrastructure is different from social infrastructure.

(*i*) Economic infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy. Social infrastructure, on the other hand, refers to such elements of support system (like schools, colleges, hospitals and nursing homes) which serve as a driving force for social development of a country.

(*ii*) While economic infrastructure directly accelerates the process of growth, social infrastructure accelerates it indirectly through human development.

19. Primary and final sources of energy are not different from each other. Comment.

Ans. No. Primary and final sources of energy are different from each other. The difference is as under:

(*i*) Primary sources of energy are those which are available to us as free gifts of nature. **Example:** Coal, Lignite, Petroleum and Gas. Whereas, final sources of energy are those which are non-available to us as free gifts of nature. These are obtained by converting input into output. **Example:** Electricity.

(*ii*) Primary sources are directly used as energy inputs in the production of goods and services including the production of other sources of energy like electric power. Final sources are to pass through a process of transformation before they are used as energy inputs

(*iii*) Primary sources need no transformation before use. Final sources involve transformation process.

20. Distinguishing between commercial and non-commercial energy.

Ans.

Commercial Energy	Non-Commercial Energy
(*i*) Goods of commercial energy have a market and command a price.	(*i*) Goods of non-commercial energy are generally procured by the villagers as free goods, and these goods generally do not have any recognised market.
(*ii*) Largely used in industrial, and for commercial purposes.	(*ii*) Largely used in domestic, and for consumption purposes.
(*iii*) **Components:** Coal, petroleum products, natural gas, electricity.	(*iii*) **Components:** Firewood, animal waste, agricultural waste.

21. What is bio energy? Write its two kinds.

Ans. Bio energy is obtained from organism or organic matter. It is of two kinds:

(*i*) Biogas: It is that source of energy which is obtained from Gobar Gas Plant by putting cow dung (gobar) into the plant. Besides producing gas, this plant converts gobar into manure. Biogas can also be used for cooking, lighting, heating and generation of electricity.

(*ii*) Biomass: It is a source of producing energy through plants and trees. The objective of biomass programme is to encourage afforestation for energy, so that fuel for the generation of energy based on gas technique could be obtained.

22. Write some important observations on the sectoral share of energy consumption in India.

Ans. Following are some important observations highlighting the sectoral share of energy consumption in India:

(*i*) Industrial sector has maintained its supremacy in energy consumption, compared to other sectors (transport, agriculture and households).

(*ii*) Consumption of commercial energy is very low in agricultural sector. This suggests the dependence of this sector on manual labour and the use of hand-operated tools and implements.

(*iii*) Overtime, there has been a fall in percentage consumption of energy of the transport sector, while share of industrial sector has tended to rise.

23. How is environment important to us?

Ans. Environment is important to us due to the following reasons:

(*i*) Environment offers resources for production.

(*ii*) Environment sustains life.

(*iii*) Environment assimilates waste.

(*iv*) Environment enhances quality of life.

24. State different types of environmental pollution.

Ans. Environmental pollution has three forms:

(*i*) Air Pollution: Air carries oxygen which is an essential element of life. Pollution of air implies pollution of an essential element of life. Accordingly, quality of life is impaired.

(*ii*) Water Pollution: Many states in India are on the brink of water famine. More serious is the problem of its pollution or contamination of water. Use of polluted water leads to the diseases like diarrhoea and hepatitis.

(*iii*) Noise Pollution: Mechanisation has raised the level of noise pollution. Noise pollution has recorded an exponential growth, because millions of vehicles fitted with loud horns and noise-generating engines are plying on the roads.

25. State three principal factors contributing to air pollution in India.

Ans. Following are the principal factors contributing to air pollution in India:

(*i*) Smoke emitted by the industries, particularly those using coal as an energy.

(*ii*) Poisonous gases emitted by the industries in the process of chemical treatment of the materials.

(*iii*) Emission of gases by the motor vehicles which has risen to a threatening level owing to exponential rise in the number of vehicles.

26. State three principal factors contributing to noise pollution in India.

Ans. Following are the principal factors contributing to noise pollution in India:

(*i*) Noise produced by engines of the various means of transport on the surface as well as in the air.

(*ii*) Noise produced by the industrial machines.

(*iii*) Noise produced by the household appliances like mixer-grinders, water boosters and washing machines.

27. What are the causes of degradation of land in India.

Ans. The causes of degradation of land in India are as under:

(*i*) Soil erosion caused by strong winds or floods.

(*ii*) Alkalinity and salinity of soil caused by water logging.

(*iii*) Excessive water logged on the top soil. It tends to suck up the nutrients of the soil and reduces its fertility.

28. State three factors contributing to deforestation in India.

Ans. Following are the principal factors contributing to deforestation in India:

(*i*) Growing industrial demand for wood and other forest products.

(*ii*) Growing demand for wood owing to explosive rise in population.

(*iii*) River valley projects.

B. Short Answer Questions–II [4 marks]

1. How can poverty be combated?

Ans. Measures to remove poverty in India are placed in four categories, as under:

(*i*) Combating poverty through GDP growth.

(*ii*) Combating poverty by improving the distribution of income (through fiscal and legislative measures).

(*iii*) Combating poverty through population control.

(*iv*) Other measures enhancing quality of life of the poor (through development of agriculture, stability in the price level, eradication of unemployment, etc.).

2. State four principal measures initiated by the government to combat poverty in India.

Ans. See Q. 4, page 383, 384.

3. Which poverty alleviation programmes have been implemented in rural India?

Ans. Following poverty alleviation programmes have been implemented in rural India:

(*i*) Swarnajayanti Gram Swarozgar Yojana, launched in the villages, in April 1999.

(*ii*) Sampoorna Gramin Rozgar Yojana, launched on 1st September, 2001.

(*iii*) Pradhan Mantri Gramodaya Yojana, launched in 2001.

(*iv*) Development of Small and Cottage Industries in rural areas.

(*v*) Minimum Needs Programme, launched during the Fifth Plan.

4. State the possible causes leading to limited impact of poverty alleviation programmes in India.

Ans. Possible causes leading to limited impact of poverty alleviation programmes in India are as under:

(*i*) Inefficient administration of the poverty alleviation programmes.

(*ii*) Neglect of remote areas and poor households located in the interiors of the villages .

(*iii*) Large scale leakage in the delivery package.

(*iv*) Lack of integration between the GDP growth strategy and poverty alleviation programmes.

5. How are small land holdings a cause of poverty?

Ans. Small land holdings contribute to poverty of the farmers. Following points may be noted in this regard:

(*i*) It is economically unviable to use modern technology (tractors, thrashers, harvesters) on small holdings. But efficiency suffers. Productivity remains low, leading to low income of the small holders.

(*ii*) Small holders often raise loans from the non-institutional sources, *viz.*, traders and commission agents. They are to pay high rate of interest. This keeps them in a perpetual state of indebtedness.

(*iii*) Owing to their immediate cash needs, small holders are compelled to sell their output in the local markets at a low price. This also contributes to their poverty.

(*iv*) Even when their income is low, small holders tend to waste lot of money on occasions like marriages. This adds to their indebtedness and compounds their poverty.

6. Write four observations suggesting education as an essential element of human resource development.

Ans. Following observations highlight how education is an essential element of human resource development

(*i*) Education produces good citizens.

(*ii*) It facilitates use of natural and human resources of all regions of the country.

(*iii*) It expands mental horizon of the people.

(*iv*) It helps economic development through greater participation of the people in the process of growth and development.

7. State the factors pointing to problems facing human capital formation in India.

Ans. See Q. 7, page 385.

8. Write the observations suggesting education as a challenging proposition in India.

Ans. See Q. 8, page 385.

9. State four principal sources of institutional credit in rural India.

Ans. Four principal sources of institutional credit in rural India are:

(*i*) **Cooperative Credit Societies:** The cooperative credit societies provide adequate credit to the farmers at reasonable rate of interest.

(*ii*) **State Bank of India and Other Commercial Banks:** The State Bank of India was set-up in 1955 with a focus on rural credit. The nationalisation of certain banks was done in 1969. The nationalised commercial banks (through their branch expansion programmes) were directed to offer credit directly to the farmers as well as indirectly through cooperative societies.

(*iii*) **Regional Rural Banks and Land Development Banks:** RRBs and land development banks were set-up to promote credit supplies, particularly in the remote rural areas and backward

(*iv*) **NABARD (National Bank for Agricultural and Rural Development):** NABARD is an apex institution handling policy, planning and operations in the field of rural credit and related economic activities.

10. Write four principal objectives of cooperative credit societies in rural India.

Ans. The four principal objectives of cooperative credit societies in rural India are as follows:

(*i*) To ensure timely and increased flow of credit to the farmers.

(*ii*) To gradually eliminate the moneylenders from the profile of credit agencies.

(*iii*) To spread credit facilities across all regions of the country.

(*iv*) To provide adequate credit support to areas covered by special programmes of development.

11. Explain the four functions of NABARD.

Ans. The four main functions of NABARD are as these:

(*i*) To serve as an apex funding agency for the institutions providing credit in rural areas.

(*ii*) To take appropriate measures to improve the credit delivery system.

(*iii*) To coordinate the rural financing activities of all credit institutions and maintain liaison with Government of India, State Government, Reserve Bank, and other national level institutions concerned with policy formulation.

(*iv*) To undertake monitoring and evaluation of projects refinanced by it.

12. How could agriculture be a profitable business for the small and marginal farmers? Give reasons to support your answer.

Ans. Agriculture could be a profitable business for the small and marginal farmers provided the following steps are initiated by the government:

(*i*) Easy and low cost credit is provided to farmers.

(*ii*) Grants and subsidies are offered for the purchase of agricultural inputs.

(*iii*) Marketing of output is free of middlemen and traders.

(*iv*) Minimum support price is offered across a wide range of crops.

(*v*) Farmers are encouraged to shift to allied activities like dairy farming, fisheries, bee-hiving and poultry farming to supplement their income.

13. Write an observation each on the four types of workers.

Ans. (*i*) Self-employed workers are those workers who are engaged in their own business or own profession.

(*ii*) Hired workers are the workers who work for others.

(*iii*) Casual workers are like daily wagers, not on permanent rolls of the employer.

(*iv*) Regular workers are on permanent rolls of their employer.

14. Distinguishing between formal workers and informal workers.

Ans.

Formal Workers	Informal Workers
(*i*) Formal workers work in organised sector of the economy.	(*i*) Informal workers work in unorganised sector of the economy.
(*ii*) Formal workers are entitled to social security benefits (like provident fund, gratuity, pension, etc.).	(*ii*) Informal workers are not entitled to social security benefits.
(*iii*) They can form trade unions.	(*iii*) They cannot form trade unions.
(*iv*) They are protected by various labour laws against uncertainties of the market.	(*iv*) They remain unprotected by labour laws, and are therefore highly vulnerable to uncertainties of the market.

15. Write four observations pointing to economic consequences of unemployment.

Ans. Following are some important economic consequences of unemployment:

(i) **Non-utilisation of Manpower:** To the extent people are unemployed, manpower resources of the country are not utilised.

(ii) **Loss of Output:** There is a loss of output to the extent manpower resources are not utilised.

(iii) **Low Capital Formation:** Unemployed people add dependency ratio and therefore lead to low savings. As a result, capital formation remain low.

(iv) **Low Productivity:** Owing to disguised unemployment, there is a low level of productivity (output per worker or output per hectare). Low productivity implies low rate of growth.

16. Write four observations pointing to social consequences of unemployment.

Ans. Following are some important social consequences of unemployment:

(i) **Low Quality of Life:** Unemployment lowers the quality of life, implying a state of perpetual suffering.

(ii) **Greater Inequality:** Higher the degree of unemployment, greater the extent of inequality in the distribution of income and wealth. In such situations, growth does not occur with social justice.

(iii) **Social Unrest:** Terrorism may be motivated by several other factors, but the contribution of self-desperation (on account of unemployment) is by no means less significant.

(iv) **Class Struggle:** Unemployment divides the society into haves and have-nots. Accordingly, there is class conflict that compounds the problem of social unrest.

17. Write your observations on the pattern of energy consumption in India.

Ans. Following observations highlight the pattern of energy consumption in India:

(*i*) Pattern of energy consumption means the percentage use of different sources of energy.

(*ii*) Use pattern of energy has undergone a considerable change over time.

(*iii*) Consumption of electricity in agricultural sector has substantially increased over time.

(*iv*) Consumption of electricity in the industrial sectors continue to be the highest compared to other sectors.

18. Write your observations indicating that electricity (as an infrastructure) is an emerging challenge in the Indian economy.

Ans. Following observations indicate that electricity (as an infrastructure) is an emerging challenge in the Indian economy:

(*i*) **Inadequate Generation of Electricity:** In spite of having enough total installed power generation capacity, India is still struggling to meet the surging demand for power. Excess of demand over supply has given rise to many problems.

(*ii*) **Less Capacity Utilisation:** In India, there is an underutilisation of production capacity of thermal power stations. Capacity utilisation is indicated by Plant Load Factor (PLF).

(*iii*) **Transmission and Distribution (T&D) Losses:** In Delhi, transmission and distribution losses of electricity are high, partly due to our backward technology but largely due to pilferage involving the official staff.

(*iv*) **Losses of Electricity Boards:** Electricity is distributed by State Electricity Boards (SEBs). At present, almost all the electricity boards are running into huge losses. They do not have funds to make payment for the electricity purchased by them.

19. How can you cope with the challenge of power generation? Write four suggestions.

Ans. The challenge of power generation can be met through the following four measures:

(*i*) **Increase Production Capacity:** Production capacity or installed capacity needs to be raised to improve the supply of electricity across all sectors of the economy.

(*ii*) **Improve Plant Load Factor:** Plant Load Factor (PLF) needs to be improved so that the existing capacity is fully utilised.

(*iii*) **Minimise the Transmission and Distribution Losses:** Transmission and distribution losses must be minimised so that the actual availability of electricity improves.

(*iv*) **Encourage Privatisation and FDI in Power Generation:** The government must encourage the participation of private sector which is yet to play a significant role in the generation of power in India. Also, FDI (Foreign Direct Investment) in power generation should be encouraged.

20. Define medical tourism. What are the common pitfalls of medical tourism industry in India?

Ans. Medical tourism is the act of travelling to other countries for availing medical treatment. Low treatment costs in the developing nations (like India) is the principal motivating factor.

However, these are certain serious pitfalls relating to medical tourism in India. These are as under:

(*i*) Medical infrastructure is not comprehensively developed.

(*ii*) Deficient facility of interaction between the doctor and the patients across countries.

(*iii*) Enforcement of laws relating to medical tourism is still a far cry.

Owing to these pitfalls, medical tourism in the developing countries has failed to take off to the extent desired.

21. State four principal factors contributing to water pollution in India.

Ans. The four principal factors contributing to water pollution in India are as these:

(*i*) Domestic sewerage that merges with the streams and rivers.

(*ii*) Industrial waste (particularly those using chemicals as inputs) flows into the rivers.

(*iii*) Agricultural run-off mixed with pesticides and insecticides and flowing into the streams and rivers.

(*iv*) Thermal power houses discharging ash mixed with water.

22. Write the four principal features of sustainable development.

Ans. The four principal features of sustainable development are as under:

(*i*) Sustained rise in real per capita income and economic welfare.

(*ii*) Rational use of natural resources.

(*iii*) No reduction in the ability of future generations to fulfil their needs.

(*iv*) No increase in pollution.

23. Which factors contributing to degradation of land in India.

Ans. Following principal factors contributing to degradation of land in India:

(*i*) Loss of vegetation due to desertification and deforestation.

(*ii*) Multiple cropping along with subsistence farming by the small and marginal holders who fail to replenish fertility of the soil.

(*iii*) Excessive use of chemical fertilizers, insecticides and pesticides which raise productivity but are a challenge to soil fertility.

(*iv*) Low water-table, owing to excessive use of groundwater.

(*v*) Soil erosion occurring due to floods and strong winds, and soil alkalinity/salinity occurring due to water logging.

Long Answer Questions [6 marks]

1. Write six points explaining how poverty line is fixed in India.

Ans. Following observations highlight how poverty line is fixed in India:

(*i*) Income cut-off (separating poor from the non-poor) is estimated with reference to consumption cut-off.

(*ii*) In the estimation of consumption cut-off, only private consumption expenditure is considered.

(*iii*) In private consumption expenditure, we consider both food and non-food items.

(*iv*) For the consumption of food items, we work out per capita consumption of calories. Frequency distribution is formed with different class intervals showing the range of calorie consumption and the level of calorie consumption. Higher class shows higher range of calorie consumption.

(*v*) Frequencies are recorded against each class interval. Each frequency counts the number of heads belonging to a particular consumption class.

(*vi*) Finally head-count ratio is worked out showing poor and non-poor (corresponding to the poverty line cut-off), separately for the rural and urban areas. The ratio shows the percentage of population below poverty line.

2. What is meant by poverty? Explain the principal causes of poverty in India with reference to underdevelopment of the Indian economy.

Ans. Poverty implies inability to get minimum consumption requirements for life, health and efficiency.

The principal causes of poverty in India are as follows:

***(i)* Low Level of National Product:** Net national product of India is miserably low compared to its size of population. Low per capita income is the obvious consequence. Implying, greater poverty.

***(ii)* Low Rate of Growth:** Rate of growth of economy has been quite low during Five Year Plans in India. Low growth rate of per capita income has tended to sustain poverty.

***(iii)* Heavy Pressure of Population:** Population has been rising at a rapid pace. Heavy pressure of population adds to dependency burden, implying greater poverty.

(*iv*) **Inflationary Pressure:** Owing to low GDP growth and high growth rate of population, less developed economies like India are vulnerable to inflationary spiral. It means a situation of persistent rise in prices. Inflation compounds poverty. It erodes real income of the households.

(*v*) **Chronic Unemployment and Underemployment:** India is a country sustaining chronic unemployment and underemployment. Poverty is just a reflection of unemployment.

(*vi*) **Capital Deficiency:** Capital stock and capital formation continue to be highly deficient. Lack of capital points to low production capacity. In turn, low production capacity leads to low level of employment. And, low level of employment implies high level of poverty.

3. Explain the principal measures to remove poverty.

Ans. Following are the principal measures to remove poverty:

(*i*) **Accelerating the Pace of Economic Growth:** GDP growth is an ultimate solution to the problem of poverty. When the pace of GDP growth is accelerated, new opportunities of employment are generated. Greater the employment, more inclusive would be the growth process, implying lesser poverty.

(*ii*) **Population Control:** Poverty can be removed only if growth rate of population is moderated so that increase in GDP is translated into increase in per capita GDP.

(*iii*) **Stability in the Price Level:** Price stability is an essential pre-requisite of poverty alleviation. If prices continue to rise, the standard of living of poor will continue to deteriorate.

(*iv*) **Eradication of Unemployment:** Special measures should be taken to eradicate unemployment, underemployment and disguised unemployment. In this context, cottage industries and construction activities should be encouraged in rural areas, the opportunities of employment in rural areas must be fully explored.

(*v*) **Labour-intensive Technique of Production:** India should adopt labour-intensive technique of production. Its adoption will raise the level of employment and reduce the level of poverty.

(*vi*) **Special Focus on Backward Regions:** Government should offer special concessions and facilities to extremely backward and poor regions so as to encourage private investment.

4. Explain the various measures taken by the Government of India to remove the problem of poverty.

Or

Briefly describe the anti-poverty employment programmes that have been launched by the government since independence.

Ans. Following measures have been taken by the Government of India to remove poverty in India:

(*i*) **Swarnajayanti Gram Swarozgar Yojana:** To remove poverty from the rural areas, 'Swarnajayanti Gram Swarozgar Yojana' was launched in the villages, in April 1999. Under this programme, a large number of small enterprises were established in rural areas. The small enterprises were organised as individual enterprises as well as on collective basis as Self-Help Groups (SHGs).

(*ii*) **Pradhan Mantri Gramoday Yojana:** It was launched in 2001. It aims at improving the standard of living of the rural people.

(*iii*) **Swarna Jayanti Shahri Rozgar Yojana (SJSRY):** This Yojana was launched on December 1, 1997. The objective of this yojana is to provide self-employment or wage employment to urban unemployed or underemployed persons.

(*iv*) **Development of Small and Cottage Industries:** Special measures have been taken by the government to develop small and cottage industries with a view to removing poverty and unemployment through the spread of cottage and small-scale industries.

(*iv*) **Minimum Needs Programme:** To raise the standard of living of the poor, Minimum Needs Programme was launched during the Fifth Plan. The programme covers primary education, adult education, rural health, rural water supply, rural roads, rural electrification, rural housing, and ecological improvement of the urban slums. This is expected to improve the quality of life of poorer sections of the society.

(*v*) **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):** Under this Act, all those who are willing to work at the minimum wage are offered work for a minimum period of 100 days. Those seeking employment are to report in those rural areas where the employment programme is being launched.

(*vi*) **Micro Units Development Refinance Agency Bank (MUDRA BANK):** The Government has set up MUDRA Bank in April, 2015. Its objective is to meet credit needs of micro enterprises and self-employed persons.

5. Write the observations suggesting the role of human capital formation in economic growth.

Ans. Following observations highlight the role of human capital formation in economic growth:

(*i*) **Change in Emotional and Material Environment of Growth:** Human capital formation generates a change in emotional and material environment of growth.

(*ii*) **Higher Productivity of Physical Capital:** Human capital formation increases productivity of physical capital. Specialised engineers and skilled workers can certainly handle machines better than the others. It enhances productivity and accelerates the pace of growth.

(*iii*) **Innovative Skills:** Human capital formation facilitates innovations, the under-current of growth and development. Larger the number of skilled and trained personnel, greater the possibilities of innovations in the area of production and related activities.

(*iv*) **Higher Rate of Participation and Equality:** By enhancing productive capacities of the labour force, human capital formation induces greater employment. This increases the rate of participation. Higher the rate of participation, greater is the degree of economic and social equality in the society.

6. Explain the sources/determinants of human capital formation.

Ans. The main sources/determinants of human capital formation are as follows:

(*i*) **Expenditure on Education:** Expenditure on education is the most effective way of raising a productive workforce in the country. It is, therefore, a very important determinant of human capital formation.

(*ii*) **Expenditure on Health:** Expenditure on health makes a man more efficient and, therefore, more productive. His contribution to the production process tends to rise. He adds more to GDP of the nation than a sick person.

(*iii*) **On-the-Job Training:** On-the-job-training helps workers to sharpen their specialised skills. It enables them to raise the level of their efficiency/productivity.

(*iv*) **Study Programmes for Adults:** Other than formal education at the primary, secondary and university levels, the Government and NGOs organise study programmes for adults to make them proficient in their work areas. This enhances their productivity, serving as a source of human capital formation.

(*v*) **Migration:** Migration contributes to human capital formation as it facilitates utilisation of (otherwise) inactive skills of the people, or it facilitates fuller/better utilisation of the skills.

(*vi*) **Expenditure on Information:** Information relating to job markets and educational institutions offering specialised skills is an important determinant of skill formation. It enables people to actualise their productive potential.

7. Which are the main difficulties being faced in the human capital formation in India?

Ans. Following are the main difficulties being faced in the human capital formation in India:

(*i*) **Rising Population:** Rapidly rising population adversely affects the quality of human capital. This is because it reduces per head availability of the existing facilities relating to housing, sanitation, drainage, water-system, hospitals, education, power supply, etc. In turn, this leads to a fall in the capacity to acquire specialised skills and knowledge.

(*ii*) **Brain-Drain:** Migration of persons (born, educated and trained in India) to developed countries is a serious threat to the process of human capital formation in the country. This is described as the problem of brain-drain. This slows down the process of human capital formation in the domestic economy.

(*iii*) **Deficient Manpower Planning:** India is facing an explosive problem relating to graduate unemployment. It is a sad reflection on the wastage of human power and human skill.

(*iv*) **Insufficient On-the-Job Training in Primary Sector:** Primary sector (agriculture in particular) is the backbone of Indian economy. Unfortunately, it has not received due attention in the area of professional skills.

(*v*) **Low Academic Standards:** As a result of opening up of many universities (in enthusiasm to spread higher education), we have a large army of half-baked graduates and post-graduates whose deficient skills only lowers the level of efficiency/productivity.

8. "Education system in India is a big challenge today." Explain.

Ans. Following observations highlight the above statement:

(*i*) **Large Number of Illiterates:** India harbours the largest number of illiterates in the world. The number exceeds even the total population of most countries in the world.

(*ii*) **Inadequate Vocationalisation:** Education continues to be largely degree-oriented throwing millions of educated youths down to the corridors of employment exchanges. Vocationalisation of education is still a far cry.

(*iii*) **Gender Bias:** There is still a significant 'gender-bias' in offering opportunities of education to male and female children. The enrolment ratio is relatively low for the female candidates and their drop-out ratio is considerably high.

(*iv*) **Low Rural Access Level:** There is a high degree of disparity in access to education. The 'access level' is considerably low for the rural population compared to the urbans.

(*v*) **Privatisation:** There is a growing trend towards privatisation of education. Being very expensive, private education has tended to widen the gulf between access level for the rich and the poor.

9. Explain the sources of agricultural credit.

Ans. The sources of rural or agricultural credit in India are broadly classified as:

(*i*) Institutional sources, and (*ii*) Non-institutional sources.

See Q. 9, page 379, for the first part.

The non-institutional sources include: (*i*) Landlords, (*ii*) Village traders, and (*iii*) Moneylenders. Traditionally, most credit needs of the farmers were met through these sources. Non-institutional sources are the conventional/traditional sources.

10. Describe the principal measures initiated by the government to improve marketing system for the farmers in India.

Ans. In order to improve the marketing system for the farmers, the government has initiated the following measures:

(*i*) **Regulated Markets:** Regulated markets have been established where sale and purchase of the produce is monitored by the Market Committee. Market system is made transparent with a strict vigil on the use of proper scales and weights. The market committees ensure that the farmers get appropriate price for their produce.

(*ii*) **Cooperative Agricultural Marketing Societies:** The government is encouraging the formation of such kind of societies. As members of these societies, farmers find themselves better bargainers in the market, getting better price of their produce through collective sale.

(*iii*) **Provision of Warehousing Facilities:** With a view to avoiding distress sale, the government is offering warehousing facilities to the farmers.

(*iv*) **Subsidised Transport:** Railways are offering subsidised transport facility to the farmers to bring their produce to the urban markets where often they get a better deal.

(*v*) **Dissemination of Information:** Electronic media and print media are actively engaged in offering market related information (particularly related to price) to the farmers. This helps the farmers in deciding how much to sell and when to sell.

(*vi*) **Minimum Support Price (MSP) Policy:** MSP policy is an important step initiated by the government to improve agricultural marketing system.

11. State the possible non-farm areas of production activity for the rural population.

Ans. The main non-farm areas of production activity for the rural population are as these:

(*i*) **Animal Husbandry:** It is an important area of employment in India different from crop farming. It is also called livestock farming.

(*ii*) **Fisheries:** The fishing community in India depends almost equally on inland sources and marine sources of fishing. Inland sources include rivers, lakes, ponds and streams, while marine sources include seas and oceans.

(*iii*) **Horticulture:** It is more like diversification of crop production rather than a source of employment different from crop farming. Horticultural crops include fruits, vegetables and flowers besides several others.

(*iv*) **Cottage and Household Industry:** Cottage and household industry has been a traditional source of non-farm production activity in rural areas.

12. Explain the advantages of organic farming in India.

Ans. The main advantages of organic farming in India are as follows:

(*i*) It discards the use of non-renewable resources.

(*ii*) It is a environment-friendly farming system.

(*iii*) It helps sustain soil fertility.

(*iv*) It offers healthier and tastier food.

(*v*) It offers inexpensive farming-technology to small and marginal farmers.

13. Define organic farming. Why is it necessary?

Ans. Organic farming is a system of farming that relies upon the use of organic inputs for cultivation. It discards the use of chemical inputs.

See Q. 12, above for the second part.

14. Describe the broad classification of unemployment in India.

Ans. Unemployment in India can be classified under following two heads:

(*i*) **Rural Unemployment:** Rural unemployment is of two types:

(*a*) **Disguised Unemployment:** Disguised unemployment occurs when the number of workers engaged in a job is much more than actually required to accomplish it. If some of them are withdrawn from that job, total production will not fall.

(*b*) **Seasonal Unemployment:** It occurs simply because agriculture is a seasonal occupation. During off-season, often the farm workers are out of job. They have no work to do.

(*ii*) **Urban Unemployment:** In urban areas, unemployed people are often registered with employment exchanges.

(*a*) **Industrial Unemployment:** It includes those illiterate persons who are willing to work in industries, mining, transport, trade and construction activities, etc.

(b) **Educated Unemployment** In India the problem of unemployment among the educated people is also quite grave. It is a problem spread across all parts of the country, and poses a serious threat to social peace and harmony.

15. What is meant by unemployment? Explain different types of unemployment in India.

Ans. Unemployment refers to a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.

In India, following types of unemployment are found across urban and rural areas of the country:

(i) **Open Unemployment:** Open unemployment occurs when a worker is willing to work, and has the necessary ability to work, yet he does not get work. He remains unemployed for full time.

(ii) **Structural Unemployment:** Structural unemployment occurs due to structural changes in the economy.

(iii) **Underemployment:** Underemployment is a situation in which a worker does not get a full time job. He remains unemployed for some months in a year or some hours everyday.

Underemployment is of two kinds:

(a) **Visible Underemployment:** In this case, people work lesser than the standard hours of work in a day.

(b) **Invisible Underemployment:** In this case, people work full time but their income is not proportionate to their abilities.

(iv) **Frictional Unemployment:** It occurs due to imperfections in the mobility of labour across different occupations.

(v) **Cyclical Unemployment:** It occurs owing to cyclical fluctuations in the economy.

16. Explain the possible causes of massive unemployment in India.

Ans. The important causes of massive unemployment in India are as these:

(i) **Slow Economic Growth:** Indian economy is underdeveloped and its rate of growth is very slow. Slow growth rate fails to generate enough employment opportunities for the rising labour force.

(ii) **Rapid Growth of Population:** Constantly rising population has been a grave problem in India. It is one of the principal factors contributing to unemployment.

(iii) **Agriculture–A Seasonal Occupation:** Agriculture is underdeveloped in India and so offers seasonal employment. Its seasonal character does not provide stable jobs to the farmers throughout the year. Farmers often remain idle for three to four months in a year.

(iv) **Lack of Irrigation Facilities:** Despite decades of planning, irrigation facilities continue to be scant. For want of irrigation, mono-cropping (only one crop a year) becomes a compulsion. In the absence of multi-cropping, opportunities of employment remain limited.

(v) **Low Savings and Investment:** There is scarcity of capital and even the scarce capital has not been optimally used to eradicate unemployment. Bulk of the capital has been invested in large-scale industries where there is high capital per unit of labour. Employment of labour per unit of capital remains significantly low.

(vi) **Limited Mobility of Labour:** Mobility of labour in India is very low. Owing to a variety of family as well as social constraints, people are unwilling to move to far-off areas even when jobs are available there. Lesser the mobility, greater the unemployment.

(vii) **Use of Labour-saving Technology:** GDP growth is increasingly becoming dependent on the use of labour-saving technology, rather than employment of labour. Consequently, GDP growth fails to generate opportunities of employment.

17. Suggest suitable measures to solve the problem of unemployment.

Ans. Following are the important measures to solve the problem of unemployment:

(*i*) **Increase in Production:** To increase employment, it is essential to increase production in agriculture and industrial sectors. Development of small and cottage industries should be encouraged.

(*ii*) **Increase in Productivity:** Demand for labour is directly related to the productivity of labour. Higher productivity generates higher profits and therefore, greater demand for labour. Accordingly, productivity (implying efficiency) of labour must improve.

(*iii*) **High Rate of Capital Formation:** Rate of capital formation in the country should be increased. Also, investment must be directed to such areas of production where employment potential is high. Notably, capital-output ratio should be kept low.

(*iv*) **Help to Self-employed Persons:** Government should provide facilities like irrigation, better seeds, manure, implements, credit, etc., to small and marginal farmers in agriculture. In addition, self-employed persons in urban areas should be given facilities of credit, marketing, raw material, technical training and the like.

(*v*) **Technique of Production:** Technique of production should suit the needs and means of the country. It is essential that labour-intensive technology is encouraged in place of the capital-intensive technology.

(*vi*) **Importance to Employment Programmes in Plans:** Such programmes should be given greater importance in plans which are likely to raise the level of employment.

18. How infrastructure impacts economic growth? Write six observations.

Ans. Following observations highlight how infrastructure impacts economic growth:

(*i*) Infrastructure impacts productivity in primary sector, secondary sector and tertiary sector of the economy.

(*ii*) Infrastructure induces investment. In fact, infrastructure is the backbone of business investment.

(*iii*) Infrastructure generates linkages in production. It is a situation when expansion of one industry facilitates the expansion of the other. Accordingly, growth becomes a self-propelling activity of change.

(*iv*) Infrastructure enhances size of the market. It was with a view to expanding size of the market for the British products in India that a network of railways was developed under the British Raj.

(*v*) Infrastructure enhances ability to work. Implying a rise in efficiency and therefore, a rise in productivity. Accordingly, growth process is accelerated.

(*vi*) Infrastructure facilitates outsourcing. India is emerging to be global destination for call centres, study centres and medical tourism. It is owing largely to its sound system of social infrastructure.

19. Write the observations suggesting improvement in health facilities in India after independence.

Ans. The following observations suggest improvement in health facilities in India after independence:

(*i*) Decline in death rate.

(*ii*) Reduction in infant mortality rate (referring to death of the infants up to 1 year of age).

(*iii*) Rise in expectancy of life (average life of a person).

(*iv*) Control over deadly diseases [like malaria, tuberculosis (TB), cholera and smallpox].

(*v*) Decline in under-five mortality rate.

20. Write the observations highlighting the deficiency of our social infrastructure in terms of health facilities.

Ans. Following observations highlight the deficiency of our social infrastructure in terms of health facilities:

(*i*) **Unequal Distribution of Healthcare Services:** Distribution of healthcare services is extremely unequal across rural and urban sectors of the country. Most of the healthcare facilities have been confined to the urban areas.

(*ii*) **Communicable Diseases:** Communicable diseases like AIDS (Acquired Immune Deficiency Syndrome), HIV (Human Immunodeficiency Virus) and SARS (Severe Acute Respiratory Syndrome) are raising their ugly heads and are posing a serious threat to the society.

(*iii*) **Poor Management:** There is a substantial mismatch between the personnel for healthcare and the number of healthcare centres. Health personnel are grossly inadequate particularly in the rural areas, and often the rural folk have to rush to the urban healthcare centres or be the victims of local quacks (un-authorised doctors).

(*iv*) **Privatisation:** The government is gradually moving towards privatisation of healthcare services. The number of private hospitals is surging in place of government hospitals. Consequently, healthcare is becoming increasingly expensive and beyond the reach of the millions in India.

(*v*) **Poor Upkeep and Maintenance:** Upkeep and maintenance of the government healthcare centres is very poor. The quality difference between private and public hospitals is so huge that the people are often compelled to depend on private treatment, even when not affordable.

(*vi*) **Poor Sanitation Level:** Sanitation level is extremely poor both in the rural and urban areas in India.

21. Why is India one of the most favourable medical tourism destinations in the world?

Ans. India is one of the most favourable medical tourism destinations in the world due to these reasons:

(*i*) Cost of medical treatment in India is significantly lower than in most developed countries of the world.

(*ii*) India offers high quality medical services.

(*iii*) India has abundant availability of hospitals, beds and nurses for the medical tourists.

(*iv*) Attractive packages are available for the specialised medical treatment.

(*v*) Availability of traditional Ayurveda treatment is an added attraction for the foreigners.

22. Define the concept of environment. Explain its functions.

Ans. Environment is defined as all those conditions and their effects which influence human life. It includes: biotic (or living) components, *viz.*, plants and animals, and abiotic (or physical) components, *viz.*, climate, mountains, land, water and air.

Its main functions are as these:

(*i*) **Environment Offers Resources for Production:** Environment includes physical resources (minerals, wood, water, soil and others) which are available to us as a free gift of nature. These resources are used as inputs for production. In fact, production is simply the process of conversion of natural resources into useful things.

(*ii*) **Environment Sustains Life:** Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. Absence of these elements of environment implies the end of life.

(*iii*) **Environment Assimilates Waste:** Production and consumption activities generate wastes. This occur mostly in the form of garbage. Environment absorbs it.

(*iv*) **Environment Enhances Quality of Life:** Surroundings include rivers, oceans, mountains and deserts. Man enjoys these surroundings, adding to the quality of his life.

23. Explain the principal causes of environmental degradation.

Ans. Principal causes of environmental degradation are as under:

(*i*) **Population Explosion:** Pressure of population on land has tremendously increased and consequently land has been ruthlessly exploited. It has caused substantial conversion of forest land into industrial and residential buildings.

(*ii*) **Widespread Poverty:** A large section of the poor people cut trees for fuel wood which they sell to earn their livelihood. This causes a massive erosion of natural capital.

(*iii*) **Increasing Urbanisation:** Increasing urbanisation has caused pressure on housing and other civic amenities. It has resulted in increasing demand for land and excessive exploitation of other natural resources.

(*iv*) **Increasing Use of Insecticides, Pesticides and Chemical Fertilizers:** Increasing use of chemical fertilizers, pesticides and insecticides has also added to environmental pollution.

(*v*) **Rapid Industrialisation:** Rapid industrialisation has also contributed to air, water and noise pollution. Industrial smoke is a serious pollutant.

(*vi*) **Multiplicity of Transport Vehicles:** Multiplicity of transport vehicles has substantially increased noise and air pollution.

24. Describe the observations suggesting protection of environment.

Ans. Following observations suggest how to protect the environment:

(*i*) **Social Awareness:** There is an urgent need to spread social awareness about the dangers of pollution, and the way each individual can combat it.

(*ii*) **Population Control:** It is absolutely essential to check rising population if environment is to be protected.

(*iii*) **Afforestation Campaign:** Extensive afforestation campaign should be launched to protect environment.

(*iv*) **Control over Industrial and Agricultural Pollution:** It is essential for environmental protection that air and water pollution caused by industrial development are managed and controlled. To avoid agricultural pollution, use of pesticides and chemical fertilizers should be restricted.

(*v*) **Water Management:** River waters should be kept clean and provision be made to supply clean drinking water to the rural people.

(*vi*) **Management of Solid Waste:** Planned management of solid waste is very essential. It should be treated chemically. Rural garbage should be converted into compost.

25. What do you understand by sustainable development? Describe the main features of sustainable development.

Ans. Sustainable development is that process which fulfils the needs of present generation without challenging the ability of the future generations to fulfil their needs. Implying that the resources are not fully exploited, but rationally utilised.

Main features of sustainable development are as under:

(*i*) **Sustained Rise in Real Per Capita Income and Economic Welfare:** There should be a sustained rise in real per capita income and economic welfare over time.

(*ii*) **Rational Use of Natural Resources:** Sustainable development simply means that natural resources be rationally used in a manner such that they are not excessively exploited.

(*iii*) **Ability of Future Generations to Fulfil their Needs not to be Impaired:** Sustainable development stresses the point that the ability of the future generations to fulfil their needs is not impaired in the wake of competitive growth process.

(*iv*) **Check on Pollution:** Sustainable development discards those activities (related to growth) which induce environmental pollution. Environmental pollution is to be viewed as an element of social cost.

26. Explain the strategies for sustainable development.

Ans. The main strategies for sustainable development are as under:

(*i*) **Input-Efficient Technology:** We are to devise such production technologies which are input-efficient. It means output is maximised. This will moderate the stress on resource endowment per unit of input.

(*ii*) **Use of Environment-Friendly Sources of Energy:** The use of LPG and CNG (which are cleaner fuels and environment-friendly) must be encouraged in place of petrol and diesel which emit huge amount of carbon-dioxide adding to the impact of Green House Gases. People in rural areas should be discouraged from using wood as a fuel. It causes deforestation and unwarranted degradation of resources. Instead, gobar gas plants may be developed as a source of domestic fuel.

(*iii*) **Integrated Rural Development:** Integrated rural development must be given a high priority in the programmes of state planning. This will generate employment opportunities in rural areas, restricting migration to urban areas.

(*iv*) **Shift to Organic Farming:** Excessive use of chemical fertilizers, insecticides and pesticides has raised the crop yield. But at the cost of soil fertility, which means a loss of production capacity for the future generations. Implying, we have to switch over to organic farming which focuses on soil-health rather than the plant-health.

(*v*) **Manage the Wastes:** Rather than allowing the industrial waste and household garbage to litter around or flow into the streams and rivers, we must systematically manage them. Household waste can be recycled into compost and used as a manure for organic farming.

(*vi*) **Public Means of Transport:** Use of public means of transport (which are rapid, comfortable and economical) will cut the private vehicular traffic in and around the metro cities. Accordingly, environmental pollution (air and noise pollution in particular) will be curbed/ reduced.

27. Explain the difference among the concepts of economic growth, economic development and sustainable development.

Ans.

Economic Growth	Economic Development	Sustainable Development
(*i*) It refers to long-term increase in real per capita income.	(*i*) It refers to long-term increase in real per capita income and economic welfare.	(*i*) It refers to increase in real per capita income, and economic welfare of both the present and future generations.
(*ii*) This concept is generally used with reference to developed economies.	(*ii*) It is generally used in the context of underdeveloped economies.	(*ii*) It is used for both developed and underdeveloped economies.
(*iii*) It ignores distribution of income.	(*iii*) It does not ignore distribution of income.	(*iii*) It does not ignore distribution of income.
(*iv*) It ignores protection of environment.	(*iv*) It lays no special emphasis on environmental protection.	(*iv*) It lays special emphasis on environmental protection.
(*v*) It does not account for the exploitation of natural capital.	(*v*) It does not account for the exploitation of natural capital.	(*v*) It emphasises rational utilisation of natural capital to safeguard the interests of future generations.
(*vi*) It does not account for structural, technical and institutional changes in the economy.	(*vi*) Lays special stress on the structural, technical and institutional changes in the economy.	(*vi*) Lays stress on social awareness and social responsibilities as crucial inputs of development over longer periods of time.

NCERT QUESTIONS

1. Why calorie-based norm is not adequate to identify the poor?

Ans. A major problem with calorie-based norm is that it groups all the poor together and does not differentiate between the very poor and the other poor. It is difficult to identify who among the poor needs help the most.

2. Why are employment generation programmes important in poverty alleviation in India?

Ans. Unemployment and underemployment lies at the core of poverty. For the poor, labour is often the only asset they can use to improve their well-being. Hence, employment generation is essential for poverty alleviation.

3. How can creation of income earning assets address the problem of poverty?

Ans. Creation of income earning assets can go a long way in eradicating poverty. Let us give land to the landless workers in rural areas. Let us give loans for the purchase of business assets to the educated unemployed in the urban areas. This would encourage people to be self-employed. Addressing the problem of poverty through self-employment schemes (based on the provision of income earning assets) is indeed the most effective means as it improves the rate of participation and also empowers the poor. This would mean multi-dimensional attack on poverty as it would not only combat poverty but also ensure skill formation, besides better health and higher literacy.

4. What programmes has the government adopted to help the elderly people, poor and destitute women?

Ans. National Social Assistance Programme.

This is a scheme initiated by the central government offering social assistance to the elderly people, poor and destitute women in the form of monthly pension. Widows are also covered under this scheme.

5. Is there any relationship between unemployment and poverty? Explain.

Ans. Unemployment and poverty are positively related to each other. In fact one is the reflection of the other.

Unemployed persons live in poverty as they do not have any source of income. In fact, poverty of the unemployed persons breeds itself. Because, owing to their poverty, they raise loans at high interest rates. And, owing to their inability to re-pay loans, they pushed them into a vicious circle of poverty. Poverty thus breeds itself. Lack of employment further accentuates this cycle.

6. Illustrate the difference between rural and urban poverty. Is it correct to say that poverty has shifted from rural to urban areas? Use the trends in poverty ratio to support your answer.

Ans. Rural poor (or rural poverty) include landless agricultural workers, marginal holders, and tenants-at-will. On the other hand, urban poor (or urban poverty) include migrants from the rural areas in search of employment, casual factory workers and self-employed serving largely as street vendors. Urban poor are largely the spillover of the rural poor, migrating to urban areas in search of jobs.

Yes, to a large extent, poverty has shifted from rural to urban areas. People tend to migrate from rural areas to urban areas in search of jobs. But, not finding jobs beyond subsistence, they only add to the percentage of BPL (below poverty line) population in urban areas.

Table 1 shows trends of rural-urban poverty in India.

Table 1. Percentage of Population below Poverty Line across Rural and Urban Areas in India

	1972-73	1987-88	1993-94	1999-2000	2004-05	2009-10	2011-12
Rural	54	39.1	37.3	27.1	41.8	33.8	25.7
Urban	42	38.2	32.4	23.6	25.7	20.9	13.7
Total	51	38.9	36.0	26.1	37.2	29.8	21.9

The above table shows that both rural and urban poverty have declined over time.

But decline in rural poverty is more pronounced than the decline in urban poverty. This is because urban poverty to a large extent is the spill-over of rural poverty: poverty has been shifting from rural to urban areas.

7. What are the two major sources of human capital in a country?

Ans. (*i*) Investment in health, and (*ii*) Investment in education.

8. What are the indicators of educational achievement in a country?

Ans. Adult literacy level, primary education completion rate and youth literacy rate.

9. Bring out the differences between human capital and human development.

Ans. The differences between human capital and human development are as follow:

Human capital is a means to an end. Human capital is a means in the sense that it consists of 'skills' as used in the process of production. It consists of 'know-how', abilities and expertise used as inputs in the production activity.

Human development, on the other hand, is an end itself. It refers to development of the individuals as valuable personalities by acquiring good education and attaining good health. Human development occurs when more and more individuals in a society are educated, healthy and skill-oriented.

10. What factors contribute to human capital formation?

Ans. See Q. 6, page 384.

11. How do government organisations facilitate the functioning of schools and hospitals in India?

Ans. The Union Ministry of education and Ministries of education at State level, Departments of education and various organisations like National Council of Educational Research and Training (NCERT), University Grants Commission (UGC) and All India Council of Technical Education (AICTE) facilitate the functioning of schools and institutions related to education. Similarly, the Ministries of health at the Union and State level, Departments of health and various organisations like Indian Council for Medical Research (ICMR) facilitate institutions which come under the health sector.

12. Education is considered to be an important input for the development of a nation. How?

Ans. Education is considered to be an important input for the development of a nation. This is because:

See Q. 6, page 378, 379.

13. Discuss the following as a source of human capital formation:

(*i*) Health infrastructure.

(*ii*) Expenditure on migration.

Ans. (*i*) **Health Infrastructure:** Expenditure on health makes a man more efficient and, therefore, more productive. His contribution to the production process tends to rise. He adds more to GDP of the nation than a sick person.

(*ii*) **Expenditure on Migration:** Migration contributes to human capital formation as it facilitates utilisation of (otherwise) inactive skills of the people, or it facilitates fuller/better utilisation of the skills. Gains of migration (in terms of higher salaries) are greater than the cost of migration.

14. How does investment in human capital contribute to growth?

Ans. Human capital formation is indicated by a rise in the level of education and health of the residents of a country. It is also indicated by a rise in the level of skill formation in the country. It contributes to the process of growth as under:

(*i*) Availability of educated and skilled labour force through human capital formation raises the emotional and material environment of growth.

(*ii*) It raises productivity of physical capital.

(*iii*) It facilitates innovative skill that accelerates the process of growth.

(*iv*) It raises the rate of participation and equality in the country.

15. Bring out the need for on-the-job-training for a person.

Ans. See Q. 6, point (*iii*), page 384.

16. Discuss the need for promoting women's education in India.

Ans. Women's education in India is imminent as it improves their economic independence and social status. It enhances their empowerment.

17. Argue in favour of the need for different forms of government intervention in education and health sectors.

Ans. Yes, need for different forms of government intervention in education and health sectors is necessary on account of the following facts:

See Q. 7, page 374.

18. What are the main problems of human capital formation in India?

Ans. See Q. 7, page 385.

19. What do you mean by rural development? Bring out the key issues in rural development.

Ans. Rural development means an 'action-plan' for the economic and social growth of the rural areas. The action-plan is to focus on the lingering and emerging challenges in rural areas.

The principal lingering challenges of rural development are:

(*i*) challenge of rural credit, and

(*ii*) challenge of rural marketing.

Emerging challenges of rural development include basically:

(*i*) exploring options of sustainable livelihood, other than farming, and

(*ii*) the challenge of organic farming.

20. Discuss the importance of credit in rural development.

Ans. (*i*) Most rural people are poor and most farmers are small and marginal holders. As the small and the marginal farmers produce only for their subsistence, they fail to generate sufficient surplus to reinvest on their lands leading to degradation of the land. Thus, credit helps the small and marginal farmers to carrying out permanent improvements on their land and commercialise their farming.

(*ii*) Owing to a long gestation lag between sowing and harvesting of the crops, short-term credit is required for the purchase of inputs (seeds, fertilizers, etc.).

(*iii*) Rural artisans and farmers require funds for meeting their general and specific needs.

(*iv*) Agriculture continues to depend on uncertain monsoon. In order to save them from natural calamities farm credit becomes essential.

21. Explain the role of micro-credit in meeting credit requirements of the poor.

Ans. Micro-credit refers to small loans (available through SHGs) and meant for the impoverished people. These loans are offered without any security and at a moderate rate of interest. Presently, more than seven lakh SHGs are operating across different rural areas. Credit provisions by the

SHGs is known as Micro-Credit Programme. These programmes are becoming popular among small borrowers owing to their 'informal credit delivery mechanism' involving minimum legal formalities.

22. Explain the steps taken by the government in developing rural markets.

Ans. In order to develop rural markets (or agricultural marketing), the government has initiated a series of steps, as under:

(*i*) Regulated markets have been set up.

(*ii*) Cooperative agricultural marketing societies have been formed.

(*iii*) Provision of warehousing facilities.

(*iv*) Subsidised transport for the transportation of farm output.

(*v*) Dissemination of marketing information for the benefit of the farming population.

(*vi*) MSP policy, focusing on some stable income to the farmers.

23. Why is agricultural diversification essential for sustainable livelihoods?

Ans. Agricultural diversification refers to the allocation of farm's productive resources to diverse areas of crop output, so as to reduce market risk. Owing to changes in the relative price structure, if one crop fetches low revenue, the other may fetch high. Thus, diversification helps stabilisation of farm income by lowering the market risk.

Diversification also minimises risk occurring due to monsoon failure.

24. Critically evaluate the role of the rural banking system in the process of rural development in India.

Ans. Rural banking in India has significantly expanded over time. Its advantages are as under:

(*i*) Nationalisation of commercial banks marked the beginning of social banking in rural areas, implying provision of institutional credit at moderate rates of interest.

(*ii*) Establishment of NABARD has made a substantial difference in the institution of rural credit. Rural financing has become much more organised than ever before.

(*iii*) Institutional credit has liberated the farmers from the debt trap of mahajans and moneylenders. Also, institutional credit has promoted commercialisation of agriculture.

But deficiencies of rural banking system are equally glaring. Important ones are:

(*i*) Banking credit or institutional credit has often been tied to collateral (security or guarantee of a property for the loans), because of which a large section of small and marginal holders are often left out.

(*ii*) Owing to political populism, the government has often shown laxity (lack of strictness) in the recovery of loans. As a result, default rate has tend to swell over time.

(*iii*) Apart from commercial banks, most financial institutions have failed to develop a culture of thrift (saving for the future) among the farming families. Mobilisation of deposits has remained rather subdued.

25. What do you mean by agricultural marketing?

Ans. Agricultural marketing may be defined as the process that involves: gathering the produce after harvesting, processing the produce, grading the produce according to its quality, packaging the produce according to buyers' preferences, storing the produce for future sale, and selling the produce when price is lucrative.

26. Mention some obstacles that hinder the mechanism of agricultural marketing.

Ans. Major obstacles that hinder the mechanism of agricultural marketing are as follows:

(*i*) Lack of transportation facilities.

(*ii*) Distress sale by the farmers.

(*iii*) Lack of credit facilities.

(*iv*) Lack of storage facilities.
(*v*) Presence of middlemen.
(*vi*) Lack of standard weights and measures.
(*vii*) Inadequate market information.

27. Who is a worker?

Ans. A worker is an individual who is in some employment to earn a living.

28. Define worker-population ratio.

Ans. Worker-population ratio is defined as the number of persons employed per thousand persons.

$$\text{WPR} = \frac{\text{Number of employed person}}{\text{Total population}} \times 1{,}000$$

29. Are the following workers—a beggar, a thief, a smuggler, a gambler? Why?

Ans. Beggars, thieves, smugglers or gamblers are not workers because they are not in any employment to earn a living and are not generating any kind of factor income.

30. The newly emerging jobs are found mostly in the __________ sector. (service/manufacturing)

Ans. Service

31. An establishment with four hired workers is known as __________ (formal/informal) sector establishment.

Ans. Informal (informal sector includes those establishments which hire less than 10 workers).

32. Compared to urban women, more rural women are found working. Why?

Ans. Compared to urban women, more rural women are found working. This is because in rural areas, poverty compels women workforce to seek employment. Thus, employment (even without education) is a priority. In urban areas, on the other hand, high priority for education implies low priority for jobs at an early age.

33. Meena is a housewife. Besides taking care of household chores, she works in the cloth shop which is owned and operated by her husband. Can she be considered as a worker? Why?

Ans. Being a housewife, Meena is merely a helping hand to her husband in his cloth shop. She is not to be considered as a worker.

34. Find the odd man out (who is not a worker) (*i*) rickshaw puller who works under a rickshaw owner, (*ii*) mason, (*iii*) mechanic shop worker, (*iv*) shoeshine boy.

Ans. Shoeshine boy because he is self-employed, all others come under the category of worker.

35. Explain the term 'infrastructure'.

Ans. Infrastructure refers to support system of economic and social development of a country, without which economic growth and social development is not possible. Infrastructure is broadly categorised as: (*i*) economic infrastructure, and (*ii*) social infrastructure.

36. Explain the two categories into which infrastructure is divided. How are they both interdependent?

Ans. Infrastructure is divided into two categories:

(*i*) **Economic Infrastructure:** It refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.

(*ii*) **Social Infrastructure:** It refers to such elements of support system (like schools, colleges and hospitals) which serve as a driving force for social development of the country.

While economic infrastructure directly accelerates the process of growth, social infrastructure accelerates it indirectly through human development.

Indeed, economic growth is incomplete without human development. Accordingly, economic and social infrastructure are complementary to each other; one reinforces the other.

37. How does infrastructure boost production?

Ans. Infrastructure provides support services (like roads, railways, ports, airports, telecommunication facilities, etc.) in the areas of industrial and agricultural production. Some of these facilities have a direct impact on production of goods and services while others give indirect support by building the social sector of the economy. Across all sectors of economy (primary, secondary and tertiary sectors), high productivity is possible only when we have good infrastructural facilities.

38. Infrastructure contributes to the economic development of a country. Do you agree? Explain.

Ans. Yes, infrastructure contributes to the economic development of a country. Following observations highlight how exactly infrastructure contributes to the process of growth and development:

See Q. 18, page 388.

39. What is the state of rural infrastructure in India?

Ans. According to the census 2001, only 56 per cent of rural households have an electricity connection and 43 per cent still use kerosene. For cooking, about 90 per cent household of rural India use bio-fuels. Supply of tap water is available to only 24 per cent households in rural areas. About 76 per cent of the population drinks water from open sources such as wells, tanks, ponds, lakes, rivers, canals, etc. Access to improved sanitation in rural areas is only 20 per cent.

40. Differentiate between commercial and non-commercial sources of energy.

Ans. The difference between commercial and non-commercial sources of energy are as under:

(*i*) Goods of commercial energy are largely used for commercial purposes in the factories and farms. **Example:** Coal, petroleum products, natural gas and electricity. Whereas, goods of non-commercial energy are generally used in the rural households as consumer goods. **Example:** Firewood, agricultural waste (straw, etc.) and animal waste (cow dung).

(*ii*) Goods of commercial energy command price while goods of non-commercial energy do not.

(*iii*) Also, commercial sources of energy are exhaustible, while the sources of non-commercial energy are renewable.

41. What are the three basic sources of generating power?

Ans. (*i*) Thermal Power Stations,

(*ii*) Hydro-electricity Stations, and

(*iii*) Atomic Power Stations.

42. What do you mean by transmission and distribution losses? How can they be reduced?

Ans. Transmission losses of electricity refer to losses between the source of supply and the points of distribution.

Distribution losses refer to losses of electricity while it is being finally distributed to the consumers. Pilferage is an important component of distribution losses.

These losses can be reduced by checking pilferage and by better maintenance of the plants and equipment.

43. What are the various non-commercial sources of energy?

Ans. Firewood, agricultural waste and dried dung.

44. Justify that energy crisis can be overcome with the use of renewable sources of energy.

Ans. We face an energy crisis, since gas and oil resources are diminishing. The oil reserves are drying up and a world energy crisis is in the offing. This can be averted only with the use of renewable sources of energy.

45. How has the consumption pattern of energy changed over the years?

Ans. See Q. 17, page 380.

46. How is the rate of growth of power supply connected to the rate of economic growth of India?

Ans. Various studies suggest that in order to have 8 per cent GDP growth per annum, power supply needs to grow around 12 per cent annually.

47. What problems are being faced by the power sector in India?

Ans. The major problems faced by the power sector in India are as under:

(*i*) Inadequate generation of electricity.

(*ii*) Less capacity utilisation.

(*iii*) Transmission and Distribution (T&D) Losses.

(*iv*) Losses of electricity boards.

48. Discuss the reforms which have been initiated recently to meet the energy crisis in India.

Ans. Privatisation of the power sector, particularly with regard to:

(*i*) the distribution of power

(*ii*) minimising the transmission and distribution losses, and

(*iii*) improving the supply of inputs to power plants.

49. What is a 'global burden of disease'?

Ans. Global burden of disease is an indicator used to assess (i) the number of premature deaths due to a particular disease, and (ii) the duration of disability of the persons suffering from that disease.

50. Discuss the main drawbacks of our healthcare system.

Ans. The main drawbacks of our healthcare system are as these:

(*i*) Unequal distribution of healthcare services across rural and urban areas are not given their due priority.

(*ii*) Communicable diseases (like AIDS, HIV and SARS).

(*iii*) Poor management of the health infrastructure.

(*iv*) Privatisation of healthcare, leading to unbearable cost-burden.

(*v*) Poor upkeep and maintenance of the government hospitals.

(*vi*) Poor sanitation level.

51. How has women's health become a matter of great concern?

Ans. Women's health in India become a matter of great concern. Because, more than 50 per cent of women in India in the age group of 15-49 years suffer from nutritional deficiency. Female foeticide is a common practice, causing a decline in sex ratio (from 946 in 1951 to 940 in 2011) and suggesting a social bias of healthcare against women in the country.

52. Name the six systems of Indian medicine.

Ans. (*i*) Ayurveda, (*ii*) Yoga, (*iii*) Unani, (*iv*) Sidha, (*v*) Naturopathy, and (*vi*) Homeopathy (AYUSH).

53. What is meant by environment?

Ans. Environment is defined as all those conditions and their effects which influence human life. It is the sum total of surroundings and the totality of resources that affect our existence and the quality of our life.

54. What happens when the rate of resource extraction exceeds the rate of their regeneration?

Ans. It leads to environmental crises.

55. Two major environmental issues facing the world today are ________ and ________.

Ans. Environmental pollution and degradation of natural resources.

56. What are the functions of the environment?

Ans. See Q. 22, page 389.

57. Identify six factors contributing to land degradation in India.

Ans. Following factors contributing to land degradation in India:

(*i*) Deforestation.

(*ii*) Unsustainable fuel wood and fodder extraction.

(*iii*) Shifting cultivation.

(*iv*) Encroachment of forest lands.

(*v*) Forest fires and over grazing.

(*vi*) Lack of soil-conservation measures.

58. Explain how the opportunity costs of negative environmental impact are high.

Ans. Opportunity costs of negative environmental impact include two principal elements:

(*i*) loss of production capacity of future generations (owing to excessive exploitation of natural resources by the present generation), and

(*ii*) environmental pollution (in terms of air pollution, water pollution and sound pollution).

Both these elements of opportunity cost tend to assume exponential growth in the pursuit of rapid GDP growth. Consequently, the growth process itself becomes un-sustainable, besides causing a massive set-back to the quality of life (in the wake of environmental pollution). The opportunity cost of negative environmental impact is so high that it is being considered as an emerging challenge of the growth process.

59. Outline the steps involved in attaining sustainable development in India.

Ans. Following steps have been taken for attaining sustainable development in India:

(*i*) Use of input-efficient technology.

(*ii*) Use of environment-friendly sources of energy.

(*iii*) Integrated rural development so that migration of rural population to urban areas is curtailed.

(*iv*) Conversion of sunlight into solar energy and solar energy into electricity.

(*v*) A focus on organic farming.

(*vi*) Efficient management of the wastes.

(*vii*) Stringent laws on the disposal of chemical effluents.

(*viii*) Spread of awareness to conserve natural assets for inter-generational equity.

(*ix*) Use of public means of transport.

60. Give two instances of:

(*a*) Overuse of environmental resources.

(*b*) Misuse of environmental resources.

Ans. (*a*) Examples of Overuse of Environmental Resources:

(*i*) Excessive exploitation of fossil fuels.

(*ii*) Excessive tree-felling to cope with the rising need of housing in urban areas.

(*b*) Examples of Misuse of Environmental Resources:

(*i*) Use of wood as a household fuel.

(*ii*) Use of rivers to absorb industrial effluents.

61. Explain the supply-demand reversal of environmental resources.

Ans. Environmental degradation owes a great deal to supply-demand reversal of resources over a period of time. Prior to industrialisation, when the pace of life was slow, demand for natural resources did not exceed their supply. As industrialisation progressed, there was a surge in human wants. Accordingly, there has been an exponential growth in demand for natural resources, leading to their overuse as well as misuse. Supply of resources has suffered a reversal from abundance to paucity. Demand, on the other hand, has reversed from manageable to unmanageable limits.

62. What is sustainable development?

Ans. Sustainable development is that process of economic development which aims at raising the quality of life of both present and future generations, without threatening natural endowment and environment.

DEVELOPMENT EXPERIENCE OF INDIA, PAKISTAN AND CHINA—A COMPARATIVE STUDY

3 UNIT

POWER POINTS

- Strategy of Growth of India, Pakistan and China
- Comparative Performance of the Economies of India, Pakistan and China in terms of: (a) GDP Growth, (b) Structure of Growth, (c) Demographic Profile, (d) Human Development
- Common Success Story and Common Failures of India and Pakistan
- China's Edge Over India

Strategy of Growth

(i) **India and Pakistan:** Mixed economy served as the basic premise of the growth model.

(ii) **China:** All critical areas of production were brought under 'state ownership' and 'command economy' served as the basic premise of the growth model.

Comparative Performance of the Economies of India, Pakistan and China

Parameter	Country					
	India		Pakistan		China	
1. GDP Growth (2018)	7 per cent		3.3 per cent		6.6 per cent	
2. Structure of Growth (2016) (Sector-wise sectoral share in output and employment)	GDP	Employment	GDP	Employment	GDP	Employment
Primary Sector	15.4	47	24.4	42.3	7.9	27.7
Secondary Sector	23.1	22	19.1	22.6	40.5	28.8
Tertiary Sector	61.5	31	56.5	35.1	51.6	43.5
3. Demographic Profile (2011)						
Growth Rate of Population	1.76		1.8		0.47	
Density	382		225		143	
Sex Ratio	940		952		950	
Urbanisation	31.2		37.2		51.3	
4. Human Development						
HDI (2017)	0.640		0.562		0.752	
HDI Rank (2016)	130		150		86	
Infant Mortality Rate	37.8 per thousand		50.4 per thousand		11.8 per thousand	
Maternal Mortality Rate	174 per lakh		178 per lakh		27 per lakh	
Improved Sanitation	39.6 per cent		63.5 per cent		76.5 per cent	

Common Success Story and Common Failures of India and Pakistan

Common Success Story

— A substantial rise in GDP per capita.

— Self-sufficiency in food production.

— Dualistic nature of the economy gradually fading.

— Considerable reduction in the incidence of poverty.

Common Failures

— Relatively slow pace of GDP growth, compared with China.

— Large scale tax evasion.

— Poor performance in HDI ranking.

— Dismal fiscal management.

— Deficient urban services.

— Political survival a dominating issue rather than good governance.

China's Edge Over India

- China has successfully focused on pro-poor reforms.
- Agrarian reforms have been effectively carried out.
- Export-driven manufacturing has significantly grown, adding to the pace of GDP growth.
- 100 per cent equity investment.
- SEZ policy has proved to be a boon for the flow of FDI in China.

QUESTION-ANSWERS

1. Objective Type Questions

A. Multiple Choice Questions

Choose the correct option:

1. One Child Policy was adopted by China in the year:

(*a*) 1972 (*b*) 1975

(*c*) 1979 (*d*) 1982

2. Which of the following countries has the least urbanised population?

(*a*) India (*b*) China

(*c*) Pakistan (*d*) None of these

3. India relied on:

(*a*) public sector (*b*) inward-looking strategy of growth

(*c*) both (*a*) and (*b*) (*d*) none of these

4. The trade-GDP ratio in Pakistan is:

(*a*) twice that of India (*b*) thrice that of India

(*c*) four-times that of India (*d*) five-times that of India

5. Which of the following countries has shown the brighter signs of urbanisation?

(*a*) India (*b*) China

(*c*) Pakistan (*d*) Both (*b*) and (*c*)

6. **In China, commune system is related to:**
(*a*) agriculture (*b*) industry
(*c*) services (*d*) none of these
7. **China has performed better with regard to:**
(*a*) nourishment (*b*) maternal mortality rate
(*c*) infant mortality rate (*d*) all of these
8. **Great Leap Forward (GLF) was the campaign launched in China in:**
(*a*) 1956 (*b*) 1958
(*c*) 1962 (*d*) 1968

Ans. **1.** (*c*) **2.** (*a*) **3.** (*c*) **4.** (*a*) **5.** (*d*) **6.** (*a*) **7.** (*d*) **8.** (*b*)

B. Fill in the Blanks

Choose appropriate word and fill in the blank:

1. The Great Leap Forward campaign was launched in ____________. (China/Pakistan)
2. In comparison to China, Indian economy has been relying more on ____________ sector for GDP growth. (secondary/tertiary)
3. China adopted ____________ to reduce the growth rate of population. (One Child Policy/Commune System)
4. China has ____________ density of population than India. (lower/higher)
5. China adopted ____________ as a model of growth. (Socialism/Capitalism)
6. High maintenance investment implies ____________ development investment. (low/high)
7. Sex ratio is found to be biased against ____________ in China. (males/females)
8. ____________ has achieved better results as regards access to improved water resources. (India/Pakistan)

Ans. **1.** China **2.** tertiary **3.** One Child Policy **4.** lower **5.** Socialism **6.** low **7.** females **8.** Pakistan

C. True or False

State whether the following statements are True or False:

1. After independence, China decided to bring all critical areas of production-activity under government control. (True/False)
2. India, after independence, relied largely on private sector to spearhead the process of growth and development. (True/False)
3. The policy of 'reforms and opening-up' launched in 1978 gave a big push to China's manufacturing exports. (True/False)
4. HDI rating of India is higher compared with China. (True/False)
5. China is home to largest percentage of world population, compared with any other country. (True/False)
6. Urbanisation is a consequence of a shift of working force from agriculture to industry and services. (True/False)
7. India adopted a mixed-economy model of growth. (True/False)

8. As a basic element of the strategy of growth in China, all the national resources were put under the control and command of the government. (True/False)

Ans. **1.** True **2.** False **3.** True **4.** False **5.** True **6.** True **7.** True **8.** True

D. Very Short Answer Questions

1. **What do you mean by structure of growth?**

Ans. Structure of growth refers to relative significance (in terms of output and employment) of different sectors of the economy.

2. **What do you mean by demographic profile?**

Ans. Demographic profile means study of population on the basis of its some parameters such as its growth rate and density.

3. **What is meant by human development?**

Ans. Human development includes such elements of change as per capita GDP, life expectancy, literacy rate, access to safe drinking water, etc.

4. **What is meant by human development index?**

Ans. Human development index is a composite index prepared by United Nations Development Programmes (UNDP) on the basis of some parameters such as longevity, knowledge or educational attainment, per capita real GDP.

5. **What do you mean by GDP growth rate?**

Ans. GDP growth rate refers to increase in the flow of goods and services produced in the economy during an accounting year.

6. **What is meant by infant mortality rate?**

Ans. Infant mortality rate refers to the death rate of children (per thousand) below the age of one year.

7. **What is meant by maternal mortality rate?**

Ans. Maternal mortality rate refers to the death rate of women (per thousand) after giving birth to a new born.

8. **What is commune system of farming?**

Ans. Commune system of farming means collective cultivation of land by the farmers.

2. Reason-based Questions (Comprehension of the Subject-matter)

Read the following statements carefully. Write 'True' or 'False' with a reason.

1. **The Great Leap Forward (GLF) campaign was launched in China with a view to achieving integrated rural development.**

Ans. False. Great leap forward campaign was launched in China with a view to achieving widespread industrialisation of the economy.

2. **FDI in China is higher than in India or Pakistan.**

Ans. True. FDI in China is higher than in India or Pakistan because China is found to be more investment-friendly destination.

3. **In terms of sectoral contribution to GDP, economies of India and Pakistan are now relying more on tertiary sector, while the economy of China is relying more on secondary sector.**

Ans. True. Economies of India and Pakistan are relying more on tertiary sector while the economy of China is relying more on secondary sector in terms of sectoral share. This is primarily because

China successfully adopted GLF (Great Leap Forward) campaign and the policy of 'reforms and opening-up'.

4. One child policy in China since 1979 has reduced the growth rate of population.

Ans. True. One child policy in China adopted by 1979 has been very successfully pursued and it has reduced the population growth rate to nearly half, from 1.33 per cent in 1979 to 0.47 per cent in the recent past.

5. In the context of growth process, low density of population has been of great advantage to China, compared with India and Pakistan.

Ans. True. Low density of population has been of great advantage to China, compared with India and Pakistan because low density implies lesser stress on the country's natural resources, raising its abilities for sustainable development.

6. A check on population growth along with a sustained rise in GDP are the key factors explaining higher per capita GDP in China than India and Pakistan.

Ans. True.

$$\text{Per Capita Income} = \frac{\text{National Income}}{\text{Population}}$$

When population growth remains within control, a rise in GDP implies a rise in per capita income. In this respect, China faced better than India and Pakistan.

7. Commune system of production in China refers to privatisation of enterprises.

Ans. False. Commune system of production in China refers to a system of collective cultivation.

8. India, China and Pakistan relied on 'mixed economy model' of growth.

Ans. False. India and Pakistan adopted mixed economy model of growth while China adopted 'statism' as a model of growth.

9. Economy of China has shown dismal performances (compared to the economies of India and Pakistan) in terms of GDP growth over time.

Ans. False. Economy of China has shown higher percentage of GDP as compared to the economies of India and Pakistan. It is primarily because of greater flow of FDI in China.

10. Poverty has declined faster in India than China.

Ans. False. Owing to political stability and effective implementation of its policies, China has succeeded in reducing poverty much more effectively than India.

11. Growth process in China shows greater reliance on primary sector than in India and Pakistan.

Ans. False. Growth process in China shows greater reliance on secondary or industrial sector than in India and Pakistan.

12. HDI (Human Development Index) ranking of India is higher compared to China and Pakistan.

Ans. False. HDI (Human Development Index) ranking of China is higher compared to India and Pakistan.

13. Globalisation has yielded better results for China, compared with India and Pakistan.

Ans. True. Globalisation has yielded higher dividend for China than India and Pakistan. Greater flow of FDI in China has stimulated its GDP growth much faster than in India and Pakistan.

14. Pakistan has performed better than India in reducing the percentage of BPL population.

Ans. True. Pakistan has performed better than India in reducing the percentage of below poverty line population. Focus on the fulfilment of basic needs (like of drinking water) has been much deeper in Pakistan than India.

15. Foreign investors have been allowed larger equality-holding in China than India.

Ans. True. Foreign investors have been allowed 100 per cent equity investment in China. This is unlike India for most sectors of the economy.

3. HOTS & Applications

1. Analyse the role assigned to public sector in the process of development in India and Pakistan in comparison to that in China.

Ans. India, Pakistan and China relied on planned development programmes as their basic strategy of growth and development. But, whereas in India and Pakistan, mixed economy served as the basic premise of the growth model, in China, all critical areas of production were brought under state ownership, and command economy served as the basic premise of the growth model. Thus, China adopted 'statism' as the model of growth.

4. Analysis & Evaluation

1. How do you view the opposition to FDI in retail in India? Compare it with the situation of smooth operation of FDI in retail in China.

Ans. It is an undisputed fact that FDI is growth-friendly. After all, it is an investment and increases production capacity of the nation. The opposition to FDI in retail in India is not because it may be a roadblock in the process of growth. It is because it may generate unwarranted competition for the retail traders in India who may be marginalised and finally driven out of the market. Such a situation may erode the opportunities of self-employment in the country, and may also lead to concentration of economic power with the foreign investors. On the other hand, China was liberal in allowing FDI in retail. China allowed foreign investors 100 per cent equity investment.

2. The complementarity between the structure of growth and the GDP growth appears quite different from that shown by the historical experience of the developed countries. Comment.

Ans. Historical experience of the developed countries shows that in terms of the percentage share in GDP, it was first the secondary sector and later the tertiary sector which emerged as the leading sectors of the economy. However, in the Indian context, what was witnessed was that a major shift directly from primary sector to the tertiary sector. Primary sector on the eve of independence was the largest contributor to GDP. Now, tertiary sector has the lead in terms of contribution to GDP. Thus, a major shift directly from primary sector to tertiary sector has been observed in India. This implies a lesser emphasis has been accorded to industrial expansion in India.

MISCELLANEOUS QUESTIONS

A. Short Answer Questions–I [3 marks]

1. Write three observations on the structure of growth in India, Pakistan and China.

Ans. Following observations highlight the structure of growth in India, Pakistan and China:

(*i*) Indian and Pakistan adopted a 'mixed-economy' model of growth. While, China adopted 'Statism' as a model of growth.

(*ii*) India and Pakistan have relied more on tertiary sector while the economy of China has relied more on secondary sector for the GDP growth.

(*iii*) In China, contribution of secondary sector to GDP is much more than in India and Pakistan.

2. Write three observations highlighting global exposure of the economy of China.

Ans. Following observations highlight the global exposure of the economy of China:

(*i*) Inward looking policy of self-sufficiency and protection of domestic industry from foreign competition has gradually been replaced by the policy of growth through competition.

(*ii*) It allowed the foreign investors the freedom to 'hire and fire' the workers. It also offered them a lucrative infrastructure.

(*iii*) China allowed foreign investors 100 per cent equity investment across most sectors of the economy.

3. Write three observations pointing to growth story of India, China and Pakistan.

Ans. Following observations highlight the growth story of India, China and Pakistan:

(*i*) China has outpaced both India and Pakistan with regard to GDP growth.

(*ii*) India has performed better than Pakistan. But compared with China, India is way behind.

(*iii*) The relative success of China is credited to political stability in China. China has proved that the more relevant factor in the context of GDP growth is not the availability of resources but good governance by the state and 'good compliance' by the citizens.

4. Write three observations pointing to re-emergence of poverty in Pakistan.

Ans. Following observations pointing to re-emergence of poverty in Pakistan:

(*i*) Lack of institutional reforms in agriculture because of which this sector has remained volatile (devoid of stability).

(*ii*) Lack of political stability in Pakistan, leading to huge public expenditure on the maintenance of law and order.

(*iii*) Allocation of huge funds to build a strong defence-system at the cost of developmental expenditure.

B. Short Answer Questions–II [4 marks]

1. What are the basic components of New Economic Policy of India?

Ans. The basic components of New Economic Policy of India are:

(*i*) A massive shift towards privatisation.

(*ii*) A transformation towards liberalisation (doing away with controls and quotas).

(*iii*) Greater reliance on export-promotion rather than import substitution.

(*iv*) Greater reliance on FDI rather than the domestic investment.

2. Write four observations on the demographic profile of India, Pakistan and China.

Ans. Following observations highlight the demographic profile of India, Pakistan and China:

(*i*) Growth rate of population in China has shown a much deeper decline than the growth rate of population in India and Pakistan.

(*ii*) Density of population is much lower in China as compared with India and Pakistan.

(*iii*) Both China and Pakistan are showing brighter signs of urbanisation than India.

(*iv*) Sex ratio is found to be biased against females in all the three countries.

3. State the principal features of strategy of growth adopted by India and Pakistan.

Ans. The principal features of strategy of growth adopted by India and Pakistan are as under:

(*i*) It was a mixed-economy model of growth.

(*ii*) The strategy of growth underlined the significance of both private and public sectors.

(*iii*) Public sector was assigned the key role of 'kick-starting' the process of growth.

(*iv*) Private sector was assigned the secondary role of pushing the process of growth.

4. Write four observations on the common success story of India and Pakistan.

Ans. Following four observations highlight the common success story of India and Pakistan:

(*i*) India and Pakistan both have succeeded in more than doubling their per capita income.

(*ii*) The incidence of absolute poverty has also been reduced significantly in both the countries.

(*iii*) Food self-sufficiency has been achieved with improved nutritional status.

(*iv*) A well-developed modern sector (along with a backward traditional sector) has emerged in both the countries.

5. Write four observations pointing to common failures of India and Pakistan.

Ans. Following four observations highlight the common failures of India and Pakistan:

(*i*) The relatively inward-looking economic policies and high protection to domestic industry did not allow India and Pakistan to take timely advantage of globalisation.

(*ii*) Both the countries recorded a dismal performance in terms of fiscal management.

(*iii*) Urban services are deficient in both the countries which are a big hurdle in their process of growth and development.

(*iv*) Large proportion of tax revenue is spent to meet defence expenditures and internal debt servicing. It hampers the process of growth.

6. Write four observations pointing to areas where Pakistan has an edge over India.

Ans. Following four observations highlight the areas where Pakistan has an edge over India:

(*i*) Pakistan has achieved better results with regard to migration of workforce from agriculture to industry, or migration of people from rural to urban areas.

(*ii*) Reduction in below poverty line population has shown better results in Pakistan than India.

(*iii*) External trade has expanded much faster in Pakistan than India.

(*iv*) Pakistan has achieved better results as regards access to improved water resources.

C. Long Answer Questions [6 marks]

1. State five important parameters of human development.

Ans. (*i*) Life expectancy – higher the better.

(*ii*) Adult literacy rate – higher the better.

(*iii*) Percentage of population below poverty line – lower the better.

(*iv*) Infant mortality rate – lower the better.

(*v*) Maternal mortality rate – lower the better.

(*vi*) Percentage of population having access to improved water sources— higher the better.

(*vii*) Percentage of undernourished population—lower the better.

2. Write your observations describing the growth story of China.

Ans. Following observations describe the growth story of China:

(*i*) In 2017, GDP in China was estimated to be 12.40 trillion USD (US dollars). It achieved the distinction of 2nd largest economy in the world.

(*ii*) China achieved a breakthrough in GDP growth in the early 1980's. The jump has indeed been very substantial.

(*iii*) Quantum jump in FDI was achieved through the establishment of SEZ (Special Economic Zones), by allowing hundred per cent equity to the foreign investors and free flow of FDI in the retail sector.

(*iv*) A jump in GDP growth was achieved also through domestic investment which was induced through Great Leap Forward campaign.

(*v*) Relying basically on external demand, China achieved a record growth in exports and by 2010 it emerged as the largest exporter in the global market.

3. Write your observations describing the growth story of India and Pakistan.

Ans. Following observations describe the growth story of India:

(*i*) The GDP growth in India showed a substantial rise only after 1991, the year when New Economic Policy was launched.

(*ii*) NEP has focused on greater integration of the domestic economy with the global economies on the basis of free play of the market forces.

(*iii*) It was because of New Economic Policy that between the period 1991-2017, GDP growth rate in India increased to around 7 per cent per annum.

Following observations describe the growth story of Pakistan:

(*i*) Pakistan achieved a breakthrough in GDP growth in the mid- 80's. It was as a consequence of economic reforms, focusing on FDI and greater participation of the private sector in the process of growth.

(*ii*) The average annual growth rate of GDP has slumped to 3.75 per cent between the period 2008-2016. In 2017, economy of Pakistan grew at the rate of 5.3 per cent.

(*iii*) Owing to slow GDP growth, and consequently the low level of income, Pakistan economy has almost sunk into a 'low income-low growth' trap.

4. Write your observations pointing to areas where India has an edge over Pakistan.

Ans. Following observations highlight the areas where India has an edge over Pakistan:

(*i*) Skilled manpower and research & development institutions in India are far more superior than in Pakistan.

(*ii*) India has shown a remarkable breakthrough in the export of software, while Pakistan is far behind.

(*iii*) Human capital formation in India has emerged as a much more significant determinant of growth than in Pakistan.

(*iv*) India also has a better record of investment in education.

(*v*) Owing to rapid decline in fertility rate, growth of population in India has been better managed.

(*vi*) Health care facilities in general and infant mortality in particular are better addressed in India than Pakistan.

5. Write your observations pointing to areas where China has an edge over India.

Ans. Following observations highlight the areas where China has an edge over India:

(*i*) China has successfully focused on pro-poor reforms.

(*ii*) Rural poverty has declined much faster in China than India.

(*iii*) In India, agricultural reforms have been far less effective than in China.

(*iv*) Export-driven manufacturing has more significantly grown in China than India.

(*v*) Global exposure of the economy has been far more wider in China than in India.

(*vi*) China is far ahead of India in terms of HDI (Human Development Index).

NCERT QUESTIONS

1. Why are regional and economic groupings formed?

Ans. Countries across the world have been trying various means to strengthen their domestic economies. It is in this context that regional and global economic groupings (such as the SAARC) have been formed. Basically, these groupings focus on enhancing their competitiveness in the international markets.

2. What similar developmental strategies have India and Pakistan followed for their respective developmental paths?

Ans. (*i*) Reliance on a large public sector, and

(*ii*) Substantial expenditure on social development.

3. Explain the Great Leap Forward campaign of China as initiated in 1958.

Ans. The Great Leap Forward (GLF) campaign was launched in China (in 1958) with a view to propelling the pace of economic and industrial development. It focussed on widespread industrialisation of the economy, by inducing and encouraging people to set-up household industry in their backyard.

4. China's rapid industrial growth can be traced back to its reforms in 1978. Do you agree? Elucidate.

Ans. In late 1970s and early 1980s, reforms were initiated in the industrial sector in China. The breakthrough in economic growth is attributed to economic reforms in terms of greater reliance on FDI (Foreign Direct Investment) and a greater leaning towards market economy.

5. Describe the path of developmental initiatives taken by Pakistan for its economic development.

Ans. Pakistan has followed the mixed economy model allowing the co-existence of public and private sectors for its economic development. However, there were certain noticeable shifts in policy-orientation. Like in India, the flagship role of public sector was moderated. Instead private sector was assigned the principal role of spearheading the process of growth.

6. What is the important implication of the 'one child norm' in China?

Ans. 'One Child Policy' adopted by China in 1979 has been very successfully pursued. Consequently, growth rate of population has reduced to nearly half, from 1.33 per cent in 1979 to 0.47 per cent in the recent past. With a check on population growth, China can now focus on raising the quality of life rather than striving for the sustenance of the people.

7. Mention the salient demographic indicators of China, Pakistan and India.

Ans. Following observations highlight the salient demographic indicators of China, Pakistan and India:

(*i*) Growth rate of population has been cut to half in China, following strict enforcement of its policy of 'one child norm'. India and Pakistan are still wrestling with the problem of high growth rate of population, which is about 1.76 per cent in India and 1.8 per cent in Pakistan.

(*ii*) The size of population is comparatively very small in Pakistan, just about 1/10th of China or India.

(*iii*) Density of population is low in China, thanks to its large geographical area compared with India and Pakistan. It is estimated to be 143 persons per square kilometer in China compared to 382 and 225 persons (per square kilometer) in India and Pakistan, respectively.

(*iv*) Both China and Pakistan are showing brighter signs of urbanisation than India.

(*v*) Sex ratio is found to be low in all the three countries pointing to social backwardness where people hold high preference for a son in the family.

8. Mention the various indicators of human development.

Ans. Refer to Q. 1, page 408.

9. Define the liberty indicator. Give some examples of liberty indicators.

Ans. Liberty indicators refer to such indicators as the freedom of expression, and the liberty to participate in state administration. Such indicators are often omitted in the construction of HDI, even when the scale of such indicators is much higher in India than China and Pakistan. Omission of these indicators leads to lower HDI rating of India compared to Pakistan and China.

10. State the factors that led to rapid economic development in China.

Ans. The principal factors that led to rapid economic development in China are as these:

(*i*) Shift from a centrally planned economy to a market economy.

(*ii*) Focus on export-related domestic production.

(*iii*) Influx of FDI [through SEZs (special economic zones) and hundred per cent equity of the foreign investors and free flow of FDI in the retail sector.

(*iv*) Availability of cheap labour force, giving China a comparative cost advantage.

(*v*) GLF (Great Leap Forward) campaign (launched in 1958).

11. Give reasons for the slow growth and re-emergence of poverty in Pakistan.

Ans. Slow growth and re-emergence of poverty in Pakistan is explained with reference to the following observations:

(*i*) Pakistan has failed to bring about stable institutional reforms in agriculture. Accordingly, performance of agricultural sector has remained volatile.

(*ii*) For its foreign exchange requirements, Pakistan has relied largely on remittances from abroad, and (volatile) agricultural exports. A setback to these sources of foreign exchange has caused a corresponding setback to the process of growth.

(*iii*) Lack of political stability in Pakistan has caused huge public expenditure on law and order.

(*iv*) Pakistan is allocating huge funds to build a strong defence-system, even when it implies a huge cut in developmental expenditure.

12. Compare and contrast the development of India, China and Pakistan with respect to some salient human development indicators.

Ans. (*i*) In most areas of human development, China has performed better than India and Pakistan. China's HDI rank in the world is 86, contrasting with 130 and 150 for India and Pakistan, respectively. However, India may attain a higher ranking if some liberty parameters are included in HDI.

(*ii*) GDP per capita is higher in China compared with India and Pakistan.

(*iii*) Besides higher GDP per capita, China has performed better (than India and Pakistan) in the area of nourishment.

(*iv*) China has also performed better with regard to infant mortality rate and maternal mortality rate.

(*v*) As regards access to improved sanitation, again China shows better performance than India and Pakistan.

13. Comment on the growth rate trends witnessed in China and India in the last two decades.

Ans. In the last two decades, China surpassed India in achieving GDP growth rate of nearly 10 per cent per annum and that too almost consistently. In case of India, GDP growth rate has yet to touch the double digit.

Between 1979-2017, average annual GDP growth in China was estimated to be about 9 per cent. It reached its peak (15.2 per cent) in 1984, and touched its bottom (3.8 per cent) in 1990. In 2018, GDP growth rate was 6.6 per cent.

The GDP growth in India showed a substantial rise only after 1991, the year when New Economic Policy was launched. However, India has failed to take big leaps, unlike China.

BLUE PRINT OF PRACTICE PAPERS

(AS PER DESIGN OF QUESTION PAPER)

S.No.	Content Unit	Unit Title	Forms of Questions				
			Objective Type/MCQ 1 mark	Short Answer I 3 marks	Short Answer II 4 marks	Long Answer 6 marks	Total
		INTRODUCTORY MACROECONOMICS					
1.	Unit–1	National Income and Related Aggregates	1	1	—	1	10
2.	Unit–2	Money and Banking	2	—	1	—	6
3.	Unit–3	Determination of Income and Employment	2	—	1	1	12
4.	Unit–4	Government Budget and the Economy	2	—	1	—	6
5.	Unit–5	Balance of Payments	3	1	—	—	6
		INDIAN ECONOMIC DEVELOPMENT					
6.	Unit–6	Development Experience (1947-90) and Economic Reforms since 1991	3	1	—	1	12
7.	Unit–7	Current Challenges facing Indian Economy	5	1	2	1	22
8.	Unit–8	Development Experience of India—A Comparison with Neighbours	2	—	1	—	6
		Sub-total	**20×1=20**	**4×3=12**	**6×4=24**	**4×6=24**	**80(34)**

PRACTICE PAPER 1

Time Allowed: 3 Hours **Max. Marks: 80**

General Instructions:

(*i*) *All questions in both sections are compulsory. However, there is internal choice in some questions.*

(*ii*) *Marks for questions are indicated against each question.*

(*iii*) *Question No. 1-10 and 18-27 are very short answer questions carrying 1 mark each. They are required to be answered in one sentence.*

(*iv*) *Question No. 11-12 and 28-29 are short answer questions carrying 3 marks each. Answers to them should not normally exceed 60 words each.*

(*v*) *Question No. 13-15 and 30-32 are also short answer questions carrying 4 marks each. Answers to them should not normally exceed 70 words each.*

(*vi*) *Question No. 16-17 and 33-34 are long answer questions carrying 6 marks each. Answers to them should not normally exceed 100 words each.*

(*vii*) *Answers should be brief and to the point and the above word limit be adhered to as far as possible.*

SECTION–A: INTRODUCTORY MACROECONOMICS

Choose the correct option:

1. Read the following dialogue between two people.

Rohit : I want 1 kg of mango.

Aarushi : What will you give in exchange?

Rohit : I can give you 1 pair of shoes in return for the mangoes.

Aarushi : I don't need shoes. I want some chocolates.

Which of the following problems is being faced by Rohit and Aarushi in their exchange process? **1**

(*a*) Lack of store of value (*b*) Lack of double coincidence of wants

(*c*) Lack of standard of deferred payment (*d*) Absence of common units of value

2. When MPC = 0.71, MPS is: **1**

(*a*) 1.71 (*b*) 0.71

(*c*) 1.29 (*d*) 0.29

3. Which of the following is not included in inventory investment? **1**

(*a*) Stock of finished goods

(*b*) Stock of semi-finished goods

(c) Consumer goods sold to the households during the accounting year

(d) Stock of raw materials

4. Reverse repo rate: **1**

(a) generates interest income for the commercial banks

(b) is increased to curb inflation

(c) is not a policy rate

(d) both (a) and (b)

5. The government budget has a revenue deficit. This gets financed by: **1**

(a) indirect taxes and borrowing (b) tax revenue and borrowing

(c) borrowing and disinvestment (d) tax revenue and indirect taxes

6. Which of the following causes loss of foreign exchange? **1**

(a) Grants from rest of world (b) Exports

(c) Imports (d) Foreign investment

7. Balance of trade relates to export and import of invisible items. (True/False) **1**

Choose the correct option and complete the following statements:

8. ______________ is equal to fiscal deficit less interest payments.

(Revenue deficit/Primary deficit) **1**

9. When marginal propensity to save is zero, the value of multiplier is ______________.

(zero/infinity) **1**

10. Define balance of payments. **1**

11. Distinguish between intermediate goods and final goods. **3**

Or

What is meant by the problem of double counting in estimating national income? State the two ways of avoiding this problem.

12. Distinguish between depreciation of currency and appreciation of currency. How are exports and imports impacted in these situations? **3**

13. How is budgetary policy used to promote GDP growth in the economy? **4**

14. In an economy, the autonomous consumption is 220 and the marginal propensity to save is 0.4. If the equilibrium level of income is 1,700, then the investment expenditure in this economy will be 400. True or False? Justify your answer. **4**

Or

In an economy, the equilibrium level of income is 900 and the autonomous saving is –100. If marginal propensity to save is 0.3, consumption expenditure in this economy will be 500. True or False? Justify your answer.

15. Explain the process of credit creation by the commercial banks. **4**

16. Explain the significance of export promotion in correcting the situation of deflationary gap in the economy. **6**

17. Calculate Gross National Product at Market Price by (a) Income Method, and (b) Expenditure Method: **6**

	Items	(₹ in crore)
(i)	Net exports	25
(ii)	Rent	35
(iii)	Private final consumption expenditure	415
(iv)	Interest	45

(*v*)	Dividends	50
(*vi*)	Undistributed profits	10
(*vii*)	Corporate tax	15
(*viii*)	Government final consumption expenditure	115
(*ix*)	Net domestic capital formation	65
(*x*)	Compensation of employees	400
(*xi*)	Consumption of fixed capital	25
(*xii*)	Net indirect taxes	65
(*xiii*)	Net factor income from abroad	(–) 10

Or

From the following data calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method:

	Items	**(₹ in crore)**
(*i*)	Private final consumption expenditure	330
(*ii*)	Mixed income of self-employed	25
(*iii*)	Gross domestic fixed capital formation	50
(*iv*)	Opening stock	15
(*v*)	Compensation of employees	230
(*vi*)	Closing stock	25
(*vii*)	Government final consumption expenditure	80
(*viii*)	Operating surplus	180
(*ix*)	Consumption of fixed capital	10
(*x*)	Net indirect taxes	15
(*xi*)	Net factor income from abroad	(–) 5
(*xii*)	Exports	20
(*xiii*)	Imports	30

SECTION–B: INDIAN ECONOMIC DEVELOPMENT

Choose the correct option:

18. Which of the following features shows backwardness of agriculture of Indian economy on the eve of independence? **1**

(*a*) Low productivity (*b*) High degree of uncertainty

(*c*) Forced commercialisation of agriculture (*d*) Both (*a*) and (*b*)

19. Which of the following is an essential indicator of good health? **1**

(*a*) Low death rate (*b*) Low infant mortality rate

(*c*) High expectancy of life (*d*) All of these

20. In terms of the sectoral contribution to GDP, economy of China is relying more on: **1**

(*a*) primary sector (*b*) secondary sector

(*c*) tertiary sector (*d*) none of these

21. Which of the following is related to agricultural marketing? **1**

(*a*) Storage (*b*) Preservation

(*c*) Processing (*d*) All of these

22. Unemployment occurs owing to cyclical fluctuations in the economy is called: **1**

(*a*) frictional unemployment (*b*) disguised unemployment

(*c*) cyclical unemployment (*d*) urban unemployment

23. Marketable surplus is the excess of output over and above 'on farm consumption'. (True/False) **1**

Choose the correct option and complete the following statements:

24. Comprehensive planning is pursued in _______________ economies. (capitalist/socialist) **1**
25. Goods which are available as free gifts of nature are largely used as inputs. (commercial/non-commercial) **1**
26. India has performed better than with regard to GDP growth. (China/Pakistan) **1**
27. Define poverty line. **1**
28. State the principal problems of agricultural sector in India. **3**
29. Write three observations on the significance of social infrastructure in the context of growth and development of the country. **3**

Or

Is there any relationship between unemployment and poverty? Explain.

30. (*a*) In India, the problem of unemployment is chronic in nature, rather than cyclical. Do you agree?

(*b*) Also explain why women in rural areas are ready to work at low wages. **2+2**

Or

State the pitfalls which act as a hurdle in the growth of medical tourism in India.

31. How does investment in human capital contribute to economic growth? **4**
32. Give a brief description of the 'common success story' and 'common failures' of India and Pakistan. **4**
33. Give a brief description of the conventional and non-conventional sources of energy. Give suggestions to cope with the challenge of power generation in India. **6**

Or

Distinguish between absolute poverty and relative poverty. Do you think GDP growth is the ultimate solution to the problem of poverty in India?

34. What do you mean by new economic policy? Describe in brief industrial sector reforms introduced under the new economic policy. **6**

PRACTICE PAPER 2

Time Allowed: 3 Hours **Max. Marks: 80**

General Instructions: *Same as Practice Paper–1.*

SECTION–A: INTRODUCTORY MACROECONOMICS

Choose the correct option:

1. If an economy is to control deflationary gap, which of the following is an appropriate policy instrument? **1**

(*a*) A cut in repo rate (*b*) A cut in CRR

(*c*) A cut in SLR (*d*) All of these

2. Which of the following agency is responsible for issuing ₹1 currency note in India? **1**

(*a*) Reserve Bank of India (*b*) Ministry of Commerce

(*c*) Ministry of Finance (*d*) Niti Aayog

3. Export of merchandise including capital goods < Import of merchandise including capital goods, indicates that: **1**

(*a*) balance of trade is in surplus (*b*) balance of trade is in deficit

(*c*) capital account BoP is in surplus (*d*) capital account BoP is in deficit

4. Which of the following is a characteristic of a good? **1**

(*a*) Intangible

(*b*) Can be stored

(*c*) Production and consumption must happen simultaneously

(*d*) Cannot be transferred

5. Which of the following statement is true? **1**

(*a*) Loans from IMF is a revenue receipt

(*b*) Higher revenue deficit necessarily leads to higher fiscal deficit

(*c*) Borrowing by a government represents a situation of fiscal deficit

(*d*) Capital deficit is the excess of capital receipts over the revenue receipts

6. Aggregate demand can be increased by: **1**

(*a*) increasing repo rate

(*b*) buying government securities by Reserve Bank of India

(*c*) increasing cash reserve ratio

(*d*) increasing margin requirement

7. Saving is estimated as C/Y. (True/False) 1

Choose the correct option and complete the following statements:

8. ______ is not a quantitative method of credit control.
(Open market operations/Margin requirements) 1

9. In case of ______ of domestic currency, less rupees are needed to buy one US dollar.
(appreciation/depreciation) 1

10. What is excess of import of goods over the export of goods called? 1

11. Distinguish between real and nominal GDP. Which of the two is a better index of welfare of the people and why? 3

12. How is the appreciation of the domestic currency good for the economy? 3

Or

Depreciation of the domestic currency leads to a rise in AD. Explain how.

13. What is inflationary gap? How is tax used as a policy instrument when there is inflationary gap in the economy? 4

Or

What is deflationary gap? Explain the significance of 'margin requirement' in correcting deflationary gap in the economy.

14. Restricting fiscal deficit is a sign of fiscal discipline. But it does not work when the economy is suffering from the deflationary gap. Explain how. 4

15. Explain the (*a*) note-issue authority, and (*b*) "banker's bank" functions of the central bank. 4

16. In an economy, S = –100 + 0.4Y is the saving function (where S = saving and Y = national income) and investment expenditure is ₹ 4,000. Calculate:
(*a*) Equilibrium level of national income, and
(*b*) Consumption expenditure at equilibrium level of national income. 6

Or

Given consumption function: C = 150 + 0.5Y (where C = consumption expenditure and Y = national income) and investment expenditure is ₹ 5,500. Calculate:
(*a*) Equilibrium level of national income, and
(*b*) Savings at equilibrium level of national income.

17. Find out (*a*) Gross Domestic Product at Market Price, and (*b*) Factor Income to Abroad: 6

Items	**(₹ in crore)**
(*i*) Factor income from abroad	40
(*ii*) Net indirect tax	140
(*iii*) Private final consumption expenditure	770
(*iv*) Government final consumption expenditure	270
(*v*) Net domestic fixed capital formation	220
(*vi*) Net imports	(–) 60
(*vii*) Gross national product at factor cost	1,260
(*viii*) Depreciation	70
(*ix*) Change in stock	30

SECTION–B: INDIAN ECONOMIC DEVELOPMENT

Choose the correct option:

18. Sustainable development refers to: **1**

(*a*) long-term increase in real per capita income

(*b*) long-term increase in economic welfare

(*c*) long-term increase in real per capita income and economic welfare of both the present and future generations

(*d*) All of these

19. Which of the following is a parameter of social infrastructure? **1**

(*a*) Communication (*b*) Banking

(*c*) Health (*d*) All of these

20. Great Leap Forward (GLF) was the campaign launched in: **1**

(*a*) China in 1952 (*b*) China in 1958

(*c*) China in 1960 (*d*) China in 1968

21. Casual workers are: **1**

(*a*) daily wagers (*b*) unskilled

(*c*) engaged in their own business (*d*) both (*a*) and (*b*)

22. Elementary education covers students: **1**

(*a*) from class 1 to class 5 in the age-group of 6 to 10 years

(*b*) from class 1 to class 8 in the age-group of 6 to 14 years

(*c*) from class 1 to class 10 in the age-group of 5 to 14 years

(*d*) none of these

23. Female workers in the rural areas are reluctant to migrate for outside jobs. (True/False) **1**

24. Commune system of farming is a system of collective farming. (True/False) **1**

Choose the correct option and complete the following statements:

25. The ______________ of trade refers to the types of goods and services we export and import. (direction/composition) **1**

26. ______________ resources can be replenished. (Renewable/Non-renewable) **1**

27. Define divestment. **1**

28. Why was public sector given the flagship role in the process of growth and development after independence? **3**

Or

Explain how far NEP is dependent on FDI.

29. Does full employment mean zero unemployment? Suggest two ways to tackle the problem of disguised unemployment in India. **3**

30. Distinguish between commercial and non-commercial sources of energy. Write two observations highlighting the fact that non-commercial sources of energy lead to environmental degradation. **4**

31. How is human capital different from physical capital? Write two observations on the significance of human capital in GDP growth of a country. **4**

Or

Suggest the possible production activities to control disguised unemployment in Indian agriculture.

32. India has an edge over Pakistan, but China has an edge over both India and Pakistan in the area of growth and development. Prove this fact, using indicators of growth and development. **4**

33. Are you in favour of withdrawal of subsidies to the Indian farmers? Support your answer with reason. **6**

Or

Would you favour the idea of offering protection to the domestic industry? Discuss your opinion in the light of NEP.

34. Describe the steps taken by the government to solve the problem of poverty and unemployment in India. **6**

PRACTICE PAPER 3

Time Allowed: 3 Hours | **Max. Marks: 80**

General Instructions: *Same as Practice Paper–1.*

SECTION–A: INTRODUCTORY MACROECONOMICS

Choose the correct option:

1. Double coincidence of wants is a characteristic feature of: **1**

(*a*) barter system of exchange (*b*) monetary system of exchange
(*c*) neither (*a*) nor (*b*) (*d*) either (*a*) or (*b*)

2. If ₹ 50 are required to buy $ 1, instead of ₹ 60 earlier, then: **1**

(*a*) domestic currency has depreciated
(*b*) domestic currency has appreciated
(*c*) rupee value of import bill will increase
(*d*) both (*a*) and (*c*)

3. Which of the following is an example of direct tax? **1**

(*a*) Value added tax (*b*) Corporate tax
(*c*) GST (*d*) Excise duty

4. Deficient demand refers to a situation when: **1**

(*a*) AD > AS (corresponding to full employment level)
(*b*) AD < AS (corresponding to full employment level)
(*c*) AS = AD (corresponding to underemployment level)
(*d*) none of these

5. Capital receipts of the budget include: **1**

(*a*) recovery of loans (*b*) borrowings
(*c*) disinvestment (*d*) all of these

6. C is not zero even when Y is. (True/False) **1**

Choose the correct option and complete the following statements:

7. Flow of goods and services and factors of production across different sectors in a barter economy is known as ____________. (real flow/monetary flow) **1**

8. If balance of trade is (–) 400 crore and value of exports is 200 crore, then the value of imports will be ____________. (₹ 200 crore/₹ 600 crore) **1**

9. What is appreciation of domestic currency? **1**

10. Calculate the value of money multiplier if the cash reserve requirement is 25%. **1**

11. State the various components of compensation of employees. **3**

Or

State any three precautions that need to be kept in mind while estimating national income by value added method.

12. What is the role of a central bank in the context of: **3**

(*a*) Fixed exchange. (*b*) Flexible exchange.

(*c*) Managed floating.

13. In an economy, the consumption function is $C = 230 + 0.7Y$ where C is consumption expenditure and Y is income. Calculate the equilibrium level of income and consumption expenditure when investment expenditure is ₹ 400. **4**

14. How do commercial banks contribute to money supply in the economy? Explain. **4**

Or

Supply of money is not simply the supply of notes and coins in the economy. Do you agree with the statement? Give reason in support of your answer.

15. The Government of Delhi has recently increased VAT (value added tax) on petrol and diesel. How would it impact fiscal deficit of the government and general price level in the state of Delhi? **4**

16. Explain with the help of diagram how equilibrium level of income in an economy is determined by saving and investment curves. Will there always be full employment at the equilibrium level of income? **6**

17. From the following data, calculate National Income by (*a*) Income Method, and (*b*) Expenditure Method: **6**

	Items	**(₹ in crore)**
(*i*)	Government final consumption expenditure	1,200
(*ii*)	Net domestic fixed capital formation	650
(*iii*)	Compensation of employees	1,050
(*iv*)	Profit	550
(*v*)	Private final consumption expenditure	1,500
(*vi*)	Mixed income of self-employed	850
(*vii*)	Change in stock	(–) 50
(*viii*)	Rent	250
(*ix*)	Interest	300
(*x*)	Net factor income from abroad	(–) 50
(*xi*)	Consumption of fixed capital	150
(*xii*)	Net indirect taxes	210
(*xiii*)	Net exports	(–) 90

Or

Calculate Net National Product at Market Price by (*a*) Income Method, and (*b*) Expenditure Method from the following data:

	Items	**(₹ in crore)**
(*i*)	Wages and salaries	750
(*ii*)	Rent	150

(*iii*)	Private final consumption expenditure	680
(*iv*)	Net indirect tax	120
(*v*)	Royalty	100
(*vi*)	Profits	350
(*vii*)	Government final consumption expenditure	1,350
(*viii*)	Net imports	80
(*ix*)	Social security contribution by employers	110
(*x*)	Social security contribution by employees	90
(*xi*)	Consumption of fixed capital	170
(*xii*)	Net factor income to abroad	(–) 20
(*xiii*)	Interest	450
(*xiv*)	Gross domestic capital formation	250

SECTION–B: INDIAN ECONOMIC DEVELOPMENT

Choose the correct option:

18. A strategy to protect domestic industry through import restrictions and import duties is called: **1**

(*a*) inward looking trade strategy (*b*) outward looking trade strategy
(*c*) export promotion strategy (*d*) none of these

19. Sale of equity of public sector enterprises by the government leads to: **1**

(*a*) liberalisation (*b*) privatisation
(*c*) globalisation (*d*) disinvestment

20. In India, absolute poverty is measured with reference to: **1**

(*a*) poverty line (*b*) GDP
(*c*) per capita income (*d*) unemployment

21. Medium-term credit is needed for: **1**

(*a*) purchase of new land (*b*) purchase of machinery
(*c*) purchase of seeds and manures (*d*) all of these

22. Alleviation of poverty was the central theme of Five Year Plans. (True/False) **1**

23. External trade has expanded much faster in India than Pakistan. (True/False) **1**

Choose the correct option and complete the following statements:

24. Natural rate of unemployment is consistent with a situation of ______________. (underemployment/full employment) **1**

25. ______________ is a non-conventional source of energy. (Wind energy/Natural gas) **1**

26. ______________ adopted a mixed-economy model of growth. (India/China) **1**

27. What is meant by infant mortality rate? **1**

28. What is meant by small scale industries? How do they help in promoting rural development? **3**

Or

"Objective of Pradhan Mantri Jan Dhan Yojana is to ensure access of financial services to the excluded section of society." Explain the goal of Indian economy highlighted in the above statement. Also identify one economic value involved in the above situation.

29. "Education for all" is still a distant dream in India. Discuss. **3**

30. There is greater risk in depending exclusively on farming for livelihood. Suggest any two activities that can be undertaken to avoid such situation. **4**

Or

What problems are being faced by the power sector in India?

31. Distinguish between formal and informal sectors of employment. **4**

32. China succeeded in attracting much greater FDI than India and Pakistan. Comment. **4**

33. Explain the need and type of land reforms implemented in the agriculture sector of the Indian economy. **6**

34. Briefly describe the three dimensional approach of the government to reduce poverty in India. **6**

Or

State the components of environment. Explain any three serious threats to India's environment caused by developmental activities of the economy.

**Hints to answers will be loaded on our website (www.vkpublications.com) in due course.*

PROJECT WORK

MULTIPLIER AND ITS APPLICATION IN THE INDIAN ECONOMY

1

PROJECT

Multiplier establishes a relationship between increase in autonomous investment (ΔI) and increase in GDP (ΔY). It is expressed as under:

$$K = \frac{\Delta Y}{\Delta I}$$

(Here, K = Multiplier; ΔY = Change in GDP; ΔI = Change in investment.)

Thus, multiplier is simply the ratio between ΔY (change in GDP) and ΔI (change in investment). To illustrate, if investment increases by ₹ 5 crore, and consequently GDP increases by ₹ 20 crore, then:

$K = \frac{\Delta Y}{\Delta I} = \frac{20}{5} = 4$. It signifies that due to an increase in investment (by ₹ 5 crore), income increases by a factor of 4 or that increase in GDP = 5 × 4 = ₹ 20 crore.

Thus:

$$\begin{array}{ccc} \Delta I \,.\, K & = & \Delta Y \\ \Downarrow \;\; \Downarrow & & \Downarrow \\ 5 \times 4 & = & 20 \end{array}$$

$K = \frac{\Delta Y}{\Delta I}$	*K : Multiplier*
Or, $\Delta I . K = \Delta Y$	*ΔY : Change in GDP*
	ΔI : Change in investment

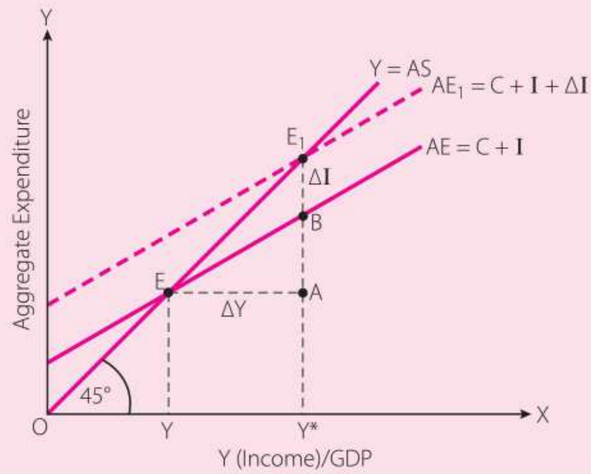
Note: *Since change in GDP is studied with respect to change in investment, it is called investment multiplier.*

- In the words of **Keynes**, "Investment multiplier tells us that when there is an increment of aggregate investment, income will increase by an amount which is K times the increment of investment."
- In the words of **Kurihara**, "The multiplier is the ratio of change in income to the change in investment."

Diagrammatic Illustration

Fig. 1 illustrates the multiplier effect of change in autonomous investment expenditure on GDP. The economy attains equilibrium at point E where AS = AD. With increase in autonomous investment expenditure, AE line shifts to AE_1. New equilibrium is at point E_1. GDP increases from OY to OY*. Change in GDP = OY* – OY = YY* = AE. Change in investment is BE_1. Clearly, AE > BE_1. Implying that, increase in GDP is the multiple of increase in investment expenditure

FIGURE 1



Why should GDP Increase many times more than the Increase in Investment?

It should be simple to understand it through an illustration:

Let us recall the multiplier equation:

$$K = \frac{\Delta Y}{\Delta I}$$

Or, $$\Delta I \cdot K = \Delta Y$$

Suppose producers make an additional investment (ΔI) of ₹ 100 crore in the economy during the year 2018-19. What does it mean? It means additional expenditure by the producers to enhance their production capacity. Where does this expenditure go? Obviously, expenditure by Mr. X becomes the income of Mr. Y. Let us assume ₹ 100 crore passes from X-set of individuals to Y-set of individuals. What will the Y-set of individuals do with additional ₹ 100 crore? Well, we all know that a part of income is saved and a part is spent. What part of the additional income is spent and what part is saved, depends on the marginal propensity to consume or marginal propensity to save of the Y-set of individuals. Suppose, marginal propensity to consume is 0.5, implying marginal propensity to save is also 0.5. (Because, we know that propensity to save + propensity to consume = 1.) Accordingly, half of ₹ 100 crore will be spent on consumption and the other half (₹ 50 crore) will be saved. Expenditure must become somebody's income. Accordingly additional expenditure of ₹ 50 crore becomes income, say of Z-set of people in the economy. Thus, owing to additional investment of ₹ 100 crore, there has been a sequence of increase in income, first by ₹ 100 crore, then by ₹ 50 crore. This sequence continues till $\frac{1}{2}$ of every additional income is used as consumption expenditure and the other half is saved. Accordingly, owing to an additional investment expenditure (of ₹ 100 crore) there is a series of consequential increase in income, *viz*., $100 + \frac{1}{2}(100) + \frac{1}{2}(50) + \frac{1}{2}(25)$, and so on. As elaborated in the subsequent section, this total should come to 200. Implying that an additional investment (ΔI) of ₹ 100 crore causes an additional income (ΔY) of ₹ 200 crore on the assumption that propensity to consume is 0.5. It is to be understood with emphasis that the value of multiplier (K which is 2 in this case as $\frac{\Delta Y}{\Delta I} = \frac{200}{100} = 2$) ultimately will depend upon the value of marginal propensity to consume or the marginal propensity to save. So, there is close relationship between the value of K and MPC. The following section substantiates this relationship further.

Relation between Marginal Propensity to Consume and Multiplier

In the words of **Kurihara,** "The value of multiplier is in fact determined by the marginal propensity to consume." Higher the marginal propensity to consume, greater is the size of multiplier. On the contrary, lower the marginal propensity to consume, smaller is the size of multiplier. People spend a part of this increased income on consumption and they save the rest. How much of their income people would spend on consumption, depends on their marginal propensity to consume (MPC). If marginal propensity to consume is high, they will spend high percentage of their income on consumption. Every expenditure reflects a corresponding increase in income. Accordingly, a high expenditure owing to high MPC would reflect itself as a high increase in income. Briefly, higher the marginal propensity to consume, greater the value of multiplier and hence, greater the increase in income. Implying a direct relation between multiplier and marginal propensity to consume.

Proving the Direct Relationship between MPC and K

We know that,

$$\Delta Y = K \,.\, \Delta I \qquad (\text{as } K = \frac{\Delta Y}{\Delta I}) \qquad \text{...(i)}$$

We have also known that in equilibrium,

$$S = I, \text{ so that}$$

$$\Delta S = \Delta I \qquad \text{...(ii)}$$

Recall that, $MPS = \frac{\Delta S}{\Delta Y}$, so that

$$\Delta S = MPS.\, \Delta Y \qquad \text{...(iii)}$$

Relating equation (ii) and (iii), we get

$$MPS \,.\, \Delta Y = \Delta I \qquad \text{...(iv)}$$

Dividing both the sides by MPS, we get

$$\Delta Y = \frac{1}{MPS} \,.\, \Delta I \qquad \text{... (v)}$$

Relating equation (i) and (v), we get

$$K \,.\, \Delta I = \frac{1}{MPS} \,.\, \Delta I$$

Or,

$$K = \frac{1}{MPS}$$

$$= \frac{1}{1 - MPC}$$

Hence, the conclusion: higher the MPC, higher the value of K; higher the MPS, lower the value of K.

Cross-Check

Let us take two different values of MPC as 0.2 and 0.4, and find the corresponding values of K.

$$K = \frac{1}{1 - MPC} = \frac{1}{1 - 0.2} = \frac{1}{0.8} = 1.25 \quad \text{...(i)}$$

and

$$K = \frac{1}{1 - MPC} = \frac{1}{1 - 0.4} = \frac{1}{0.6} = 1.67 \quad \text{...(ii)}$$

So, it is clear that higher the value of MPC, higher the value of K.

Check the value of K, now using two different values of MPS as 0.2 and 0.4

$$K = \frac{1}{MPS} = \frac{1}{0.2} = 5 \quad \text{...(i)}$$

$$K = \frac{1}{MPS} = \frac{1}{0.4} = 2.5 \quad \text{...(ii)}$$

Evidently, higher the value of MPS, lower the value of K.

In the words of **Hanson**, "The multiplier is large or small according as the marginal propensity to consume is large or small." Following table shows the value of K corresponding to the different values of MPC.

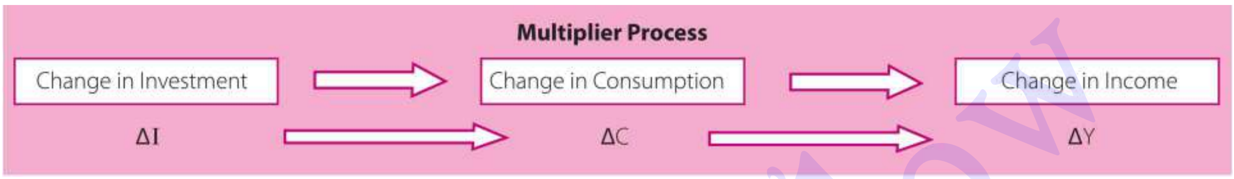
Table 1. Value of K Corresponding to Different Values of MPC

Marginal Propensity to Consume ($MPC = \frac{\Delta C}{\Delta Y}$)		Value of Multiplier	
0 (lowest value)		$K = \frac{1}{1 - MPC} = \frac{1}{1 - 0} = 1$	Higher MPC implies higher K
$\frac{1}{3}$	Some arbitrary values	$K = \frac{1}{1 - \frac{1}{3}} = \frac{1}{\frac{2}{3}} = 1.5$	
$\frac{1}{2}$		$K = \frac{1}{1 - \frac{1}{2}} = \frac{1}{\frac{1}{2}} = 2$	
$\frac{3}{4}$		$K = \frac{1}{1 - \frac{3}{4}} = \frac{1}{\frac{1}{4}} = 4$	
$\frac{4}{5}$		$K = \frac{1}{1 - \frac{4}{5}} = \frac{1}{\frac{1}{5}} = 5$	
$\frac{9}{10}$		$K = \frac{1}{1 - \frac{9}{10}} = \frac{1}{\frac{1}{10}} = 10$	
1 (highest value)		$K = \frac{1}{1 - 1} = \frac{1}{0} = \infty$	

Table 1 shows that when MPC is zero, multiplier is unity (1). Similarly, when MPC is unity (1), multiplier is infinity (∞). Between these two extremes, value of multiplier may be determined anywhere depending on the size of MPC. If MPC is unity, it implies that people spend all their income on consumption. In this situation, any increase in investment would lead to an infinite increase in national income. But in real life, as indicated by Keynes' Psychological Law, consumption does not increase in the same ratio as income; accordingly, the infinite value of multiplier is only a theoretical possibility.

Working of the Multiplier or Multiplier Process

Multiplier is a process. It works through the interplay of three macro variables, *viz*., investment, income and consumption as under:



Change in investment causes change in income. As a result, there is change in consumption. Consumption expenditure of one person is an income of the other. Hence, change in consumption leads to change in income. This process continues till ΔC as a consequence of ΔI reduces to zero. Check Table 2 for details.

Table 2. Multiplier Process

Round	Increase in Investment (ΔI) (₹ crore)	Induced Change in Consumption (ΔC) [assumed MPC = 0.5] ΔC = MPC × ΔY (₹ crore)	Change in Income (ΔY) (₹ crore)
1	100	—	100
2	—	0.5 × 100 = 50	50
3	—	0.5 × 50 = 25	25
4	—	0.5 × 25 = 12.5	12.5
5	—	0.5 × 12.5 = 6.25	6.25
6	—	0.5 × 6.25 = 3.12	3.12
7	—	0.5 × 3.12 = 1.56	1.56
8	—	0.5 × 1.56 = 0.78	0.78
9	—	0.5 × 0.78 = 0.39	0.39
10	—	0.5 × 0.39 = 0.195	0.195
	and so on till ΔC = 0		
	Total	100	200

Table 2 is based on the assumption that investment has been increased by ₹ 100 crore and MPC = 0.5. It offers following observations on the multiplier process:

(i) As a result of initial increase in investment by ₹ 100 crore, there is a change in income by ₹ 100 crore. This is assumed to occur in 1st round of change.

(ii) On the assumption that MPC = 0.5, consumption in the 2nd round increases by 0.5 (100) = ₹ 50 crore. Accordingly, income rises by ₹ 50 crore in the 2nd round.

(iii) In the 3rd round of change, consumption increases by 0.5 (50) = ₹ 25 crore. Accordingly income rises by ₹ 25 crore in the 3rd round.

(iv) This process of increase in consumption as $\frac{1}{2}$ of increase in income and additional consumption expenditure showing as additional income continues till increase in consumption reduces to zero, occurring nearly in the 10th round.

(v) Adding up the total change in income, we get ₹ 200 crore.

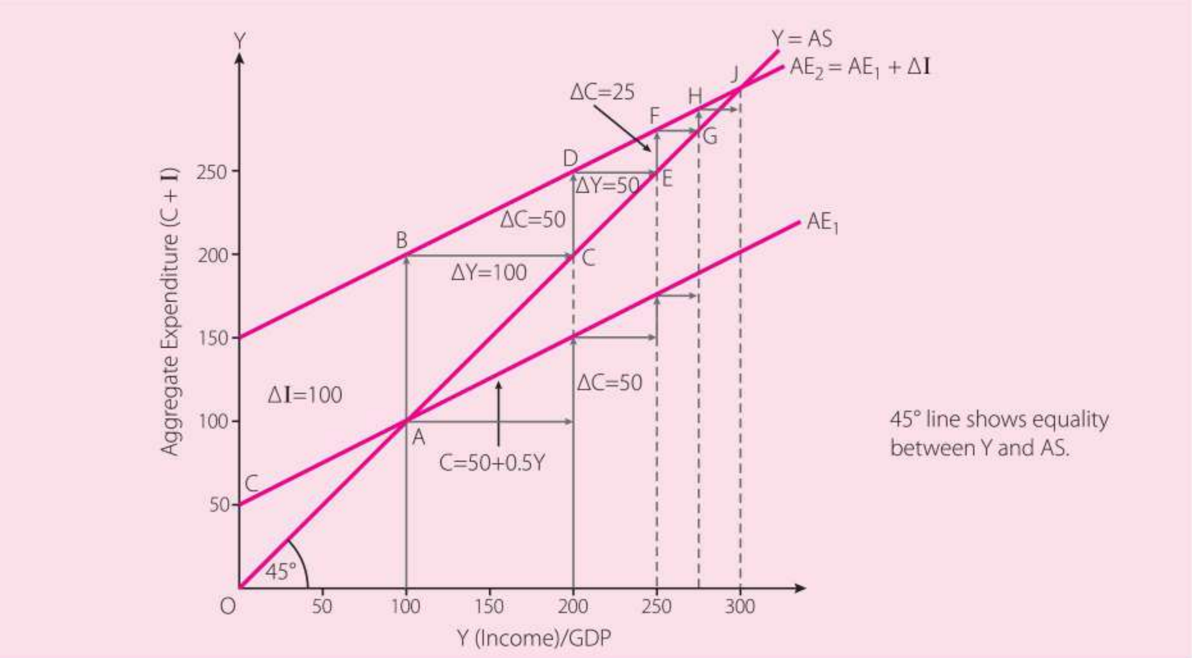
(vi) ΔY being 200 in response to ΔI of 100, the multiplier value = 2.

$$\left[K = \frac{\Delta Y}{\Delta I} = \frac{200}{100} = 2\right]$$

Diagrammatic Illustration of Multiplier Process

Multiplier process is explained diagrammatically through Fig. 2. This diagram is drawn on the assumption that MPC = $\frac{1}{2}$.

FIGURE 2



Income is shown on X-axis and expenditure (C + I) on Y-axis. AE is aggregate expenditure curve: AE_1 and AE_2 show lower and higher levels of AE, respectively. Initially the economy is in equilibrium at an income level of ₹ 100 crore. Point 'A' is an equilibrium point, because at this point AS = AD. Now, ΔI of ₹ 100 crore is planned. As a result, aggregate expenditure shifts from AE_1 to AE_2. Because of increase in investment by ₹ 100 crore (= AB), there will be an increase in income by ₹ 100 crore (= BC) in the 1st round. In the 2nd round, consumers will spend ₹ 50 crore (= CD) on consumption resulting in an increase in income by ₹ 50 crore (= DE). In the third round, the consumers will spend ₹ 25 crore (= EF) on consumption. As a result, income will increase by ₹ 25 crore (= FG). In the 4th round, the consumers will spend ₹ 12.5 crore (= HG) on consumption. This will increase income by ₹ 12.5 crore. This process will continue till additional consumption expenditure reduces to zero. This occurs at point J when the level of income reaches

₹ 300 crore. Thus, we find that an investment of ₹ 100 crore ultimately leads to an increase in income by ₹ 200 crore (= 300 – 100), on the assumption that MPC = 0.5. Accordingly, income increases by factor of 2 (of the increase in investment) and multiplier happens to be 2.

$$\left[K = \frac{\Delta Y}{\Delta I} = \frac{300 - 100}{100} = \frac{200}{100} = 2\right]$$

Reverse Operation of Multiplier

Multiplier is a double-edged sword. If an injection of investment (ΔI) causes multiplier-times (K times) increase in income, withdrawal of investment or disinvestment ($-\Delta I$) will cause K times decrease in income as well. So if, ΔI of ₹ 100 crore causes ΔY of ₹ 200 crore on the assumption that MPC = 0.5 (and therefore, K = 2), then – ΔI of ₹ 100 crore should cause – ΔY of ₹ 200 crore on the same assumption that MPC = 0.5 (and therefore, K = 2).

Fig. 3 illustrates the reverse operation of multiplier.

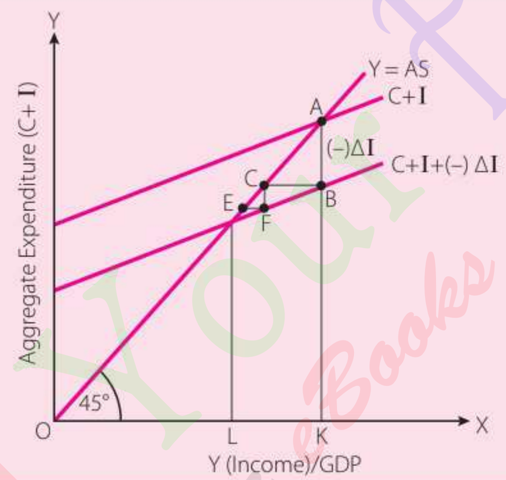


FIGURE 3

It is assumed that economy is in a state of equilibrium at point A when AS = AD. Equilibrium level of income = OK. Investment is reduced by AB (so that ΔI = – AB). Consequently, income reduces by CB in the 1st round (AB = CB); it further reduces by EF in the 2nd round, and finally (in all the rounds together) reduces by KL which is surely greater than the initial reduction in investment (ΔI = – AB; ΔY = – KL).

Application of the Multiplier Principle in the Indian Economy

Should Growth not be a Quick Process in the Indian Economy where MPC is very high?

This question must be bugging the reader's mind at this stage. Why should India continue to be less developed for so long when investment generates a multiple rise in income? And, when MPC in India is fairly high (because poor people spend the bulk of their income on consumption). The following description should bring out the fact why multiplier process is grossly truncated (much less than fully operational) in the Indian economy. Accordingly, the principle of multiplier loses much of its validity when studied in the Indian context.

Working of the multiplier process is based on the fundamental assumption that there exists excess capacity in the economy. So that, when investment rises and consequently, income rises and additional income is converted into additional consumption (implying additional demand), the producers respond by planning higher level of output, **utilising the existing production capacity**. But in India, the basic issue is not of utilisation of the existing production capacity, but of the lack of capacity itself.

Due to the presence of excess capacity, whenever consumption expenditure rises (implying increase in demand) there is a corresponding increase in production (implying increase in income). Excess capacity occurs due to lack of demand, which is a typical feature of developed economies. Accordingly, when demand rises, excess capacity is utilised, leading to a multiple rise in production and GDP (income) till the excess capacity is exhausted. The problem in India is of generation of capacity. It is the problem of capital formation. We do not have abundant capital stock to increase the level of GDP, even when we have abundant labour force. Our labour force remains unemployed because of the lack of capital (production capacity). Accordingly, rise of demand consequent upon rise in expenditure is not expected to cause a rise in output. Instead, it may lead to higher pressure of demand on the existing output. Leading to inflationary spiral in the country.

Does it mean that the multiplier process does not work at all in the Indian economy? Does it mean that increase in expenditure (AD) is dangerous as it would always lead to inflationary spiral? Answer is 'NO'. While full scale application of the multiplier principle is ruled out in the Indian economy, its partial application is not denied. Indian economy exhibits a typical characteristic: while there is always a lingering threat of overall inflation, the industrial sector often suffers from the deficiency of demand. This sector is often confronted with deflation. The reason is this: having spent the bulk of their income on food and related essential items, the vast majority of the population in India are left with meager (small) income for the purchase of industrial goods (related to comforts and luxury of life). Accordingly, demand for these goods remains subdued (low) even when there is overall inflationary spiral in the economy. Such a situation is described by the economists as of 'stagflation'. Implying stagnation of the industrial sector in the midst of over inflationary spiral in the country. The situation of industrial stagnation quite often implies the existence of excess capacity in the industrial sector. When aggregate demand rises, it is this sector (loaded with excess capacity) which is expected to respond with higher level of output. And in this process, autonomous investment is expected to generate multiplier effect on the rise in GDP (income).

Briefly, multiplier effect in the India (like other less developed countries) works only partially and is confined only to that production activity where deficiency of demand is a prominent feature.

VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

1. Define multiplier.

Ans. Multiplier is the ratio of change in income to the change in investment.

2. What is the relationship between MPC and multiplier?

Ans. The value of multiplier is directly related to the value of MPC. Higher MPC leads to higher value of the multiplier.

3. How does the multiplier process work?

Ans. Multiplier process works through the interplay of three macro variables: investment, income and consumption.

Investment is an expenditure and additional expenditure becomes additional income in the economy. Since additional income is split as additional consumption and additional saving ($\Delta Y = \Delta C + \Delta S$), every time the consumption rises, there is a rise in expenditure, implying a rise in income. Higher the MPC, greater should be the component of additional consumption out of additional income. Accordingly, higher should be the level of additional income. According to this process, if additional investment (ΔI) = 100, and MPC = 0.5 (or MPS = 0.5), then the total additional income generated in the economy would be $= 100 \times \frac{1}{0.5\,(MPS)} = 200$.

Or, $100 \times \frac{1}{1 - MPC} = 100 \times \frac{1}{1 - 0.5} = 100 \times \frac{1}{0.5} = 200$.

4. Multiplier process is active only when there is excess capacity in the economy. Do you agree?

Ans. It is true that the multiplier process is active only when there is excess capacity in the economy. When expenditure rises, it must lead to utilisation of the excess capacity, so that output rises, implying a rise in income. In case there is no excess capacity, additional expenditure would only lead to additional demand without additional supply. It would be a situation of inflationary spiral without any real rise in output.

5. Multiplier process is only partially active in less developed economies like India. Do you agree?

Ans. It is true that the multiplier process is only partially active in less developed countries like India. It is because in these countries, the problem is not of utilisation of excess capacity. Instead it is the problem of creation of production capacity.

6. Multiplier as a tool of economic analysis is more relevant in the context of deflation rather than inflation. Explain how.

Ans. It is true that multiplier as a tool of economic analysis is more relevant in the context of deflation rather than inflation. Because, existence of excess capacity (unutilised production capacity) is a necessary prerequisite of the operational success of the principle of multiplier. And, this condition is fulfilled only when the economy is battling deflation, not inflation.

7. Why multiplier principle is of limited validity in the Indian economy even when propensity to consume is high?

Ans. Multiplier principle is of limited validity in the Indian economy even when MPC is high. This is because of the general lack of excess capacity in the economy. The problem in the Indian economy is not as much of utilisation of the excess capacity as of the generation of more capacity. We know, the multiplier process becomes active only when there is unutilised capacity in the economy.

2

PROJECT

DEMONETISATION IN INDIA

Introduction

November 8, 2016 was the day when ₹ 500 and ₹ 1,000 notes were withdrawn from circulation. It amounted to withdrawal of 86% currency in circulation. People were advised to go to the banks to replace old notes with the new ones. There were serpentine queues inside and outside the banks. The economy was gripped by the liquidity crises. But, by and large, the people endured it. Because, they believed that demonetisation was a move against the hoarders of black money. The people believed that demonetisation was an action against the rich, and a move in favour of the poor.

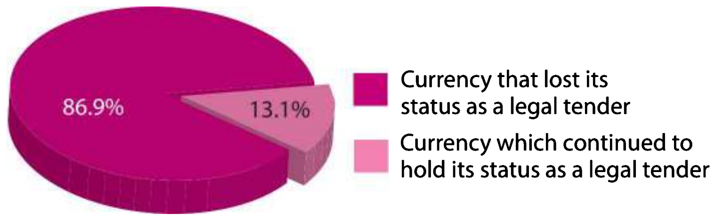
Demonetisation was a major economic event of the year 2016. It led to a deep impact on all sections of the society including households, traders and industrialists. The present paper attempts to examine the good and bad impact of demonetisation along with its overall evaluation as an economic policy.

Concept of Demonetisation

A currency note of ₹ 2,000 is just a piece of paper unless the government declares it as a legal tender. It carries the exchange value of ₹ 2,000 because the government imparts this value to it. When the government withdraws the value imparted to a currency note, it no longer remains a legal lender. It is reduced to a piece of paper. Withdrawal of the status of 'legal tender' to the currency in circulation is called demonetisation. After demonetisation, the exchange value imparted to the currency ceases to exist. Demonetised currency is no longer accepted as a medium of exchange. Its purchasing power is reduced to zero. Thus, demonetisation of ₹ 1,000 and ₹ 500 notes on Nov. 8, 2016 by the Government of India implied that these notes lost their status of legal tender. These notes were no longer to be accepted as a medium of exchange. Their purchasing power was reduced to zero. These notes were reduced to pieces of paper.

Extent of Demonetisation

Nov. 8, 2016 was the doom's day for the holders of unaccounted cash. Because, demonetisation of ₹ 500 and ₹ 1,000 notes (high value currency notes) led to a massive loss of liquidity in the economy.



According to RBI Report, demonetised currency (on Nov. 8, 2016) valued at ₹ 15.4 trillion. It amounted to 86.9% of the value of total currency in circulation.

Why was Demonetisation Done: Expected Benefits of Demonetisation

Demonetisation was expected to generate the following benefits:

(1) Elimination of Black Money

Black money is a household name in India. It refers to unaccounted money. Holders of black money avoid payment of tax on this money. By demonetising high value currency notes, the government wanted to eliminate the stock of black money in the economy. Following demonetisation, people were forced to declare their unaccounted cash balances. Otherwise, these balances would be reduced to pieces of paper.

(2) Eradication of Corruption

High value currency notes are the commonly accepted medium of bribe. The government wanted to strike at the root of corruption by banning these notes.

(3) Elimination of Counterfeit Currency

Note ban would have implied the elimination of counterfeit currency. Counterfeit currency enhances money in circulation and contributes to inflationary spiral. It destablises the economy.

(4) Elimination of Terror Funding

Note ban also aimed at the elimination of terror funding. It is largely in high value currency notes that the terrorists receive funds through hidden sources.

(5) Money Laundering

Demonetisation was expected to check money laundering. It refers to hidden transfer of funds across different regions of the country. With cash transactions coming to a grinding halt, demonetisation would have hurt money laundering in a big way.

(6) Rise in Government Revenue

Demonetisation was expected to force many people to convert their black money into white by paying taxes and penalty to the government. Accordingly, government revenue was expected to rise.

(7) Financial Inclusion

The government expected poor people to deposit their cash in Jan Dhan Accounts. This would increase financial inclusion in the economy. The poor people could avail loans from the banks on the basis of their bank deposits.

(8) Cashless (or Low Cash) Economy

Demonetisation was expected to promote digital transactions or e-transactions in the economy. Higher level of e-transactions (implying lower level of cash transactions) would mean a shift from cash economy to cashless economy. Cash economies are breeding centres of corruption. If transactions are effected through banks, the corruption would get a big jolt. Developed economies are cashless economies and almost free from corruption.

Impact of Demonetisation

It is not easy to analyse the actual impact of demonetisation. Because demonetisation is a recent economic event, it is yet to unfold its full impact particularly over a longer period of time. Impact of demonetisation as discussed in the present literature is mostly immediate impact or short period impact. One can only make a guess about long period impact of demonetisation. Short period impact of demonetisation is split as good and bad impact. This is discussed as under.

Good Impact of Demonetisation

Following observations highlight the good impact of demonetisation:

(1) Check on Food Inflation

Owing to a substantial withdrawal of currency in circulation, demonetisation led to a check on food inflation in the economy. Liquidity crunch led to a substantial fall in stock-piling of food grains. Accordingly, there was a sharp fall in food inflation by about 240 basic points between November 2016—January 2017.

(2) Elimination of Fake Currency

There was 100% elimination of fake currency (counterfeit currency) from the economy. The racketeers of fake currency were badly hurt just with one stroke of the government.

(3) Surge in Cash Deposits

There was a surge in cash deposits in Jan Dhan Accounts. This promoted financial inclusion to its top gear. According to the RBI estimate, ₹11.5 lakh crore money was deposited in the banks following demonetisation.

(4) Attack on Hawala Transactions

Hawala transaction (hidden transactions and transfers of money) were deeply hurt as cash almost evaporated from the economy.

(5) Realisation of Overdues

People rushed to clear their overdues related to bank loans, property tax, electricity bills, etc. Because, the government provided a window of clearing the old dues by using the old (demonetised) currency.

(6) Push towards Digitisation

With cash almost disappearing from the market, people were driven to digital mode of transactions. This was a big move towards cashless (or low cash) economy. It also promoted banking habits of the people, a big leap towards financial inclusion.

(7) Tax Compliance

A shift from cash to banking transactions led to better tax compliance. The government recorded a noticeable rise in tax to GDP ratio.

(8) Real Estate Cleansing

Demonetisation led to a deep cleansing of real estate sector. This sector served as the centre-stage of shadow economy (economy that is driven through black money transactions). With the eradication of black money (following demonetisation) real estate sector lost its sheen for speculative investment through black money. Prices in the real estate sector have crashed and housing is becoming more and more affordable for the middle and lower sections of the society.

Bad Impact of Demonetisation

Demonetisation was not all boon; it was a bane as well. It generated bad impact in the economy, as evident from the following observations:

(1) A Deep Hurt to Economic Sentiment

The idea of banning nearly 86% of the currency in circulation led to a serious cut in monetary base of the country: the monetary base declined from ₹ 22.5 trillion to ₹ 13.7 trillion. This caused a deep hurt to economic sentiment in the domestic economy. Economic activity is driven by economic sentiment. If economic sentiment is hurt, economic activity must suffer. Consequently, following demonetisation, all parameters of economic activity (production, consumption, investment and exchange) received a big jolt. The producers planned lesser output, consumers planned lesser consumption, investors planned lesser investment and exchange (sale and purchase of goods and services) starting shrinking. There was an environment of economic slowdown.

(2) Large-Scale Lay-off in Unorganised Sector (Informal Economy)

Nearly 90 per cent of the workforce in India is engaged in informal economy (or unorganised sector of the economy) for their livelihood. And this segment of the economy is highly cash dependent and cash-sensitive. A huge cut in liquidity (following note ban) implied that cash purchase of inputs and cash payment of wages became impossible. These led to an instantaneous cut in production activity. Consequently, there was a large-scale lay-off. Daily wagers lost their employment from day-1 of demonetisation.

(3) Dent in GDP Growth

Massive lay-off and declining economic sentiment implied a significant dent in GDP growth. According to most estimates (including the one by Prof. Manmohan Singh, the former Prime Minister of the country), there was nearly a 2 per cent decline in country's GDP growth as a consequence of demonetisation.

Once GDP growth takes a hit, it leads to a spiral effect (snowball effect). Because, declining level of production activity (as indicated by a declining GDP growth) leads to a chain-effect in the economy. So that, the decline (the downward trend) become self-perpetuating over the years. Unless, of course, some drastic measures are initiated by the government to arrest the down-trend. The following flow chart reveals how once a decline in GDP growth is triggered, it tends to become repetitive in nature:

Decline in GDP growth rate ⟶ Decline in the level of income and employment ⟶ Decline in the level of AD ⟶ Decline in planned output ⟶ Further decline in GDP growth rate

This cycle continues to repeat itself, and may drive the economy from slowdown to stagnation.

It is in view of such possibilities that various agencies have had revised their estimates of GDP growth in India as indicated in the Table 1.

Table 1. Original and Revised Estimates of GDP Growth for the Year 2017

(Figures in percentage)

Name of the Estimating Institution	Original Estimate	Revised Estimate
RBI	7.6	7.1
World Bank	7.6	7.0
IMF	7.6	6.6

Actual estimates of GDP growth (for the year 2017), as presented in Economic Survey (2017-18) have indeed recorded a slowdown in GDP growth to 6.6%.

(4) Slump in Real Estate

Demonetisation has led to slump in real estate sector of the economy. This sector has been one of the prime GDP drivers in the Indian economy. Undoubtedly, demonetisation has significantly cleansed this sector of black money transactions. But, at the same time, sale and purchase in this sector has touched the rock-button. Construction activity has been severely hit, while inventory has piled up. Opportunities of employment have dried up. The hope of revival of this sector is rather bleak and remote. Stagnation of real estate sector is bound to be a serious bottleneck in the overall growth process of the Indian economy.

Should We Expect the Economy to be Back on the Track

It is a general belief that the dent in GDP growth may be larger than anticipated and may last longer than expected. Once the economic sentiment is negatively hurt, it turns into a momentum of economic pessimism. It is, therefore, believed that the recovery process is much longer, even when the supply of money is fully restored in the economy.

Undoubtedly, there is a lingering liquidity crunch in the economy. The government desires that the people shift to digital mode of transactions. But adoption of digital devices is not so easy in a country where even the literacy rate is not so encouraging. Indian economy is driven by cash transactions, not entirely because cash transactions facilitate corruption, but also because cash transactions are a convenient mode of exchange for the bulk of population in India which is highly cash sensitive owing to their poverty and limited survival-needs. Not that digitisation is not desired. But it is a typical characteristic of advanced economies where people have diverse needs and sound banking habits. Digitisation of transactions is perhaps a far cry for a nation which is still grappling with the problem of financial inclusion. Let financial inclusion be achieved before we look for digitisation of transactions.

Summing up, we can say that while Note Ban in India has shown good result in the elimination of black money and eradication of corruption, it has certainly dented our GDP growth.

Moreover, we have failed to realise our dream of turning cash-sensitive economy into a cash-less economy. This transition seems to be a long drawn process and perhaps could not be achieved with a single act of demonetisation.

VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

1. Differentiate between demonetisation and remonetisation.

Ans. Demonetisation refers to withdrawal of the status of 'legal tender' to the currency in circulation. Remonetisation occurs when new currency is issued in place of the banned currency.

2. Has demonetisation really eradicated corruption in India?

Ans. See Q. 30, page 320.

3. What is shadow economy?

Ans. A shadow economy means a black money economy where business transactions are conducted without tax-payment. Tax evasion is the core characteristic of a shadow economy.

4. How is demonetisation linked with financial inclusion?

Ans. See Q. 29, page 320.

5. How is cashless economy different from cash economy?

Ans. Cash economy is the one which is highly cash-sensitive and in which most transactions are conducted in cash. On the other hand, cashless economy is the one which is dominated by digital mode of transactions (e-transactions).

6. Tell the principal merit of cashless economy.

Ans. The principal merit of cashless economy is that it leads to the elimination of black money. Because, black money transactions occur largely in terms of cash.

7. Demonetisation has dented the GDP growth in India. How?

Ans. Indian economy is a cash-sensitive economy. Demonetisation led to the withdrawal of nearly 80% currency in circulation. With a long time lag between demonetisation and remonetisation, there was almost a drought of cash in the economy. Accordingly, economic sentiment of the people was deeply hurt and economic transactions received a big jolt. Production activity severely declined, particularly in unorganised sector of the economy. Accordingly, GDP growth was dented.

8. Was demonetisation a good move? Give your opinion.

Ans. See Q. 21, page 325.

9. Do you think demonetisation should become a recurring feature to eliminate black money from the economy?

Ans. No, demonetisation should never become a recurring feature in the cash-sensitive economies like India. Because, the recent experience shows that demonetisation leads to a big decline in economic sentiment, implying a big dent in GDP growth. Also, it leads to social disruption as the bulk of population in India is liquidity-sensitive and not used to banking transactions or e-transactions.

PROS AND CONS OF GST

3

PROJECT

Introduction

Broadly speaking, GST (Goods and Service Tax) is one tax subsuming (replacing) all the indirect taxes in the economy. It is said to be national tax. Because, it is a uniform tax across all states of the country: only one rate will prevail on one set of goods across all parts of the country. Accordingly, GST carries the slogan of 'one tax, one nation, one market'.

So simple it appears to be. But GST has covered a long journey of nearly 17 years before coming to its final shape. Implying, that it was indeed very difficult for the government to work out a simplified tax structure relating to goods and services. Pros and Cons of GST are being hotly debated by the cross section of the society. Opposition to GST is so strong that there have been strikes and 'bandhs' in many parts of the country, following its introduction.

Concept of GST

GST is essentially a tax on value addition covering the entire range of production activity from manufacturer to the consumer. If the producer pays GST on the purchase of inputs, he can avail of GST credit (input credit) when he converts inputs into output and there is value addition. Thus, if Good-X passes through 3 stages of value addition (before becoming a final good), the consumer is loaded with GST only at the third stage when it is purchased for final consumption. At the other two stages [which are intermediate stages of production (and during which output of one firm is used as input by the other)] tax burden will automatically be siphoned off. Thus, there is no cascading (compounding) of tax load on the consumer. The following example illustrates this point:

- Firm A manufactures household furniture.
- It buys inputs from different firms.
- Firm A buys some inputs from Firm B and pays GST = ₹10,000.
- Firm A buys some more inputs from Firm C and pays GST = ₹20,000.
- Firm A buys another set of inputs from Firm D and pays GST = ₹30,000.
- Firm A sells its final output to the households for ₹10,00,000 and charges 10% GST

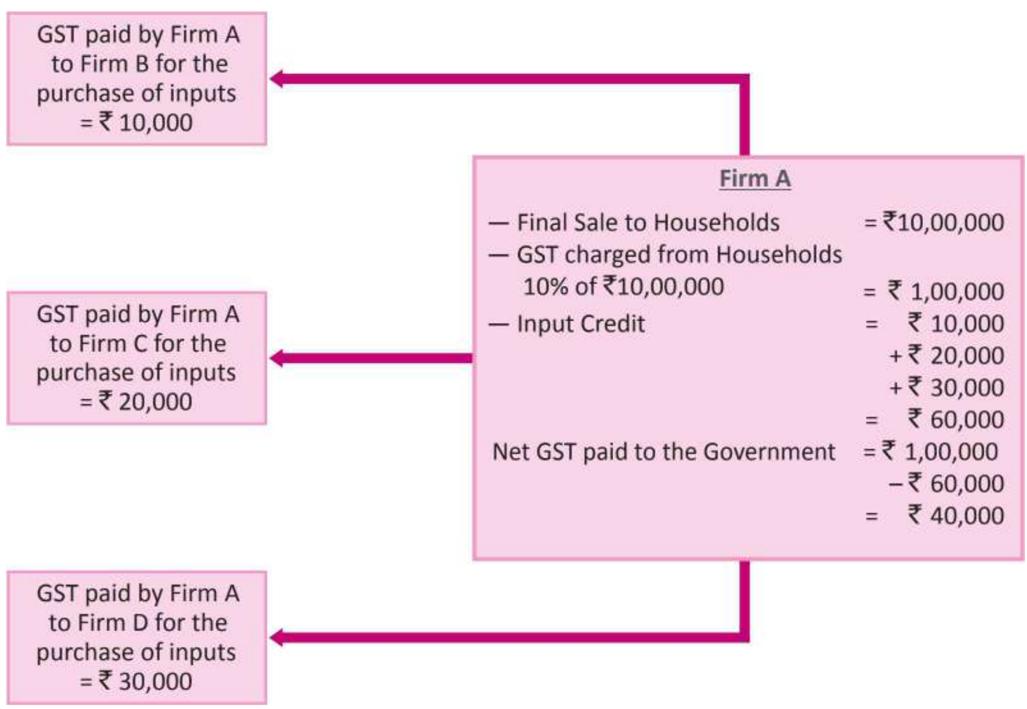
$$= \frac{10}{100} \times ₹10,00,000$$

$$= ₹1,00,000.$$

- GST liability of Firm A = GST charged – GST paid
  = ₹1,00,000 – ₹60,000 (₹10,000 + ₹20,000 + ₹30,000)
  = ₹40,000.
- GST of ₹60,000 paid by Firm A on the purchase of inputs is adjusted against GST charged by it (= ₹1,00,000). This is called adjustment of 'GST credit' or 'input credit.'
- Final incidence (impact) of GST on the consumers = ₹1,00,000 which is 10% of the value of the FINAL PRODUCT.

Briefly, Firm A collects GST of ₹1,00,000 from the households (the end-users of household furniture), and it deposits ₹1,00,000 – ₹60,000 = ₹40,000 with the government having adjusted for 'input credit' of ₹60,000. Input credit is equal to GST paid by Firm A to Firm B, C and D on the purchase of inputs. The following flow chart further elaborates this point:

GST Flow Chart



Note: If GST amount charged by a firm on the sale of its output is less than the GST amount paid by it on the purchase of inputs, the firm can claim refund of GST from the government.

Structure of GST

GST Council has specified multi-tier tax structure of 0%, 5%, 12%, 18% and 28% as applicable to different categories of goods and services. The latest category list (issued by the government in 2019) is as under:

(1) No Tax Category

It includes goods like sanitary napkins, deities made of stone, raw material used in brooms, and fortified milk, fresh fruits & vegetables.

It also includes services like of hotels and lodges who carry a tariff below ₹ 1,000.

(2) 5% GST Category

It includes goods like skimmed milk powder, fish fillet, frozen vegetables, coffee, coal, fertilizers, tea, spices, pizza bread, kerosene and so on.

Services like of railways and airways are also included.

(3) 12% GST Category

It includes goods like frozen meat products, butter, cheese, ghee, pickles, sausage & fruit juices, jewellery box, ayurvedic medicines, wooden frames for painting and photographs.

Business class air tickets and movie tickets below ₹ 100 also fall in this category.

(4) 18% GST Category

Sugar, cornflakes, pasta, pastries and cakes, detergents are some notable items in this category.

It also includes services of restaurants located inside hotels with tariffs between ₹ 2,500 and ₹ 7,500 and above, outdoor catering & movie tickets priced above ₹ 100.

(5) 28% GST Category

This includes over 200 goods, mainly sunscreen, pan masala, automobiles, dishwasher, vending machines.

Services like of five-star hotels with tariff exceeding ₹ 7,500.

Merits of GST

The government claims the following merits of GST:

(1) Common Man Friendly

A common man should get following benefits of GST:

(i) GST Act provides that the common items of consumption of the common man remain tax-free. Thus, no tax is levied on items like milk, curd, fresh fruits, vegetables and the like. This should give a big relief to the common man.

(ii) Only a moderate tax of 5% is levied on items like tea, coffee and medicines which is another set of items being commonly used by most people of the country.

Briefly, the essentials of life of a common man are either tax-free or moderately taxed.

(2) Advantages for Trade and Industry

In this context, we may note the following observations:

(i) Procedure for filing GST returns has been simplified. Facility for filing e-returns will definitely save lot of time of the traders and the industrialists.

(ii) There shall be an uninterrupted flow of 'input credit'. So that, the incidence of taxation does not cascade (compound). The traders and the industrialists can claim 'input credit' themselves while filing GST returns.

(iii) A cut in taxation (compared to the earlier tax structure) would enhance competitive power of the traders and the industrialists in the international goods market.

(iv) Tax-exemption on many commonly used items would offer a more favourable market environment to the small traders who deal in these items.

(3) Benefits to the Economy

Following points highlight the benefits of GST to the economy:

(i) GST is expected to create one unified market for most goods and services in the country. It means that for every producer in the economy the size of the market will expand.

(ii) If the prices of goods and services tend to fall in the domestic economy (as is expected by the government), exports will rise, leading to higher earnings of foreign exchange.

(iii) A unified market is expected to lead to Balanced Regional Growth.

(iv) With the growth of market size, GST is expected to raise the level of economic activity in the economy. Implying faster GDP growth. It would also mean faster generation of the opportunities of employment.

(v) GST is expected to improve tax compliance. Because:

(a) Input credit will be available to only those who buy their inputs from GST-compliant firms.

(b) There is to be a digital record and monitoring of value addition at stages of production activity.

Higher degree of tax compliance would mean:

(a) higher tax-GDP ratio, and

(b) gradual elimination of the 'shadow economy' or the black money economy.

Creating One Economic India

With unified market and free movement of goods across all parts of the country, GST will help create one 'Economic India'. This would mean 'level playing field' for all buyers and sellers in the country. Domestic economy would become more competitive. Higher the degree of competition, greater the need for innovations. Innovative economy is always better placed for 'takes-off' and 'sustained growth'.

Demerits of GST

GST is not free from criticism. Following points are raised against this tax:

(i) Due to compulsions of tax compliance, small and marginal producers of the shadow economy (where tax is evaded) may find it difficult to continue their business operations.

(ii) If the small and marginal producers are eliminated, production activity will decline. Still harder will be the impact on employment. Because, it is production activity in the shadow economy which generates most employment opportunities in the country.

(iii) The government proposes to set up 'Anti-profiteering Authority' to monitor that the benefits of lower taxation is actually passed on to the consumers. This authority shall have the right to cancel registration of such business establishments which are found to be exploiting the consumers by charging higher price. The business community has expressed their serious resentment over this issue. They are fearing that the Anti-profiteering Authority will mean the return of 'Inspector Raj' leading to a rise in corruption.

(iv) It is feared that the operating cost of small and marginal producers will rise owing to the maintenance of records at all levels of sale and purchase of goods and services.

(v) There is a definite possibility that post-GST, the prices of some goods and services will rise. This might contribute to inflationary spiral in the country. Inflationary spiral is also feared owing to the fact that post-GST nearly 75% goods and services will bear the incidence (impact) of taxation.

(vi) According to P. Chidambaram (ex-Finance Minister), small, medium and microscale entrepreneurs are not GST-prepared. Even when GST is a tax-reform, its introduction should have waited till these entrepreneurs fully understand the pros and cons of this tax. These entrepreneurs, according to Chidambaram, are still not clear as to who is leving GST–state or the centre.

(vii) Petroleum and Electricity are out of the ambit of GST, even when these products constitute nearly 35-40% of the economy. This is a serious demerit or deficiency of GST.

Evaluation

GST is a national tax replacing multiple of taxes on goods and services in the economy. 'One tax in place of all' is undoubtedly a significant reform in the field of taxation. It is also an undoubted fact that GST would increase tax compliance leading to (i) a rise in tax-GDP ratio, and (ii) elimination of the shadow economy (even though it may happen only over a longer period of time). Yet, the flaws related to GST cannot be overlooked. Particularly, the fact that petroleum products which are a significant source of revenue of the state governments are out of the ambit of GST. Presently, these products are carrying a tax load of nearly 50% of the market price. Given the fact that the highest GST slab is 28%, if petroleum products are brought in the ambit of GST, the consumers will get a significant relief by way of price cut. If GST is being propagated as consumer-friendly, then why not bring petroleum products in the ambit of GST. Also, the government must allay fears of the small and marginal entrepreneurs that Anti-profiteering Authority will not mark the return of 'Inspector Raj' in the country. This authority should work for erosion of corruption rather than promoting it through harassment of the business community.

Briefly, GST is welcome provided it is implemented in letter and spirit. The government must make GST as a landmark tax reform rather than a tax regime laden with fears and apprehensions.

VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

1. Explain the concept of GST.

Ans. See Q. 31, page 320.

2. How is GST a national tax?

Ans. GST is a national tax, because it carries one tax rate for a given set of goods across all parts of the country.

3. What is input credit?

Ans. Input credit refers to the credit claimed by a firm on account of GST paid on the purchase of inputs.

4. Explain how GST is essentially a value added tax.

Ans. GST is essentially a value added tax as it is a tax levied at all stages of value addition. But, it does not mean cascading of a tax. Consumers are loaded with GST only at the final stage of value addition (when goods are ready for use by the consumers). The burden of GST on the purchase of inputs is not passed on to the final buyers (consumers). Instead, it is refunded to the firm by way of input credit.

5. Give a brief description of the structure of GST.

Ans. See Q. 22, page 325.

6. GST will lead to better tax compliance. Do you agree?

Ans. Of course, GST would lead to better tax compliance. It is because of two reasons:

(i) Input credit (refund of GST on the purchase of inputs) is available to the firms only when the inputs are purchased from the GST compliant firms, and

(ii) A digital record is to be maintained of value addition at all stages of production.

7. How is GST a common man friendly tax?

Ans. See Q. 31, page 320, 321.

8. Explain how GST will enhance competitiveness in the economy.

Ans. GST is expected to enhance competitiveness in the domestic market as it provides a level-playing field to all the producers of a particular commodity in the market. All producers, across all states of the country, are liable to a uniform GST.

9. GST will lead to one unified market in the domestic economy. Explain how.

Ans. GST is expected to lead to a unified market in the domestic economy, because a uniform tax structure (relating to goods and services) is to prevail across all parts of the country.

10. Why is there opposition to GST?

Ans. Opposition to GST arises owing to two factors:

(i) The marginal producing units operating in a shadow economy can no longer evade their liability to pay taxes (taxes on goods and services), and

(ii) It carries the fear that the Anti-profiteering Authority may lead to the return of 'Inspector-Raj'.

11. Give your evaluation of GST in India.

Ans. See Q. 23, page 325.

PUBLIC HEALTH EXPENDITURE IN INDIA

4

PROJECT

Introduction

"Sound mind in a sound body." It is an old saying conveying a significant message. It underlines the need for good health of the citizens of a nation. A country with healthy population will have healthy workforce. Healthy workforce, having sound physical and mental abilities, will set up new benchmarks of efficiency and skill. Over the long run, it would mean a shift in the potential level of output even when other resources (other than human resource) of the country remain constant. Technically, this would mean a forward shift in production possibility curve of the nation. Implying a forward shift in economic prosperity of the residents.

The present study focuses on the role played by the government in maintaining and promoting health of the residents of our country. Public health expenditure is the central parameter of this study.

What does Public Health Expenditure Mean?

Public health expenditure in India refers to expenditure on health incurred by the three layers of the government: (i) the Central Government, (ii) the State Government, and (iii) Local Self Government (Municipal Committees and Municipal Corporations). The Central Government spends money on building medical infrastructure in the countries like AIIMS (All India Institute of Medical Sciences). It also provides Grant-in-Aid to the state governments for healthcare of the residents of the state. The state government runs several hospitals and dispensaries, offering free medical care to the residents. The state government also transfers funds to the local bodies for healthcare. The local bodies concentrate on cleanliness of their areas. Expenditure on preventive care (preventing the occurrence of diseases) is their principal concern. However, it is a matter of debate whether expenditure on sanitation by the local bodies should be included in health expenditure or not.

The Data Base and Analysis

We are relying on secondary data. The data is drawn primarily from two sources:

(i) Economic Survey of India, and

(ii) World Health Organisation.

The data used in the study relate to India and other countries. The idea is to assess how India fares in public health expenditure in relation to other countries of the world. The following sections of the study include diverse sets of data relating to diverse indicators of healthcare. Each data-set is presented in the form of a Table, showing how India performs in healthcare in relation to rest of the world. We are starting with a Table, showing public health expenditure as percentage of GDP across different countries of the world including India.

Table 1. Public Health Expenditure (Percentage of GDP) in India and Other Countries (1995 & 2016)

Country	Expenditure 1995	Expenditure 2016
Algeria	3.7	6.65
Argentina	8.3	7.55
Australia	7.3	9.25
Austria	7.5	10.44
Bahamas	6.9	6.38
Bangladesh	3.2	2.37
Belgium	7.6	10.04
Bhutan	4.0	3.45
Brazil	6.5	11.77
Bulgaria	4.8	8.23
Canada	8.9	10.53
China	3.5	4.98
Colombia	6.8	5.91
Cuba	5.2	12.19
Denmark	8.1	10.35
El Salvador	6.4	6.96
Ethiopia	3.0	3.97
France	10.1	11.54
Germany	9.4	11.14
Greece	8.3	8.45
Haiti	6.6	5.39
Hungary	7.2	7.36
India	4.0	3.66
Indonesia	2.0	3.12
Iran	3.7	8.10
Ireland	6.4	7.38
Israel	7.3	7.31
Italy	7.1	8.94
Japan	6.6	10.93

Source: World Bank

Observations

Table 1 offers the following observations:

(i) In India, public health expenditure (as percentage of GDP) ranks amongst lowest in the world. In 2016, it is estimated to be 3.66% of GDP, contrasting with 11.54% in France, 11.14% in Germany, 10.53% in Canada and 10.35% in Denmark. Even China and Iran are performing better (than India) where it is 4.98% and 8.10% respectively. Of course, we compete better with Indonesia where it is 3.12% and Bangladesh where it is 2.37%.

(ii) Over time, public health expenditure (as percentage of GDP) has decreased, from 4.0% in 1995 to 3.66% in 2016. Countries like Iran are showing substantial improvement, from 3.7% in 1995 to 8.10% in 2016. This shows attitude of continuous neglect by the government in India with regard to healthcare of its citizen.

(iii) Considering the fact that India's GDP number is far smaller than that of developed countries and the fact that India's population size is far larger, low percentage of public health expenditure points to a miserably low per capita public health expenditure in India.

$$\frac{\text{Small size of total public health expenditure}}{\text{Big size of total population}} = \text{Miserably low per capita public health expenditure}$$

No wonder, if Indian population is confronted with disease and premature loss of life.

We now come to Table 2 showing public health expenditure as percentage of total government expenditure in 2014.

Table 2. Public Health Expenditure as Percentage of Total Government Expenditure (2014)

Country	Government Expenditure (%)	Country	Government Expenditure (%)
Australia	17.3	Japan	20.3
Austria	16.3	Malaysia	6.4
Bangladesh	5.7	Mexico	11.6
Belgium	15.1	Myanmar	3.6
Brazil	6.8	Nepal	11.2
Canada	18.8	Netherlands	20.9
China	10.4	New Zealand	23.4
Denmark	16.8	Norway	18.2
France	15.7	Pakistan	4.7
Germany	19.6	Spain	14.5
India	5.0	Thailand	13.3
Indonesia	5.7	Sweden	19.0
Israel	11.6	UK	16.5
Iraq	6.5	USA	21.3
Italy	13.7		

Observations

Table 2 offers the following observations:

(i) In India, public health expenditure (as percentage of total government expenditure) is extremely low. In 2014, it was estimated to be 5.0% which is miserably low compared with most countries in the world.

(ii) Even some less developed countries and smaller economies are performing better than India. In Bangladesh, for example, the government is allocating 5.7% of its budgetary expenditure to healthcare, while in India, it is just 5.0%. Luckily, we are performing better than Pakistan where it is just 4.7%.

(iii) Public health expenditure (as percentage of total government expenditure) in India contrasts sharply with that in developed countries of the world. Thus, compared to 5.0% in India, it is 21.3% in USA, 20.3% in Japan, 18.8% in Canada and 19.0% in Sweden.

This reinforces our earlier conclusion that the government in India has seldom been serious about public health.

Here arises an important question: where does the government expenditure go? Of course, the bulk of it goes to the funding of welfare schemes. But these schemes focus more on freebies and cash incentives rather than medical care of the people. Freebies and cash incentives are politically more suitable to the government than public health expenditure. A poor person with cash in hand will be more inclined to vote for the government than with medicine in hand. Expenditure on promoting populist policies of the government leaves little funds for expenditure on healthcare.

We now shift to yet another parameter of public healthcare in India. Let us assess the extent to which people in India depend on 'Out of Pocket Expenditure' for their healthcare. Higher out of pocket expenditure would mean lesser healthcare expenditure by the government. It would mean that the people are left to rely on private medical care, no matter how expensive it is. Table 3 presents data indicating out of pocket healthcare expenditure as percentage of total health expenditure in India and other countries of the world.

Table 3. Out of Pocket Healthcare Expenditure (Percentage of Total Health Expenditure) (2014)

Country	Government Expenditure (%)	Country	Government Expenditure (%)
Algeria	26.5	India	62.4
Argentina	30.7	Israel	27.0
Australia	18.8	Italy	21.2
Bangladesh	67	Japan	13.9
Belgium	17	Myanmar	50.7
Bhutan	25	Nepal	47.7
Canada	13	Norway	13.6
China	32	Spain	24.0
Denmark	13.4	UK	9.7
France	6.3	USA	11.0
Ghana	26.8	World	18.2
Haiti	34.8	Least Developed Countries (UN Classification)	46.4

Observations

Table 3 offers the following observations:

(i) Out of pocket healthcare expenditure in India (as a percentage of total health expenditure) is extremely high. It is here that India achieves the dubious distinction of a very high rank.

(ii) Out of pocket healthcare expenditure in India contrasts sharply with developed countries of the world. Compared with just 6.3% in France, 9.7% in UK and 11.0% in USA, in India it is as high as 62.4%.

(iii) Even least developed countries like Myanmar, Nepal and Haiti are performing better than India. Out of pocket expenditure on healthcare (as percentage of total health expenditure) is 50.7% in Myanmar, 47.7% in Nepal and 34.8% in Haiti.

Higher percentage of out of pocket expenditure reveals a very bitter truth if it is analysed in the context of the fact that private medical treatment in India is very expensive and beyond the means of the bulk of population in India. The bitter truth is that only a small section of the population enjoys good healthcare; for the majority healthcare is like an unaffordable luxury.

It reveals an utter neglect of healthcare of the citizen of India by the Government of India.

Conclusion

India is a poor country, agreed. But its performance in public healthcare is way behind even the poorer countries in the world. This points to a serious flaw in priorities of the government. The government priority has been to achieve maximum possible political mileage with every rupee of public expenditure. This has resulted in neglect of significant social issues like public healthcare. As a strategy of growth and development, the government also encouraged the growth of private healthcare system. Luxurious nursing homes offering 5-star facilities are spreading in every nook and corner of the country. So much so that we claim India to be an emerging destination of medical tourism. But who are the beneficiaries? Only the slender (small) percentage of population: the rich and the super rich. The staggering majority of the poor (some of whom are driven to commit suicide to avoid the stress of hunger) suffers deprivation of healthcare. They fall prey to sickness and diseases. With low energy and low efficiency, they are forced to survive on low wages. This amounts to a massive loss of human resource, besides bringing shame to the nation. It is high time that the government responds to the wake-up call relating to public healthcare.

Economic prosperity that neglects critical social issues (like healthcare) is meaningless. If the majority of the country's population suffers disease and sickness, the prosperity of the few would ultimately become redundant (irrelevant). The planners and the politicians are to realise that neglect of healthcare in a poor country like ours would amount to an irreparable loss of human resource, besides being a social stigma.

VIVA VOCE (EXAMINATION THROUGH SPOKEN COMMUNICATION)

1. Narrate the significance of public health expenditure.

Ans. Efficiency is the under-current of growth and prosperity. Only healthy workforce, having sound physical and mental abilities, can set new benchmarks of efficiency. Low efficiency (implying low productivity) is the root cause of low wages (and therefore, low quality of life) in less developed countries. It keeps these countries in a state of perpetual poverty, implying 'vicious circle of poverty'. Efficiency levels must be raised to break the vicious circle of poverty. The foremost requirement of raising efficiency is to raise public health expenditure. Owing to their poverty and deprivation, the bulk of labour force in India are left with little or no means for their healthcare.

2. Give some oral information on public health expenditure in India compared to other countries of the world.

Ans. In India, public health expenditure is extremely low compared to most other countries in the world. Even some less developed countries and small economies are performing better than India. Here are some illustrations:

— In India, public health expenditure was estimated to be 3.66% of GDP in the year 2016. In France, it was 11.54%, in Germany 11.14%, in Canada 10.53%, and in Denmark 10.35%.

— In India, public health expenditure, as a percentage of total government expenditure contrasts sharply with developed countries of the world. Compared to 5% in India (2014), it was estimated to be 21.3% in USA, 20.3% in Japan, 18.8% in Canada and 19% in Sweden.

Thus, public health expenditure in India is very bleak (low), both as a percentage of GDP and as a percentage of total government expenditure.

3. Out of pocket healthcare expenditure in India is very high: higher than even USA. Is it not a sign of high health consciousness in India than most other countries?

Ans. High out-of-pocket healthcare expenditure is not a sign of high health consciousness in India. Instead, it reflects low or negligible healthcare expenditure by the government of the country. Neglect of healthcare of the millions of the poor by the government leaves them in a state of lurch (state of helplessness). They are forced to neglect their health. The rich, on the other hand, spend richly on the luxurious healthcare facilities.

4. How does low public health expenditure in India lead to the loss of human resource?

Ans. It is true that low public health expenditure in India leads to the loss of human resources. Low public health expenditure in a country where people are battling poverty and deprivation would mean loss of health. Loss of health implies loss of human resource. Because only a healthy labour force can deliver high levels of output, other things remaining constant.

5. How would you link low public health expenditure with the loss of efficiency or productivity?

Ans. In a poor country like India, low public health expenditure leads to low efficiency. Poor people cannot afford expensive healthcare in the market. They depend on public healthcare facilities. But low public health expenditure implies the lack of public healthcare facilities, which indeed is a hard fact in India. Consequently, people are to drag their life with disease and sickness. This implies loss of efficiency and consequently, low productivity. Low productivity is a sign of economic backwardness.

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