

CHAPTER – 4

Getting to Know Plants

Q. 1

Correct the following statements and rewrite them in your notebook:

- (a) Stem absorbs water and minerals from the soil.
- (b) Leaves hold the plant upright.
- (c) Roots conduct water to the leaves.
- (d) The number of petals and sepals in a flower is always equal.
- (e) If the sepals of a flower are joined together, its petals are also joined together.
- (f) If the petals of a flower are joined together, then the pistil is joined to the petal.

Answer:

- (a) Roots absorb water and minerals from the soil.
- (b) Stem holds the plant upright.
- (c) Stem conducts water to the leaves.
- (d) The number of petals and sepals in a flower can be equal or different.
- (e) If the sepals of a flower are joined together, its petals are not necessarily joined together.

(f) If the petals of a flower are joined together, then the pistil may or may not necessarily be joined to the petal.

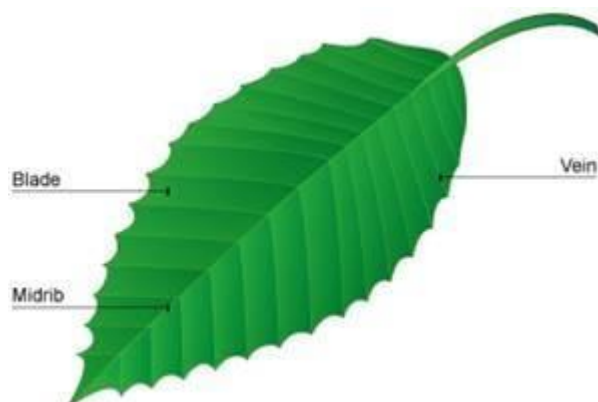
Q. 2

Draw (a) a leaf, (b) a taproot and (c) a flower, you have studied for below table.

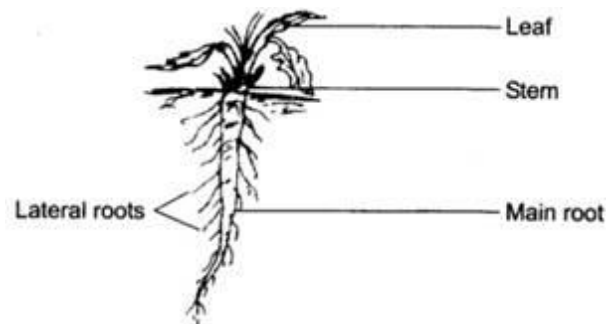
Answer:

(a) A leaf

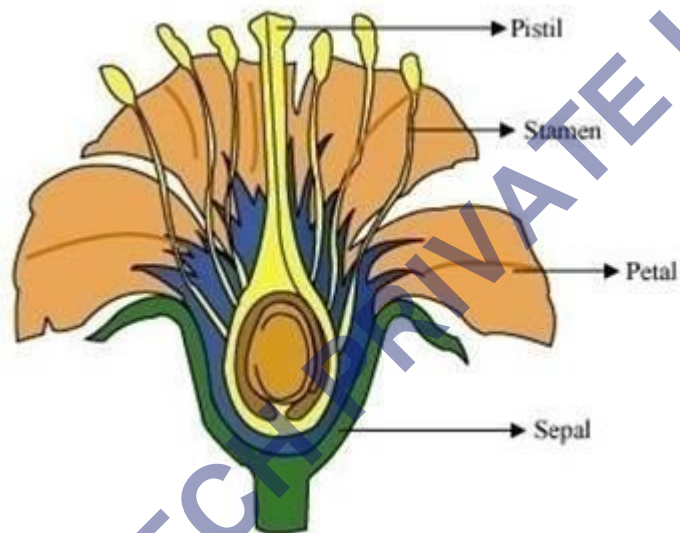
Name of flower	Number & Colour of Petals	Number & colour of sepals	Are the sepals Joined together or separate?	Stems are free or joined to petals?	Pistil Present / Absent
Rose	Many, Pink	5, Pink	Separate	Free	Present
China Rose	Five, Red/White	5, Green	Separate	Joined	Present



(b) Tap Root



(c) A bell shaped flower



Q. 3

Can you find a plant in your house or in your neighbourhood, which has a long but a weak stem? Write its name. In which category would you classify it?

Answer:

Yes, we can find a plant in our house as well as in our neighbourhood which has a long but a weak stem. Its

name is money plant. It has a weak stem; hence it needs support. It is a climber.

Q. 4

What is the function of a stem?

Answer:

Stem performs following **functions**:

- i. It gives support to the plant.
- ii. It transports water and minerals from roots to different parts of the plants.
- iii. It transports food from leaves to other parts of the plant.
- iv. It bears leaves, fruits and flowers.

Q. 5

Which of the following leaves have reticulate venation?

Wheat, tulsi, maize, grass, coriander (dhania), China rose.

Answer:

In the given options, leaves of tulsi, coriander (dhania), China rose have reticulate venation.

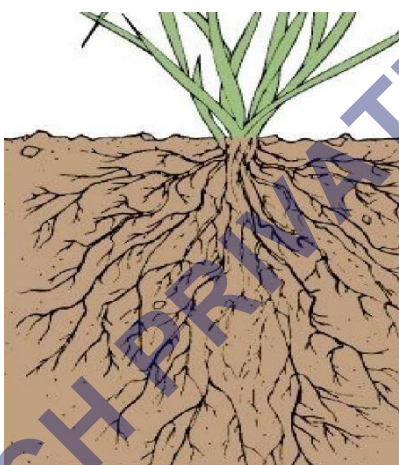
Q. 6

If a plant has fibrous root, what type of venation do its leaves likely to have?

Answer:

If a plant has fibrous root, then the plant leaves likely to have Parallel venation. Example, wheat, grass, etc.

A picture of a plant with fibrous roots is attached.



Fibrous

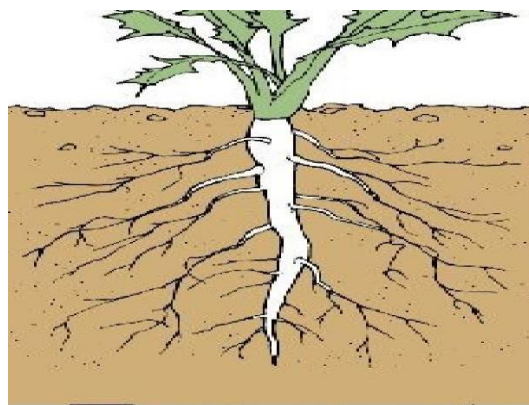
Q. 7

If a plant has leaves with reticulate venation, what kind of roots will have it?

Answer:

If a plant has leaves with reticulate venation, then the plant likely to have tap root.

In a tap root, there is the mainroot, from which other roots sprout laterally. Example, carrot. The picture of tap root is given below:



Taproot

Q. 8

Is it possible for you to find out whether a plant has taproot or fibrous roots by looking at the

Impression of its leaf on a sheet of paper?

Answer:

Yes, we can tell the type of venation and thus the root system by looking at the impression by: The root of a plant with parallel venation is a fibrous root. The root is a tap root if the plant has reticulate venation.

Taproot:

These are the large, central, and dominant roots that grow deep into the soil from the seed's radicle.

Many other secondary roots sprout from the taproot , which grows mostly laterally.

Carrot, beet, sugarbeet, and many other dicot plants contain these.

Q. 9

What are the parts of a flower?.

Answer:

Most flowers have four main parts : sepals , petals , stamens, and carpels. The stamens are the male part whereas the carpels are the female part of the flower . Most flowers are hermaphrodite where they contain both male and female parts.

Q. 10

From the following plants, which of them have flowers?

Grass, maize, wheat, chilli, tomato, tulsi, papal, shisham, banyan, mango, jamun, guava, pomegranate, papaya, banana, lemon, sugarcane, potato, groundnut

Answer:

We have seen all these plants. Plants with flowers are:

Chilli, Jamun, Tomato, Guava, Tulsi Pomegranate

Mango Papaya Lemon Banana

Q. 11

Name the part of the plant which produces food. Name this process.

Answer:

Leaves produce the food for the plant. The process by which plant prepares its food is called photosynthesis.

Q. 12

In which part of a flower, you will find the ovary?

Answer:

We find ovary in pistil. It is the lowermost and swollen part of the pistil.

Q. 13

Name two plants in which one has joined sepals and the other has separate sepals.

Answer:

(i) Flowers with joined sepals: Hibiscus, Datura.

(ii) Flowers with separate sepals: China rose, mustard flower.