# CLASS -3

SUBJECT -SCIENCE

# CHAPTER – 2 PARTS OF A PLANT

# Chapter Explanation in Brief:

In this chapter we are going to learn about parts of a plant. A plant has many parts like roots, stem, leaves, flowers, fruits and seeds.

Lets study about each part in detail.

- Roots The part of a plant which lies under the ground is called the root. Roots are of two types tap root and fibrous root.
  - (i) TAP ROOT- The main root of a plant that grows straight down and gives off smaller side roots. Example: radish, carrot.
  - (ii) FIBROUS ROOT They are made up of many small roots, all about the same size. The small roots grow out in many directions from the base of the stem. Example : grass, wheat, rice.
- Stems The part of a plant that grows above the ground is called the stem. It holds the plant
  upright and carries water and minerals from the root to all the parts of the plant. The primary
  functions of the stem are to support the leaves; to conduct water and minerals to the leaves,
  where they can be converted into usable products by photosynthesis; and to transport these
  products from the ;leaves to other parts of the plants, including the roots.
- Leaves It is one of the most important part of a plant. Leave produce food for the plant. Thus, it
  is also called the kitchen or the food factory of the plant.
  Parts of leaf:
  - (i) A leaf has a flat and broad part called the leaf blade.
  - (ii) Leaf blade is also attached to the stem of a plant through a tiny stalk called petiole.
  - (iii) The thick line which is visible in the centre of the leaf is called midrib.
  - (iv) The small lines which connects to the midrib is called side veins.
  - (v) Small tiny pores on the surface of the leaf is called stomata.
  - (vi) A special green coloured substance is present on the surface of the leaves. It is called Chlorophyll.

# Functions of leaf:

- (i) Leaves prepares food for the plants.
- (ii) The oxygen which is present in the environment is released by leaves only.
- Flowers It is the most beautiful part of the plant. Flowers are of different shapes, sizes, colours and fragrance. The attractive part of the flower is petals.
   Functions of flowers:
  - (i) Most of the fruits origin is from flowers.
  - (ii) It also provides food to the bees and butterflies in the form of nectar.
- Fruits and seeds- Fruits which we eat is the another fleshy part of the plant. It also protects the seeds inside it. Some fruits have only one seed . Example : mango and apricot . Whereas some fruits have many seeds. Example: papaya and watermelon.

Seeds are also very important part of a plant because it produce new plants. Some seeds are edible seeds like almond, groundnuts and coconut.

#### DO THIS IN YOUR TEXT BOOK.

Exercise from book.

## A. Write True or False.

- 1. The root holds a plant upright. T
- 2. Leaves help in preparing food for a plant. T
- 3. Papaya has many seeds. T
- 4. A leaf is called the food factory of a plant. T
- 5. Coconut is a non-edible seed. F

#### B. FILL IN THE BLANKS :

- 1. Tiny pores on the surface of the leaves are called <u>stomata</u>.
- 2. The green colour of the leaves is due to <u>chlorophyll</u>.
- 3. The stem holds the plant <u>upright</u>.
- 4. The <u>roots</u> absorbs water and minerals from the soil.

# C. Match the following.

Root
 Stem

- e. lies under the ground.
- d. takes food to all parts of the plant.
- 3. Leaves a. are food factory of a plant.
- 4. Flower b. helps in reproduction.
- 5. Seed c. is found inside the fruit.

# D. Multiple choice questions.

- Which of the following plant stores food in its root?
   b. Carrot
- 2. Which of the following part of the plant transports water and minerals to other parts of the plant?

a. Stem

3. Fruits cover and protect the -

d. Seed

- 4. Which of the following is an edible seed?
  - d. Groundnut seed
- E. Tick the correct sentences and cross the wrong ones.
  - 1. Mango has one seed.

- 2. Potato and ginger are examples of fruits. W
- 3. Wheat and rice have fibrous roots.
- 4. The part of the plant which remains under the ground is called shoot. W

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5. Leaves support the branches of a plant.

# F. ANSWER THE FOLLOWING QUESTIONS. (Write all the given answers in your note book)

Q1.Name the parts of a plant that are above the ground.

Ans. The different parts of a plant which is above the ground are stem, leaves, flowers, fruits and seeds.

Q2.What are the two main functions of a root?

Ans. The two main functions of a root are:

- (i) It holds the plant firmly to the soil.
- (ii) It absorbs nutrients, water and minerals from the soil.
- Q3. What is the function of stomata?

Ans. Stomata helps in exchange of gasses by taking in carbon- dioxide and giving out oxygen.

Q4. Write the name of two plants that store food in their roots.

Ans. Radish and carrot are two plants that store food in their roots.

Q5. Give two examples of tap root and fibrous root.

Ans. Example of tap root are radish and carrot.

Example of fibrous root are wheat and rice.

Draw the diagram of parts of a plant.



