(DBOT 01)

$\begin{array}{c} {\rm M.Sc.~(Previous)~DEGREE~EXAMINATION,} \\ {\rm DECEMBER~2010.} \end{array}$

First Year

Botany

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

Time: Three hours Maximum: 100 marks

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

Answer any FIVE questions.

- 1. Role of Blue Green algae in Agriculture.
- 2. Nucule.
- 3. Apospory and Apogamy.
- 4. Types of vascular bundles in Lycopodium.
- 5. Capsule in Anthoceros.
- 6. Lepidocarpon.

- 7. Ephedra stem.
- 8. Cycas corolloid roots.

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

Answer ALL questions.

9. (a) Give an account on economic importance of algae.

Or

- (b) Discuss the thallus organization in algae.
- 10. (a) Give a brief account of the life history of Polytrichum.

Or

- (b) Discuss the evolution of sporophyte in bryophytes.
- 11. (a) Give details of classification of pteriodophytes along with salient features of pteridophytes.

Or

(b) Write an essay on heterspory and seed habit.

2 (DBOT 01)

12. (a) Write an essay on evolution of Gymnosperms.

Or

(b) Discuss the variations in the structure of female gametophyte in gymnosperms.

(DBOT 01)