

MR COACHING CENTER

MOST IMPORTANT AND MOST REPEATED QUESTIONS FROM CHEMICAL REACTIONS

1-Mark Questions (Very Short Answer)

1. Define a chemical reaction.
 2. What is a balanced chemical equation?
 3. What are reactants and products?
 4. Why do we balance a chemical equation?
 5. Write the chemical formula for quick lime and slaked lime.
 6. What type of reaction is represented by the equation: $2Mg + O_2 \rightarrow 2MgO$?
 7. Write any one example of a double displacement reaction.
 8. Name the gas evolved when zinc reacts with hydrochloric acid.
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2-3 Marks Questions (Short Answer)

1. Balance the following chemical equations:
 - a. $Fe + H_2O \rightarrow Fe_3O_4 + H_2$
 - b. $Na + H_2O \rightarrow NaOH + H_2$
 - c. $Al + O_2 \rightarrow Al_2O_3$
2. Write a balanced chemical equation for the reaction between:
 - a. Calcium carbonate and hydrochloric acid.
 - b. Zinc and sulphuric acid.
3. Explain the following with examples:
 - Combination reaction
 - Decomposition reaction
 - Displacement reaction
 - Double displacement reaction
4. What are oxidation and reduction? Explain with examples.
5. What is a redox reaction? Give one example.

6. What happens when iron nails are dipped in copper sulphate solution? Write the reaction and explain.
 7. What is corrosion? How can it be prevented?
 8. What is rancidity? How can we prevent it?
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5-Mark Questions (Long Answer / Application-Based) *Very Rare*

1. Write balanced chemical equations for all types of reactions with examples:
 - Combination
 - Decomposition
 - Displacement
 - Double displacement
 - Oxidation and reduction
 2. Explain the following terms with suitable examples:
 - Corrosion
 - Rancidity
 - Oxidation
 - Reduction
 3. Describe the chemical changes observed when:
 - Magnesium ribbon burns in air.
 - Zinc reacts with dilute HCl.
 - Ferrous sulphate is heated.
 - A piece of iron is dipped in copper sulphate solution.
 4. What are the characteristics of a chemical reaction? Explain with examples.
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Frequently Repeated Board Questions

- Define and give one example of each type of chemical reaction.
- Explain oxidation and reduction with suitable examples.
- Why should a chemical equation be balanced?
- Explain the reaction between iron and copper sulphate solution.
- What is the difference between physical and chemical change?

- What are the effects of oxidation in everyday life?
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