

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024
(Regular/Improvement/Supplementary)

BOTANY

**FBOT1C03- ANGIOSPERM ANATOMY, ANGIOSPERM EMBRYOLOGY,
PALYNOLOGY AND LAB TECHNIQUES**

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. What are the components of plant cell wall?
2. Comment on exine ornamentation.
3. Write a note on crystal idioblasts.
4. What are vital stains? Give two examples.
5. What are filiform apparatus?
6. Differentiate between acropetal and basipetal differentiation in leaves.
7. Comment on Apomixis.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. Explain different stomatal types in dicots.
9. Comment on Melittopalynology.
10. Describe the importance of wood anatomy.
11. Explain *in vitro* pollination and fertilization.
12. Comment on Nodal Anatomy.
13. Write a note on different types of microtomes.
14. Differentiate between polyembryony and parthenocarpy.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Write an essay on Anomalous secondary growth in angiosperms.
16. Explain the basic procedures in plant microtechnique.
17. Describe the structure, function and types of endosperms.
18. Give an account on the ultra-structure of the pollen wall. Add a note on its development.

(2 × 5 = 10 weightage)