

First Year

Botany

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

Time : Three hours  
100 marks

Maximum :

Answer any FIVE questions from Section A.

Each question carries 8 marks.

Answer ALL questions from Section B.

Each question carries 15 marks.

SECTION A — (5 × 8 = 40 marks)

1. Heterocyst.
2. Auxospore formation.
3. Anthoceras.
4. Archegoniophore.
5. Rhynia.
6. How pteridophytes are more evolved over bryophytes?
7. Caytonia.
8. Wood of coniferales.

SECTION B — (4 × 15 = 60 marks)

9. (a) Describe reproduction and life cycle in Algae.  
Or  
(b) Write an account on the thallus organisation in phaeophyta.
10. (a) Describe the general characters and range of thallus in bryophytes.  
Or  
(b) Describe the evolution of sporophyte in bryophytes.
11. (a) Describe heterospory and seed habit in pteridophytes.  
Or  
(b) Write an account on the classification of pteridophytes.
12. (a) Describe the evolutionary tendencies in the female gametophyte of gnetales.  
Or  
(b) Write an account on the distribution and classification of gymnosperms.