

B.Sc. (CBCS Pattern) Semester-I  
**BO-02 - Botany Paper-II - Plant Diversity-II - Bryophyta, Pteridophyta,  
Gymnosperm and Paleobotany**

P. Pages : 2

Time : Three Hours



**GUG/S/25/11543**

Max. Marks : 50

- 
- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw well labelled diagram wherever necessary.

1. Write on:
- a) Range of thallus organization with respect to Morphology & Anatomy. 5
  - b) General characteristics of Bryophyta. 5
- OR**
- Write short notes on.
- c) Economic importance of Bryophyta. 2½
  - d) Thallus structure of Riccia. 2½
  - e) Classification of Bryophyta as per G. M. Smith. 2½
  - f) Adaption of Bryophytes to land habit. 2½
2. Write on:
- a) Early land Plant Rhynia. 5
  - b) Sexual reproduction in Equisetum. 5
- OR**
- Write short note on.
- c) Protostele 2½
  - d) T. L. S. of sporocarp Marsilea (diagram only) 2½
  - e) Economic importance of Pteridophyta. 2½
  - f) General characteristics of Pteridophyta. 2½
3. Write on:
- a) External Morphology of Cycas. 5
  - b) Economic importance of Gymnosperm. 5
- OR**
- Write short notes on.
- c) General characteristics of Gymnosperm. 2½
  - d) Classification Gymnosperms. 2½
  - e) L. S. Male Cone Pinus 2½
  - f) Coralloid root of Cycas. 2½

4. Write on:
- a) Glossopteris 5
  - b) Replacement theory & infiltration theory of fossilization. 5

**OR**

Write short note on.

- c) Petrification 2½
- d) Importance & significance of Paleobotany 2½
- e) Cycadeoidea 2½
- f) Paleozoic era 2½

5. Write **any ten** questions in one or two lines only (Diagram are not necessary) **1x10**  
**=10**

- a) Tuberculate rhizoids
- b) Homothallic species.
- c) Liverworts
- d) Homospory
- e) Ectophloic siphonostele
- f) Annalas
- g) Spur
- h) Algal zone
- i) Resin canal
- j) Birbal Sahani
- k) Impression
- l) Mesozoic era

\*\*\*\*\*