

D1ABT2102

(2 Pages)

Name.....

Reg.No.....

**FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021
(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. What is Rhizosphere? Discuss its significance.
2. Explain the ultra structure of the cell wall in a Gram negative bacteria.
3. Explain the role of fungi in pesticide degradation. Give examples.
4. What are the different types of reproductive bodies in Lichens.
5. Give a short note on plant disease management.
6. What are endophytes?
7. With suitable illustration explain the ultra structure of flagella in bacteria.
8. Write a note on the ecological significance and economic importance of Lichens.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

9. Give brief account on Mycorrhizal associations of fungi. What is Ericoid mycorrhiza.
10. Discuss the symptoms, causal organisms, disease cycle and control measures of *Phytophthora* foot rot of Pepper and Mahali disease in Arecanut.
11. Explain Parasexuality in fungus .
12. Explain the features of Plasmids and briefly discuss the different types.
13. Differentiate between Prions, Virions and Viroids.
14. Write an account on the general characters of Mastigomycota.

(4 × 3 = 12 weightage)

(P.T.O.)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Explain in detail about the different types of spores in fungi and their dispersal mechanisms with suitable illustrations.
16. What are bacteriophages? Give an account on their classification, structure and replication.
17. With suitable examples give a detailed account on the industrial applications of microbes.
18. Explain the process of infection of a pathogen on a host plant and discuss the different methods used in the process.

(2 × 5 = 10 weightage)