



Class: VII

Max. Marks: 90

Date:

Time: 3 hours

General Instructions:

- This question paper has 9 questions and 3 printed pages.
- Write the correct serial number of the question before attempting it.
- Please draw a line with a scale after every answer.

1. Choose the correct answer to each of the following:

1x10=10

a. Which of these surround stomatal opening?

- i. chloroplast ii. chlorophyll iii. water iv. guard cells

b. The chewing of food to break it into small pieces is called _____.

- i. mastication ii. pseudopodia iii. nutrition iv. absorption

c. The valency of the underlined radical in the compound $\text{Na}\underline{\text{NO}_3}$ is _____.

- i. 3 ii. 2 iii. 1 iv. 4

d. Which of these has the largest size of particles?

- i. silt ii. sand iii. clay iv. loam

e. The formula for sodium sulphate is _____.

- i. Na_2SO_3 ii. Na_3SO_3 iii. Na_2SO_4 iv. Na_4SO_2

f. What is the name of an animal of the camel family that gives us wool?

- i. Angora ii. Alpaca iii. Yak iv. Sheep



- g. 212°F is the same temperature as _____.
- i. 100°C ii. 100°F iii. 212°C iv. 0°C
- h. Which of these is a strong acid?
- i. sulphuric acid ii. citric acid iii. acetic acid iv. tartaric acid
- i. Which of these absorbs and retains the maximum water?
- i. sandy soil ii. clayey soil iii. loam soil iv. sandy-loam soil
- j. Conduction takes place in _____.
- i. solids only ii. liquids only iii. gases only iv. all of these

2. Correct the underlined words and rewrite the statements:

1x10=10

- a. Valency of calcium element is zero.
- b. Animal fibres are made up of carbohydrate.
- c. Mushroom is a parasite.
- d. Atomicity of helium is two.
- e. Structure in cells that contain chlorophyll are called stomata.
- f. Oxygen gets absorbed from the atmosphere during photosynthesis.
- g. Warming of eggs to a temperature suitable for hatching is called spinning.
- h. Celsius temperature scale is used for scientific work.
- i. Sea and land breezes are caused by currents set up in air due to radiation.
- j. Cotton fibre gives a characteristic burning hair smell on being burnt.

3. Give one word for each of the following:

1x4=4

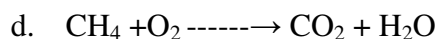
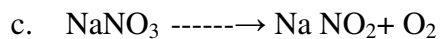
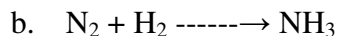
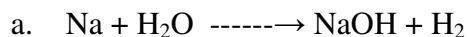
- a. Non-porous layer of soil above which rainwater gathers:
- b. Property of silk that makes it so attractive:
- c. During digestion, proteins are changed into:



d. Small projections in the small intestine that help in absorption of digested food:

4. Balance the following chemical equation:

1x4=4



5. Give reasons for the following statements in 30-40 words:

2x7=14

a. Farmers do not add fertilizers to soil in which leguminous plants are grown.

b. Topsoil has much more humus than subsoil.

c. Magnesium hydroxide is used as an antacid.

d. Expansion joint and pipe loops are made in piping systems.

e. Firemen usually crawl while entering a building where fire has broken out.

f. Most elements are not found in the free state in nature.

g. Properties of different compounds are so different from each other.

6. Answer the following question in 40-50 words:

2x3=6

a. How can you test for the presence of starch in a leaf?

b. How are autotrophs different from heterotrophs?

c. Explain peristalsis with the help of a diagram.

7. Answer the following questions in 50-60 words:

2x8=16

a. What is the function of dull black colour at the back of refrigerators?



- b. What conditions are necessary for transfer of heat from one body to another by conduction?
- c. Convert 95°F to $^{\circ}\text{C}$.
- d. Define valency in terms of hydrogen.
- e. What happens when hydrochloric acid reacts with Magnesium? Also write the chemical reaction.
- f. How does exchange of gases take place in leaves? Explain with the help of a diagram.
- g. What is an acid base indicator? Give one example.
- h. What is the function of acid and digestive juices in the stomach?

8. Draw neat and well-labelled diagrams of the following:

3x2=6

- a. Human digestive system.
- b. Soil profile.

9. Answer the following questions in detail and draw labelled diagrams wherever required:

4x5=20

- a. Explain with the help of a diagram the working of an automatic fire alarm.
- b. Explain the ingestion of food in hydra.
- c. Ramsaran was working in a sericulture industry for many years. One day he fell sick and doctor diagnosed him with a skin disease. Ramsaran's friend, Mohanlal who was an animal right activist was always opposed to Ramsaran working in the sericulture industry. He advised his friend to quit his job. He helped Ramsarn financially and took care of him until he got well.
 - i. Which disease is Ramsaran likely to suffer from?
 - ii. Why is it common in workers working in sericulture industry?
 - iii. Why are animal right activists opposed to the process of getting silk from cocoon?
 - iv. What values are displayed by Mohanlal?
- d. Describe an experiment to show the process of conduction.
- e. List four properties of bases. Give two uses of Calcium hydroxide.