

QUIZ: SEXUAL REPRODUCTION IN PLANTS

1. Which of the following statements is not correct?
 - (a) Bisexual flowers are generally self-pollinated.
 - (b) All unisexual flowers are generally self-pollinated.
 - (c) All unisexual flowers are generally cross pollinated.
 - (d) Plants show many mechanisms to ensure cross pollination and prevent self-pollination.

2. The possible function of petals is
 - (a) Storage of food and protection of essential parts (androecium and gynoecium).
 - (b) Protect the essential parts namely androecium and gynoecium.
 - (c) Help in pollination by attracting insects and storage of food.
 - (d) Protection of androecium and gynoecium and in attracting insects for pollination.

3. Both pea (*Pisum sativum*) and mustard (*Brassica* sp) are herbaceous annual plants. In both the plants the numbers of seeds per fruit are 8-10. However, at the end of the season when the gardener was harvesting the seeds from both the plants, he found the yield of seeds per plant is more in mustard than the sweet pea. What possible explanation could you give?
 - (a) Pea seeds are larger in size than the ones formed by mustard
 - (b) Pea seeds are destroyed during maturation by worms, whereas mustard seeds are not damaged by worms
 - (c) Pea plant produces less number of flowers per plant where as in mustard flowers produced are more.
 - (d) Pea plant is a creeper whereas mustard is an erect herb.

Answers:

1. (b)

Explanation: When a flower is unisexual either androecium or gynoecium is not present and the flower is incomplete. Thus they are generally cross pollinated.

2. (d)

Explanation: In the insect pollinated flowers, the petals are generally brightly coloured. Also the other function of calyx and corolla is to protect the essential parts (androecium and gynoecium) of the flower.

3. (c)

Explanation: In a pea plant flowers are solitary in arrangement so the numbers of flower produced/plant are less.

In mustard plant the flowers are borne in inflorescence and thus the numbers of flowers produced/plant are more in comparison to pea plant.