C066

Total Pages : 3

Roll No.

MBOT-507

Biology and Diversity of Bryophyta and Pteridophyta

M.Sc. BOTANY (MSCBOT-201)

2nd Semester Examination, 2022 (June)

Time : 2 Hours]

Max. Marks : 40

Note : This paper is of Forty (40) 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 Ten (10) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 10 = 20)$

1. Write an essay on general characters of Bryophytes. Write the similarities and dissimilarities between Bryophytes and Pteridophytes.

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- 2. With the help of labelled diagram describe the various methods of reproduction in *Marchantia*.
- 3. Discuss sexual reproduction in *Anthoceros*.
- **4.** What is Heterospory? Write a note on different evidences regarding the origin of heterospory in pteridophytes.
- 5. Give a detailed account of Stelar evolution in pteridophytes.

SECTION-B

(Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Five (05) marks each. Learners are required to answer any Four (04) questions only. (4×5=20)
- 1. Write a note on economic importance of bryophytes.
- 2. Describe the life cycle of *Sphagnum*.
- **3.** Draw a well labelled diagram showing the successive stages in the development of antheridium in Jungermanniales.
- 4. Write short notes on the following (any five) :
 - (a) Sporophyte.
 - (b) Gametophyte.
 - (c) Uses of Sphagnum.

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- (d) Apospory.
- (e) Apogamy.
- (f) Parthenogenesis.
- (g) Fossil Pteridophyte.
- 5. Describe the external morphology of *Rhynia gwynne-vaughanii*.
- 6. What is overtopping and syngenesis.
- 7. Describe the external morphology of *Psilotum*.
- 8. Write a note on classification of pteridophytes.