

FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, NOVEMBER 2020

(CBCSS)

Botany

BOT IC 02—MYCOLOGY, LICHENOLOGY, MICROBIOLOGY AND PLANT PATHOLOGY  
(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

## General Instructions

1. In cases where choices are provided, students can attend all questions in each section.
2. The minimum number of questions to be attended from the Section / Part shall remain the same.
3. There will be an overall ceiling for each Section / Part that is equivalent to the maximum weightage of the Section / Part.

## Part A

Answer any four questions.  
Each question carries 2 weightage.

1. Write a note on ericoid mycorrhizae and orchid mycorrhizae.
2. Write a note on heterothallism in fungi
3. Give the general characteristics of myxomycota.
4. Explain the structure mycoplasma. What is their significance?
5. Write a note on biocides in plant protection.
6. Distinguish between archaeobacteria and eubacteria.
7. Describe the fine structure of T4 Phage with the help of a diagram.

(4 × 2 = 8 weightage)

## Part B

Answer any four questions.  
Each question carries 3 weightage.

8. What are bacteriophages? Discuss in brief their morphology and replication.
9. Write a note on microbiology of fermented food.

Turn over

10. Briefly describe the role of microbes in sewage disposal.
11. Give the salient features of cyanobacteria and add a note on their economic importance.
12. Describe the morphology of thallus structure of lichens.
13. What are the different types of zoospore found in mastigomycotina ?
14. Give an account on : (a) Sclerotia. (b) Mycelial strands. and (c) Rhizomorphs.

(4 × 3 = 12 weightage)

### Part C

Answer any **two** questions.

Each question carries 5 weightage.

15. Give a detailed account on the symptoms, causal organism, disease cycle and control measures of powdery mildew and abnormal leaf fall of rubber.
16. Explain the classification of fungi by Alexopoulos and describe the characters of major groups.
17. What are the general characters of Ascomycetes ? Give an account on their economic importance.
18. Give an account on the production of : (a) Antibiotics ; (b) Organic acids and (c) Vitamins.

(2 × 5 = 10 weightage)