

10th Chemistry

CBSE TEST PAPER-02

SCIENCE & TECHNOLOGY (Class-10)

Chapter 1. Chemical Reaction and Equations

1. When a copper strip is placed in a solution of silver nitrate, copper nitrate and silver are formed. Name this reaction. (1 mark)
2. Give one example of a redox reaction which is also a combination reaction. (1 mark)
3. Name two anti-oxidants which are usually added to fat and oil containing foods to prevent rancidity. (1 mark)
4. When SO₂ gas is passed through saturated solution of H₂S, the following reaction occurs:
$$\text{SO}_2 + 2\text{H}_2\text{S} \rightarrow 2\text{H}_2\text{O} + 3\text{S}$$
In this reaction, which substance is oxidised and which one is reduced?
5. When hydrogen is passed over heated CuO, brown copper is deposited. Which element is reduced. (1 mark)
6. A solution of CuSO₄ was kept in an iron pot. After few days, the iron pot was found to have a number of holes in it. Write the equations of the reaction that took place. Explain this reaction in terms of reactivity. (2 marks)
7. What happens when silver chloride is exposed to sun light? Write a chemical equation for this reaction. Give one use of such a reaction. (2 marks)
8. What is meant by double displacement reaction? Explain with the help of an example (2 marks)
9. Why is double the amount of a gas collected in one of the test-tubes in the electrolysis of water experiment? Name this gas. (2 marks)
10. Write balanced chemical equation with state symbols for the following reaction: (2 marks)
 - (i) Solution of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.
 - (ii) Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water.
11. Why is respiration reaction considered as an exothermic reaction? Explain. (2 marks)
12. (a) What is the general name of the chemicals which are added to fat and oil containing foods to prevent the development of rancidity?
(b) What are anti-oxidants? Why are they added to fat and oil containing foods?
(c) Explain, why food products containing fats and oils. (like potato chips) are packaged in nitrogen. (5 marks)