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

1) **a) $AgNO_3(aq) + NaCl(aq) \rightarrow AgCl(s) \downarrow + NaNO_3(aq)$**

b) $FeS + H_2SO_4 \rightarrow FeSO_4 + H_2S \uparrow$

Consider the above mentioned two chemical equations with two different kinds of arrows (↑ and ↓) along with product. What do these two different arrows indicate? (1)

2) Balance the given chemical equation: $Fe(s) + H_2O(g) \rightarrow Fe_3O_4(s) + H_2(g)$ (1)

3) How will you define a reducing agent? (1)

4) Why does not silver evolve hydrogen on reacting with dil H_2SO_4 ? (2)

5) What is an oxidation reaction? Give an example of oxidation reaction. Is oxidationan exothermic or an endothermic reaction ? (2)

6) What is meant by skeletal type chemical equation? What does it represent? Using the equation for electrolytic decomposition of water, differentiate between a skeletal chemical equation and a balanced chemical equation. (3)

7) 2 g of ferrous sulphate crystals are heated in a dry boiling tube.

(a) List any two observations.

(b) Name the type of chemical reaction taking place.

(c) Write the chemical equation for the reaction. (3)

8) What is redox reaction? Identify the substance oxidised and the substance reduced inthe following reactions: (3)

(a) $2PbO + C \rightarrow Pb + CO_2$

(b) b) $MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$

9) A metal nitrate 'A' on heating gives yellowish brown coloured metal oxide along with brown gas 'B' and a colourless gas 'C'. Aqueous solution of 'A' on reaction with potassium iodide forms a yellow precipitate of compound 'D'. Identify 'A, B, C, D'. Also identify the types of both the reactions. Metal present in 'A' is used in alloy which is used for soldering purposes. (4)

10) Magnesium is more reactive than copper or iron but iron is more reactive than copper:

(i) A solution of magnesium sulphate is put into copper pot.

(ii) A solution ofcopper sulphate is put into iron pot.

(iii) A solution of magnesium sulphate is put into iron pot. Which of the above pots will get damaged? Why? What is this reaction called? (5)