

**T.Y.B.SC. SEM – VI (2014 COURSE) : SUMMER - 2018**  
**SUBJECT: BOTANY: BIOLOGY OF HIGHER CRYPTOGAMES**  
**(Bryophytes and Pteridophytes)**

Day : **Tuesday**  
Date : **10/04/2018**

**S-2018-0764**

Time : **12.00 NOON TO 02.00 PM**  
Max. Marks: 40.

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate full marks.
  - 3) Draw neat labeled diagrams **WHEREVER** necessary.
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- Q.1** Attempt any **TWO** of the following: **(10)**
- a) Describe vegetative reproduction in *Anthoceros*.
  - b) Give external morphology of *Adiantum*.
  - c) Describe *Lepidocarpon* as a fossil Pteridophytes.
- Q.2** Attempt any **TWO** of the following: **(10)**
- a) Explain the sporophyte in *Polytrichum*.
  - b) Describe process of fossil formation in Pteridophytes.
  - c) Explain reproductive structures of *Lycopodium*.
- Q.3** Attempt any **TWO** of the following: **(10)**
- a) Explain stelar evolution with suitable examples.
  - b) Describe characters and significance in Pteridosperm.
  - c) Give external morphology of *Marchantia*.
- Q.4** Attempt any **FIVE** of the following: **(10)**
- a) What are fossils?
  - b) Give general outline of classification in Bryophytes with suitable examples.
  - c) What is heterospory? Give suitable examples.
  - d) Give economic importance of Bryophytes.
  - e) Enlist species of *Rhynia* fossil.
  - f) What is ecological importance of Bryophytes?
  - g) Give external morphology of *Equisetum*.

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