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MSCBOT-501

Fungi, Lichens, Viruses and Bacteria M.Sc. Botany (MSCBOT)

1st Semester Examination June, 2024

Time: 2:00 Hrs. Max. Marks: 70

Note:— This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

(Long Answer Type Questions) 2×19=38

Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

Learners are required to answer any two (02) questions only.

- Define structure, nutrition and economic importance of bacteria.
- 2. What are sac fungi? Give their salient features and explain their life cycle pattern with suitable diagrams.
- 3. What is heterothallism? Give detailed account of heterothallism in fungi studied by you.
- Describe the forms and structure of lichens. Give detailed account of morphology, classification and sexual reproduction in lichens.
- 5. What do you understand by fruiting bodies? Describe various sexual fruiting bodies found in fungi.

Section-B

(Short Answer Type Questions) 4×8=32

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- 1. Explain the role of the fungi in treatment of industrial effluents and bioremediation.
- 2. Write a note on seed borne fungi.

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- 3. Write short notes on any two of the following:
 - (a) Fungal nutrition
 - (b) Fungi as biocontrol agents
 - (c) Structure of virus
- 4. Briefly describe the salient features of actinomycetes.
- 5. Give a brief note on Mycoplasma.
- 6. Describe different methods of sexual reproduction in fungi.
- 7. Write a brief account of economic importance of lichens.
- 8. Differentiate between any two of the following fungi:
 - (a) Late blight and Early blight disease
 - (b) Powdery mildews and Downey mildews disease
 - (c) Loose smut and Covered smut
