

# SCIENCE

## REVISION and MODEL QUESTIONS

1. Four alternatives are given for each of the following questions/incomplete statements. Only one of them is correct or most appropriate. Choose the correct alternative and write the complete answer along with its alphabet in the space provided against each questions.

1) In Fleming's left hand rule the middle finger represents the direction of

- (a) magnetic field
- (b) current
- (c) movement of conductor
- (d) induced current

Ans. : (b) current .

2) The S I unit of potential difference is .....

- (a) volt (V)
- (b) ampere (A)
- (c) coulomb (C)
- (d) ohm meter ( $\Omega m$ )

Ans:- (a) volt (V)

3) The device used to produce electricity is.....

- a) Galvanometer
- b) Electric generator
- c) Ammeter
- d) Electric motor

Ans:- (b) Electric generator

4) The structural and functional unit of nerve tissue is .....

- ,a) neuron
- b) axon
- c) dendrite
- d) myelin

Ans:- (a) neuron

5) To get diminished and real image of an object from a convex lens, the object should be placed

- a) at principal focus  $F_1$
- b) between principal focus  $F_1$  and  $2F_1$
- c) beyond  $2F_1$
- d) between principal focus  $F_1$  and optical centre O.

Ans:- (C) beyond  $2F_1$

6) Food cans are coated with tin and not with zinc because -

- a) zinc is costlier than tin.
- b) zinc has a higher melting point than tin.
- c) zinc is more reactive than tin.
- d) zinc is less reactive than tin.

Ans:- (c) zinc is more reactive than tin.

7) The acid used to remove unreacted silica in extraction of silicon is

- (a) Hydrochloric acid
- (b) hydrofluoric acid
- (c) Nitric acid
- (d) sulphuric acid

Ans:- (b) hydrofluoric acid

8) The constituent metals in brass are

- (a) copper and zinc
- (b) aluminium and tin
- (c) copper and tin
- (d) zinc and aluminium

Ans:- (a) copper and zinc

9) Type of the mirror used in vehicles as rear view mirror is

- (a) plane mirror
- (b) concave mirror
- (c) convex mirror
- (d) planoconcave mirror

Ans. : (C) convex mirror

10) When parenchyma as cells containing chloroplasts, it is called .....

- a) areenchyma
- b) chlorenchyma
- c) collenchyma
- d) sclerenchyma

Ans:- (b) chlorenchyma

11) Which one of the following compounds is not an ionic compound?

- a) Sodium chloride
- b) Calcium chloride
- c) Carbon tetrachloride
- d) Magnesium chloride

Ans:- c) Carbon tetrachloride

12) While cooking, if the bottom of the vessel is getting blackened on the outside, it means that

- (a) The food is not cooked completely.
- (b) The fuel is not burning completely.
- (c) The fuel is wet.
- (d) The fuel is burning completely.

Ans: (b) The fuel is not burning completely and unburnt carbon particles get deposited on the vessel making it black

13) In the electrolysis of water the gases that are released at cathode and anode and their ratio respectively are,

- (a) Hydrogen : Oxygen ; 1 : 2
- (b) Oxygen : Hydrogen ; 2 : 1
- (c) Hydrogen : Oxygen ; 2 : 1
- (d) Oxygen : Hydrogen ; 1 : 2

Ans. : (C) Hydrogen : Oxygen ; 2 : 1

Answer the following

1) What is spectrum of white light ?

Ans. : The band of the coloured components of a white light beam is called spectrum of white light.

2) Why is photosynthesis considered an endothermic reaction?

Ans:- Photosynthesis is an endothermic reaction as it takes energy from sun.

3) We have seen lemon or tamarind juice being used to clean tarnished surface of copper vessels. Explain why these sour substances are effective in cleaning the vessels?

Ans:- Lemon or tamarind juice is acidic in nature and reacts with oxidized copper (compounds) to dissolve it into salt and water. Thus, copper vessels are cleaned.

4) What are acids? How are they produced?

Ans:- a) Acids are the chemicals which contain hydrogen atom and are sour in taste.

b) They are produced when oxides of non-metals react with water.

5) Name the metal which shows properties of non-metals but is also present in the activity series of metals.

Ans:- Hydrogen is the metal which shows properties of non-metals but is also present in the activity series of metals

6) Name the functional group present in each of the following organic compounds:

- (i)  $C_2H_5Cl$
- (ii)  $C_2H_5OH$

Ans: (i) (-Cl) Halogen (Chloro)

- (ii) (-OH) Alcohol

7) What is a homologous series?

Ans: The series of organic compounds having same functional group, similar chemical properties is called homologous series. Each member of this series differs from successive member by  $-CH_2-$  group and by 14 u in its molecular weight.

8) Would you be able to check if water is hard by using a detergent?

Ans: No, we cannot determine, whether the water is hard or not by using a detergent because it will form equal lather with both hard and soft water

9) What is meant by a saturated hydrocarbon?

Ans: Those hydrocarbons in which valency of carbon is satisfied by single bonds only are called saturated hydrocarbons.

10) Give reasons for the following:

Hydrogen is not a metal but it has been assigned a place in the activity series of metals.

Ans:- The reactivity of metals depends on the ease with which they can lose electrons. Hydrogen also loses one electron more easily than some other metals and forms positive ions. Therefore, it also finds a place in the activity series of metals.

(Contd.....)