

## Chemical Reaction and Equation

### 1 – MARK QUESTIONS ANSWER

1. What happens when magnesium ribbon burns in air?
2. Name the gas evolved when zinc reacts with dil. HCl.
3. What is a chemical equation?
4. On what chemical law, balancing of chemical equation is based?
5. Represent decomposition of ferrous sulphate with the help of balanced chemical equation.
6. When carbon dioxide is passed through lime water, it turns milky, why?
7. A zinc rod is left for nearly 20 minutes in a copper sulphate solution. What change would you observe in zinc rod?
8. What type of reaction is this:  $\text{Na}_2\text{SO}_4 + \text{BaCl}_2 \rightarrow \text{BaSO}_4 + 2\text{NaCl}$
9. Identify the compound oxidized in the following reaction.  $\text{H}_2\text{S} (\text{g}) + \text{Cl}_2 \text{S} (\text{s}) \longrightarrow 2\text{HCl} (\text{g})$
10. What is rust?
11. How does the food become rancid?

### 2-MARKS QUESTIONS/ ANSWERS

1. An iron knife kept dipped in a blue copper sulphate solution turns the blue solution light green. Why?

2. A copper coin is kept in a solution of silver nitrate for some time. What will happen to the coin and the colour of the solution?
3. What do you understand by precipitation reaction? Explain with suitable examples.
4. What is lime-water test for the detection of carbon dioxide?

### 3 MARKS QUESTIONS/ ANSWERS

- Q.5.** what is corrosion? State the conditions necessary for rusting of iron. How rusting is harmful?
- Q.6.** what is rancidity? Write the common method to prevent it.
- Q.7.** (a) Why cannot a chemical change be normally reversed?  
(b) Why is it always essential to balance a chemical equation?  
(c) What happens when  $\text{CO}_2$  gas is passed through lime water and why does it disappear on passing excess  $\text{CO}_2$ ?  
(d) Can rusting of iron takes place in distilled water?

### HOTS QUESTIONS (Chemical Reactions and Equations)

8. The marble statues often slowly get corroded when kept in open for a long time .Assign a suitable explanation
9. You are given the following materials (a) marble chips (b) dilute hydrochloric acid (c)Zinc granules Identify the type of reaction

when marble chips and Zinc granules are added separately to acid taken in two test tubes.

10. The gases hydrogen & chlorine do not react with each other even if kept together for a long time. However, in the presence of sunlight, they readily combine. What does actually happen?
11. A, B and C are three elements which undergo chemical reactions in the following way
12. A water insoluble substance 'X' on reacting with dilute  $\text{H}_2\text{SO}_4$  released a colourless and odourless gas accompanied by brisk effervescence. When the gas was passed through water, the solution obtained turn blue litmus red. On bubbling the gas through lime water, it initially became milky and the milkiness disappeared when the gas was passed in excess. Identify the substance 'X' and write the chemical equations of the reaction involved .
13. Ahmad took a magnesium ribbon (cleaned) and burned it on a flame. The white powder formed was taken in a test tube and water was added to it. He then tested the solution formed with red and blue litmus paper. What change was seen? Why?

14. Give one example of a combination reaction in which an element combines with a compound to give you a new compound.

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