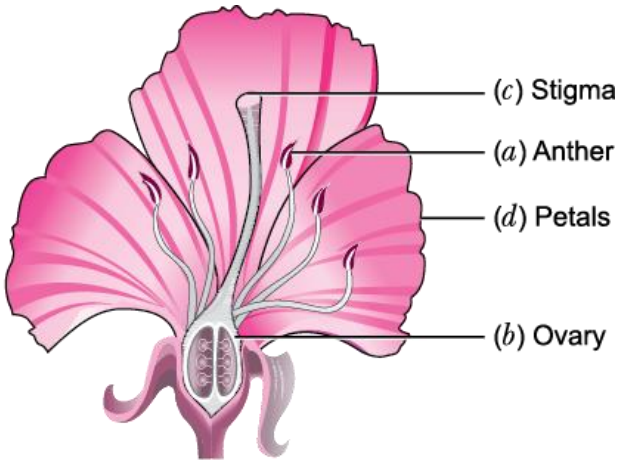
Long Answer Questions

Q.1. In the figure of a flower label the parts whose functions are given below and give their names.

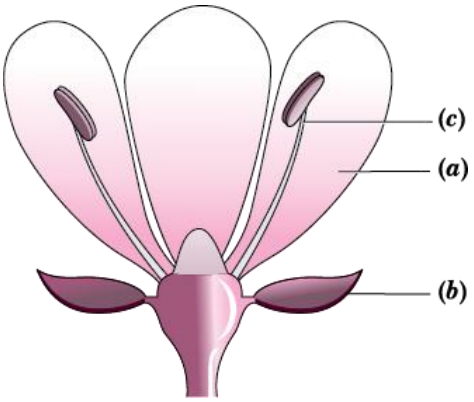
a. **The part which contains pollen grains.**
b. **The part where the female gamete is formed.**
c. **The female reproductive part where pollen grains germinate.**
d. **The colourful part of flower which attracts insects.**

[NCERT Exemplar]

Ans.

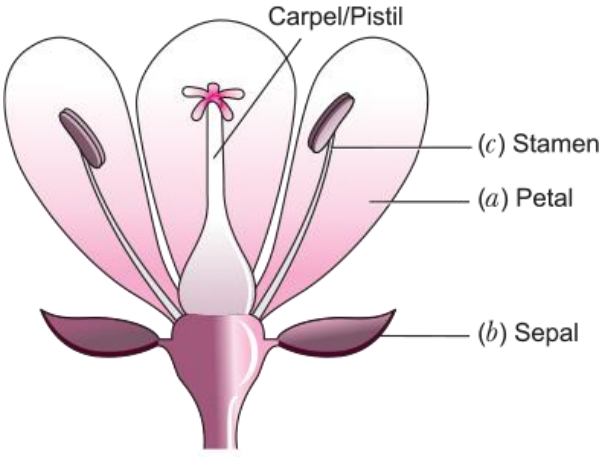


Q.2. In the diagram of a bisexual flower given as figure below, draw the missing part and label the parts marked (a), (b) and (c). Also label the missing part that you draw.



[NCERT Exemplar]

Ans.



Q.3. Write how the following seeds are dispersed.

a. **Seeds with wings.**
b. **Small and light seeds.**
c. **Seeds with spines/hooks.**

[NCERT Exemplar]

Ans. (a) Dispersed by wind.

(b) Dispersed by wind.

(c) Dispersed by animal.

Q.4. Distinguish between the following.

Q. Stamen and Pistil

Ans.

S. No.	**Stamen**	**Pistil**
i.	It is the male reproductive organ of the flower.	It is the female reproductive organ of the flower.
ii.	It consists of anther and filament.	It consists of stigma, style and ovary.

Q. Unisexual flower and Bisexual flower

Ans.

S. No.	**Unisexual flower**	**Bisexual flower**
i.	These are flowers having either male or female reproductive organs.	These are flowers having both male and female reproductive organs.
ii.	For example, papaya, corn, etc.	For example, rose, brinjal, etc.

Q.5. Give reasons for the following.

Q. Insect pollinated flowers are brightly coloured and sweet smelling.

Ans. Insect pollinated flowers are brightly coloured and sweet smelling to attract insects to itself.

Q. Spores are covered by a hard covering.

Ans. Spores are covered by a hard covering to provide protection from harsh conditions.

Q. Wind pollinated flowers produce large number of pollen grains.

Ans. During wind pollination many pollen grains are lost. So to ensure that at least some pollens reach the stigma, a large number of pollen grains are produced.

Q. Hooks and spines are present in seeds or fruits dispersed by animals.

Ans. Hooks and spines help seeds and fruits to stick to the bodies of animals and be safely dispersed or transported to far off places.

Q. Seed dispersal helps the plant.

Ans. To avoid growing of the plants at one place leading to scarcity of nutrients and ensure survival of the plants, seeds are dispersed.

Q.6. What are the advantages and disadvantages of vegetative reproduction?

Ans. Advantages of vegetative reproduction

- Some of the plants such as bananas do not reproduce from seeds at all. They multiply only vegetatively.
- Vegetative reproduction is faster.
- Sometimes the seeds produced are not viable or fit that means they cannot form new plants.
- It is the embryo of the seeds that forms the new plants. If the embryo is not there or is destroyed, the new plants cannot be formed.
- The new plants formed through vegetative reproduction are exactly like the parent plants. Disadvantage of vegetative reproduction
- Since vegetative reproduction produces an exact copy of the parent, some undesired qualities of the parent plant also pass on to the plants of new generation.