

Exercises

(A). Fill in the blanks:

1. sour
2. natural
3. alkali
4. sodium chloride (NaCl)
5. natural

(B). Multiple choice questions:(Ans.)

1. sulphuric acid
2. a base
3. grapes
4. common salt
5. baking soda

(C). Fill the information in the given flow chart :

. What are Acids & Bases?

Ans. Acids : Substances which are sour, corrosive in nature and which turn blue litmus red are called acids.

Bases : Substances which are bitter soapy to touch and which turns red litmus blue are called bases.

(Properties)	(Acids)	(Common Examples)
1. Sour Taste		Citric acid
2. Litmus test (Acids turn blue litmus red)		Vinegar(acetic acid)
3. Dissolved in water		Hydrochloric acid
	(Bases)	
1. Bitter Taste		Sodium hydroxide
2. Litmus test (Bases turn red litmus blue)		Calcium hydroxide
3. Dissolved in water		Potassium hydroxide
	(Salts)	
1.High melting & boiling point		Sodium Carbonate (washing soda)
2. Conductivity (Good conductor of electricity)		Sodium chloride
3. Dissolved in water		Sodium bicarbonate (baking soda)

(D). Answer the following questions in brief.(Ans.)

1. An acid is a chemical which tastes sour, corrosive and turn blue litmus paper red.

Examples of mineral acids are: Hydrochloric acid, & Sulphuric acid

Examples of natural acids are: Citric acid, & Acetic acid

2. A base is a chemical which tastes bitter, is soapy to touch and turns red litmus paper blue.

Examples: Sodium hydroxide, & Magnesium hydroxide

3. The substances which are used to indicate whether a substance is acidic or basic in nature are known as indicators.

Examples of natural indicators are:

- a) Flowers: China rose, rose
- b) Roots: beetroot
- c) Stems: turmeric
- d) Leaves: red Cabbage

4. Uses of acids are:

- a) Hydrochloric acid: It is produced in stomach and it helps in digestion of food.
- b) Sulphuric acid: It is very important in the field of chemical industry, and hence it is called the king of chemicals.
- c) Nitric acid: It is used in the manufacture of artificial silk, synthetic dyes, and fertilizers.

5. Uses of bases are:

- a) Sodium Hydroxide: It is used in to manufacture of paper, textiles, and detergents.
- b) Calcium Hydroxide: It is used to neutralize the acidity in soil.
- c) Ammonium Hydroxide: To manufacture fertilizer such as ammonium nitrate.

6. Uses of salts are:

- a) Sodium chloride: It is the common salt or table salt used in food to enhance taste.
- b) Sodium Carbonate: It is used in manufacture of glass.
- c) Copper Sulphate: It is used in the dyeing industry and also as a wood preservative.

7. Neutralisation reaction is the reaction in which acids and bases react with each other to add salt and water. Example:

