



Student Name					
Date		Grade	X	Roll No.	
Subject	Science	Marks	80	Teacher's Sign	

Sample paper S A 1 [2020-21]

GENERAL INSTRUCTION:

The question paper contains 5 sections

Section A : One marks questions

Section B : Two marks questions

Section C : Three marks questions

Section D : Five marks questions

Section E : Practical based skills ,two marks question

SECTION A :

1. Plants raised by _____ can bear flower and fruits earlier than those produced from seeds .
2. Oesophagus takes food from mouth to stomach by _____ movement.

SECTION B :

- 3 A solution of a substance 'X' is used for white washing
 - a) Name the substance 'X' and writes its formula.
 - b) Write the reaction of the substance 'X' named in (i) above with water
- 4 Name a device that helps to maintain a potential difference across a conductor
- 5 The radius of curvature of a spherical mirror is 20 cm. What is its focal length?

SECTION C :

- 6(a) Write two points of difference between electric energy and electric power.
(b) What is the commercial unit of electric energy? Convert it into joules.
- 7 What is a neutralization reaction? Give two examples.
- 8 Explain the following in terms of gain and loss of oxygen with two examples each?
 - a) Oxidation
 - b) Reduction
- 9 Which gas is usually liberated when an acid reacts with a metal? Illustrate with an example. How will you test for the presence of this gas?
- 10 A convex lens forms a real and inverted image of a needle at a distance of 50cm from it. Where is the needle placed in front of the convex lens if the image is equal to the size of the object? Also, find the power of the lens.
- 11 What are the modes of excretions in pants ?.

- 12 a) What is meant by electric current? Name and define its SI unit
b) Which instrument is used for measuring electric current ?

- 13a) What is the common name of the compound CaOCl_2 ?
b) Write an equation to show the reaction between plaster of Paris and water.

- 14 How is transpiration pull responsible for upward movement of water ?
15 Write the difference between inhalation and exhalation ?.

SECTION D :

- 16 Draw a labeled diagram of longitudinal section of a flower.
17 .Write the balanced chemical equation for the following and identify the type of reaction in each case.
- a) Potassium bromide (s) + Barium iodide (aq) \rightarrow Potassium iodide (aq) + Barium bromide (s)
- b) Zinc carbonate (s) \rightarrow Zinc oxide (s) + Carbon dioxide (g)
- c) Hydrogen (g) + Chlorine (g) \rightarrow Hydrogen chloride (g)
- d) Magnesium (s) + Hydrochloric acid (aq) \rightarrow Magnesium chloride (aq) + Hydrogen (g)
- 18 a) How are fats digested in our bodies ? Where does this process take place?
b) What is the role of saliva in the digestion of food?

OR

What is placenta ? Explain its role in pregnancy.

- 19 State Ohm's law. Write the necessary conditions for its validity. How is this law verified experimentally? What will be the nature of graph between potential difference and current for a conductor?

- 20 A concave mirror produces three times magnified (enlarged) real image of object placed at 10 cm in front of it. Where is the image located?

- 21a) What are the components of transport system in highly organized plants ?
b) What are the components of transport system in human beings ?

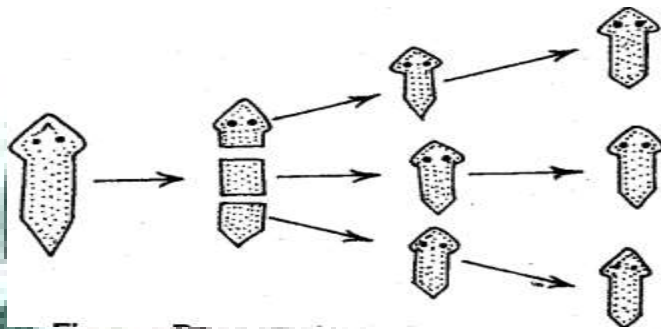
SECTION E

- 22 You have been provided with three test tubes. One of them contains distilled water and the other two contain an acidic solution and a basic solution, respectively. If you are given only red litmus solution, how will you identify the contents of each test tube?.

- 23 A compound X of sodium is commonly used in kitchen for making crispy pakoras. It is also used for curing acidity in the stomach. Identify 'X'. What is its chemical formula? State the reaction that takes place when it is heated during cooking?

24 Observe the following chart carefully

- Identify the organism
- Which method of asexual reproduction is observed by you?



25 A student took 2-3 g of a substance X in a glass beaker & poured water over it slowly.

He observed bubbles along with hissing noise. The beaker becomes quite hot. Identify X. What type of reaction is it?

26 Suppose the ammeter or voltmeter you are using in the Ohm's law experiment does not have +ve and -ve terminal markings. How will you use such ammeter or voltmeter in the circuit?

27 While performing an experiment to study the dependence of current on the potential difference across two ends of the resistor, a student keeps the circuit closed for a long time to measure the current and potential difference. State how the resistance of the resistor will be affected?