

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023  
(Regular/Improvement/Supplementary)

BOTANY

GBOT2B02T: MICROBIOLOGY, MYCOLOGY, LICHENOLOGY & PLANT PATHOLOGY

Time:2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries two marks.**

**(Ceiling 20 Marks)**

1. Write any two examples for the role of bacteria in agriculture.
2. Write down the difference between episome and mesosome.
3. Differentiate between lophotrichous and amphitrichous bacterium.
4. Name any two diseases caused by *Pythium*.
5. What are rhizomorphs? List out its functions.
6. Describe VAM.
7. What are rhizines?
8. What is mycobiont? Mention its role.
9. What are Koch's postulates?
10. What are the four major aspects of Plant pathology?
11. Write down the symptoms of blast of paddy.
12. Comment on the control measures employed for checking bunchy top disease of banana.

**SECTION B: Answer the following questions. Each carries five marks.**

**(Ceiling 30 Marks)**

13. What is SCP? Write examples, advantages and disadvantages.
14. Give an account on the structure of bacterial flagella and classification of bacteria based on flagellation.
15. List out the salient features of Mastigomycotina
16. Explain the role of fungus in agriculture.
17. Describe bioremediation with special reference to lichens.
18. Comment on the various levels of parasitism depending upon the nature of nutritional level.
19. Write down the causative organisms, symptoms and control measures of Koleroga of areca palm.

**SECTION C: Answer any one question. Each carries ten marks.**

20. Write an essay on the structure and reproduction of bacteriophages.
21. Explain the vegetative structure and reproductive methods of *Aspergillus*.

**(1 x 10 = 10 Marks)**