

20U137S

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Name:

Reg. No.

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2020

(CUCBCSS-UG)

CC15U BOT1 C01 - ANGIOSPERM ANATOMY AND MICRO TECHNIQUE

(Complementary Course)

(2015 to 2018 Admissions - Supplementary)

Time: Three Hours

Maximum: 64 Marks

Draw diagrams only when specified

Part A

Answer *all* questions. Each question carries 1 mark.

1. Calyptrogen is found in -----
2. Passage cells are common in ----- layer of root.
3. Proponent of Tunica - Corpus theory.
4. Oil glands are common in -----
5. Stinging hairs are present in -----
6. Roughness of grass is due to the presence of -----
7. Name a cytological stain.
8. Name a fixative agent.
9. Give the expansion of TEM.
10. Name a dehydration reagent used in histological preparations.

(10 x 1 = 10 Marks)

Part B

Answer any *seven* questions. Each question carries 2 marks.

11. What are tyloses? Mention its functions.
12. Differentiate Sapwood and Heartwood.
13. Explain Collenchyma tissue.
14. Describe bicollateral vascular bundle.
15. What are lenticels?
16. Explain companion cells.
17. Define resolving power.
18. Name the optical parts of a compound microscope.
19. Explain acid stains.
20. What are annual rings?

(7 x 2 = 14 Marks)

Part C

Answer any *six* questions. Each question carries 4 marks.

21. What is meristem? Classify them based on position and origin.
22. With suitable labelled diagrams, describe the primary structure of a dicot stem.
23. Explain the structure and functions of xylem components.
24. Give a detailed account of isobilateral leaf with the help of labelled sketch.
25. Briefly describe the mechanism of electron microscope.
26. Important anatomical characters of dicot root.
27. Describe digestive glands.
28. Briefly describe progressive staining.

(6 x 4 = 24 Marks)

Part D

Answer any *two* questions. Each question carries 8 marks.

29. Describe the method of permanent slide preparation by microtomy.
30. Describe the normal secondary growth in dicot stem with suitable diagrams.
31. Describe anomalous secondary growth in Boerhaavia stem.

(2 x 8 = 16 Marks)
