

Gaining Apex Coaching Centre

(Where Toppers make..... Toppers)

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Sexual Reproduction

1. Name the part of the flower which the tassels of corn cob represent
2. Draw a diagram of a matured microspore of an angiosperm. Label its cellular components only.
3. State the function of filiform apparatus found in mature embryo sac of an angiosperm
4. Abilobed, ditheous anther has 100 microspore mother cells per microsporangium. How many male gametophytes this anther can produce?
5. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give one reason
6. Name the organic materials of which exine and intine of an angiosperm pollen grains are made up of. Explain the role of exine.
7. Differentiate between the two cells enclosed in a mature male gametophyte of an angiosperm.
8. Name all the haploid cells present in an unfertilised mature embryo sac of a flowering plant. Write the total number of cells in it.
9. Where is sporopollenin present in plants? State its significance with reference to its chemical nature.
10. (i) Draw a schematic diagram of TS of a mature anther. Label only the layers that help in dehiscence of the anther to release pollen grains.
(ii) Why is exine of the pollen grain not a continuous layer?
11. Why are angiosperm anthers called ditheous? Describe the structure of its microsporangium.
12. Draw a labelled diagram of a typical anatropous ovule.
13. Draw a diagram of a male gametophyte of an angiosperm. Label any four parts. Why is sporopollenin considered the most resistant organic material?
14. Draw a labelled diagram of sectional view of a mature embryo sac of an angiosperm.
15. (i) Describe the formation of mature female gametophyte within an ovule in angiosperms.
(ii) Describe the structure of cell that guides the pollen tube to enter the embryo sac.
16. How does the pollen mother cell develop into a mature pollen grain? Illustrate the stages with labelled diagram.