

Q.P. Code – 42433

Fourth Semester B.Sc. Degree Examination, April/May 2019

(CBCS Scheme)

Botany

**Paper IV — PLANT ANATOMY MORPHOLOGY OF ANGIOSPERMS,
PLANT PROPAGATIONS**

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates :

- 1) *Answers all Parts.*
- 2) *Draw diagrams wherever necessary.*

PART – A

I. Answer any **TEN** of the following : **(10 × 2 = 20)**

1. What is companion cell? Mention its function.
2. Differentiate between Exarch and Endarch.
3. What is sclerenchyma? Mention its types.
4. Differentiate between Amphistomatic and Hypostomatic condition.
5. What are trichomes? Give an example.
6. Differentiate between heart wood and sapwood.
7. What are tendrils? Mention any two stem tendrils.
8. Differentiate between Raceme and spike with example.
9. What are schizocarpic fruits? Give any two examples.
10. What is fasciculated root? Give an example.
11. What is phyllotaxy? Mention any two types.
12. What is Grafting? Mention any two types.

PART – B

II. Answer any **SIX** of the following : **(6 × 5 = 30)**

13. Write a note on Collenchyma.
14. With neat labelled diagram, explain T.S. of dicot root.

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15. List out the properties of wood.
16. Explain adventitious root modifications for mechanical support.
17. With neat labelled diagram, explain anomalous secondary growth in *Dracena* stem.
18. Explain cyathium inflorescence.
19. Draw neat labelled diagram of L.S. of typical angiospermic flower.
20. Explain simple fruits.

PART – C

III. Answer any **FOUR** of the following : **(4 × 10 = 40)**

21. Describe T.S. of dicot stem.
 22. With neat labelled diagram, explain anomalous secondary growth in *Boerhaavia*.
 23. Explain any four underground stem modifications.
 24. Explain different types of Cymose inflorescence.
 25. Explain different types of leaf modification in Angiosperms.
 26. Explain :
 - (a) Secretory tissues
 - (b) Histogen theory
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