Chemistry Practical Class 10 Types of Reaction - Combination Reaction - Action of Water on Quicklime Viva Questions with Answers

Q1. What is Combination Reaction?
Answer: Combination reaction is a type of chemical reaction in which two or more reactants combine to form a single product.

Q2. What is the product formed when water reacts with quicklime?
Answer: Calcium hydroxide is formed when water reacts with quicklime.

Q3. What is the common name of calcium hydroxide?
Answer: Calcium hydroxide is commonly called slaked lime.

Q4. What is the molecular formula of calcium hydroxide?
Answer: The molecular formula of calcium hydroxide is $Ca(OH)_2$.

Q5. How do you calculate the molecular mass of $Ca(OH)_2$?
Answer: The molecular mass of $Ca(OH)_2$ is calculated as follows:

Atomic mass of Ca: 40
Atomic mass of O: 16
Atomic mass of H: 1
Molecular mass of $Ca(OH)_2$ = 40 + 16 + 16 + 1 + 1 = 74 g/mol.

Q6. Write the chemical equation for the reaction between water and quicklime?
Answer: $CaO + H_2O \rightarrow Ca(OH)_2$.

Q7. What is the molecular mass of water?
Answer: Molecular mass of water is 18 g/mol.

Q8. What is the molecular mass of calcium oxide?
Answer: Molecular mass of calcium oxide is 56 g/mol.

Q9. In what physical state is the product formed?
Answer: $Ca(OH)_2$ is obtained in solid state. It is seen in powder form.

Q10. What is the physical observation of the reaction between water and calcium oxide?
Answer: The beaker becomes hot.

Q11. Is heat released during the above reaction?
Answer: Yes, heat is released.

Q12. Is the above mentioned reaction endothermic or exothermic?
Answer: The reaction is exothermic.

Q13. Is heat released during the reaction of H_2O and CaO?
Answer: Yes, heat is released.

Q14. What is the common name of calcium oxide?
Answer: Calcium oxide is commonly called quick lime.

Q15. What are the uses of calcium hydroxide?
Answer: Calcium hydroxide is used in the paper industry, sewage treatment and is an important starting material for production of ammonia.