

MY TUTORIALS COACHING, JAIPUR

HALFYEARLY EXAMINATION 2022-23

SUBJECT: SCIENCE (Chapter 1 to 10)

CLASS: 8th

TIME:2:30 HOURS

MAX.MARKS: 80

A. Tick the correct option:

(10*1=10)

- Usually mixed to maintain the nutrient level in the soil.
(a)seed (b)manure
(c)insecticide (d)water
- Name of the discoverer of vaccine for smallpox is:
(a)Edward Jenner (b)Alexander Fleming
(c)Louis Pasteur (d)Darwin
- Polymer of ester is
(a)Rayon (b)Nylon
(c)Polyester (d)Acrylic
- Which of the following is fossil fuel?
(a)Coal (b)petroleum
(c)Natural gas (d)All of the above
- Which of the following is non-metal?
(a)Iron (b)Sulphur
(c)Aluminium (d)Copper
- Which of the following is not combustible substances.
(a)Magnesium (b)Wood coal
(c)Iron (d)Wood
- The liquid in which sodium metal is preserved at room temperature is-
(a)Petroleum (b) Water
(c)Kerosene Oil (d)Lemon juice
- The slow process of conversions of dead vegetation into coal is called-
(a)Oxidation (b)Carbonisation
(c)Reduction (d)Hydrogenation
- The gas produced by the burning of candle flame is-
(a)Black (b)Yellow/Blue
(c)Red (d)Blue
- How many trees are to be cut for obtaining one ton of paper, the number is-
(a)7 (b)17
(c)27 (d)37

B.Fill up the blanks with the words given:

(10*1=10)

- The same kind of plants grown and cultivated on a large scale at a place is called _____
- Microorganisms can be seen with the help of a _____
- Synthetic fibres are synthesized from raw material called _____
- phosphorus is a very _____ non-metal.
- Least polluting fuel for vehicle is _____
- Burning of wood and coal causes _____
- Migratory birds fly too far away places because of _____ changes
- Hen's egg is a single _____
- Testes is the _____ reproduction organ.
- Adolescents are also called _____

C. Write 'T' for true and 'F' for false statements.

(10*1/2=5)

- The crops grown in the winter seasons are called kharif crops.
- Fertiliser is an organic salt.
- Bacteria multiply only in host.
- Rayon is a natural fiber.
- Sodium is a very reactive metal.
- India has vast reserve of natural gas.

7. Carbon dioxide is essential in air for combustion.
8. Important person's names are written in the red data book.
9. Muscle cells are branched.
10. Each egg is a single cell.

D. Match the organisms in Column A with their action in Column B.

(10*1/2=5)

A	B
(i) Bacteria	(a) Fixing nitrogen
(ii) Rhizobium	(b) Setting of curd
(iii) Lactobacillus	(c) Baking of bread
(iv) Yeast	(d) Causing malaria
(v) A protozoan	(e) Causing cholera
(vi) A virus	(f) Causing AIDS
	(g) Producing antibodies

E. Answer the following questions.

(10*2=20)

1. What are crops?
2. Can microorganisms be seen with the naked eye? If not, how can they be seen?
3. Give examples to show that plastics are non-corrosive in nature.
4. Can you store the lemon pickle in an aluminium utensil? Explain.
5. Explain why fossil fuels are exhaustible natural resources.
6. Can the process of rusting be called combustion? Discuss.
7. Why should we conserve biodiversity?
8. Make a sketch of the human nerve cell. What function do nerve cells perform?
9. Explain the importance of reproduction in organisms.
10. Define adolescence.

F. Answer the following questions.

(6*5=30)

1. Differentiate between manure and fertiliser.
2. Describe the nitrogen cycle with the help of a neat and labelled diagram.
3. List changes in the body that take place at puberty.
4. Explain binary fission in Amoeba with the help of diagram.
5. Describe how coal is formed from dead vegetation. What is this process called?

ANSWERS

A 1.Manure 2. Edward Jenner 3. Polyester 4.All of the above 5.Sulphur 6.Iron 7.keroseneOil 8.Carboniasation 9.Blue 10.17

B.1.crop 2.microscope 3.petrochemicals 4.active 5.C.N.G 6.pollution. 7.climatic.8.cell. 9.male 10.teenagers.

C. 1.F 2.F 3.F 4.F 5.T 6.T 7.F 8.F 9.F 10.T

D

A	B
(i) Bacteria	(e) Causing cholera
(ii) Rhizobium	(a) Fixing nitrogen
(iii) Lactobacillus	(b) Setting of curd
(iv) Yeast	(c) Baking of bread
(v) A protozoan	(d) Causing malaria
(vi) A virus	(f) Causing AIDS

E.

1. Crops are plants of the same kind grown in large quantities for food.

2. The microorganisms cannot be seen with our naked eyes because they are very small in size. Some of these, such as fungus growing on bread, can be seen with a magnifying glass. Others cannot be seen without the help of a microscope.

3.The literal meaning of non-corrosive is resistant to get destroyed by chemical action.

Following are the examples that show that plastics are non-corrosive in nature.

- Plastic containers do not react with items stored in it.
- They do not get rusted when exposed to moisture and air.
- They do not decompose when left in open for a long period.

4.No, we cannot store lemon pickle in an aluminium utensil because aluminium is a metal and metals readily react with acids to produce hydrogen. When aluminium comes in contact with lemon, which is acidic, would react to give hydrogen and the pickles will be spoiled.

5.Fossil fuels take millions of years to be formed. They are limited in nature and cannot be replenished easily, once consumed. Hence, they are considered as exhaustible natural resources.

6. No, because rusting is an exothermic process as heat is liberated during rusting. On the other hand, combustion is a chemical process in which a substance reacts with oxygen to release energy in the form of heat or light.

7. The variety in life existing on the earth, their inter-relationships, and their relationships with the environment is referred to as biodiversity. We should conserve biodiversity so as to maintain the food chain. The disturbance in the food chain may affect the whole ecosystem.

8. Function of nerve cells: The function of the nerve cell is to receive and transfer messages, it helps to control and coordinate the working of different parts of the body.

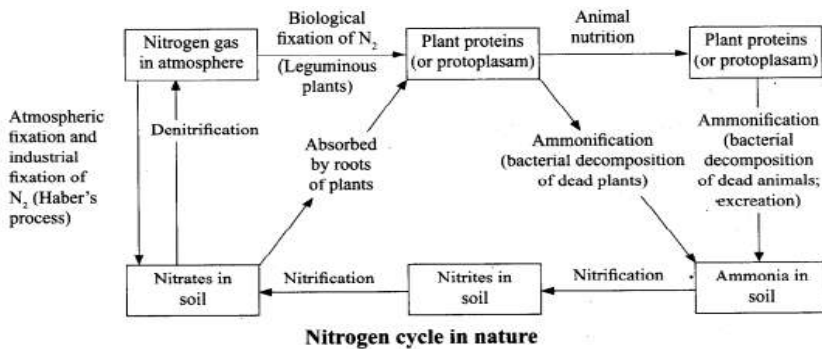
9. Reproduction is a vital phenomenon on this planet earth which is essential for existence and continuity of life and species on it, generation after generation.

10. The period of life, when the body undergoes changes, leading to reproductive maturity, is called adolescence. The period of adolescence is normally 11 years to 19 years.

F.1

Manure	Fertiliser
(i) It is natural.	(i) It is man-made.
(ii) It is organic.	(ii) It is inorganic.
(iii) It adds humus to the soil.	(iii) It does not add humus.
(iv) It is not nutrient specific.	(iv) It is nutrient specific.
(v) It is cheap.	(v) It is costly.
(vi) It is prepared in the fields.	(vi) It is prepared in factories.

2.



3. The changes take place differently in the body of boys and girls at puberty. These change may be listed as below:

- There is sudden increase in the height of both boys and girls. However, both reach their maximum height at the age of 17 to 18 years.
- The voice of boys become hoarse and that of girls become shrill.
- Shoulders become broader and muscles grow more prominently in boys. In girls, the regions below the waist becomes wider.
- Hair start growing in different parts of boys and girls.
- In most of the teenagers, due to increased secretion of sweat and sebaceous gland, get acne and pimples on their face.

- Onset of puberty brings changes in secondary sexual characters in both male and female.
- Boys and girls become capable of reproduction.
- In girls, menstruation starts.
- Different types of hormones start to release in initiating a reproductive function.

4. Amoeba is a unicellular organism, the nucleus of the amoeba gradually divides into two nuclei. Then the cytoplasm also divides and each part gets one nucleus. This is known as binary fission and it asexual reproduction.

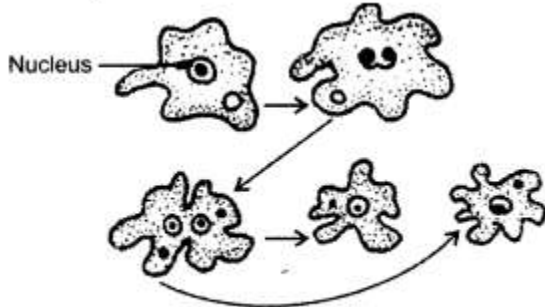


Fig. Binary fission in *Amoeba*

5. Millions of years ago, trees, plants, ferns and forests got buried below the rocks, soil and sand due to natural processes like flooding, earthquake, etc. Slowly, as more soil deposited over them, they were compressed. This led to the conditions of high pressure and heat. These conditions along with the anaerobic conditions turned the carbon-enriched organic matter of wood into coal.

This slow process of conversion of wood into coal is called carbonisation.