22U125	(Pages: 2)	Name:
		Reg.No:

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(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. Explain Tunica Corpus theory.
- 2. Explain the structure of parenchyma.
- 3. Describe the stinging hairs of Tragia.
- 4. What are radial vascular bundles?
- 5. What are medullary rays?
- 6. Describe the anatomy of dicot leaf.
- 7. What is ray initial?
- 8. What is periderm?
- 9. Differentiate between ring porous wood and diffuse porous wood.
- 10. What is heartwood?
- 11. What is resolving power of a microscope?
- 12. What do you mean by double staining?

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer all questions. Each question carries 5 marks.

- 13. What are meristems? Classify them based on origin, position, growth patterns and function.
- 14. Briefly describe the components of phloem tissue.
- 15. With illustration explain the T.S. of monocot stem.
- 16. Briefly explain secondary thickening in a dicot stem.

- 17. Briefly explain secondary thickening in Tinospora root.
- 18. Briefly explain anomalous secondary thickening in a dicot root.
- 19. Give a brief account on clearing.

(Ceiling: 30 Marks)

Part C (Essay questions)

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

- 20. Explain the anatomical differences between dicot root and monocot root with the help of diagrams.
- 21. What is the principle of microtome? Explain the various types of microtomes and their applications.

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