

QP Code : P24A013

Reg. No :

Name :

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

I SEMESTER M.Sc. (CBCSS-PG) DEGREE EXAMINATION, November 2024

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** questions. Weightage 2 for each question*

1. What are lichens? Provide two uses of lichens. [BTL1]
2. What is rhizosphere? [BTL1]
3. What is the role of biocides in protection? [BTL1]
4. What are the different types of plant disease management strategies? [BTL3]
5. What are prions and viroids? [BTL4]
6. Explain mycorrhizial association. Compare ectomycorrhiza with endomycorrhiza. [BTL4]
7. Describe the distinctive features of viruses and their various types? [BTL4]

(4x2 = 8 Weightage)

Part B

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

8. List out and explain the toxins and enzymes that are involved in pathogenesis. [BTL4]
9. Discuss about the biotic and abiotic causes of plant diseases. [BTL4]
10. Discuss the role of biofertilizers and biopesticides in agricultural microbiology. [BTL4]
11. Outline the symptoms, causal organism and control measures of Bacterial Blight of paddy. [BTL3]
12. Elaborate on the classification of bacteria according to Bergey's manual. [BTL4]
13. Distinguish between fungal homothallism and heterothallism. [BTL1]

Turn over

14. What is a Plasmid? Give an account on different plasmids and their importance. [BTL3]

(4x3 = 12 Weightage)

Part C

Essay-type questions: Answer any two questions. Weightage 5 for each question

15. Examine the role of fungi as saprophytes in the decomposition of organic matter. [BTL2]

[BTL1]

16. Discuss the mechanisms involved in the process of pathogenic infection in plants.

17. Discuss the different symptoms of plant diseases with suitable examples. [BTL2]

18. Describe how industrial microbiology benefit in individual's life. [BTL5]

(2x5 = 10 Weightage)

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