

Maharashtra State Board

Class VIII Science

Sample Paper – 2

Time: 2 hrs

Max. Marks: 60

Note:

1. All questions are compulsory.
2. The marks related to the question are marked at end of the question.

I. Choose the correct alternative:

[15]

1. The proton has a charge equal in magnitude but opposite in sign to that of the
 - (a) Neutron
 - (b) Electron
 - (c) Canal rays
 - (d) Deuterons

2. A certain planet is a member of the outer planets. It rotates on its axis in the direction opposite to the direction in which the Earth rotates. Which planet is being described?
 - (a) Jupiter
 - (b) Saturn
 - (c) Uranus
 - (d) Neptune

3. Which amongst the following kill or stop the growth of disease causing microorganisms?
 - (a) Antibodies
 - (b) Antibiotics
 - (c) Vaccines
 - (d) Enzymes

4. An electric current flowing through a conductor produces
 - (a) Magnetic field
 - (b) Electric Field
 - (c) Both electric and magnetic field
 - (d) Electromagnetic field

5. The organization who looks after the issues relating to the slaughtering of and cruelty towards animals is
- (a) SPCA
 - (b) WII
 - (c) IUCN
 - (d) Red Data Book
6. Which of the following systems of the human body is affected by HIV?
- (a) Respiratory system
 - (b) Digestive system
 - (c) Immune system
 - (d) Cardiovascular system
7. Digging out coal from earth is known as
- (a) Digging
 - (b) Mining
 - (c) Extraction
 - (d) Drawing
8. If a charged particle does not experience any force in a magnetic field, then
- (a) It is stationary
 - (b) It moves in the direction parallel to magnetic field
 - (c) Both (a) and (b)
 - (d) It moves perpendicularly to the field.
9. What is the basic principle behind simple distillation process?
- (a) Sufficient difference in the boiling points of two miscible liquids and the two liquids should boil without decomposition.
 - (b) Difference in boiling and melting points of two miscible liquids should be less than 30°C .
 - (c) The two liquids should be immiscible.
 - (d) The two liquids should have molecular weight greater than 200 g/mol .
10. Which of the following statements is incorrect?
- (a) Acid rain is caused due to presence of acids in rain.
 - (b) Acid rain has no affect on aquatic life.
 - (c) Acid rain can be reduced by using clean fuels.
 - (d) Acid rain corrodes water pipes.

11. Which of the following is not a function of the plough?
- (a) Tilling the soil
 - (b) Weeding
 - (c) Adding fertilizers
 - (d) Irrigation
12. Which one of the following is not an allotrope of carbon?
- (a) Diamond
 - (b) Graphite
 - (c) Butane
 - (d) Fullerene
13. A metal 'A' reacts with dilute HCl to give a metal, a salt and a gas 'B'. Identify gas 'B'.
- (a) O₂
 - (b) H₂
 - (c) Cl₂
 - (d) N₂
14. Which of the following apparatus is used in the assembly for fractional distillation process?
- (a) Evaporating dish
 - (b) Test tube
 - (c) Fractionating column
 - (d) Tongs
15. Which of the following cannot be accounted for atmospheric pressure?
- (a) Using a dropper for measuring out drops of a liquid
 - (b) Pins and nails are made with pointed ends
 - (c) Filling of ink in a fountain pen
 - (d) Using straw to drink soft drinks

II. Answer the following:

[10]

16. How does atmospheric pressure play a role while drinking through a straw?
17. What is animal husbandry? Write names of any four animals raised in animal husbandry.
18. Define reduction. Give an example.
19. What is triple vaccine? How is it useful?
20. Why copper and aluminium are used for making wires?

III. Answer the following:

[15]

21. Write the chemical equation of 'when electric current is passed through acidulated water'. Which type of reaction is this?
22. Describe the function of the cell wall.
23. Mention any three features of the image obtained by a plane mirror.
24. Differentiate between diamond and graphite.
25. What are the breeds of hen that are grown for poultry farming?

IV. Answer the following in brief:

[20]

26. What is tissue culture? How tissue culture method is a boon for agriculture sector?
27. Differentiate between real and virtual image.
28. How to make an electromagnet?
29. Define nitrogen fixation. Write a short note on nitrogen fixation?
30. Differentiate between metals and non-metals on the basis of their physical properties.