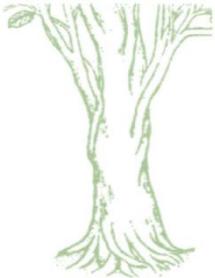


Additional Important Questions

- (c) A branch with leaves and flowers.
-

Shrub	Tree
<ol style="list-style-type: none"> More branches arise from the base of stem. The stem is hard and thin.  <p style="text-align: center;">Shrub</p>	<ol style="list-style-type: none"> The branches arise from the stem. The stem is hard, fat and woody.  <p style="text-align: center;">Tree</p>

- Jammu (Jamun is a tree while others are herbs).
 - Guava (Guava is a tree while others are shubs).
- In some plants like grape vines, money plant, bean stalk, gourd plants, etc., the stem is so weak that it cannot hold it straight. It either up some support or they just spread on the ground. In first condition the plants are called climbers and in second condition they are called creepers or runners.
- Close look of these plants make it clear that these plants are not of same type.
 Plants (a) and (b) are small and have soft and thin stem. These are called herbs.
 Plant (c) has many branches arising from the base and its stem is thin but hard. It is shrub.
 Plant (d) is tall. Its stem is thick and hard, it is a tree.

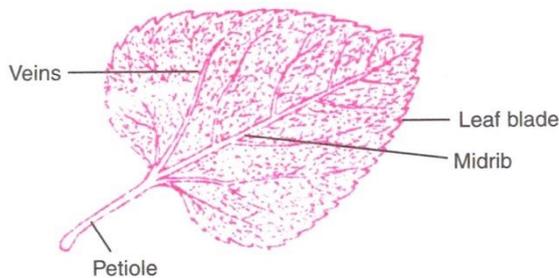
Stem

- The part of the plant which generally grows outside the ground and bear fruit leaf and flowers is called stem.
- Yes. Stem carries the water absorbed by the roots to the leaves and also the food prepared by the leaves to the roots.
-

S. No.	Description of the stem	Name of the plant
1.	Green and tender stem	Pea
2.	Hard, woody, thick brown stem	Mango
3.	Hard, woody, thin stem	Lady finger
4.	Branches arise from the base of the stem	Rose
5.	Branches arise from the upper part of the stem	Rubber plant

Leaf

1.



2. The green colour is because of the presence of chlorophyll.

3.

Reticulate Venation	Parallel Venation
Peepal	Grass
Mint	Sugarcane
Tulsi	Maize
Rose	Wheat
Mustard	Rice
Neem	
Dhania (coriander)	
Methi	
Mango	

Root

1. Main function of roots are:

- (i) Roots absorb water and minerals from soil for the other parts of the plants.
- (ii) Roots hold the plant firmly with the soil.
- (iii) Some roots transform to store food e.g. raddish.
- (iv) Roots of leguminous plants contain symbiotic bacteria which add the fertility of soil by fixing nitrogen into nitrates.

2. This is a fibrous root. It has following features:

- (i) Roots are grown from the base of the stem.
- (ii) These roots do not reach upto more depth in the soil.
- (iii) These roots are found in the plants having parallel venation in leaves e.g. grasses.

3.

Taproot	Fibrous Root
1. There is only one main and long root from which small roots grow.	1. There is no main root. Many roots are grown together from the base of stem in the form of bundi.
2. These roots go into the soil to more depth.	2. These do not go down much deep.

3.	These roots cannot be separated from soil easily.	3.	These are easily separated from the soil.
4.	Found in the plants like weeds having reticulate venation in leaves.	4.	Found in the plants like grasses having parallel venation in leaves.

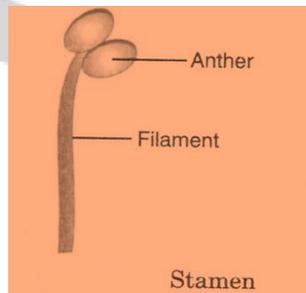
4.

S. No.	Name of the plant	Root	Stem	Leaf	Flower	Fruit	Seed
1.	Radish	√	√	√			
2.	Oil seed	√	√	√	√		√
3.	Pallak (spinach)	√		√			
4.	Rose	√	√	√	√		
5.	Potato	√	√	√			
6.	Croton	√	√	√			
7.	Nagfani	√	√				
8.	Pudina (mint)	√	√	√			
9.	Dhania (coriander)	√	√	√	√	√	
10.	Maize	√	√	√			√
11.	Bathua	√	√	√			

Flower

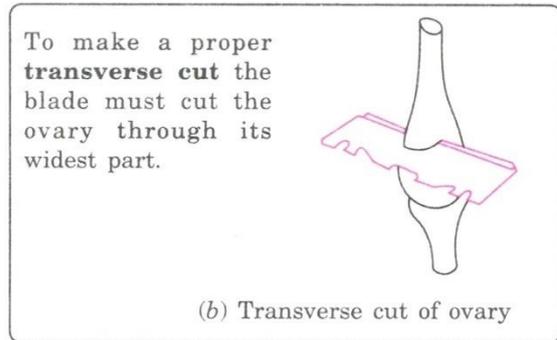
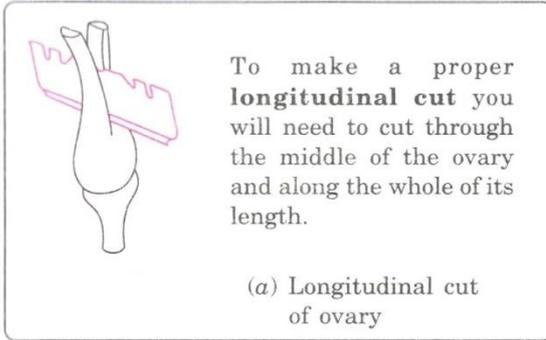
- Functions of sepals:** Sepals protect the inner parts of flower when it is a bud.

Function of petals: Petals attract the insects which are the agencies of pollination by colour and smell.
- The reproductive parts of a flower are:
 - Stamens
 - Pistil
- No. Some flowers have more whorls than others. Sometimes some of these whorls may even be absent. For example:
 - In Gudhal an additional whorl of epicalyx is found.
 - In unisexual flowers either stamen or pistil is absent.
- Male part of a flower is known as stamen. It has two parts – filament and anther. Anther contains pollen grains.



- After fertilization, the ovary of the flower swells up and forms the fruits, like mango, orange etc. embryo surrounded by a hard wall is called the seed.
- A plant bears first flowers, then fruit and in the last seeds.

7.



8.

