

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021
(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. Differentiate between monothealous and dithealous anther.
2. Describe pollen and allergy.
3. Differentiate between Unilacunar and Trilacunar node.
4. Describe the stomatal types.
5. Define parthenocarpy. Mention its importance.
6. Write notes on Transfer cells.
7. Describe Maceration and Smear.

(4 × 2 = 8 weightage)

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

8. Briefly explain vital staining.
9. Write notes on chemical constituents of secondary wall.
10. What is polyembryony? Briefly explain the classification of polyembryony.
11. Write notes on structure and development of dicot embryo. Mention the functions of suspensor.
12. Explain the development of vascular and cork cambium in stem.
13. Discuss the morphological features of pollen.
14. Explain unifacial, bifacial and centric leaves.

(4 × 3 = 12 weightage)

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

15. Explain secondary growth in dicot stem and root with suitable examples.
16. Elaborate on the structure and function of anther wall layers with suitable diagrams.
17. Discuss the composition and specific uses of commonly used stains.
18. Explain embryology in relation to Taxonomy.

(2 × 5 = 10 weightage)