



6. Explain the difference between self-pollination and cross-pollination

Answer:

<i>Self-Pollination</i>	<i>Cross-Pollination</i>
(a) Pollen grains are transferred to the stigma of the same flower.	Pollen grains are carried to stigma of another flower.
(b) Occurs in bisexual plants having anther and stigma maturing at same time.	Occurs in bisexual flowers having anther and stigma maturing at different times.
(c) It takes place in plants like wheat, peas etc.	It takes place in plants like lady-finger, tomato, brinjal etc.

7. How does the process of fertilization take place in flowers?

Answer: When the pollen grain reaches the stigma of a same species flower, it starts growing out into the pollen tube of the stigma. This tube continues to grow inside the style till it reaches the ovule. Male cells are released into the ovule for the fertilization with the female egg cell and thus the zygote is formed. After this process of fertilization, the ovary develops into fruit and ovule into seeds.

8. Describe the various ways by which seeds are dispersed.

Answer: Following are the ways in which the seeds are dispersed:

- (i) Some light seeds like that of madar, which are hairy, dry and small are carried away by the wind to different places.
- (ii) Spiny seeds and fruits like that of xanthium and urena, stick to the clothes of passers by and animals. These seeds are carried away by these agents to different places.
- (iii) In some plants having heavy seeds like that of coconut, water acts as the dispersing agents.
- (iv) Some seeds are dispersed with the fruit burst like in case of balsam and castor.

9. Match items in Column I with those in Column II.

Column I	Column II
(a) Bud	(i) Maple
(b) Eyes	(ii) Spirogyra
(c) Fragmentation	(iii) Yeast
(d) Wings	(iv) Bread mould
(e) Spores	(v) Potato
-	(vi) Rose

Answer:

Column I	Column II
(a) Bud	(iii) Yeast
(b) Eyes	(ii) Potato
(c) Fragmentation	(v) Spirogyra
(d) Wings	(i) Maple

(e) Spores	(iv) Bread mould
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10. Tick the correct answer:

(a) The reproductive part of a plant is the

- (i) leaf
- (ii) stem
- (iii) root
- (iv) flower

(b) The process of fusion of the male and the female gametes is called

- (i) fertilisation
- (ii) pollination
- (iii) reproduction
- (iv) seed formation

(c) Mature ovary forms the

- (i) seed
- (ii) stamen
- (iii) pistil
- (iv) fruit

(d) A spore producing plant is

- (i) rose
- (ii) bread mould
- (iii) potato
- (iv) ginger

(e) Bryophyllum can be reproduced by its

- (i) stem
- (ii) leaves
- (iii) roots
- (iv) flower

Answer:

- (a) (iv) flower
- (b) (i) fertilisation
- (c) (iv) fruit
- (d) (ii) bread mould
- (e) (ii) leaves

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