

**C 43537**

(Pages 2)

Name.....

Reg. No.....

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, JULY 2013**

(CCSS)

Botany

**BO 1C 01—ANGIOSPERM ANATOMY AND MICROTECHNIQUE**

Time : Three Hours

Maximum : 30 Weightage

**Part A**

*Answer all questions.*

1. Define a tissue.
2. What is hypodermis ?
3. Endarch.
4. Epidermal hair.
5. What is closed vascular bundle ?
6. Give the magnification of a compound microscope.
7. Name a cytological stain.
8. Name the machine used to take thin sections for microtechnique.
9. Middle lamella is made up of ; (a) Calcium ; (b) Pectin ; (c) suberin ; (d) calcium pectate.
10. Where do you find dumbbell shaped cells ?
11. In xerophytes, stomata are seen in the : (a) upper side ; (b) lower side ; (c) both sides ; (d) sunken condition.
12. Name an insectivorous plant.
13. What is heartwood ?
14. Who proposed Tunica-carpus theory ?
15. Where do you see spongy tissue ?
16. What is cyclosis ?
17. Define terminal bud.
18. Which tissue conducts prepared food in plants ?
19. Give the name of a living tissue in plant body.
20. Name the storage region in a plant.

(20 × ½ = 10 weightage)

**Turn over**

**Part B**

Answer any **six** in one or two sentences.

21. Bicollateral vascular bundle.
22. What are medullary rays?
23. What are hydathodes?
24. Bulliform cells.
25. Name the part of electron microscope that functions as magnifying lenses.
26. Expand TEM.
27. What is tonoplast?
28. What is callus?

(6 × 1 = 6 weightage)

**Part C**

Answer any **three**.

29. Briefly explain the components of xylem tissue.
30. Give the importance of stomata.
31. Name two mordants used in microtechnique.
32. What is an objective lens?

(3 × 2 = 6 weightage)

**Part D**

Answer any **two**.

33. Explain the primary structure of a monocot stem.
34. Briefly explain secondary thickening in a stem.
35. Briefly explain the structure and function of hydathode.

(2 × 4 = 8 weightage)