

D1BBT2101 (S3)

Reg. No.....

Name:

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2024

(Improvement/Supplementary)

BOTANY

GBOT1B01T: ANGIOSPERM ANATOMY AND MICROTECHNIQUE

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)**

1. Write a note on non-living inclusions.
2. Explain briefly about Mineral crystals.
3. Describe hydathodes.
4. Write a note on Fixatives.
5. Comment on Micrometry.
6. Write a note on Apical and Histogen Theory.
7. Define laticifers.
8. What is Aleurone grains.
9. Differentiate between Heart wood and Sap wood.
10. Write an account on Microtome.
11. Differentiate between schizogenous and Lysigenous Ducts.
12. Write a note on Mounting.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)**

13. Give an account on meristematic tissues.
14. Describe the principle and working of a compound microscope.
15. Write an account on stains.
16. Describe Vascular bundles.
17. Give an account on reserve food materials found in plants.
18. Discuss extra stellar secondary growth in stem and root.
19. Explain the paraffin wax method for infiltration and specimen preparation.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Write an account on anomalous secondary growth in *Boerhaavia* stem
21. Explain the working principles, applications and differences between Transmission Electron Microscopy (TEM) and Scanning Electron Microscopy (SEM).

(1 × 10 = 10 Marks)