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

First Year

Botany

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

Time: Three hours Maximum: 100 marks

SECTION A — $(5 \times 8 = 40 \text{ marks})$

Answer any FIVE questions.

Each question carries EIGHT marks.

- 1. Desmids.
- 2. Algae as bio-fertilizer.
- 3. Spagnum.
- 4. Archigoniophore.
- 5. Psilotum.
- **6.** Apogamy.
- 7. Corollorhiza.
- 8. Ephedra.

SECTION B — $(4 \times 15 = 60 \text{ marks})$

Answer ALL questions.

Each question carries 15 marks.

9. (a) Give an account of the reproduction in Rhodophycease.

 \mathbf{Or}

- (b) Describe the thallus evolution in the members of chlorophyceae.
- **10.** (a) Discuss the evolution of sporophyte in Bryophytes.

 \mathbf{Or}

- (b) Describe the origin of Bryophytes and discuss their relationship with other group of plants.
- 11. (a) Write an essay on heterospory and seed habit.

- (b) Discuss the stelar evolution in pteridophytes.
- **12.** (a) Give a comparative account of sporophyte in living Gymnosperms.

 \mathbf{Or}

(b) Describe the salient features of Gnetales and add a note on their evolutionary significance.