

CBSE TEST PAPER-02

SCIENCE & TECHNOLOGY (Class-10)

Chapter 3. Metal and Non-metals

1. State two ways to prevent the rusting of iron. (1 mark)
2. What type of oxides are formed when non-metals combine with oxygen? (1 mark)
3. Name a metal which is both ductile as well as malleable. (1 mark)
4. Write the chemical equation to represent the reaction taking place when copper oxide is heated in a stream of hydrogen. (1 mark)
5. Name two elements that are stored in kerosene. (1 mark)
6. The reaction of a metal X with Fe_2O_3 is highly exothermic and is used to join broken railway tracks. Identify metal X. Write the chemical equation of its reaction with Fe_2O_3 . (2 marks)
7. Metal sulphides occurs mainly in rocks and the metal halides occur mostly in seas and lakes. What could be the reason for this difference in behavior? (2 marks)
8. Pratyush took sulphur powder on a spatula and heated it. He collected the gas evolved by inverting a test-tube over it. (2 marks)
 - (i) What will be the action of gas on (a) dry litmus paper? (b) Moist litmus paper?
 - (ii) Write a balanced chemical equation for the reaction taking place.
9. Which gas is produced when diluted hydrochloric acid is added to a reactive metal? Write the chemical reaction. When iron reacts with dilute H_2SO_4 . (2 marks)
10. Why do ionic compounds have high melting points? (2 marks)
11. Give reasons: (3 marks)
 - (i) Platinum, gold and silver are used to make jewellery.
 - (ii) Sodium, potassium and lithium are stored under oil.
 - (iii) Aluminium is a highly reactive metal, still it is used to make utensil for cooking.
12. Explain with labelled diagram, the Froth Floation Process used to separate the gangue from a sulphide ore. (3 marks)
13.
 - (i) What is corrosion of metals? Name one metal which does not corrode and one which corrodes on being kept in atmosphere.
 - (ii) How will you show that the rusting of iron needs oxygen and moisture at the same time?

Or

Write an activity to show that ionic compounds are good conductors of electric current in their aqueous solution. (5 marks)