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## Chapter – 9

### Soil

- Soil is the uppermost crust that covers the earth. It is a mixture of rock particles and humus.
  - Soil is important for life on the earth.
  - **Formation of Soil:**
    - (i) Soil is formed by weathering or disintegration of parent rocks.
    - (ii) Physical weathering is degradation of rocks by physical agents like water, ice, wind, sun, etc.
    - (iii) Chemical weathering is chemical decomposition of rocks.
    - (iv) Biological weathering is decomposition of parent rocks by bacteria and microorganisms.
  - **Soil Profile:** It is the vertical section of soil from the ground surface to the parent rock. Soil profile is a section through different layers of the soil, Various layers are called horizons.
  - **Constituents of Soil:** Soil consists of both living and non-living matter. These constituents make the soil fertile.
  - **Types of Soil:** Soil is of different types: clayey, loamy and sandy.
  - **Sandy soil:** It contains soil particles with a diameter of 0.2 to 2.0 mm. It comprises of around 60% sand along with some clay. It has very low water retention capacity. It is not rich in humus.
  - **Clayey soil:** It contains soil particles with a diameter of less than 0.2 mm. It has an excellent water retention capacity and air circulation is sufficient.
  - **Loamy soil:** It contains a good mixture of sand, clay and humus. It has a good water retention capacity and air circulation is sufficient.
  - Percolation rate of water is different in different types of soil. It is highest in the sandy soil and least in the clayey soil.
  - Different types of soils are used to cultivate different types of crops. Clay and loam are suitable for growing wheat, gram and paddy. Cotton is grown in sandy loam soil.
  - Soil holds water in it, which is called soil moisture. The capacity of a soil to hold water is important for various crops.
  - Clayey soil is used to make pots, toys and statues.
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