

Carmel School Madhupur

Std-VI Subject—Biology

Chapter—1 THE LEAF

Long answer questions.

1. Giving examples, differentiate between the following:

1) Tap root and fibrous root

Tap root

The tap root system has a thick main root called primary root and bears many side branches called secondary roots. For ex- gram, pea.

Fibrous root

The fibrous root system has a cluster of roots of the same thickness and size arising from the base of the stem. For ex- maize, grass.

Simple leaf

In a simple leaf, the Lamina is undivided and is a single piece. The blade may be entire or cut to any depth, but not down to the midrib. For ex- Mango, Banyan

Compound leaf

In a compound leaf blade or Lamina is divided into smaller units called leaflets. For ex- Rose

Parallel venation.

In this type of venation, veins run parallel to each other. For ex- grass, maize, banana

Reticulate venation

In this type of venation, veins and veinlets are irregularly distributed in the lamina forming a network. For ex- peepal, mango.

2. What is the modification seen in Bryophyllum? Explain.

Ans:--The buds on the margin of leaves are seen in Bryophyllum plant. Leaves produce buds along their margin. When these buds fall in moist soil, they begin to grow as young tiny plants. This type of reproduction is called vegetative propagation.

3. What purpose is served by the spines borne on the leaves of cactus?

Ans:- The spines borne on the leaves of cactus protect the plant from being eaten by animals.

Spines defend the plants as well as reduce the loss of water through transpiration.

4. Explain why leaf survival is so important to the plant?

Ans:- Leaf survival is so important to the plant because leaves are an important part of a plant.

They perform various functions.

- The most important function of a leaf is to manufacture food. The process by which a Plant leaf prepares food from water and carbon dioxide in the presence of chlorophyll and sunlight is called Photosynthesis. There are two end products of Photosynthesis Glucose and Oxygen.
- Plants take in oxygen for respiration and carbon dioxide for Photosynthesis through tiny pores called stomata present on the leaves.
- The stomata release water vapour into air. The process by which plants give out water In the form of vapour is called transpiration.

5. Give an example of the following

i) Simple leaf and compound leaf

Ans:- Simple leaf—Peepal

Compound leaf—Rose

ii) Parallel venation and reticulate venation.

Ans:- Parallel venation—Maize

Reticulate venation—Guava leaves

( Draw generalized diagrams for the same in biology copy)