

**D 72929**

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Name .....

Reg. No.....

**FIRST SEMESTER M.A./M.Sc./M.Com. DEGREE EXAMINATION  
DECEMBER 2019**

(CBCSS)

Botany

**BOT 10 01—PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS**

(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

**Part A**

*Answer any four questions.*

*Each question carries 2 weightage.*

1. Explain the various terms used to refer life cycle patterns in Algae.
2. Describe the range of thallus structure in Rhodophyceae.
3. Give an account on the structure and fossil history of any two bryophytes belonging to different groups.
4. Discuss the role of Bryophytes as indicators of environmental pollution.
5. Describe the stelar organization in Psilotales, Lycopodiales, Isoetales and Equisetales. Draw suitable diagrams.
6. Mention the contributions of Indian Pteridologists.
7. List out the general characters of Pteridospermales and Pentoxylales.

(4 × 2 = 8 weightage)

**Part B**

*Answer any four questions.*

*Each question carries 3 weightage.*

8. Describe the mode of reproduction in Bacillariophyta.
9. Explain the relationship and evolutionary trends in Phaeophyta
10. Describe vegetative reproduction and perennation in liverworts and mosses, citing examples.
11. Write an account on apogamy, apospory and parthenogenesis in Pteridophytes.
12. Outline the classification of Pteridophytes by Holttum.

**Turn over**

13. Give an account on the distribution of Gymnosperms in India
14. Bring out the anatomical evolution in Gymnosperms.

(4 × 3 = 12 weightage)

### Part C

*Answer any two questions.*

*Each question carries 5 weightage.*

15. What are the criteria used in the classification of Algae? Write an account on Fritsch's classification with important characters of different classes.
16. Write an essay on the evolution of sporophytic generation in Bryophytes with the help of neat labelled diagrams.
17. Write a detailed account of the development and evolutionary trends in the gametophytes of Pteridophytes.
18. Discuss the economic importance of Gymnosperm in detail.

(2 × 5 = 10 weightage)