Ch. 04 – CHEMICAL REACTIONS & EQUATIONS | **CLASS–X TIME-1 HR M.M.-30**

1) Hydrogen being a highly inflammable gas and oxygen being a supporter of combustion, yet water which is a compound made up of hydrogen and oxygen is usedto extinguish fire. Why? [1]
2) What change in colour is observed when white silver chloride is left exposed to sunlight ? State the type of chemical reaction in this change. [1]
3) Name the process in which gain of electrons takes place. [1]
4) A white salt on heating decomposes to give brown fumes and a residue is left behind.
   (a) Name the salt.
   (b) Write the equation for the decomposition reaction. [2]
5) What is a redox reaction? When a magnesium ribbon burns in air with a dazzling flame and forms a white ash, is magnesium oxidised or reduced? Why? [2]
6) Write chemical equation for the reactions taking place when [3]
   (a) Iron reacts with steam
   (b) Copper is heated in air
   (c) Magnesium reacts with dil. HCl
7) State the type of chemical reactions with chemical equations that take place in thefollowing:
   (a) Magnesium ribbon is burnt in air.
   (b) Electric current is passed through water.
   (c) Ammonia and hydrogen chloride gases are mixed. [3]
8) A reddish brown coloured metal, used in electrical wires, when powdered and heated strongly in an open china dish, its colour turns black. When hydrogen gas is passed over this black substance, it regains its original colour. Based on the above information answer the following questions.
   (a) Name the metal and the black coloured substance formed.
   (b) Write balanced chemical equations for both the reactions.
   (c) How can the black coating on the surface be turned reddish brown? [3]
9) (a) Explain two ways by which food industries present rancidity. [4]
   (b) Discuss the importance of decomposition reaction in metal industry with three points.
10) (a) A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed. Write the chemical reaction involved and also mention the type of the chemical reaction.

(b) Ferrous sulphate when heated, decomposes with the evolution of a gas having a characteristic odour of burning sulphur. Write the chemical reaction involved and identify the type of reaction. **(Board Term I, 2016)**

c) Take 3 g of barium hydroxide in a test tube, now add about 2 g of ammonium chloride and mix the contents with the help of a glass rod. Now touch the test tube from outside.

(i) What do you feel on touching the test tube?

(ii) State the inference about the type of reaction occurred.

(iii) Write the balanced chemical equation of the reaction involved.**(Board Term I, 2017)** [5]