

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/W/23/11543**

Max. Marks : 50

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

1. Write a detail account on:

- a) Sexual reproduction in Riccia. 5
- b) General characters of Bryophytes. 5

**OR**

Write short notes on:

- c) Economic importance of Bryophyta. 2½
- d) T.S. of Riccia Thallus (Diagram only). 2½
- e) Classification of Bryophytes by GM smith (lass) outline only. 2½
- f) L.S. of Funaria capsule (Diagram only). 2½

2. Write a detail account on:

- a) General characters of pteridophytes. 5
- b) Types of stele in pteridophytes with suitable example. 5

**OR**

Write short notes on:

- c) Rhynia: External Morphology. 2½
- d) Equisetum : L.S. of strobilus (Diagram only). 2½
- e) Marsilea: HLS of sporocarp (Diagram only). 2½
- f) Economic importance of pteridophytes. 2½

3. Write a detail account on:

- a) General characters of gymnosperm. 5
- b) Structure of Cycas ovule. 5

**OR**

Write short notes on:

- |    |  |    |
|----|--|----|
| c) | Classification of gymnosperm by Sporne (Outline only). | 2½ |
| d) | Economic importance of gymnosperm.                     | 2½ |
| e) | External morphology of <u>Cycas</u> .                  | 2½ |
| f) | Pinus female cone.                                     | 2½ |

**4.** Write a detail account on:

- |    |                   |   |
|----|-------------------|---|
| a) | Types of fossils. | 5 |
| b) | Cycadeoidea.      | 5 |

**OR**

Write short notes on:

- |    |                                   |    |
|----|-----------------------------------|----|
| c) | Mesozoic.                         | 2½ |
| d) | Replacement theory.               | 2½ |
| e) | Contribution of Birbal Sahni.     | 2½ |
| f) | Glossopteris leaf (Diagram only). | 2½ |

**5.** Write **any ten** questions in one or two lines only (Diagrams are not necessary). **10**

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|-----------------------|---------------------|
| a) Monoecious.        | b) Liverworts.      |
| c) Trabeculae.        | d) Water fern.      |
| e) Tuber.             | f) Horsetail.       |
| g) Naked seed plants. | h) Coralloid roots. |
| i) Yellow shower.     | j) Epoch.           |
| k) Miocene.           | l) Paleobotany.     |

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