

S-36

Total Pages : 3

Roll No.

MBOT-507

Biology and Diversity of Bryophyta and Pteridophyta

M.Sc. Botany (MSCBOT)

2nd Semester Examination, 2022 (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.

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. Describe the various methods of reproduction in *Sphagnum*. With the help of well labelled diagram explain antheridial and archigonial development in *Sphagnum*.

2. Give an account on classification of bryophytes. Write the general characters of bryophytes and mention their economic importance also.
3. Discuss Telome theory in detail.
4. Describe the development of gametophyte in *Selaginella* and compare it with that of *Lycopodium*.
5. Discuss any two fossil Pteridophytes in detail along with well labelled diagrams.

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. Draw a labelled diagram of Stellar system in pteridophytes.
2. What is Heterospory? Write a short note on origin of Heterospory.
3. Write a general account of Jungermanniales.
4. Write the similarities and dissimilarities between Bryophytes and Pteridophytes.

5. Write short notes on any *four* of the following :
- (a) Apogamy.
 - (b) Apospory.
 - (c) Parthenogenesis.
 - (d) Gametophyte.
 - (e) Sporophyte.
6. Describe the structure of *Anthoceros*.
7. Write a short note on :
- (a) Reduction theory.
 - (b) Condensation theory.
8. Draw habit and T.S. of root of *Equisetum*.
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