

## Very Short Answer Questions

**Q.1. Define photosynthesis.**

**Ans.** The process by which leaves make food for plants is called photosynthesis.

**Q.2. What is pollination?**

**Ans.** The transfer of pollen from anther to stigma is called pollination.

**Q.3. Where do we find ovules in a flower?**

**Ans.** Ovules are present inside the ovary of flower.

**Q.4. What are weeds?**

**Ans.** Unwanted plants that grow in a field are called weeds.

**Q.5. Which part of the plant absorbs water and mineral from the soil?**

**Ans.** Root

**Q.6. What is leaf venation?**

**Ans.** The design made by vein in leaf is called leaf venation.

**Q.7. Define transpiration.**

**Ans.** The loss of water in the form of vapour from plant parts is termed as transpiration.

**Q.8. What are parts of stamen?**

**Ans.** Anther and filament are the two parts of stamen.

**Q.9. What is the innermost swollen called part of pistil?**

**Ans.** Ovary is the innermost swollen part of pistil.

**Q.10. Where is food stored in plant?**

**Ans.** Food is stored leaves and in some plants in roots in the form of starch.

## Short Answer Questions

**Q.1. Boojho wanted to test the presence of starch in leaves. He performed the following steps.**

**(i) He took a leaf and boiled it in water.**

**(ii) He placed the leaf in a petri dish and poured some iodine over it.**

**He did not get the expected result. Which step did he miss? Explain.**

[NCERT Exemplar]

Ans. He did not boil the leaf in spirit to remove the chlorophyll.

**Q.2. Will a leaf taken from a potted plant kept in a dark room for a few days turn blue-black when tested for starch? Give reasons for your answer.**

[NCERT Exemplar]

Ans. No, all the starch stored in the leaf would have been used up by the plant. No starch would be synthesised afresh due to non-availability of sunlight.

**Q.3. Can the stem of a plant be compared with a street with two-way traffic?**

**Give reason.**

[NCERT Exemplar]

Ans. Yes, just like two-way traffic, water and minerals and food are moving in opposite directions. Water and minerals move upwards from roots to other parts of the plant and food moves downwards from leaves to other parts.

**Q.4. Write three functions of the root.**

**Ans.**

- i. Helps the plant to stand erect.
- ii. Checks soil erosion.
- iii. Stores food.

**Q.5. How are plants classified on the basis of their?**

**(i) life span?**

Ans. Perennial and annual.

**(ii) form?**

Ans. Tree, shrub, herb, climber and creeper.

**Q.6. Write three functions of the leaf.**

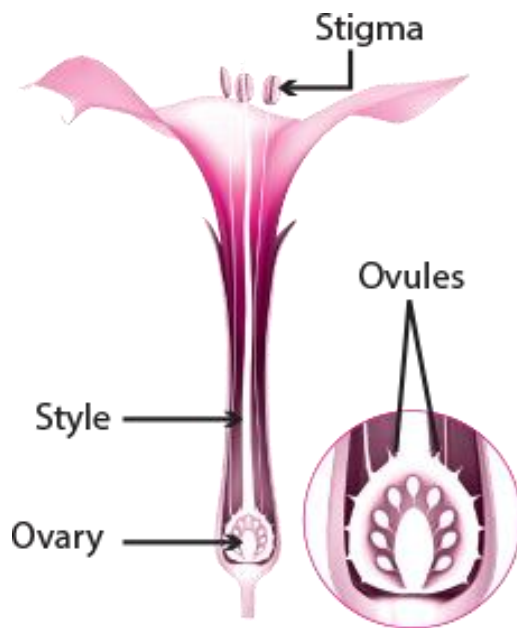
**Ans.**

- i. Transpiration,

- ii. Photosynthesis,
- iii. Storage of food.

**Q.7. Draw a well labelled diagram showing different parts of pistil.**

**Ans.**

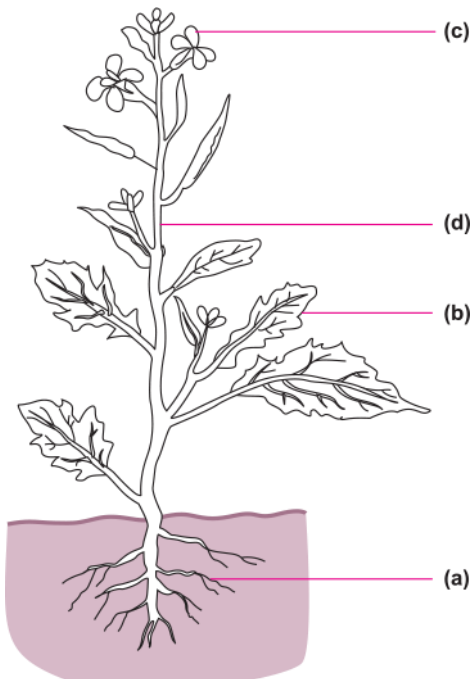


## Long Answer Questions

**Q.1. Read the function of parts of a plant given here:**

- (a) Fixes plant to the soil
- (b) Prepares starch
- (c) Takes part in reproduction
- (d) Supports branches and bears flowers

In the given diagram, write the names of the parts whose functions you have just read at the appropriate space.



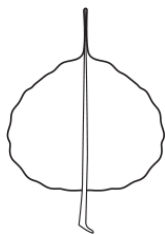
**Ans.**

- (a) Root
- (b) Leaf
- (c) Flower
- (d) Stem

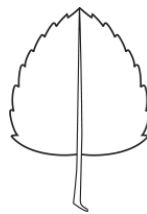
**Q.2.**



**Grass**



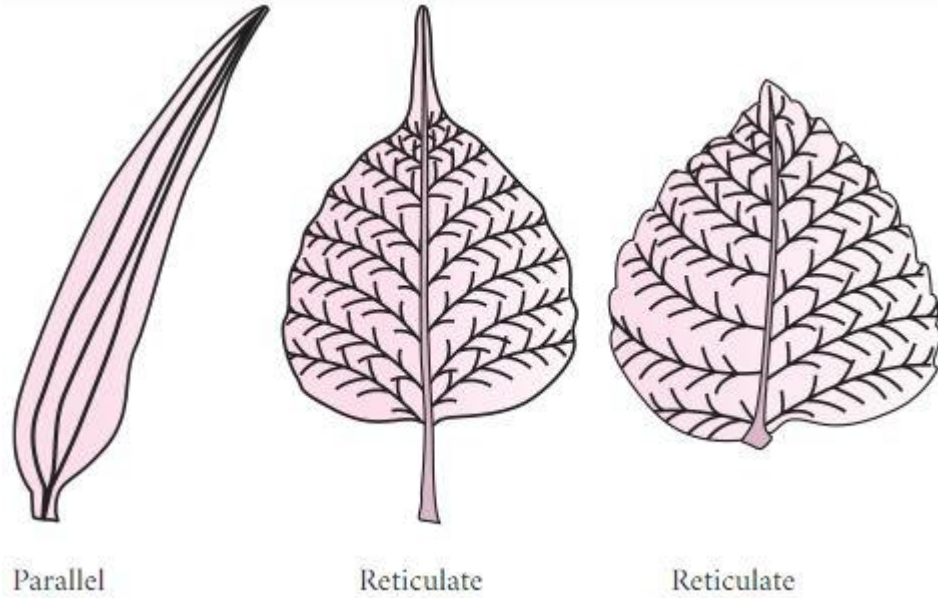
**Peepal**



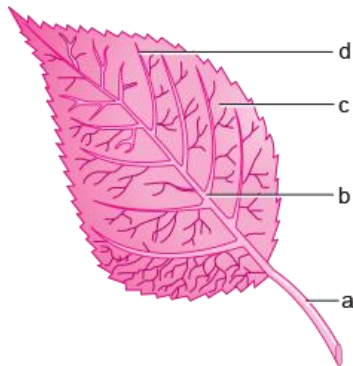
**China rose**

[NCERT Exemplar]

**Ans.**



**Q.3. Observe the figure given below and attempt the questions that follow it.**



*[NCERT Exemplar]*

**(i)** Label the parts (a), (b), (c) and (d) in the diagram.

**Ans.**

- (a)** Petiole,
- (b)** Midrib,
- (c)** Lamina,
- (d)** Vein

**(ii)** What type of venation does the leaf has?

**Ans.** Reticulate venation

**(iii)** What type of venation is seen in grass leaves?

**Ans.** Parallel venation

**Q.4. Observe the picture of an activity given below carried out with leaves of plants and polythene bag.**



**Now answer the following:**

**(i)** Which process is demonstrated in the activity?

**Ans.** Transpiration

**(ii)** When will this activity show better results—on a bright sunny day or a cloudy day?

**Ans.** On a bright sunny day.

**(iii)** What will you observe in the polythene bag after a few hours of setting up the activity? [NCERT Exemplar]

**Ans.** Small drops of water inside the polythene cover.

**(iv)** Mention any one precaution you must take while performing this activity.

**Ans.** The set-up must be airtight/polythene bag must be dry/the twig must be fresh with 10-12 leaves. (*Any one*)

**Q.5. Identify the wrong statements and correct them.** [NCERT Exemplar]

**(i)** Anther is a part of the pistil.

**Ans.** Wrong— Anther is a part of the stamen.

**(ii)** The visible parts of a bud are the petals.

**Ans.** Wrong— The visible parts of a bud are the sepals.

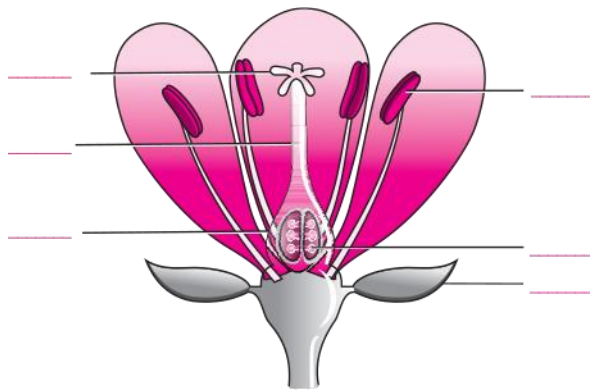
**(iii)** Lateral roots are present in a tap root.

**Ans.** Correct

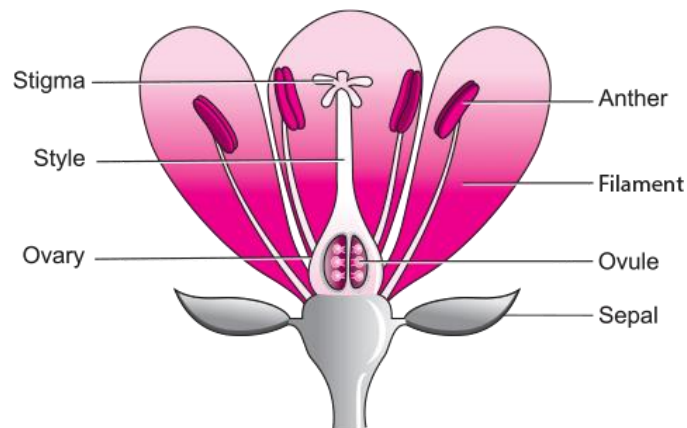
(iv) Leaves perform the function of transpiration only.

**Ans.** Wrong– Leaves also perform photosynthesis.

**Q.6. Given below is a diagram of a flower. Study it carefully and label the parts as indicated.**



**Ans.**



### **HOTS (Higher Order Thinking Skills)**

**Q.1. Rahul tries to pull out a grass and a rose plant from the soil. Which one will he be able to pull out more easily and why?**

**Ans.** Rahul will be able to pull out a grass plant more easily because it has fibrous root which does not go down much deep in soil.

**Q.2. Is a mango sapling a herb (it has a green stem like herbs)? Give reasons to support your answer.**

**Ans.** No, it is not a herb because sapling is a stage in growth of the plant. A mango sapling would grow into a tree.