

**(DBOT 01)**

**M.Sc. (Previous) DEGREE EXAMINATION,  
DECEMBER 2009.**

**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 of the following.**

1. Heterocyst.
2. Nostac.
3. Rhizoids.
4. Leafy Liver Wort.
5. Ligules.
6. Isoetes axis.
7. Leaf structure of caytoniales.
8. Fossils in cycadales.

**SECTION B — (4 × 15 = 60 marks)**

**Answer ALL questions.**

9. (a) Discuss Thallus structure in Chlorophyta and its classification.

**Or**

- (b) A detail account of Life cycles in Rhodopyta.

10. (a) Discuss about the reproduction in Jugermanniales.

**Or**

(b) Write about the Gametophyte in Mosses.

11. (a) Give a detailed account of Soral Evolution in Pteridophytes.

**Or**

(b) Write about the detail account of Ophioglossales.

12. (a) Narrate in detail about the reproduction and Economic importance of coniferales.

**Or**

(b) Write about the differences between female gametophyte of Caytoniales and Gnetales.

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