



ST.MARY'S CO-ED SCHOOL, HARDA

[2020-21]

CLASS- VI

SUBJECT- SCIENCE

CHAPTER- 4 [GETTING TO KNOW ABOUT PLANTS]

Chapter at a Glance:-

1. Plants vary in heights, and different herbs grow in different seasons and different plants have different flowering seasons.
2. All flowering plants have underground root system and aerial shoot system.
3. Roots are of two types:-
 - (a) Tap root system.
 - (b) Fibrous root system.
4. Shoot system consists of stem, branches, leaves, buds, flowers and fruits.
5. Roots help in absorption and anchoring. Some roots perform extra functions like storage of food, giving extra support to the plant, etc.
6. Leaf help in making food for the plant by the process of photosynthesis.
7. The conducting tissues of the plants are Xylem and phloem.
8. Flowers are the reproductive parts of plant. They are made up of four whorls. They are: Sepals, Petals, Stamen and Carpel or pistil.
9. The male gamete and female gamete fuse to form a seed.
10. Seed develops into a baby plant, where the radicle gives rise to root system and the plumule to the shoot system.

BOOK BASED EXERCISES:

A) Fill in the blanks.

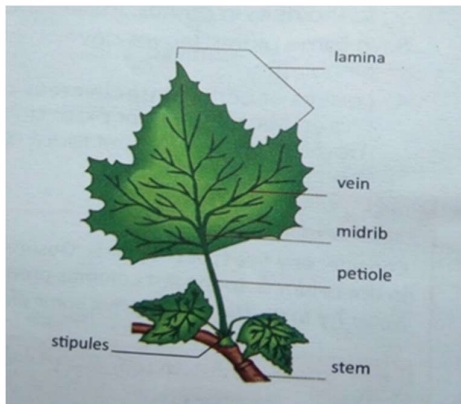
1. Very short plants with soft stems are Herbs.
2. Rose and lemon belongs to Shrubs type of plants.
3. Potato is a modified Stem.
4. Xylem help in transport of water from roots to all parts.
5. Dicot roots have tap root system.
6. Transfer of pollen from anthers to stigma is known as Pollination.

B) Choose the correct option.

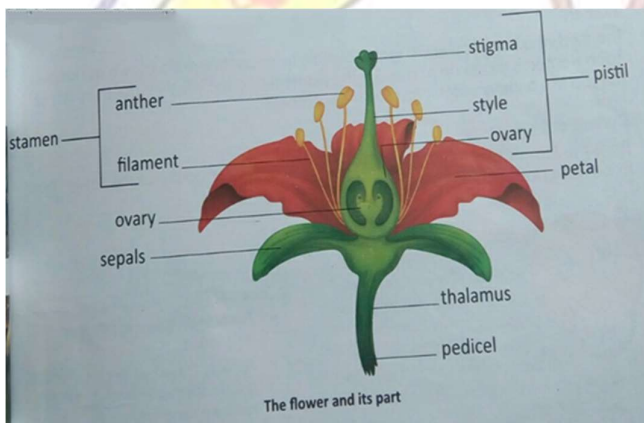
1. One of the following is a creeper:
a) Potato b) Pumpkin c) Beet root d) Rose
2. Anther belongs to:
a) Pistil b) Stamen c) Thalamus d) Calyx
3. All monocots show:
a) Taproot system b) Fibrous root
c) Parallel venation in leaves d) Both c and d
4. Ovary, style and stigma are the:
a) Female part of the flower. b) Male part of the flower
c) Corolla d) Root system
5. Spines of cactus help in: Protective in function
a) Giving beauty to plant. b) Protective in function.
c) Conduct water. d) Help in climbing.

C) Draw the following.

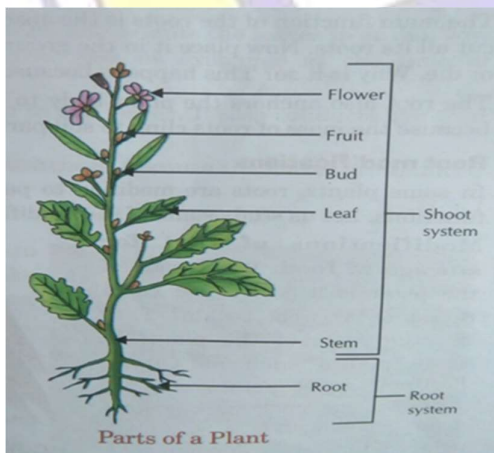
1. Parts of leaf



2. A typical flower and its parts



3. Parts of plant.



F) Distinguish between:

1. Dicot plant and monocot plant.

Answer:- Dicot plant: Dicot seed of a dicot plant has two cotyledon. Example: Beans, grams etc.

Monocot plant: Seed of a monocot plant has one cotyledon. Example: wheat, rice, etc.

2. Herbs and shrubs.

Answer:- Herbs: Very short plants with green and tender stems are known as herbs.

Example: Mint, tomato, etc.

Shrubs: Some plants are taller than herbs and have woody stem and thick branching which appears at the base of the stem and these are called shrubs. Example: Lemon, Rose.

3. Root system and shoot system.

Answer:- Root system: Part of plant which grows under the ground is called root system.

Shoot system: Part of plant which grows above the ground is called shoot system.

4. Stamen and pistil.

Answer:- Stamen: The male reproductive part of the flower is called stamen.

Pistil: The female reproductive part of the flower is called pistil.

G) Answer in short:

1. Name two modified roots for storage.

Answer: The two modified roots are:

1. Radish 2. Carrot

2. Banana, coconut, rice and wheat are monocots. What type of venation is seen in the leaves of those plants?

Answer:- Banana, coconut, rice and wheat are monocots. Parallel venation is seen in the leaves of those plants.

3. Name the part of the flower which protects the flower when it is in the bud form.

Answer:- Sepals protects the inner parts when the flower in the bud form.

4. List the function of roots.

Answer:- Function of roots are:-

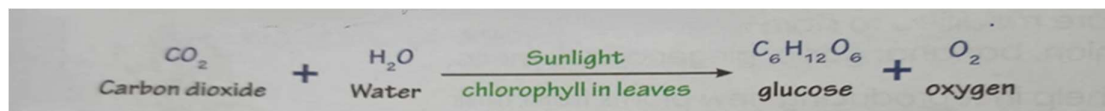
1. They help in absorbing water and minerals.

2. They help in fixing the plant in the soil.

3. They help in preventing soil erosion.

5. What is photosynthesis?

Answer:- Plant absorb carbon dioxide from the air and water from the soil, green plants make food in the presence of sunlight this process is called photosynthesis.



6. Define pollination.

Answer:- The process in which pollen is transferred from the anther of a flower to the stigma of the flower is called pollination.

H. Long answer type question.

1. Classify the plants according to their height.

Answer:- Classification of plants according to their height are :-

1. Herb: Very short plants with green and tender stems are known as herbs. Example: mint, tomato etc.

2. Shrubs: some plants are taller than herbs and have woody stem and thick branching which appears at the base of the stem and these are called shrubs. Example: lemon, rose

3. Trees: Very tall plants with thick and hard stem. Example: neem and mango.

4. Climbers: The stem of these plants are very weak and need a support to grow.

Example: money plant, grape vine etc.

5. Creepers: Some plants have very weak stem. They grow along the ground or creep along the soil. Example: watermelon, pumpkins etc.

2. What are the functions of leaves? Draw the leaf and label the parts.

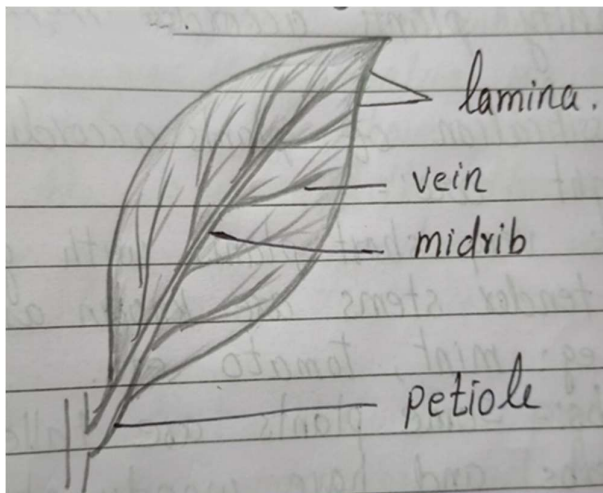
Answer:- The main function of leaves are:

1. Leaf help in making food for the plants by the process of photosynthesis.

2. Respiration – Gas (air) exchange.

3. Transpiration – Water transport

4. Store food During germination



3. What are the modification of stem? Give examples.

Answers:- The modification of stem are :-

1. Some stem store food. Example:- potato, onion, etc.
2. Some stems in reproducing new plants. Example:- strawberry.
3. In dry climates, stem does photosynthesis. Like in cactus stem store water.
4. Explain the modification of roots with diagrams.

Answer:- Some root do additional functions based on the requirement of the plant.

1. Some roots store food. Example: Radish, carrot.



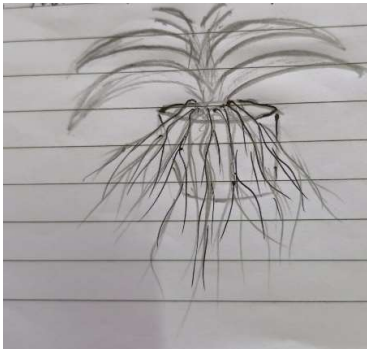
[Carrot]

2. Some root give support to the plants such as banyan tree, sugarcane etc.



[Sugercane]

3. In some plants root help in absorbing water from the atmosphere. Example: Vanda plant.



[vanda plant]

5. What is the importance of xylem and phloem to the plant?

Answer:- Xylem: Conducting tissue which transports water and minerals from root to other parts of plants.

Phloem: Conducting tissue which transport food from leaves to other parts of plants.

6. What happens in the absence photosynthesis?

Answer:- Photosynthesis is the way or method of making food for plants. Oxygen is a byproduct of photosynthesis. There is no other natural process on the earth which can give out oxygen. Without oxygen their cannot be life on the earth.



* THANK YOU*