

A Tick the correct option

1. Which of the following is not considered as a whorl of flower?
 (b) Receptacle
2. Anther and filament are parts of
 (d) stamen
3. Which of the following is not pollinated by wind?
 (b) Pea
4. Which of the following plants does have bisexual flowers?
 (c) Mustard

B Fill in the blanks with the correct word.

1. Stigma, style and ovary are parts of a carpel.
2. In wind pollinated flowers, pollen grains are light, dry and are produced in large numbers.
3. Water, wind and insects are agents of pollination.
4. Stamens consists of anther and filament.
5. A complete flower has all four whorls.

C Name the following :

1. Male reproductive part of a flower :- Stamen
2. The flowers having both stamens and carpels :- bisexual flowers
3. The middle neck portion of an ovary :- Style
4. Transfer of pollen grains from anther to stigma of a same flower :- ^{self} Pollination

D Answer the following questions :

1. What are the different parts of a flower?
Ans. The different parts of a flower are pedicel, receptacle, sepals, petals, stamens and carpel.
2. What is pollination? Discuss Self and Cross pollination.
Ans. The process of transfer of pollen grains from anther to stigma is called pollination.

Self pollination :- Transfer of pollen grains from anther of a flower to stigma of the same flower on the same plant is called self pollination. It is also called autogamy.

Cross pollination :- Transfer of pollen grains from anther of one flower to the stigma of a flower of another plant of same species is called cross pollination. It is also called allogamy.

Q3. Write the difference between unisexual and bi-sexual flowers.

Ans: The difference between unisexual and bi-sexual flowers is as follows:

Unisexual flowers	Bisexual flowers
a) The flowers in which either male or female reproductive organs are present are called unisexual flower. b) They are also termed as incomplete flowers. eg. papaya, corn etc	a) The flowers in which both male and female reproductive organs are present are called bisexual flowers. b) They are also termed as complete flowers. eg. Lily, Hibiscus etc

Q4. What are the agents of pollination? How is insect-pollination different from wind pollination?

Ans: The conditions or organisms involved in the pollination are known as agents of pollination. Insects, wind and water are the agents.

When an insect visits a flower, the pollen grains get stuck to the body of the insect and when this insect visits another flower, the pollen grains get transferred to the stigma of that flower thus bringing about pollination by insects. Whereas, in case of wind pollinated flowers, pollen grains get blown away by the wind. If they happen to fall on the stigma of a flower of the same type, then pollination by wind occurs.

UNDERSTAND AND ANSWER.

E GIVE REASONS:

1. Flowers and insects are beneficial to each other:

Ans. Flowers provide sweet nectar as food to insects like bees, wasps, moths and butterflies and in return, these insects carry pollen stuck on their bodies to other plants and help plant in the reproduction process. Thus, flowers and insects are beneficial to each other.

2. Wind pollinated flowers are small and light:

Ans. Pollen grains of wind pollinated flowers are small and light so that they are easily carried away by the wind.

3. Unisexual flowers undertake cross pollination:

Ans. As unisexual flowers either have male or female reproductive organs, they undertake cross pollination.

'F' and 'G' → H/W [Pg - 49]

H/W Try to support the question / answers with diagrams.

Note :- Read and Learn 'Practice Assignment - 4'

(as extra/inside questions)

• Read "Key-words", "Let's Revise" given at the end of the chapter for definitions / one word / differences etc.

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