C065

Total Pages : 3

Roll No.

MBOT-506

Biology and Diversity of Fungi

M.Sc. BOTANY (MSCBOT-20)

2nd 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 ultra structure of a fungal cell.
- **2.** Explain various modes of vegetative and asexual reproduction in fungi with the help of labelled diagrams.

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- **3.** Write briefly about the somatic structure and sexual reproduction of members of Ascomycotina.
- **4.** Explain the fungi as biocontrol agents.
- 5. Briefly write about the reproduction in Deuteromycotina.

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.** Write a note on Biofertilizers.
- **2.** Describe the following :
 - (a) Hyphal growth.
 - (b) Nacrotrophs & Biotrophs.
- **3.** Discuss the chemical composition of fungal cell wall.
- 4. Describe different types of nutrition in fungi in detail.
- 5. Write a short note on any *two* :
 - (a) Chlamydospore.
 - (b) Applications of Citric acids.
 - (c) Plant Growth Promoting Rhizobacteria (PGPR).

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- **6.** What are Mycorrhiza ? Explain the advantages of mycorrhizal application to the field crops.
- 7. Explain about heterothallism.
- **8.** Discuss briefly about fungal food.