<b>21U128</b> (Pages: 2) Name:	
--------------------------------	--

Reg.No:	
IXEE.INU.	

## FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021

(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. Briefly explain Histogen theory of root apex organization.
- 2. What is a complex tissue?
- 3. Elucidate the structure and function of laticiferous tissue.
- 4. What are radial vascular bundles?
- 5. Enumerate any four salient features of Monocot stem.
- 6. List any four major differences between dicot leaf and monocot leaf.
- 7. What is fusiform initial?
- 8. What are lenticels?
- 9. Write a brief account of annual rings.
- 10. Why heart wood is more durable than sap wood?
- 11. What do you mean by fixation?
- 12. What are basic stains? Give an example.

(Ceiling: 20 Marks)

**Part B** (Short essay questions - Paragraph)

Answer all questions. Each question carries 5 marks.

- 13. Explain the classification of meristems based on its origin and position.
- 14. Explain the structure and function of sclerenchyma.

- 15. Describe the primary structure of a dicot root.
- 16. Differentiate between intra stelar secondary growth and extra stelar secondary growth.
- 17. Briefly explain secondary thickening in Tinospora root.
- 18. Explain anomalous secondary growth in Boerhaavia.
- 19. Give a short account on the mechanical operation of a compound microscope.

(Ceiling: 30 Marks)

## Part C (Essay questions)

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

- 20. With suitable labelled diagrams, describe the primary structure of a dicot stem.
- 21. Describe the method of permanent slide preparation by microtomy.

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

\*\*\*\*\*