Revision Notes

Chapter – 6

Physical and Chemical Changes

- Changes can be of two types, physical and chemical.

1. **Physical changes** are changes in the physical properties of substances. No new substances are formed in these changes.These changes may be reversible.
   Example: crushing a can, glowing of an electric bulb, tearing of paper, mixing of sand and water.

2. **Chemical Changes** are changes in which the composition and chemical properties of the substance get changed. In chemical changes new substances are produced. This change is permanent and irreversible.
   Example: burning of a candle, formation of curd from milk, ripening of fruits.

- · **Chemical Reactions in daily life**:

1. **Rusting of Iron:** Rusting is the process in which iron turns into iron oxide**.** It happens when iron comes into contact with water and oxygen. The process is a type of corrosion that occurs easily under natural conditions.

   Prevention of Rusting:
   (i) By Painting
   (ii) By Oiling and greasing
   (iii) By Chromium plating
   (iv) By Galvanizing
   (v) By Alloying

2. **Cooking of food:** Cooking causes breakdown of complex molecules of carbohydrates, fats and proteins into smaller molecules.
   It is regarded as a decomposition reaction. Cooked food is easier to digest than uncooked food.

3. **Decay of Organic Substances:** Microorganisms like fungi and bacteria produce enzymes which break down complex organic compounds into smaller substances.
   It is also regarded as a decomposition reaction.

   - Some substances can be obtained in pure state from their solutions by crystallization.