

**A-0026**

Total Pages : 3

Roll No. ....

**MBOT-502**

**M.Sc. BOTANY (MSCBOT)**

**(Biology and Diversity of Algae)**

1st Semester Examination, Session December 2024

Time : 2:00 Hrs.

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)     2×9½=19**

*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.

- Q. 1. What are the principle criteria used to classify the algae ? Give a detailed account of the classification of algae proposed by Smith.
- Q. 2. Discuss in detail the various patterns of life cycles found in Algae.
- Q. 3. Discuss the structure and reproduction in *Oedogonium* with a well-labeled diagram.
- Q. 4. Give the salient features of Phaeophyta and discuss *Ectocarpus* with a labeled diagram.
- Q. 5. Discuss how algae are useful and harmful to us.

### **Section–B**

**(Short Answer Type Questions)      4×4=16**

**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.

- Q. 1. Write a short note on vegetative reproduction in algae.
- Q. 2. Describe *Volvox* with a well-labeled diagram of its life cycle.

- Q. 3. Give a brief note on diatoms.
- Q. 4. Briefly discuss the range of thallus structure in algae.
- Q. 5. Describe asexual reproduction in *Vaucheria*.
- Q. 6. Why blue-green algae are considered primitive of all the algae ?
- Q. 7. Describe the structure of the thallus and sexual reproduction in the *Fucus*.
- Q. 8. What are tetrasporophytes ? How do they differ from carposporophytes ?

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