

Chemical Reaction

Full marks: 45

Time :1 hr 15 mins

1. Fill in the Blanks

1×10=10

- a. $\text{CaO} + \text{H}_2\text{O} \text{ ----- } \text{_____} + \text{Heat}$
- b. $\text{SnO} + 2 \text{NaOH} \text{ ----- } \text{_____} + \text{H}_2\text{O}$
- c. $\text{Zn} + \text{CuSO}_4 \text{ ----- } \text{_____} + \text{Cu}$
- d. $\text{V}_2\text{O}_5 + \text{SO}_2 + \text{____} \text{ ----- } \text{SO}_3$
- e. $\text{_____} + 3\text{HCl} \text{ ----- } 2\text{AlCl}_3 + 3 \text{H}_2\text{O}$
- f. $\text{ZnSO}_4 + 2\text{NH}_4\text{OH} \text{ ----- } \text{Zn(OH)}_2 + \text{_____}$
- g. $\text{SnO} + \text{_____} \text{ ----- } \text{SnCl}_2 + \text{H}_2\text{O}$
- h. $\text{Cl}_2 + \text{_____} \text{ ----- } 2\text{KCl} + \text{Br}_2$
- i. $\text{ZnO} + \text{HNO}_3 \text{ ----- } \text{_____} + \text{H}_2\text{O}$
- j. $\text{_____} + 2\text{KI} \text{ ----- } \text{PbI}_2 + 2\text{KNO}_3$

2. Answer all the questions

2×5=10

- a. What are the differences between Endothermic and Exothermic Reactions?
- b. What is Double Displacement Reaction? And their types
- c. What is Displacement Reaction?
- d. What are called Indicators?
- e. What are Thermal Decomposition Reactions?

3. Write short notes on:

2 ½×4=10

- a. Oxides and their types
- b. Catalysts
- c. Activity Series of Metals
- d. Characteristics of Chemical Reactions

4. Write with Chemical Reaction, and mention which type of reaction is that 1 ½ ×10=15

What Happen when

- i. Sodium Hydroxide reacts with Dilute Hydrochloric Acid
- ii. Zinc Oxide reacts with Nitric Acid
- iii. Sodium Chloride solution is added with Silver Nitrate Solution
- iv. Ferric Chloride reacts with Sodium Hydroxide Solution
- v. Electric Current is passed through a solution of Sodium Chloride.
- vi. Zinc Sulphate solution reacts with Ammonium Hydroxide solution
- vii. Barium Chloride reacts with Copper Sulphate solution.
- viii. Lead Nitrate Solution reacts with Potassium Iodide Solution
- ix. Electric Current is passed through molten Aluminum Oxide.
- x. Silver Bromide is placed in Day light.