



**2022/TDC/ODD/SEM/
BOTHCC-301T/138**

TDC (CBCS) Odd Semester Exam., 2022

BOTANY

(Honours)

(3rd Semester)

Course No. : BOTHCC-301T

(Anatomy of Angiosperm)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

UNIT—I

1. Answer any *two* of the following questions :

2×2=4

(a) What do you mean by cytodifferentiation?

(b) What is organogenesis in plants?

(c) What do you mean by permanent tissue? Give examples.



(2)

2. Answer any *one* of the following questions : 6

- (a) Discuss the applications of plant anatomy in pharmacognosy and forensics.
- (b) Give detailed account of vascular tissue system in plants.

UNIT—II

3. Answer any *two* of the following questions : 2×2=4

- (a) Write a note on sieve elements.
- (b) What are Ergastic substances?
- (c) What do you mean by laticifers? State their functions.

4. Answer any *one* of the following questions : 6

- (a) Discuss the classification of tissues on the basis of origin and position in the plant body.
- (b) Write notes on pits and plasmodesmata. Define hydathodes.

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(Continued)

(3)

UNIT—III

5. Answer any *two* of the following questions : 2×2=4

- (a) What is apical cell theory?
- (b) Write a note on Kranz anatomy.
- (c) State the functions of quiescent centre.

6. Answer any *one* of the following questions : 6

- (a) Discuss Korper-Kappe theory and Tunica Corpus theory. 3+3=6
- (b) Write the internal differences between dicotyledonous stem and monocotyledonous stem. Add diagrams.

UNIT—IV

7. Answer any *two* of the following questions : 2×2=4

- (a) What is dendrochronology?
- (b) What are sapwood and heartwood?
- (c) Write a note on lenticels.

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(Turn Over)



(4)

8. Answer any *one* of the following questions : 6

(a) Write a note on seasonal activity of cambium. Add a note on rhytidome. 4+2=6

(b) What is secondary growth? Give an account of secondary growth in stem. 1+5=6

UNIT—V

9. Answer any *two* of the following questions : 2×2=4

(a) What is epidermal tissue system? Give example.

(b) What are glandular and non-glandular trichomes?

(c) Write the anatomical peculiarities of xerophytes.

10. Answer any *one* of the following questions : 6

(a) Write in detail the anatomical adaptation of hydrophytes.

(b) Write about cuticle, adcrustation and incrustation.

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