

November 2025
M.Sc.
First Semester
CORE – 04
BOTANY
Course Code: MBOC 1.41
(Plant Morphology & Anatomy of Angiosperms)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. What are simple and compound leaves? Explain the various types of compound leaves with proper diagrams. 2+12=14
2. Give an account of leaf lamina with reference to its margin and apex. 14

UNIT-II

3. Define inflorescence. Differentiate between racemose and cymose inflorescences. Explain the different types of cymose inflorescence with the help of schematic diagrams. 2+4+8=14
4. With the help of suitable diagrams explain the different types of aestivation and placentation. 14

UNIT-III

5. Give an account of the development of lateral root and root hair. 14
6. What are meristems? With the help of schematic diagrams explain the organisation of shoot apical meristem. 2+12=14

UNIT-IV

7. Write a note on each of the following: 7×2=14
 - (a) Epidermis
 - (b) Leaf anatomy of C3 and C4 plants

8. Discuss the structure and ontogeny of the stomatal complex. 6+8=14

UNIT-V

9. Write a note on each of the following: 7×2=14

(a) Early wood and late wood

(b) Reaction wood

10. Elucidate the intrastellar and extrastellar secondary growth in dicot stem. 14
