K-368

Total Pages: 3 Roll No.

MBOT-506

Biology and Diversity of Fungi

M.Sc. Botany(MSCBOT)

2nd Semester Examination, 2023 (Dec.)

Time: 2 Hours] [Max. Marks: 35

Note: This paper is of Thirty Five (35) 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

(2×9½=19)

- **1.** Give a detailed account on different types of nutrition in fungi.
- **2.** Describe characteristics and classification of Deuteromycotina.
- **3.** What are Fungi? Give an account of recent trends in classification of fungi. Explain the composition of cell wall with the help of suitable diagram.
- **4.** What do you understand by mycorrhiza discuss in detail. Explain the advantage of mycorrhizal application to the field crop.
- **5.** Write an essay on biofertilizers.

SECTION-B

(Short Answer Type Questions)

Note: Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)

- 1. Mention the different types of harmful activities of fungus.
- **2.** What are the different types of fungal infections?

- **3.** Write a short note on mycoherbicides.
- **4.** Write a short note on the production of citric acid. Write the application of citric acid also.
- **5.** What is parasexuality. Draw the parasexual cycle as observed in *Aspergilus nidulans*.
- **6.** Describe the different types of life cycles in fungi.
- **7.** Differentiate the following:
 - (a) Ascocarp and Basidiocarp.
 - (b) Autotrophic and Heterotrophic fungi.
- **8.** Write a brief note about hyphal growth.