QP Code: P25DRIS011

Reg. No : .....

Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (CBCSS - PG) DEGREE EXAMINATIONS, NOVEMBER 2025

(Regular/Improvement/Supplementary)

M. Sc. Botany

BOT1C02 : Mycology and Lichenology, Microbiology and Plant Pathology

2024 Admission Onwards

Time: 3 Hours **Maximum Weightage: 30**

Part A

*Short answer type questions. Answer **any four**. Weightage **2** for each.*

(4x2 = 8 Weightage)

1. What is VAM? What role does it play in plant protection and nutrition?
2. What is the causative organism of Powdery Mildew disease of rubber? Describe the symptoms associated with the disease.
3. Write an account on seed pathology.
4. Determine the role of fungi played in the breakdown of pesticides.
5. What is Mycoplasma? Give the structural details?
6. Discuss the reproductive bodies seen in lichens.
7. Differentiate between the water and wind mediated transmission of plant diseases.

Part B

*Short essay-type questions. Answer **any four**. Weightage **3** for each.*

(4x3 = 12 Weightage)

8. Detail the various symptoms seen in plant diseases.
9. Describe the morphology, ultrastructure, and nutrition of Archaebacteria with a diagram.
10. Outline the classification of fungi by Ainsworth and Bisby (1983).
11. Describe the morphology, ultrastructure, and reproduction of Cyanobacteria.
12. Justify the significance of lichens as ecological indicators.
13. Analyze the various reproductive modes seen in fungi.
14. Briefly elaborate the role of microbial communities in soil fertility and nutrient cycling.

Turn Over

Part C

*Essay-type questions. Answer **any two**. Weightage **5** for each.*
(2x5 = 10 Weightage)

15. Discuss the mechanisms involved in the process of pathogenic infection in plants.
16. Describe the various types of plant and animal viruses with classification.
17. Compare and contrast the main features of Agricultural Microbiology with Industrial Microbiology.
18. Evaluate the various defence mechanism seen in plants.

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