

**A-0010**

**Total Pages : 3**

**Roll No. ....**

**MSCBOT-501**

**M.Sc. BOTANY (MSCBOT)**

**(Fungi, Lichens, Viruses and Bacteria)**

**1st Semester Examination, Session December 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.*

1. Give a detailed account on genetic recombination of bacteria.
2. Mention the characteristics features of Mastigomycotina. Describe the vegetative structure and reproduction of *Synchytrium*.
3. Write explanatory note on the followings :
  - (a) mode of nutrition in fungi
  - (b) major groups of bacteria
  - (c) transmission of virus
4. Give a detailed account of the life cycle of Puccinia.
5. Discuss a brief account of the morphology, taxonomy and characteristics of Rickettsia. Describe the methods of transmission and economic importance of this group.

### **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. Highlight the role of fungi in medicine.

2. Write short notes on the following :
  - (a) sooredia
  - (b) isidia
  - (c) Dolipore septum
3. Explain the symptoms, causes and control measures of TMV.
4. Discuss economic importance of ascomycetes fungi in detail.
5. Describe the characteristic features of Actinomycetes.
6. Explain the importance of lichen in medicine and environmental monitoring.
7. Describe the development stages of basidiocarp with labelled diagram.
8. Give an account structure and reproduction in *Alternaria*.

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