Total Pages : 3

Roll No.

BOT-501

Biology and Diversity of Viruses, Bacteria and Fungi

M.Sc. Botany (MSCBOT)

1st Year Examination, 2022 (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.

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)
- **1.** What are viruses? Write a detailed note on the transmission of plant viruses.

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- 2. What do you understand by the genetic recombination in bacteria? Discuss the different methods of genetic recombination in bacteria.
- 3. Give a general account on the origin and phylogeny of fungi.
- 4. Describe how ascus develops in ascomycetes? Explain about ascosporogenesis and types of ascocarp in sac fungi.
- 5. Describe the economic importance of bacteria in detail.

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. Write a brief note on the types of nucleic acids present in different viruses.
- 2. What are archaebacteria? Describe the various major groups of archaebacteria.
- **3.** Write a short note on mycotoxins.
- **4.** What is mycoplasma? Highlight its characteristic features in brief.
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- 5. What do you understand by thallus? Describe in brief about the various forms of thallus occur in fungi.
- 6. Briefly describe the hetrothallism in fungi.
- 7. Write a short note on mycorrhizae.
- 8. Discuss the nutritive value of edible mushrooms.