

19U133A

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Name:

Reg. No.....

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(Supplementary/Improvement)

(CUCBCSS-UG)

CC15U BOT1 C01 – ANGIOSPERM ANATOMY & MICROTECHNIQUE

(Botany- Complementary Course)

(2015 to 2018 Admissions)

Time: Three Hours

Maximum: 64 Marks

Draw diagrams only when specified

PART A

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

1. ----- is a dehydrating agent.
2. Name the thickenings present on endodermal cells.
3. In dicot root cork cambium originates from -----
4. ----- is a living mechanical tissue.
5. The structure that favours gas exchange in old stems is -----
6. A vascular bundle in which xylem is sandwiched by phloem on both the sides is -----
7. Name the structure that brings about the rolling and unrolling of leaves in monocot leaf.
8. The illuminating agent in electron microscope is -----
9. Name the lenses involved in the magnification and image formation in compound microscope.
10. In oil immersion objective lens, the magnification is -----

(10 x 1 = 10 Marks)

PART – B

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

11. Dendrochronology.
12. Digestive glands.
13. Concentric vascular bundles.
14. Calyptrogen.
15. Storied and non-storied cambium.
16. Differentiate between radial and conjoint vascular bundles.
17. Lenticels.
18. The composition and functions of Farmer's fluid.

19. Tunica-carpus theory.

20. Microtome.

(7 x 2 = 14 Marks)

PART – C

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

21. Give an account of primary structure of monocot stem.

22. Explain the formation of periderm.

23. Differentiate sapwood from heartwood.

24. Describe the principle and working of Electron microscope.

25. Explain the theories regarding the apical organization of root apex.

26. What are hydathodes? Explain the structure and function of it with the help of a labeled diagram.

27. Give an account of the structure and functions of sclerenchyma.

28. What are tyloses? How are they formed? Add a note on their function.

(6 x 4 = 24 Marks)

PART – D

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

29. Explain the secondary growth pattern in *Tinospora* root with suitable diagrams.

30. What are complex tissues? Describe the structure and functions of the complex tissue found in plants.

31. What is anomalous secondary growth? Discuss the secondary growth in *Boerhaavia* stem with the help of diagrams.

(2 x 8 = 16 Marks)
