D1BBT2302 (S1)	Reg. No
	Namas

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

BOTANY: COMPLEMENTARY COURSE FOR ZOOLOGY GBOT1C01T: ANGIOSPERM ANATOMY AND MICROTECHNIQUE

Time: 2 Hours Maximum Marks: 60

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

- 1. Define a microtome.
- 2. What are wood fibres?
- 3. What is a stain? Name one acidic stain.
- 4. Mention the characteristic features of cork cells.
- 5. Name two reagents used for clearing.
- 6. What are simple tissues?
- 7. Comment on fixatives.
- 8. What are companion cells?
- 9. What is protoxylem lacunae? Where is it found?
- 10. State the functions of bulliform cells.
- 11. Give an account on the digestive glands in Nepenthes.
- 12. What are laticiferous tissues? Give one example.

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

- 13. Write a detailed note on meristematic tissues.
- 14. Write an account on the types of wood found in angiosperms.
- 15. Describe the steps involved in the preparation of permanent slides.
- 16. Write a note on extra-stelar secondary growth.
- 17. Compare the anatomical features in the primary structure of dicot and monocot stem.
- 18. Give a short note on secretory tissues.
- 19. With the help of a neat labelled diagram explain the structure of a dicot leaf.

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

- 20. Explain the principle and parts of electron microscope.
- 21. Discuss the anomalous secondary thickening in *Boerhaavia diffusa*.

 $(1 \times 10 = 10 \text{ Marks})$