KALPAVRUKSH4

KALPAVRUKSHA MODEL SCHOOL

Online class Assignments

Class: X Sub: Chemistry Date: 12.07.2021

Topic: Acids, Bases and Salts

I. Answers for the following questions:

- 1. What will happen following indicators comes in contact with base?
 - a) Methyl orange b) Phenolphthalein c) red litmus d) blue litmus

Ans: a) Methyl orange → Yellow

b) Phenolphthalein → Pink

- c) red litmus \rightarrow Blue
- d) blue litmus \rightarrow No change.
- 2. What do you observe when a base comes in contact with metals? Explain with 2 balanced chemical equations.

Ans: A base reacts with a metal to produce oxy salts with the liberation of hydrogen gases.

 $Zn + 2KOH \rightarrow K_2ZnO_2 + H_2$ (Potassium Zincate)

 $2A1 + 2KOH + 2H_2O \rightarrow 2KAlO_2 + 3H_2$ (Potassium Aluminate)

 $Zn + 2NaOH \rightarrow Na_2ZnO_2 + H_2$ (Sodium Zincate)

 $2Al + 2NaOH + 2H_2O \rightarrow 2NaAlO_2 + 3H_2$ (Sodium Aluminate)

3. What do you observe when bases react with ammonium salts? Explain with a balanced chemical equation.

Ans: When bases are warmed with ammonium salts, ammonia gas is produced.

$$2NaOH + NH_4Cl \rightarrow NaCl + H_2O + NH_3$$

4. With the help of suitable examples explain neutralization reaction.

Ans: Bases reacts with acids to form salt and water.

Acid + Base → Salt + Water

 $HCl + NaOH \rightarrow NaCl + H_2O$

 $H_2SO_4 + 2NaOH \rightarrow Na_2SO_4 + H_2O$