

**BACHELOR OF SCIENCE (CBCS-2018 COURSE)**  
**T. Y. B. Sc. Sem-VI :SUMMER- 2022**  
**SUBJECT : BOTANY : BIOLOGY OF HIGHER CRYPTOGAMS (BRYOPHYTES &**  
**PTERIDOPHYTES)**

Day : Saturday  
Date : 2/7/2022

**S-18478-2022**

Time : 11:00 AM-02:00 PM  
Max. Marks : 60

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate **FULL** marks.
  - 3) Draw neat and labelled diagram wherever necessary.
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- Q.1** Attempt **ANY TWO** of the following : **(12)**
- a) Describe sporophyte of *Polytrichum*.
  - b) Explain structure of *Lepidostobus*.
  - c) Give classification of Pteridophytes.
- Q.2** Attempt **ANY TWO** of the following : **(12)**
- a) Explain heterospory and seed habit.
  - b) Describe stelar evolution.
  - c) Give classification of Bryophytes.
- Q.3** Attempt **ANY TWO** of the following : **(12)**
- a) Give economic importance of Bryophytes.
  - b) Explain internal structure of *Lepidodendron*.
  - c) Describe synangia in *Psilotum*.
- Q.4** Attempt **ANY THREE** of the following : **(12)**
- a) Describe sporocarp of *Marsilea*.
  - b) Explain sporophyte of *Anthoceros*.
  - c) Describe process of fossil formation.
  - d) Give characters and significance of Pteridosperms.
- Q.5** Attempt **ANY FOUR** of the following : **(12)**
- a) Give morphology of *Adiantum*.
  - b) Explain vegetative reproduction in *Marchantia*.
  - c) Give morphology of *Lycopodium*.
  - d) Explain morphology of *Equisetum*.
  - e) Give characters of *Calamites*.
  - f) Explain structure of *Lepidocarpon*.

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