Board – CBSE	Class – 12	Topic – Sexual Reproduction In Flowering Plants

1. In angiospermic plant before formation of microspore sporogenous tissue undergo cell division

(a) Name the type of cell division.

(b) What would be the ploidy of the cells of tetrad?

2. Outer envelope of pollen grain made of a highly resistant substance. What is that substance? At which particular point the substance is not present?

3. Fruits generally develops from ovary, but in few species thalamus contributes to fruit formation.

(a) Name the two categories of fruits.

(b) Give one example of each.

4. Among the animal, insects particularly bees are the dominant pollinating agents. List any four characteristic features of the insect pollinated flower.

5. Differentiate between geitonogamy and xenogamy.

6. In the given figure of a dicot embryo, label the parts (A) and (B) and give their function.

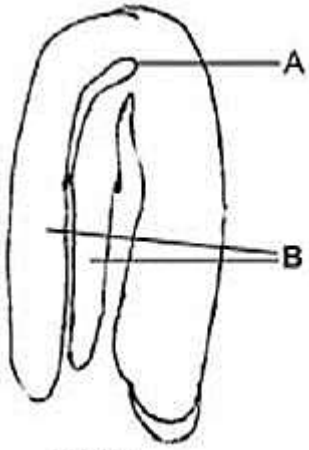


Figure 1

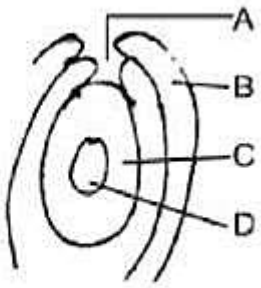
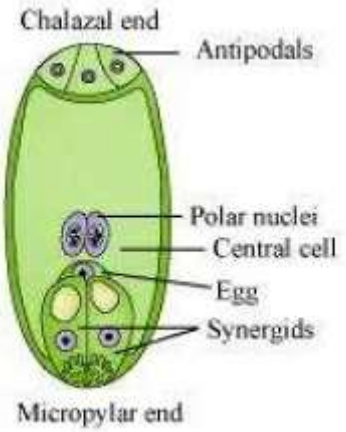


Figure 2

7. Name the parts A, B, C and D of the anatropous ovule (Figure 2) given above.

8. Given below is an incomplete flow chart showing formation of gamete in angiospermic plant. Observe the flow chart carefully and fill in the blank A, B, C and D.



9. Name the blank spaces a, b, c and d is the table given below : Item What it represents in the plant

(i) Pericarp a (ii) b Cotyledon in seeds of grass family

(iii) Embryonal axis c (iv) d Remains of nucellus in a seed.

10. Even though each pollen grain has two male gametes. Why are at least 10 pollen grains and not 5 pollen grains required to fertilise 10 ovules present in a particular carpel?

11. Describe the structure of a microsporangium with a neatly labelled diagram.

12. Why pollen grains can remain well preserved as fossils?

13. How are the cells arranged in an embryo sac?

14. Why are cleistogamous flowers invariably autogamous?

15. State any one advantage and disadvantage of pollen grains to humans.

16. State the characteristics of insect pollinated flowers.

17. Differentiate between chasmogamous and cleistogamous flowers

18. Which type of pollination ensures the arrival of genetically different pollen grains to stigma?

19. What relationship exists between a species of moth and Yucca plant?

20. Differentiate between Geitonogamy & Allogamy

21. Draw a diagram of L.S. of an anatropous ovule of an Angiosperm & label the following parts :-

(i) Nucellus

(ii) Integument

(iii) Antipodal cells

(iv) Secondary Nucleus.

22. Why is process of fertilization in flowering plants referred to as double fertilization?

23. What are cleistogamous flowers? Can cross – pollination occurs in cleistogamous flowers. Give reason?

24. Draw a labelled diagram of mature embryo sac & label the following
(i) Egg cell (ii) Antipodal cells (iii) Synergids (iv) Polar nuclei

25. Mention two strategies evolved lay flowers to prevent self-pollination

26. What is apomixis? What is its importance?

27. Draw a well labelled diagram of longitudinal section of pistil showing pollen germination?

28. List the advantages of pollination to angiospermic plants?

29. Continued self-pollination lead to inbreeding depression. List three devices, which flowering plant have developed to discourage self-pollination?

30. What will be the fate of following structures in the angiospermic plant? Ovary wall, Ovule, zygote, outer integument Inner integument and primary endosperm nucleus.