

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(Regular/Improvement/Supplementary)

BOTANY

FBOT1C02-MYCOLOGY & LICHENOLOGY, MICROBIOLOGY AND PLANT PATHOLOGY

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. Define prions and give an example of a disease caused by it.
2. Describe the general characteristics of ascomycota.
3. What are the symptoms and causal agent of Blister blight of tea.
4. Define bioremediation with an example.
5. What are coprophilous fungi? Give examples.
6. Describe the role of microorganisms in water purification.
7. What are the symptoms and causal agent of Tikka disease of groundnut?

(4 × 2 = 8 weightage)**Part B: Answer any *four* questions. Each carries *three* weightage.**

8. Describe general features of Actinomycetes.
9. Explain the process of lignin degradation by fungi.
10. Describe the general structure and reproductive bodies of lichens.
11. Explain the ultrastructure of a typical bacterial cell.
12. Give a brief account on industrial applications of microbes.
13. Describe the general characteristics of Basidiomycota.
14. Give a comparative account on viroids and virusoides.

(4 × 3 = 12 weightage)**Part C: Answer any *two* questions. Each carries *five* weightage.**

15. Discuss the classification of fungi as proposed by Alexopoulos *et al.* in detail.
16. Explain different defense mechanisms in plants with suitable example.
17. Explain the causes, types and prevention methods of food spoilage by microorganisms.
18. Give a detailed account of mycorrhizal associations and discuss their ecological significance.

(2 × 5 = 10 weightage)