

K-350

Total Pages : 3

Roll No.

MSCBOT-502

Algae and Bryophytes

M.Sc. Botany (MSCBOT)

1st Semester Examination, 2023 (Dec.)

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 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 Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

(2×19=38)

1. What is isomorphic alternation of generation? Explain in terms of the life cycle of *Ectocarpus*.
2. Give a detailed account on the thallus variation and reproduction exhibited by members of Phaeophyceae.
3. Write critical notes on the following :
 - (a) Sporophyte of *Polytrichum*.
 - (b) Life cycle of *Funaria*.
4. Describe the development of Antheridium and Archegonium in *Funaria*.
5. Write a detailed account on any *two* of the following :
 - (a) General account of Xanthophyceae.
 - (b) Range of Thallus organization in Algae.
 - (c) Fossil Algae.

SECTION-B
(Short Answer Type Questions)

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. (4×8=32)

1. Describe mode of sexual reproduction in any member of Chlorophyceae with suitable diagram.

2. Give an account of classification of Bryophytes up to order levels.
 3. Describe the formation of daughter colonies in a coenobial algae through asexual reproduction.
 4. Write notes on :
 - (a) Bryophytes as amphibian among plant kingdom.
 - (b) Elater, elaterophore and pseudoelater.
 5. Give an account of range of photosynthetic apparatus and pigments among algae.
 6. Describe the sex organs and sexual reproduction in *Fucus*.
 7. Explain role of Peristome and its structure in *Polytrichum* in detail.
 8. Give a general account of *Takakiales*.
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