

**First Semester FYUGP Degree (Reg/Sup) Examination
November 2025**

KU1DSCBOT103 - DIVERSITY OF PLANTS - I

2024 Admission onwards

Time : 1.5 hours

Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. Define pit and pit aperture?
2. Briefly describe the chemical composition of the plant cell wall.
3. List three key discoveries in the progress of cell biology.
4. In the context of the Six Kingdom Classification, briefly describe the distinguishing characteristics of one kingdom, including examples of organisms within that kingdom.
5. Give the distinct characteristics of fungi.
6. What is a mycobiont?
7. Give an account on the classification of bryophytes?
8. Outline the general characteristics of pteridophytes.

Section B

Answer any 4 questions. Each carry 6 marks.

9. Provide a brief account of fungi according to Ainsworth's system.
10. Draw and explain the structure of ascogonium? Explain how it is different from ascocarp?
11. Name any three fungal diseases of plants with causative organism? Discuss the symptoms and control measures?
12. Write down the salient features of bryophytes? Why they are called amphibians of plant kingdom?
13. Discuss the role of algae in live stock management and fisheries.
14. Examine the roles of algae and bryophytes in ecological succession and soil formation.

Section C

Answer any 1 questions. Each carry 14 marks.

15. Compare and contrast the ultrastructure and functions of chloroplasts and mitochondria, with the help of diagrams.
16. (a) Compare and contrast the characteristics of prokaryotic and eukaryotic cells, analyzing their structural and functional differences.
(b) Analyze how the Six Kingdom Classification system improved over Aristotle's classification.