

# Maharashtra State Board

## Class VIII Science

### Sample Paper – 1

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. Moving two like poles together usually causes a magnet resting on a table to repel and rotate. This occurs because
  - (a) like magnetic poles repel
  - (b) unlike magnetic poles attract
  - (c) Both of these
  - (d) None of these
2. When the nozzle of a syringe is dipped in a liquid and its piston is withdrawn, the pressure inside the syringe is
  - (a) Lowered
  - (b) Increased
  - (c) Kept constant
  - (d) Amplified
3. Which is not a contributory cause of a person acquiring a water borne disease?
  - (a) Genetic susceptibility to the disease
  - (b) Lack of sufficient food
  - (c) Lack of clean drinking water
  - (d) Attack by bacteria
4. Which one of the following reactions is an example of decomposition reaction?
  - (a)  $C + O_2 \rightarrow CO_2$
  - (b)  $CaO + H_2O \rightarrow Ca(OH)_2$
  - (c)  $CaCO_3 \rightarrow CaO + CO_2$
  - (d)  $2H_2 + O_2 \rightarrow 2H_2O$
5. In which season, is maximum irrigation needed?
  - (a) Dry winter
  - (b) Dry summer
  - (c) Humid summer
  - (d) Humid winter

6. What is the advantage of turning and loosening of soil before sowing?
- (a) This brings the nutrient-rich soil to the top so that plants can use the nutrients present in the lower layer.
  - (b) The colour of the soil particles can be maintained by this process.
  - (c) The nutrients present in the soil can get evaporated by this process.
  - (d) The nutrients of the top layers can get a chance to go below to facilitate the growth of burrowing animals.
7. In a dark room, a parallel beam of light falls on a white wall and reflected light can be seen from anywhere because:
- (a) Wall is a rough surface and irregular reflection takes place from its surface.
  - (b) Wall is a rough surface and regular reflection takes place from its surface.
  - (c) Wall is a smooth surface and irregular reflection takes place from its surface.
  - (d) Wall is a smooth surface and regular reflection takes place from its surface.
8. Regular reflection takes place when a beam of light strikes
- (a) Chalk powder
  - (b) Cardboard surface
  - (c) Concrete wall
  - (d) Polished wooden table
9. According to J.J Thomson, an atom is a positively charged sphere. Which sub-atomic particles are embedded in it?
- (a) Protons
  - (b) Neutrons
  - (c) Electrons
  - (d) Canal rays
10. In animal husbandry, why is it essential to provide good care, food and shelter to animals?
- (a) So that they stop fighting with each other
  - (b) So that they provide us with good quality animal products
  - (c) So that they are not tempted to leave the shelter and run away
  - (d) So that they develop their taste buds and eats well.
11. What is the full form of term UNEP?
- (a) United Nations Educational Programme
  - (b) United National Environment Programme
  - (c) United Nations Environmental Programme
  - (d) United Nations Environment Programme

12. Hydrogen gas is not evolved when metals react with
- (a) Water
  - (b) Nitric acid
  - (c) Dilute hydrochloric acid
  - (d) Both water and nitric acid
13. We use aluminium foils for wrapping food. This shows that aluminium is
- (a) Malleable
  - (b) Ductile
  - (c) Sonorous
  - (d) Strong
14. An allotrope of carbon which conducts electricity is
- (a) Diamond
  - (b) Fullerenes
  - (c) Graphite
  - (d) Both diamond and fullerenes
15. Which material core is used in solenoid to make an electromagnet?
- (a) Iron
  - (b) Steel
  - (c) Soft iron
  - (d) Cobalt

**II. Answer the following:**

**[10]**

16. What is a comet? How does it appear?
17. List any two steps which can be taken to conserve wildlife.
18. Which property of iron metal is utilized in making iron sheets required for making buckets? Why iron is used?
19. How carbon monoxide is produced. What is its impact on blood?
20. Where is petroleum found and how is it extracted?

**III. Answer the following:**

**[15]**

21. How is carbon dioxide produced in the fire extinguisher?
22. What care should be taken for preserving the agricultural implements?
23. Describe an experiment to show that like poles repel each other.
24. What are alloys? Mention two characteristics of alloys.
25. Is Rhizobium a free living bacterium? Where is it found? How does it live there?

**IV. Answer the following in brief:**

**[20]**

26. How do gene banks and botanical gardens help in conserving biodiversity?
27. What are the precautions to be taken while handling nuclear power plants?
28. What is an electromagnet? How is it different from a permanent magnet? State two uses of electromagnet.
29. Differentiate between plant and animal cells.
30. Explain the properties of a nucleus concluded from Rutherford's model of atom.