

Chemical Reactions and Equations

1 Mark:

1. Balance the following chemical equation :
 $Fe(s) + H_2O(g) \rightarrow Fe_3O_4(s) + H_2(g)$ [CBSE, 2008]
2. Why is respiration considered an exothermic process? [CBSE, 2008]
3. In electrolysis of water, why is the volume of gas collected over one electrode double that of gas collected over the other electrode? [CBSE, 2009]
4. What changes in the colour of iron nails and copper sulphate solution do you observe after keeping the iron nails dipped in copper sulphate solution for about 30 minutes? [CBSE, 2010]

2 Marks:

1. Give an example of a decomposition reaction. Describe an activity to illustrate such a reaction by heating. [CBSE, 2008]
2. I. What is observed when a solution of potassium iodide is added to a solution of lead nitrate taken in a test tube?
II. What type of reaction is this?
III. Write a balanced chemical equation to represent the above reaction. [CBSE, 2008]
3. What happens when an aqueous solution of sodium sulphate reacts with an aqueous solution of barium chloride? State the physical conditions of reactants in which the reaction between them will not take place. Write the balanced chemical equation for the reaction and name the type of reaction. [CBSE, 2010]