



K25U 3353

Reg. No. :

Name :

I Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Supplementary)

Examination, November 2025

(2019 to 2023 Admission)

CORE COURSE IN BOTANY/PLANT SCIENCE

1B01BOT/PLS : Cytology and Angiosperm Anatomy

Time : 3 Hours

Max. Marks : 40

Instruction : Draw diagrams wherever specified.

PART – A

Objective type questions. Answer **all**.

(4×1=4)

1. In roots a group of inactive cells found in between root cap and active meristem is
 - a) Periblem
 - b) Quiescent centre
 - c) Cortex
 - d) Piliferous layer
2. A membranous channel that found as cross walls of adjacent plant cells is
 - a) Lysosomes
 - b) Endoplasmic reticulum
 - c) Plasmadesmata
 - d) Chloroplast
3. Mineralized objects found in the form of bunch of grapes
 - a) Cystolith
 - b) Aleurone grains
 - c) Druses
 - d) Raphides
4. Negatively geotropic and aerial respiratory roots are found in
 - a) Epiphytes
 - b) Halophytes
 - c) Xerophytes
 - d) Hydrophytes

PART – B

Short essay questions. Answer **any eight**.

(8×2=16)

5. Comment on Lysosomes and its functions.
6. Differentiate Prokaryotic with Eukaryotic cell.

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7. Explain the functions of Ribosome.
8. Describe the role of Aleurone grains in seeds.
9. Give an account on Lenticel.
10. Explain Apical cell theory.
11. Differentiate vascular bundles of root and stem.
12. Write a note on starch grains.
13. Comment on phagocytosis.
14. Give an account on Nodal anatomy.
15. Describe the anatomical adaptations Epiphytes.
16. State the major functions of Sclerenchyma.

PART – C

Essay questions. Answer **any four**.

(4×3=12)

17. Explain the structure of Chloroplast.
18. Describe the structure and functions of Nucleolus.
19. Describe anatomical features of a typical dorsiventral leaf.
20. Explain the reasons for anomalous secondary growth in Boerhaavia.
21. Comment on Laticiferous tissue and Glandular tissue.
22. Explain the structure and functions of plasma membrane.

PART – D

Long essay questions. Answer **any one**.

(1×8=8)

23. Describe the structure and its function of cell wall with suitable illustrations.
 24. Discuss the secondary growth of dicot stem with secondary growth of dicot root with suitable example.
 25. Describe the classification and characteristics of simple, complex and special tissues.
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