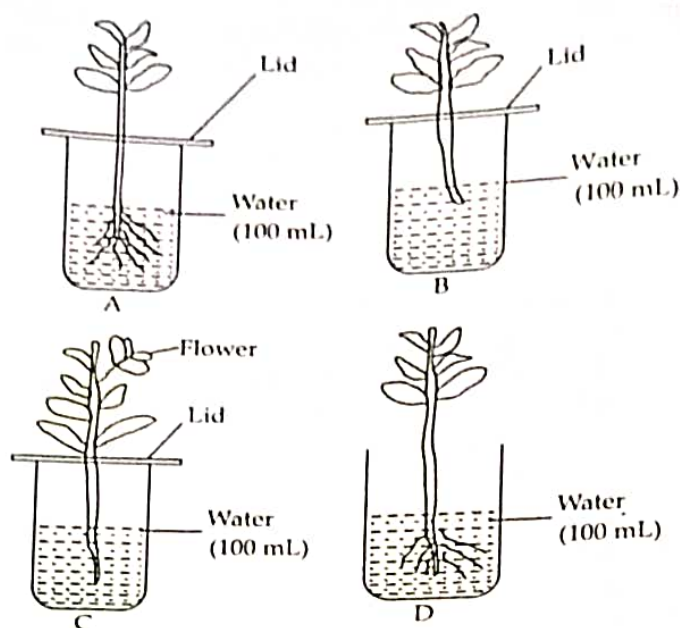




- (a) A and B
(c) B and C

- (b) A and D
(d) B and D

Fill in the Blanks

- The roots grow _____ from the light and the stem grows _____ the light.
- In _____ root system, a number of thin fibre-like roots arise from the base of the stem.
- Stem conducts _____ and _____ from the roots to the other plant parts such as leaves, flowers, fruits, etc.
- The process of synthesis of food by using CO_2 and water in the presence of sunlight and chlorophyll is referred to as _____.
- _____ are the plants with _____ stems that spread on the ground and cannot stand upright.
- _____ is the arrangement of veins in a leaf.
- _____ is the main axis of the shoot system which bears branches, leaves, buds, flowers, fruits and seeds.
- If a plant has fibrous roots, its leaves are most likely to have _____ venation.
- Parts of a stamen are _____ and _____.
- The process of release of water from the surface of leaves is called _____.

True or False

- Trees are medium-sized plants with thick brown stems.
- Leaves use oxygen, sunlight and chlorophyll to prepare food.
- Unopened flower is called a bud.
- Roots absorb water and minerals from the soil.
- Sepals in most flowers are colourful.
- Reticulate venation of leaves is usually present in plants having fibrous roots.
- Plants with weak stems that climb up a support are called climbers.
- Transverse section of an ovary shows the presence of small bead like structures called anthers.
- All the flowers have sepals, petals, stamens and carpels.
- Parallel venation is found in grass, banana, maize, etc.

Assertion and Reason Type

Directions : In the following questions, a statement of assertion is followed by a statement of reason. Mark the correct choice as :

- If both assertion and reason are true and reason is the correct explanation of assertion.
- If both assertion and reason are true but reason is not the correct explanation of assertion.
- If assertion is true but reason is false.
- If both assertion and reason are false.

- Assertion** : We cannot easily pull out a plant from the soil.

Reason : Roots of a plant hold it firmly in the soil.
- Assertion** : It is possible to find out whether a plant has taproot system or fibrous root system by looking at its leaves.

Reason : A plant with reticulate venation in its leaves usually has fibrous root system and a plant with parallel venation in its leaves usually has taproot system.
- Assertion** : Stem is like a two way street in a plant.

Reason : Stem conducts water and minerals from roots to leaves and other plant parts (upward) and also conducts food from leaves to roots and other plant parts (downward).

Assertion : The flat, green portion of the leaf is called lamina.

Reason : Lamina is attached to the stem by a narrow stalk called petiole.

Assertion : Number of sepals and petals is same in all the flowers of all the plants.

Reason : Sepals and petals are similar in number, colour, shape and size in all the flowers of all the plants.

Assertion : To test a leaf for the presence or absence of starch, it should be boiled in alcohol/spirit.

Reason : Boiling in alcohol removes the green colour of the leaf and the colour change of leaf after putting iodine solution can be easily observed.

Assertion : Money plant and beanstalk take support of neighbouring structures for climbing.

Reason : Money plant and beanstalk have weak stems which cannot stand upright.

Assertion : In reticulate venation, veins are arranged in the form of a network.

Reason : Reticulate venation is present in the leaves of basil, rose and China rose.

Assertion : During the process of photosynthesis, O_2 is taken in and CO_2 is given out.

Reason : Photosynthesis is mainly carried out by the stem and branches of a plant.

Assertion : Water comes out of leaves in the form of water vapour by a process called transpiration.

Reason : Transpiration process can be demonstrated by enclosing a leafless twig of a plant in a polythene bag and tying its mouth properly.

Subjective Questions

Very Short Answer Type

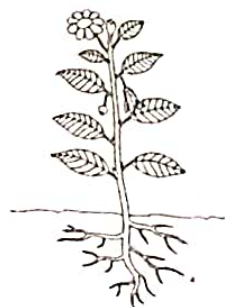
1. We often see in our neighbourhood some plants that have long but weak stems and they coil and climb up a support. What are these plants called? Give one example of such plants.

2. Leaves of basil plant has reticulate venation and leaves of maize plant has parallel venation. Can you identify the types of root system present in these plants?
3. Give two examples of plants having fibrous roots.
4. Name the four whorls of a flower.
5. Which part of a flower protects it when it is still a bud?
6. Define transpiration.
7. Mention any one function of roots.
8. Why are leaves called food factories of a plant?
9. Give two examples of edible roots.
10. Leaves of which of the following plants have parallel venation?
Hibiscus, Maize, Basil, Banana, Mint, Grass
11. In which state (solid, liquid or gas), is water released into air during the process of transpiration?
12. Give two examples of creeper plants.
13. How is the stem of herbs different from stem of shrubs?
14. Is banana plant a tree or a herb?
15. Why leaves of pitcher plant are modified?

Short Answer Type

1. Why is stem of a plant considered as street with two-way traffic?
2. Read the features of parts of a plant given below:
(i) Grows away from sunlight
(ii) Conducts water, minerals and food
(iii) Carries out photosynthesis
(iv) Takes part in reproduction

Write the names of the plant parts (i) (ii), (iii) and (iv), and label them in the given diagram.



3. Saanvi tries to pull out a grass plant and a rose plant from the soil in her garden. Which plant she would be able to pull out easily?
4. (a) Name the plant with largest flower.
(b) Name the largest herb.
(c) What are the raw materials required for the process of photosynthesis?