Total Pages : 3

Roll No. .....

# **MSCBOT-501**

## FUNGI, LICHENS, VIRUSES AND BACTERIA

M.Sc. Botany (MSCBOT)

1st Semester Examination, 2023 (Dec.)

Time : 2 Hours]

### 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)

**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.

(2×19=38)

K-349/MSCBOT-501

- 1. What is parasexuality? Discuss various steps involved in the parasexual cycle in fungi.
- 2. Write an essay on economic importance of fungi.
- **3.** Describe the structure and mode of nutrition in bacteria. Give a detailed account of genetic recombination in bacteria.
- 4. What do you understand by fruiting bodies? Describe various sexual fruiting bodies found in fungi.
- **5.** Describe the structure of plant virus in detail. Discuss the various methods of transmission of plant viruses.

# SECTION-B

# (Short Answer Type Questions)

- **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. (4×8=32)
- 1. Give a brief account of any *two* of the following fungi :
  - (a) Fusarium.
  - (b) *Colletotrichum*.
  - (c) Synchytrium.

### K-349/MSCBOT-501 [2]

- 2. Differentiate between any *two* of the following :
  - (a) Cleistothecium and Apothecium.
  - (b) Ascus and Basidium.
  - (c) Hypertrophy and Hyperplasia.
- 3. Briefly describe the thallus organization in Chytridales.
- **4.** Give a brief account on structure and multiplication of bacteriophage.
- 5. What do fungi prefer asexual reproduction? Give a general account of asexual reproduction in fungi.
- 6. Discuss the salient features of mycoplasma. Draw a well labelled diagram of a typical mycoplasma cell.
- 7. Write a detailed note on role of Bacteria in agriculture.
- 8. Briefly describe the economic importance of Lichens.