23U127	(Pages: 2)	Name:
		Reg.No:

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U BOT1 C01 - ANGIOSPERM ANATOMY AND MICROTECHNIQUE

(Botany - Complementary Course)

(2019 Admission onwards)

Time: 2.00 Hours Maximum: 60 Marks

Credit: 2

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

- 1. How meristems are classified based on position?
- 2. Briefly describe sclerenchyma.
- 3. Explain hydathode.
- 4. What are concentric vascular bundles?
- 5. Enumerate any four salient features of dicot root.
- 6. How do you correlate the activity of cambium with changing seasons?
- 7. Enumerate any four salient features of dicot leaf.
- 8. What is periderm?
- 9. What are growth rings?
- 10. Why heart wood is more durable than sap wood?
- 11. What is dehydration in paraffin method? Name a reagent used for dehydration.
- 12. What is a stain? Explain with types.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

- 13. Explain the organization of shoot apex by Tunica corpus theory.
- 14. Xylem is considered as a complex tissue. Substantiate the statement.
- 15. Give a brief account of the primary structure of monocot stem.
- 16. Describe the intra stelar secondary growth in dicot stem

- 17. Briefly explain secondary thickening in a dicot root.
- 18. Briefly explain anomalous secondary thickening in a dicot root.
- 19. Describe electron microscope.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

- 20. Describe the primary structure of a dicot stem.
- 21. What is the principle of microtome? Explain the various types of microtomes and their applications.

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