



**Answer the following:-**

1. Nichrome is used to make the elements of electric heater. Why? (1)
2. A solution of substance 'X' is used for white washing. Name the substance 'X' and write its formula. (1)
3. Name two organisms that exhibit parasitic nutritive strategy. (1)
4. A current of 0.2 A flows through a conductor of resistance 4.5 Ω. Calculate the potential difference at the ends of the conductor. (1)
5. Why are the halides of silver kept in dark brown or black bottles? (1)
6. In the experiment, 'Sunlight is essential for photosynthesis'. (2)
  - a. Why does the uncovered part of the leaf turn blue black after putting iodine solution?
  - b. The potted plant is kept in a dark room for three days. Justify.
7. A copper wire of length 3m and the area of cross section  $1.62 \times 10^{-6} \text{ m}^2$  has a resistance of  $3 \times 10^{-2} \Omega$ . Calculate the resistivity of copper? (2)
8. Write balanced equations for the following reactions. (2)
  - a. Nitrogen reacts with hydrogen to give ammonia
  - b. Barium chloride + copper sulphate  $\longrightarrow$  Barium sulphate + Copper chloride
9. The digestion of food in case of man takes place in the alimentary canal. Complete the blanks from 'a' to 'f' in the given table (3)

Site Of Action/Organ	Digestive Gland	Digestive juice	Enzyme	Function
Mouth	Salivary Gland	Saliva	a) -----	b) -----
c) -----	Gastric Gland	Gastric Juice	HCl	d) -----
e)-----	Liver	Bile	Bile salts	f) -----

10. Differentiate between a combination reaction and a decomposition reaction. Write one chemical equation each for these reactions. (3)
11. a. State Ohm's law. (3)
  - b. An electric circuit consisting of 0.5m long nichrome wire XY, an ammeter, a voltmeter, four cells of 1.5V each and plug key were set up. Draw the diagram of this electric circuit to study the relation between potential difference maintained between the points X and Y and electric current flowing through XY .



Marks:-20

**Answer the following:-**

1. Define the unit of electric current? (1)
2. What is the product formed when quick lime is added to water? Write its formula. (1)
3. Name two organisms that break-down the food materials outside the body and absorb it. (1)
4. How much work is done in moving a charge of 5C between two points in a circuit having potential difference of 10V? (1)
5. Why respiration is considered an exothermic reaction? Explain. (1)
6. Two healthy potted plants ‘A’ and ‘B’ taken, both destarched and a watch-glass containing potassium hydroxide is placed inside the set-up A and not in set-up B. The set-ups made airtight and starch test performed on the leaves. (2)
  - (a) Mention the role played by potassium hydroxide in the set-up.
  - (b) What conclusion can be drawn from this activity?
7. A wire has resistivity  $1.90 \times 10^{-6} \Omega m$ . What will be its new resistivity and resistance if it is stretched to double of its length? (2)
8. Write balanced equations for the following reactions. (2)
  - (a) Hydrogen reacts with chlorine to form hydrogen chloride
  - (b) Potassium + water  $\longrightarrow$  potassium hydroxide + hydrogen
9. Differentiate between a displacement reaction and a double displacement reaction. Write one chemical equation each for these reactions. (3)
10. (a) State Ohm’s law. Express it mathematically. (3)
  - (b) Shows the relationship between the potential differences applied across a conductor and current flowing through it graphically.
11. The digestion of food in case of man takes place in the alimentary canal. Complete the blanks from ‘a’ to ‘f’ in the given table. (3)

Site Of Action/Organ	Digestive Gland	Digestive juice	Enzyme	Function
Mouth	Salivary Gland	Saliva	a) -----	b) -----
Stomach	c) -----	Gastric Juice	d) -----	Converts proteins to amino acid
Duodenum	e)-----	Bile	Bile salts	f) -----



## INDIAN SCHOOL SOHAR

SET:-III

CLASS - X FORMATIVE ASSESSMENT- 1 Time:- 40 Minutes

...-05-15 SCIENCE

Marks:-20

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### Answer the following:-

1. Define electric potential difference and write its SI unit. (1)
2. Why should magnesium ribbon be cleaned before burning in air? (1)
3. Name the energy reserve in plants and in animals. (1)
4. How many electrons will flow for the charge of  $4C$ ? (charge on 1 electron is  $1.6 \times 10^{-19}C$ ) (1)
5. What happens when iron filings are added to a solution of copper sulphate? (1)
6. How are the following processes carried out in man? (2)
  - (a) Absorption of digested food.
  - (b) Digestion of fat in the duodenum.
7. A wire is 1m long, 0.2mm diameter has resistance of  $20\Omega$ . Calculate the resistivity of material. (2)
8. Write balanced equations for the following reactions. (2)
  - (a) Calcium carbonate decomposes to form Calcium oxide & Carbon dioxide.
  - (b) Sodium + Water  $\longrightarrow$  Sodium hydroxide + hydrogen
9. Carbon and energy needs of the autotrophs are fulfilled by photosynthesis. Enumerate the events that occur during this process. (3)
10. Differentiate between exothermic reaction and endothermic reaction. Write one chemical equation each for these reactions. (3)
11. (a) State Ohm's law. The resistance of a conductor is  $1\Omega$ . What is meant by this statement? (3)
  - (b) A bulb of resistance  $400\Omega$  connected to 200V main supply. Calculate the magnitude of the current flowing through the bulb.