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Name.....

Reg. No.....41

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION  
NOVEMBER 2014**



(CUCBCSS-UG)

Complementary Course – Botany

**BOT 1C 01 – ANGIOSPERMIC ANATOMY AND MICROTECHNIQUE**

Time : Three Hours

Maximum : 64 Marks

I. Answer *all* questions :

Answer in a single word :

1. Vascular bundles where the phloem is found to be present on both sides of xylem is called.
2. Which type of latex duct present in *Euphorbia*?
3. Cork cambium is otherwise known as.
4. Name a killing and fixing agent.
5. Give an example for nuclear stain.

Fill in the blanks :

6. Casparian stripes of suberin occur in \_\_\_\_\_.
7. \_\_\_\_\_ is an example for mounting medium.
8. Histogen theory was put forward by \_\_\_\_\_.
9. \_\_\_\_\_ is an example of a living mechanical tissue.
10. Sieve plates are associated with \_\_\_\_\_.

(10 × 1 = 10 marks)

II. Answer any *seven* questions. Short Answer. (2 marks each) :

11. Differentiate between ring porous wood and diffuse porous wood.
12. Cambium is considered to be lateral meristem. Why?
13. What are hydathodes?
14. List out the objectives of killing and fixing.
15. Describe oil glands in *Citrus*.
16. What is quiescent centre?
17. What is the significance Iris diaphragm?

Turn over

18. Write a brief account on simple microscope.
19. What are Complementary cells?
20. What is periderm?

(7 × 2 = 14 marks)

III. Answer any *six* questions. Short Essay. (4 marks each) :

21. How do you correlate the activity of cambium with changing seasons?
22. Explain the Tunica-carpus theory regarding the organization of root apex.
23. Differentiate between intrastelar secondary growth and extrastelar secondary growth.
24. Explain the different types of vascular bundles.
25. What are the advantages of serial sectioning over hand sectioning?
26. What is the Significance of a Rotary microtome?
27. Describe the anatomy of dicot leaf.
28. Differentiate between sap wood and heart wood.

(6 × 4 = 24 marks)

IV. Answer any *two* questions. Essay. (8 marks each) :

29. What is a stain and its significance? Explain the preparation and uses of any *two* stains.
30. Define permanent tissues, How will you classify them? Describe simple and complex tissue.
31. Describe the normal secondary growth in dicot stem and root.

(2 × 8 = 16 marks)