

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER 2008.

First Year

Botany

Paper I — BIOLOGY AND DIVERSITY OF ALGAE, BRYOPHYTES,
PTERIDOPHYTES AND GYMNOSPERMS

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

Each question carries 8 marks.

1. Frustule.
2. Myxophyceae.
3. Fossil bryophytes.
4. *Anthoceros*.
5. *Rhynia*.
6. Apospory.
7. Cones of gymnosperms.
8. *Welwischia*.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

9. (a) Write a detailed account on the economic importance of Algae.
Or
(b) Describe different life cycle patterns found in the members of Algae.
 10. (a) Give a comparative account of the gametophyte and sporophyte in Marchantiales and Bryales.
Or
(b) Describe in detail the spore dispersal mechanism in Bryophytes.
 11. (a) Give an account of aquatic Pteridophytes.
Or
(b) What is sorus? Discuss its evolutionary trend in Pteridophytes.
 12. (a) Write an essay on fossil gymnosperms.
Or
(b) What are the salient features of Gnetales? Discuss their evolutionary significance.
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