CBSE TEST PAPER-06

SCIENCE & TECHNOLOGY (Class-10)

Chapter 1. Chemical Reaction and Equations

1. Write a chemical equation for each of the following reactions   (2 marks)
    (i) Zinc metal reacts with aqueous solution of hydrochloric acid to form zinc chloride solution and hydrogen gas.
    (ii) When solid mercury (II) oxide is heated, liquid mercury and oxygen gas are produced.
2. Give two examples from daily life where redox reactions are taking place.   (2 marks)
3. State any two methods to prevent or retard the development of rancidity in fat and oil containing foods.   (2 marks)
4. Why articles made of aluminium do not corrode?   (2 marks)
5. Giving examples explain the difference between balanced and unbalanced chemical equations.   (2 marks)
8. What is the difference between displacement and double displacement reactions? Write equations for these reactions.   (3 marks)

9. What are the three essentials of a chemical equation?   (3 marks)

10. What is corrosion? What are its effects? State two conditions necessary for the rusting of iron.   (3 marks)

11. (i) What is meant by 'oxidation' in terms of oxygen?
     (ii) In the reaction represented by the equation:
     $MnO_2 + 4HCI \longrightarrow MnCI_2 + 2H_2O + CI_2$
     (a) Name the substance oxidised   (b) Name the oxidizing agent
     (c) Name the substance reduced   (d) Name the reducing agent.   (5 marks)
                                   Or
     Write one activity to show the decomposition of a chemical compound with the evolution of a gas.
12. (i)   Explain the term 'corrosion' with an example.
     (ii) Which chemical reaction is involved in the corrosion of iron?
     (iv) Name any two objects (or structures) which are gradually damaged by the corrosion of iron and steel?
     (v)   Name two metals which corrode easily and two metals which do not corrode easily.
     (vi) Aluminium corrodes in moist air but it is widely used for making cooking vessels and other cutlery. Explain.   (5 marks)