19U133	(Pages: 2)	Name:
		Reg. No.

## FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019 (CUCBCSS-UG)

## CC19U BOT1 C01 – ANGIOSPERM ANATOMY AND MICROTECHNIQUE

(Botany- Complementary Course) (2019 Admission Regular)

Time: Two Hours Maximum: 60 Marks

Credit: 2

Draw diagrams only when specified.

- I. Answer all Questions. Each question carries 2 marks.
  - 1. Differentiate between diffuse porous wood and ring porous wood.
  - 2. What is bark?
  - 3. Describe Histogen theory.
  - 4. What are laticifers?
  - 5. What are tyloses?
  - 6. Differentiate between storied and non-storied cambium.
  - 7. Comment on the functions of collenchyma.
  - 8. What are growth rings?
  - 9. What are bulliform cells? Comment on its function.
  - 10. Mention the composition and function of FAA.
  - 11. Distinguish between killing and fixing.
  - 12. What is rotary microtome? Comment on its applications.

(Ceiling 20 Marks)

- II. Answer all Questions. Each question carries 5 marks.
  - 13. Explain extra stelar secondary growth in dicot stem.
  - 14. Give an account on anomalous secondary thickening in *Boerhaavia*.
  - 15. With the help of labelled cellular diagram explain the structure of dicot leaf.
  - 16. Give an account on different types of vascular bundles with suitable diagrams.
  - 17. Explain in detail the structure and functions of various components of phloem.
  - 18. Describe the working of an electron microscope.
  - 19. Explain dehydration in microtechnique. Give examples of dehydrating agents.

(Ceiling 30 Marks)

- III. Answer any *one* question. The question carries 10 marks.
  - 20. With the help of suitable diagrams explain the normal secondary thickening in dicot root.
  - 21. Define meristem. Give an account on its salient features and classification based on the origin and position.

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

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