

No. of Printed Pages : 03

Roll No.

28840

B. Sc. EXAMINATION, 2025

(Third Semester)

PLANT ANATOMY

Time : 3 Hours]

[Maximum Marks : 40

Note : Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. 1 is compulsory.

Compulsory Question

1. Explain the following : 1×8=8

- (i) Biennials with example
- (ii) Aerenchyma
- (iii) Tracheids
- (iv) Exarch condition
- (v) Opposite phyllotaxy

- (vi) Guard cells
- (vii) Root cap
- (viii) Vascular cambium.

Unit I

2. What is parenchyma ? Discuss its types. 8
3. What is phloem ? Give an account of components of xylem with their functions. 8
4. Explain various theories regarding shoot apex organization. 8
5. Write notes on the following : 8
 - (a) Heartwood and sapwood
 - (b) Cork cambium.

Unit II

6. What are compound leaves ? Give their types with example. 8

7. Discuss the anatomy of a monocot leaf with well labelled diagram. 8
8. Describe the secondary growth in dicotyledonous root with well labelled diagram. 8
9. Write notes on the following : 4×2=8
 - (a) T.S. of pneumatophere
 - (b) T.S. of epiphyte root.