

1.	Calcium oxide reacts vigorously with water to produce slaked lime. $\text{CaO}_{(s)} + \text{H}_2\text{O}_{(l)} \rightarrow \text{Ca}(\text{OH})_{2(aq)}$ This reaction can be classified as (A) Combination reaction (B) Exothermic reaction (C) Endothermic reaction (D) Oxidation reaction Which of the following is a correct option? (a) (A) and (C) (b) (C) and (D) (c) (A), (C) and (D) (d) (A) and (B)
2.	When hydrogen sulphide gas is passed through a blue solution of copper sulphate, a black precipitate of copper sulphide is obtained and the sulphuric acid so formed remains in the solution. The reaction is an example of a (a) combination reaction (b) displacement reaction (c) decomposition reaction (d) double displacement reaction
3.	Study the following equation of a chemical reaction: $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$ (i) Identify the type of reaction. (ii) Write a balanced chemical equation of another example of this type of reaction.
4.	1 g of copper powder was taken in a China dish and heated. What change takes place on heating? When hydrogen gas is passed over this heated substance, a visible change is seen in it. Give the chemical equations of reactions, the name and the colour of the products formed in each case.
5.	Mention with reason the colour changes observed when: (i) silver chloride is exposed to sunlight. (ii) copper powder is strongly heated in the presence of oxygen. (iii) a piece of zinc is dropped in copper sulphate solution
6.	Lead nitrate solution is added to a test tube containing potassium iodide solution. (a) Write the name and colour of the compound precipitated. (b) Write the balanced chemical equation for the reaction involved. (c) Name the type of this reaction justifying your answer.
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 balanced chemical equation for the reaction and name the products formed.

1	When zinc metal is treated with a dilute solution of a strong acid, a gas is evolved, which is utilised in the hydrogenation of oil. Name the gas evolved. Write the chemical equation of the reaction involved and also write a test to detect the gas formed.
2	The pH of an aqueous solution decreases from 3 to 2. What will happen to the nature of the solution ?
3	The pH of an aqueous solution decreases from 3 to 2. What will happen to the nature of the solution ?
4	Which is a stronger acid ? A solution with pH 5 and a solution with pH 2 ?
5	What will be the colour acquired by a basic solution if a few drops of indicator methyl orange are added to it ?