18U145 (Pages: 2) Name: …….……

Reg. No……

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

CC15U BOT1 C01 – ANGIOSPERM ANATOMY AND MICROTECHNIQUE

(Botany - Complementary Course)

(2015 Admission onwards)

Time: Three Hours Maximum: 64 Marks

Draw diagrams only when specified.

PART A

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

1. Cork cambium is otherwise known as ----------.
2. A concentric vascular bundle where phloem surrounds the xylem is called ----------.
3. Proponent of Tunica – Corpus theory.
4. Name a nuclear stain.
5. Formation of intercellular space by disintegration of cells is called ----------.
6. Plant length is increased by ---------- meristems.
7. An epidermal pore specialized for the exudation of water is ----------.
8. Name a living mechanical tissue.
9. Bicollateral vascular bundles are seen in ---------- family.
10. ---------- is used to take serial sections.

(10 x 1 = 10 Marks)

PART B

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

11. Compare fusiform and ray initials.
12. Illustrate the structure of a monocot stem vascular bundle.
13. What are Tyloses? Mention their functions.
14. What are annual rings?
15. Define resolving power.
16. What are the components of Xylem?
17. What is dehydration in paraffin method? Name a reagent used for dehydration.
18. Differentiate TEM from SEM.
19. What are passage cells?
20. Write a note on bulliform cells. **(7 x 2 = 14 Marks)**

PART C

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

21. How do you correlate the activity of cambium with changing seasons?
22. Describe the anatomy of dicot leaf.
23. Give a short account of secretary tissue.
24. Differentiate between intrastelar and extrastelar secondary growth.
25. What is meristem? Classify them based on origin, position and function.
26. What is killing and fixing? Give the composition of Farmer's formula and FAA.
27. Compare Electron microscope with light microscope.
28. Describe the different types of vascular bundles.

(6 x 4 = 24 Marks)

PART D

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

29. Explain the anomalous secondary growth in Boerhaavia stem.
30. Give a detailed account of the primary structure of dicot root and compare it with monocot root.
31. Define permanent tissue. How will you classify them? Describe the simple and complex tissues.

(2 x 8 = 16 Marks)

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