

KALPAVRUKSHA MODEL SCHOOL

Online class Assignments

Class: X Sub: Chemistry Date: 01.06.2021

Topic: Chemical reactions and equations

I. Answer the following questions:

1. Define double displacement reaction.

Ans: A chemical reaction in which there is an exchange of ions between the reactants to give new substances is called a double displacement reaction.

2. Write any five balanced double displacement reaction.

Ans:
$$Pb(NO_3)_2 + 2NaCl \rightleftharpoons 2NaNO_3 + PbCl_2$$

 $2NaCl + CaSO_4 \rightarrow Na_2SO_4 + CaCl_2$
 $Al_2(SO_4)_3 + 6NH_4OH \rightarrow 2Al(OH)_3 + 3(NH_4)_2SO_4$
 $H_2SO_4 + 2LiOH \rightleftharpoons Li_2SO_4 + 2H_2O$
 $AgNO_3 + HCl \rightleftharpoons AgCl + HNO_3$
 $HCl + NaOH \rightarrow NaCl + H_2O$

3. What will happen when sodium sulphate is added into barium chloride solution? Explain with balanced chemical equation.

Ans: When Barium chloride (colourless) is added into Sodium sulphate (colourless) solution. There is an exchange of ions takes place and immediately the colour of the solution changes into white colour after some time a white precipitate of Barium Sulphate settles

at the bottom and colourless solution of Sodium chloride will be on top of it.

$$BaCl_2 + Na_2SO_4 \rightarrow BaSO_4 + 2NaCl$$

4. What will happen when Sodium chloride is added into Silver nitrate solution? Explain with balanced chemical equation.

Ans: When Silver nitrate (colourless) is added into Sodium chloride (colourless) solution. There is an exchange of ions takes place and immediately the colour of the solution changes into white colour after some time a white precipitate of Silver chloride settles at the bottom and colourless solution of Sodium nitrate will be on top of it.

$$AgNO_3 + NaCl \rightarrow AgCl + NaNO_3$$