

Maharashtra State Board

Class VIII Science

Board Paper – 1

Time: 2 hrs

Max. Marks: 60

Note:

1. All questions are compulsory.
2. The marks related to the question are given in brackets.

I. Choose the correct alternative:

[15]

1. In aluminium chloride (AlCl_3), the valency of aluminium is _____ and that of chlorine is _____.
(a) 1, 3
(b) 3, 1
(c) 2, 1
(d) 1, 2
2. The planet which is smallest in the Solar System and closest to the Sun is
(a) Mercury
(b) Saturn
(c) Uranus
(d) Neptune
3. Antibiotics are prescribed to combat bacterial and/or fungal infections because
(a) They are antibacterial and/or antifungal agents.
(b) They are made using bacterial or fungal cultures.
(c) Both a and b
(d) Neither a nor b
4. Pure water does not conduct electricity, but normal tap water conducts electricity because
(a) Pure water is a poor conductor of electricity
(b) Pure water is free of salts
(c) Both a and b
(d) Neither a nor b
5. Which of the following is not related to the conservation of biological diversity?
(a) National parks
(b) Sanctuaries
(c) Reserved biodiversity zones
(d) Dams

- 6.** Which of the following is a contagious disease?
(a) Scabies
(b) AIDS
(c) Eczema
(d) Both A and C
- 7.** Which of the following statements is false?
(a) Burning of 1 kg of wood releases 1700 joules of energy.
(b) Fossil fuels contain hydrocarbon compounds.
(c) Uranium is used to obtain atomic energy.
(d) Fuel oil is used in big furnaces in factories.
- 8.** A _____ is used in a mariner's compass.
(a) Horseshoe magnet
(b) Bar magnet
(c) Disc magnet
(d) Magnetic needle
- 9.** Which of the following methods is used to separate components of crude oil?
(a) Distillation
(b) Fractional distillation
(c) Evaporation
(d) Centrifugation
- 10.** _____ is a non-crystalline form of carbon.
(a) Coke
(b) Graphite
(c) Diamond
(d) Fullerene
- 11.** Soil has to be turned and loosened before sowing the seeds because
(a) It allows the roots to penetrate deep into the soil
(b) It allows the roots to breathe in the soil
(c) It allows the growth of microbes in the soil
(d) All of the above
- 12.** In advertisement signs, _____ gas is used.
(a) Helium
(b) Neon
(c) Argon
(d) Oxygen

- 13.** Abhi made a circuit using some batteries, a bulb, an iron nail and few lead wires. The bulb did not glow when he completed the circuit. Which of the following could be the most appropriate reason for the same?
- He did not connect the wires properly.
 - The bulb was fused.
 - Lead is a poor conductor of electricity.
 - Either A or B
- 14.** Which of the following pairs is not correctly matched?
- Plough : Ploughing
 - Seed drill : Sowing
 - Pickaxe : Digging the ground
 - Spade : Harvesting crops
- 15.** An earthen pot has two holes. When water is poured into the pot, it gushes out from the holes and falls at the same distance from the pot. This is because
- Liquids exert a pressure on the sides of the container
 - The holes are at the same height
 - Liquids exert the same pressure at the same depth
 - All of the above

II. Answer the following:

[10]

- 16.** Why are tiles placed over a slushy patch of the ground to help cross it?
- 17.** In what way are dogs useful to mankind?
- 18.** Name two catalysts and the reactions in which they are used?
- 19.** Why does each planet have a different period of revolution?
- 20.** Match the following:

Column A	Column B
(a) Squirrel	(i) Swallows the prey
(b) Snake	(ii) Gnaws the fruit
(c) Hen	(iii) Licks the food
(d) Dog	(iv) Picks up grains

III. Answer the following:

[15]

- 21.** State the characteristics of a magnet.
- 22.** What were the conclusions drawn from the alpha ray (α) experiment performed by Rutherford?
- 23.** Write balanced chemical equations for the following reactions:
- Water is poured on calcium oxide.
 - Coal is burnt in air.
 - Magnesium wire is lit.
- 24.** Differentiate between algae and fungi.
- 25.** List the common symptoms of tuberculosis.

IV. Answer the following in brief:

[20]

26. Describe the construction of Leclanché cell.

27.

(a) How are metal oxides formed?

(b) How will you show that metal oxides are alkaline?

28. Give scientific reason: Marble tiles are not used in the kitchen.

29. State the functions of

(a) Cytoplasm

(b) Nucleus

(c) Vacuole

(d) Cell membrane

30. Differentiate between sandy soil, clayey soil and silt.