

**2023/TDC(CBCS)/ODD/SEM/
BOTHCC-301T/138**

TDC (CBCS) Odd Semester Exam., 2023

BOTANY

(Honours)

(3rd Semester)

Course No. : BOTHCC-301T

(Anatomy of Angiosperms)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer ten questions, selecting any two from each

Unit : 2×10=20

UNIT—I

1. Write two differences between collenchyma and sclerenchyma.
2. What is meristematic tissue? State its functions.
3. Write one application of plant anatomy in pharmacognosy.

(2)

UNIT—II

4. Define simple and complex tissues.
5. Define pits and plasmodesmata.
6. Differentiate between tracheids and vessels.

UNIT—III

7. What do you mean by open vascular bundle?
8. Differentiate between protoxylem and metaxylem.
9. Write a short note on quiescent centre.

UNIT—IV

10. Write a short note on tylosis.
11. What are ray and axial parenchyma?
12. What are ring and diffuse porous woods?

UNIT—V

13. Write a short note on cuticle.
14. What are adcrustation and incrustation?
15. Name two plants where glandular trichomes are found.

24J/154

(Continued)

(3)

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 6×5=30

UNIT—I

16. Discuss the applications of plant anatomy in forensic science. 6
17. Define tissue system. Write an account on simple permanent tissues with neat sketches. 1+5=6

UNIT—II

18. Describe in detail the different types of simple tissues. Add diagrams. 6
19. Write a note on the different types of elements of xylem tissue with suitable diagrams. 6

UNIT—III

20. Describe different theories of structural development and organization of shoot apex. 6
21. Differentiate anatomically a dicot leaf from a monocot leaf with the help of suitable diagrams. 6

24J/154

(Turn Over)

UNIT—IV

22. Discuss in detail the development and composition of periderm. 6
23. Discuss the important events during the secondary growth in thickness in the dicot stem. 6

UNIT—V

24. Write in detail the anatomical adaptations of xerophytes. 6
25. Write the salient features of stomata. Classify the different types of stomata with neat sketches. 2+4=6

UNIT—III