DATE: 01.04.2020 [ WED ] CLASS: VIID SUB: SCIENCE SUB. TR: D.K.NIRMAL

## **CH: 1. Nutrition in Plants**

**NUTRIENTS**: The components of food that are necessary for our body are called **nutrients**.

Such as: carbohydrates, proteins, fats, vitamins and minerals.

The nutrients enable living organisms to build their bodies, to grow, to repair damaged parts of their bodies and provide the energy to carry out life processes.

**NUTRITION:** It is the mode of taking food by an organism and its utilisation by the body.

## **MODE OF NUTRITION:**

- **A] AUTOTROPHIC -** The mode of nutrition in which organisms make food themselves from simple substances is called **autotrophic** (*auto* = self; *trophos* = nourishment) nutrition.
- **B] HETEROTROPHIC** The mode of nutrition in which organisms take in ready made food prepared by the plants is called **heterotrophic** (*hetero* = others; *trophos*= nourishment) nutrition.

## ORGANISMS ON THE BASIS OF NUTRITION

- **A] AUTOTROPHS : O**rganisms having autotrophic mode of nutrition are called Autotrophs. Such as : Plants
- **B] HETEROTROPHS O**rganisms having heterotrophic mode of nutrition are called Heterotrophs. Such as : Animals

## 1.1 MODE OF NUTRITION IN PLANTS

- Plants are the only organisms that can prepare food for themselves by using water, carbon dioxide and minerals.

- Where the food factories of plants are located:

The food factories of plants are located in the leaves.

- Whether food is made in all parts of a plant or only in certain parts?

No, food is not made in all parts of a plant; It is made in certain parts i.e Leaves

- How do plants obtain the raw materials from the surroundings?

Plants obtain the raw materials water and minerals from soil and carbon dioxide from atmosphere.

- How do plants transport the raw materials to the food factories of the plants?

Plants transport the raw materials water and minerals from the roots and carbon dioxide from stomata.