

Question Bank 7 B science

Chapter 1

Nutrition in Plants

Section A (1M)

1. Name the gases absorbed and released during photosynthesis.
2. Define autotrophic nutrition.
3. Define photosynthesis
4. Write down the equation to represent the process of photosynthesis.
5. Name the test conducted to test the presence of starch in a leaf. Also mention the observation of the test.
6. Why is alcohol used in the activity to test the presence of starch in a leaf?
7. Give reason why destarching of leaves is necessary on conducting tests to see sunlight is necessary for photosynthesis.
8. What is the use of potassium hydroxide in the activity to show carbon dioxide is necessary for photosynthesis.
9. Name an organism that helps plants fix nitrogen.
10. Name one each of partial parasite and total parasite.
11. Pitcher plant can photosynthesize yet it feeds on insects. Justify the statement.
12. What is symbiosis?

Section B (2M)

1. Differentiate between a parasite and a saprophyte.
2. What kind of association is seen in lichen? Explain the specific roles of the two organisms involved here.
3. Draw a diagram to structure of a closed and open stomata.
3. Define nutrition. Why are green plants called autotrophic?
4. Give reason why certain plants are also called parasites? Give an example of such plant.
5. Name the two organisms associated with each other in lichen. Mention their functions.

Section C

1. Plants cannot utilize the atmospheric nitrogen in its gaseous form. Citing an example explain how plants obtain nitrogen to produce food.
2. Explain how a pitcher plant traps insects and digests it.
3. How do plants obtain a) carbon dioxide b) water for performing photosynthesis?

Section D

1. What is photosynthesis? Write down the equation representing photosynthesis. Explain how plants carry out photosynthesis.

Chapter 2

Nutrition in Animals

Section A

1. Which enzyme converts starch into simple sugars?
2. Name any two organs along the human alimentary canal where digestion does not take place.
3. Name a vestigial organ found in an adult human's buccal cavity.
4. Name the phenomenon that helps pushing the bolus down the oesophagus.
5. Why do carnivores have a shorter digestive system?
6. Name the organs along the human alimentary canal where the food start getting digested and get completed.
7. What are enzymes?
8. Name the mode of ingestion in lizard and Hydra.
9. Food pipe: oesophagus :: mouth: _____
10. Which is the largest gland in humans and what does it produce?
11. What is a proboscis?
12. Name the part of the human alimentary canal where the bile juice and pancreatic juice act upon to break down food.
13. What are villi?

14. How do amino acids get assimilated in our body?

What do you mean by the term emulsification?

15. What is enamel?

Section B

1. Name the different organs and glands of the human digestive system.
2. State the functions of tongue.
3. Name the different types of permanent teeth in humans and mention the respective numbers that they are present in each jaw.
4. Draw a well labelled diagram to show the process of ingestion of food by Amoeba?
5. Name the different types of permanent teeth in humans and write down their functions.
6. State the major organ of digestion in Amoeba, Paramecium, Hydra and butterfly.
7. How does the cavity in the tooth form? Explain.
8. Which acid is present in the human stomach? What is its function?

Section C

1. Explain how the absorption of food takes place in humans.
2. Explain how the assimilation of the absorbed food takes place.
3. Explain structure and function of the large intestine of the human.
4. State the location of pancreas. Name the substance released by it and mention the function of the substance released by the pancreas.
5. What are the constituents of the gastric juice? Explain each of their respective functions.

Section D

1. Describe the human digestive system. Support your answer with a suitable diagram.
2. Explain what happens to the food when it reaches the small intestine.
4. Explain the process of digestion in Amoeba.
5. Explain the process of digestion in ruminants.

Chapter 3

Animal Fibres

Section A

1. Give reason why woollen clothes keep us warm even in the rain.
2. What is a breed?
3. What does the term wool blind mean?
4. State the steps involved in production of wool.
5. What do you mean by the term shearing?
6. Name an artificial silk. How is it obtained?
7. Define filature.
8. Name the bacterium that causes sorter's disease.
9. Name the fungi that causes coccidioidomycosis.
10. Name the different types of silk found in India.

Section B

1. State any two differences between sorting and scouring.
2. Which fibre is known as regenerated fibre? Give reason why it is called so.
3. Draw a diagram to show the life cycle of a silk moth.
4. What is shearing? Why is it done during the hot season.
5. Mention any four properties of silk.
6. Name the countries which are considered as the largest producer and biggest consumer of raw silk. Also name the four types of silk produced in India.

Section C

1. Name any three properties of silk. What does the quality of the silk fabric depend upon?
2. State any four properties of wool. What factors are judged upon to test the quality of the wool?
3. Name any three animals from which wool fibre is obtained and also mention the respective type of wool fibre.

4. What is carding? Explain it in brief.
5. Write a short note on sheep farming.
6. Explain the processing of silk.

Section D

1. Write down an activity to differentiate between the natural fibers like wool and silk from artificial fibers.
2. Explain the life cycle of silk moth.
3. Explain the steps involved in wool production.
4. Explain the health hazards that the workers in the wool and sericulture industries may suffer from.

Chapter 4

Heat and Temperature

Section A

1. Name the three different units of temperature and also mention their symbols.
2. Write down the overall formula that can be used to inter-convert between the three different scales of temperature.
3. Convert 77degree Fahrenheit to Celsius scale.
4. State the normal body temperature of a healthy person in degree Celsius and in degree Fahrenheit.
5. Mention the boiling point and melting point of mercury.
6. State the commonly used units of heat.
7. What is the S.I. unit of heat?
8. In which mode of heat transfer the actual movement of molecules is involved?
9. Name the mode of heat transfer with the help of which the outer walls of houses are painted dark to it warm inside.
10. In a thermos flask, how is heat loss by radiation minimised?

Section B

1. What is a kink? Mention it's important.

2. Write down the range of temperature in Celsius scale as seen in (a) clinical thermometer, (b) laboratory thermometer.
3. What is the range of temperature in Kelvin scale? Also mention the freezing point and boiling point of water in this scale.
4. State the effects of heat.
5. Give reason why a thick glass tumbler breaks when you pour hot water in it.
6. Why are room heaters placed in the floor or at a lower level of a room?
7. Why the reflectors behind the coil in room heaters are shiny, silvery and polished?
8. Why does a hot-air balloon ride up in air?
9. Why are the coastal areas cooler and more pleasant during the day?

Section C

1. What is radiation? Write down any two applications of radiation.
2. Explain the working of a thermos Flask .
3. Explain the formation of land breeze.
4. State the conditions necessary for conduction of heat.
5. Draw a well labelled diagram of a thermos flask and explain its working too.
6. Explain with an example to show thermal expansion in solids.
7. How does expansion in liquids take place as a result of heat? Cite an example.

Section D

1. Explain the formation of land breeze and sea breeze.
2. State the differences between conduction, convection and radiation.
3. How does heat cause things to expand? Explain thermal expansion in liquids and gases giving one example in each case.
4. What are laboratory thermometers used for? What precautions have to be taken while using a laboratory thermometer.

5.(a) Write down the advantage of using a digital thermometer. (b) Why is mercury used in thermometers?

Chapter 5

Section A

1. Define element.
2. Write down the valency of the radical nitrate(NO_3^-).
3. What is the full form of IUPAC.
4. Give an example of a diatomic element.
5. Write down the Latin name of iron.
- 6.

Section B

7. Write down the chemical formula of acetic acid, ammonium hydroxide, calcium oxide and sulphuric acid.
8. Write down two differences between compounds and mixtures.

Section C

9. Define chemical formula. Write down the significance of chemical formula.
10. What are indicators? Write down the names of any two commonly used indicators and the respective colour changes that they indicate.

Section D

11. What is a chemical equation? Illustrate it with the help of a suitable example. Also write down a balanced equation to show the reaction between hydrochloric acid and sodium. (1+2+2)
12. State the differences between a compound and a mixture.
13. To write a chemical formula of a substance, what two things are necessary for you to know? Illustrate the steps involved in writing the chemical formula of magnesium sulphate.

CHAPTER 6

Section A

1. Give two examples of organic acids.
2. Give two examples of mineral acids.

3. Give two examples of bases commonly used in our homes.
4. What is the chemical name of milk of magnesia?
5. What is the chemical name of caustic soda?
6. What is the chemical name of caustic potash?
7. What is the chemical name of slaked lime?
8. What is the chemical name of vinegar?
9. What is the chemical name of common salt?
10. What is aqua regia?

Section B

11. Write down two uses of slaked lime.
12. Write down two uses of sulphuric acid.
13. Write down two uses of HNO_3 .
14. What happens when acids react with metals? Give an example.
15. What does it indicate if a solution has : (a) pH less than 7, (b) pH more than 7.
16. Name the acid which is named as the king of chemicals. Why is it named so?
17. Give reason why we should never add water to acids.
18. What are alkalis? Give two examples.
19. Which base is present in baking soda? Write down its chemical formula too.
20. How does antacid function as a medicine to subside acidity? Write down its chemical name.

Section C

21. State the differences between acids and bases.
22. State any three uses of slaked lime.
23. State any three uses of HCl .
24. Name any two commonly used synthetic indicators. Illustrate their colour changes in acidic and basic mediums.
25. State the properties of salt.

26. Write down any three uses of salts.

Section D

27. What is a neutralisation reaction? Explain how neutralisation reactions are useful to treat (a) insect stings, (b) treating soil.

28. Explain neutralisation reactions in our daily life with five suitable examples.

29. What are salts? Explain any four uses of salts in our daily life.

CHAPTER 7

Section A

1. What is crystallisation?
2. Define displacement reaction.
3. What is a decomposition reaction?
4. What is a saturated solution?
5. What is galvanisation?
6. How is endothermic reaction different from exothermic reaction?
7. Write down an equation to show the formation of rust.
8. Write down an equation to show precipitation in a chemical reaction.
9. Give an example of an irreversible physical change.
10. Which gas is produced when vinegar reacts with baking soda?

Section B

11. What is displacement reaction? Illustrate with a suitable example.
12. Why is baking soda used for baking?
13. Explain how you can change a saturated solution to a super saturated solution.
14. What is rusting? Illustrate rusting with the help of a chemical equation.
15. What is the difference between melting of wax and burning of candle.

16. Give reason why lime water turns milky on passing carbondioxide gas.
17. State four properties of a physical change.
18. State four properties of a chemical change.
19. What happens when a magnesium ribbon is burnt ?
20. How is magnesium hydroxide obtained? What is the nature of magnesium hydroxide?

Section C

21. State the differences between physical and chemical change.
22. Write down any three characteristics of a chemical change and explain them with suitable examples.
23. Explain the reaction between iron fillings and copper sulphate solution.
24. State the methods of prevention of rusting.
25. Why do cut fruits turn brown if left out in open? How can we prevent the browning, state two methods.

Section D

26. Eexplain any five characteristics of chemical change with suitable exaples.
27. Exppalin an activity to show a displacement reaction between iron and copper sulphate.
28. Explain the methodology to prepare saturated and super saturated solutions.
29. What is rusting? Explain with a suitable chemical reaction. How can we prevent rusting?

CHAPTER 8

1. What is weather?
2. State the elements of weather.
3. What is climate?
4. State the factors that affect the climate of a place.
5. Define humidity.

6. Define relative humidity.
7. Name the climatic zones of the earth.
8. Why do we see penguins to be huddling together?
9. What is hibernation?
10. What is migration? name two animal found in the emergent layer of the forest.
11. What are aboreal animals? Give an example.
12. State the range of temperature of tropical forests in summer and in the winters.

Section B

13. State any two adaptations seen in the red eyed frogs.
14. How do the legs of a camel act as an adaptive feature in the desert?
15. Write down the adaptive features of the fennec fox.
16. Write down two differences between weather and climate.
17. How doe the polar bear keep itself warm in the Arctic region?
18. Why is the land hotter near the equator than on lower and higher latitudes?
19. How does altitude affect the climate of a place?
20. How does the blubber help the polar bear?

Section C

21. Write down the adaptive features of lion tailed macaque.
22. State the differences between weather and climate.
23. Explain the three climatic zones of the earth.
24. What is a hygrometer? How is it functionally different from the rain gauge?
25. Draw a well labelled diagram to show the climatic zones of the earth.
26. Write down the adaptive features of penguin.

Section D

27. State all adaptive features of a penguin.

28. How is the Asian elephant adapted to live in the tropical region? Explain in detail.
29. How is the camel adapted to live in the desert? Explain in detail.
30. How is the seal adapted to live in the polar region? Explain in detail.
31. What is migration? State the adaptations shown by siberian cranes.

CHAPTER 9

1. Define weathering.
2. Define soil profile.
3. Why are earthen pots used to store water in summer?
4. Write the composition of loamy soil.
5. Define soil conservation.
6. Which layer of soil is rich in mineral?
7. What is terrace farming?

Section B

8. What is soil erosion? mention any two factors of soil erosion.
9. State any two methods of soil conservation.
10. Differentiate between the A and B horizons of the soil profile.
11. Write down the characteristics of R horizon of the soil profile.
12. Which type of soil is used for making toys and why?

Section C

13. State the properties of soil. Explain them very briefly.
14. What are the roles of various organisms found in the soil?
15. State the causes of soil pollution.

Section D

16. Explain soil profile. Support your answer with a suitable diagram.
17. What is soil conservation? Explain the steps that can be taken to conserv soil.

CHAPTER 10

SectionA

1. Define respiration.
2. What is epiglottis?
3. What is cellular respiration?
4. What do insects breathe with?
5. What are lenticels?
6. How many alveoli are present in each lung?
7. How does yawning help us?

SectionB

8. What are the two steps of respiration?
9. Write an equation to represent cellular respiration.
10. State the sequence of different parts of the human respiratory system.
11. Why does the exhaled air contain more carbondioxide and less oxygen?
12. What is aerobic respiration? Represent it with the help of an equation.
13. What is anaerobic respiration? Represent it with the help of an equation.
14. How do plants respire? State any two parts of plants meant for respiration.

Section C

15. Explain how insects respire.
16. Explain the method of respiration seen in Amoeba.
17. Explain all the methods that the frogs undertake for respiration.

18. Differentiate between breathing and cellular respiration.

Section D

19. Explain the respiratory system in humans.

20. Explain the mechanism of breathing in humans.

21. Explain how exchange of gases takes place in alveoli.

22. Name and define the two types of respiration. Differentiate between the two.

23. Explain how fishes respire through gills. Support our answer with suitable diagram.

=====