## C071

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# **MBOT-603**

## **Applied Mycology**

M.Sc. BOTANY (MSCBOT)

3rd Semester Examination, 2022 (June)

Time: 2 Hours] Max. Marks: 40

**Note:** This paper is of Forty (40) 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 Ten (10) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 10 = 20)$ 

- 1. Describe the different modes of reproduction in fungi.
- **2.** Give a detailed account of medicinal and nutritional values of edible mushrooms.

- 3. Discuss about production of organic acids and antibiotics.
- **4.** Give an account on different criteria used in the classification of fungi.
- **5.** Give a detailed account on role of fungi in detoxification and fungal enzymes.

#### SECTION-B

## (Short Answer Type Questions)

**Note:** Section 'B' contains Eight (08) short answer type questions of Five (05) marks each. Learners are required to answer any Four (04) questions only. (4×5=20)

- 1. Discuss briefly the industrial importance of fungi.
- **2.** Define the terms "fermentation" and "fermenter". Give an account of conditions required in fermenter for the growth of microorganisms.
- **3.** Write a short note on any *two*:
  - (a) Vitamins.
  - (b) Applications of Mycorrhizae.
  - (c) RAPD & RFLP.
- **4.** Explain about scope of Fungal Biotechnology.

- **5.** Describe the following :
  - (a) Thallus organization in fungi.
  - (b) Cell and cell wall structure in fungi.
- **6.** Give a brief account on the diversity of fungal habitats.
- **7.** Write a short note on bioremediation of waste water and sewage treatment.
- **8.** Describe the role of fungi in degradation of hydrocarbons.