Revision Notes

Class - 7 Science

Chapter 1 - Nutrition in plants

- **Nutrition** refers to how an organism consumes food and how the body processes it.
- **Nutrients** are the components of food that give the body with nutrition.
- All creatures consume food and use it to obtain energy for body growth and upkeep.
- Photosynthesis is the mechanism through which green plants produce their own food. They are **autotrophic** organisms.
- **Photosynthesis**: In the presence of sunshine, green plants prepare their own food using **chlorophyll** (found in green plants), carbon dioxide, and water absorbed from the environment. Photosynthesis is the name for this process. For food synthesis, plants use simple chemical ingredients such as carbon dioxide, water, and minerals.
- For photosynthesis to occur, chlorophyll and sunshine are required. Photosynthesis produces complex chemical compounds such as sugars.
- With the help of chlorophyll, solar energy is stored in the form of food in the leaves. During photosynthesis, oxygen is created.
- Living species use the oxygen generated during photosynthesis to survive.
- Fungi get their food from rotting, dead things. They are saprotrophs, or saprotrophic organisms. Cuscuta plants are parasitic. They eat the host plant's food.

- **Heterotrophs** are plants and animals that rely on others for their nutrition.

- **Parasitic creatures** are parasitic organisms that live on the bodies of other organisms.

- All parasitic plants eat other plants in one of two ways:
  A. **Partial parasites:** They get some of their sustenance from the host, for example, a painted cup.
  B. **Total parasites,** such as mistletoe, are fully reliant on the host for nourishment.

- **Saprophytic** organisms are those that feed on dead and decaying plant and animal debris.
  Mushrooms, moulds, and some fungi and bacteria are examples.

- **Insectivorous Plants:** Green plants that get their nutrition from both the soil and the atmosphere, as well as small insects. Pitcher plant, bladderwort, and Venus fly trap, for example.

- **Symbiosis** is a type of nutrition in which two or more individuals work together to meet their nutritional needs.

- The relationship between algae and fungus can be seen in the form of **lichens** on tree trunks. Fungus provides water to algae, and algae provides food to fungus.