

**K-878**

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[Roll No. ....]

**BOT-502**

**M.Sc. (MSCBOT) Ist Semester  
Examination Dec., 2023**

**BOTANY**

**Biology and Diveristy of Algae, Bryophyte and  
Pteridophya**

**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 there in. 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**      2×19=38

*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.

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( 1 )

P.T.O.

1. Describe in detail the different types of thallus organization in Algae.
2. What are Bryophytes ? Discuss general characters, classification and economic importance of Bryophytes.
3. What is sterlar theory ? Discuss types of steles in detail.
4. Describe the classification of algae given by F.E. Fritsch.
5. Describe structure and reproduction of *Vaucheria* with diagram.

### **Section–B**

#### **Short Answer Type Questions**      4×8=32

**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.

1. Discuss general characters of Xanthophyceae.
2. Write a short note on vegetative reproduction in Algae.
3. Discuss about the cell structure of *Nostoc*.
4. Differentiate between the following :
  - (i) Apogamy and Apospory
  - (ii) Haplobiontic and Diplobiontic life cycle in Algae

5. Write a short note on external morphology of *Rhynia*.
6. Give a brief note on economic importance of Algae.
7. Discuss about the life cycle of *Marchantia*.
8. Differentiate Pteridophytes with Gymnosperms.

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