ACIDS, BASES AND SALTS

Q.1. Name two natural indicators.

Ans. Litmus solution, beet-root extract and turmeric solution.

Q.2. Name the acid present in vinegar and lemon.

Ans. In vinegar acetic acid is present and in lemon it is citric acid.

Q.3. What is an Alkali.

Ans. The base that dissolves in water is called alkali.

Q.4. What is the colour of methyl orange in acidic solution.

Ans. The colour of methyl orange is pink in acidic solution.

Q.5. In a solution phenolphthalein turns pink. What is the nature or solution?

Ans. The solution is basic.

Q.6. Hydrogen ion concentration of an acid is 1×10^{-2} mol/L, what is its pH.

Ans. Its pH is 2.

Q.7. pH of one solution is 7, is it acidic basic or neutral.

Ans. Solution with pH no 7 is neutral.

Q.8.Which has a higher pH value, 1M HCl or 1M NaOH solution. Ans. 1M NaOH solution has higher pH value.

Q.9. Name two strong and two weak acids.

Ans. Strong acid: Hydrochloric acid and Nitric acid. Weak acid: Acetic acid and carbonic acid.

Q.10. Name the gas formed when sodium hydroxide reacts with zinc.

Ans. Hydrogen gas is formed when NaOH reacts with zinc.

Q.11. What is bleaching powder?

Ans. Bleaching powder is a mixture of $CaOCl_2$.$Ca(OH)_2$.$CaCl_2$.$2H_2O$.

Q.12. Write the chemical formula for washing soda.

Ans. Chemical formula for washing soda is $Na_2CO_3.10H_2O$.

Q.13. Write the chemical name of baking soda.

Ans. Its chemical name is sodium hydrogen carbonate.

Q.14. Write one domestic use of sodium carbonate.

Ans. It is used as a cleansing agent.

Q.15. What happens when gypsum is heated at 373 K.

Ans. When gypsum is heated at 373 K .it changes to plaster of paris.

$CaSO_4$. $2H_2O \rightarrow CaSo_4$. ½ H_2O +1 ½ H_2O

Gypsum Plaster of Paris

Q.16. Doctors use paste of a white substance in water to maintain a fractured bone in its place. Identify the substance and write its chemical formula.

Ans. Name of the compound: Plaster of Paris.

Chemical formula: CaSo4. ½ H2O