M.Sc. (Previous) DEGREE EXAMINATION, MAY 2009.

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 of the following

Each question carries 8 marks.

- 1. Life cycle of Charyophyta.
- 2. Fossil Algae.
- 3. Female gametophyte of Targionia.
- 4. Archegoniophore in Marchantia.
- **5.** Eusporangium.
- **6.** Apospory.
- 7. Bennettites.
- 8. Economic importance of Gymnosperms.

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

Answer ALL questions.

Each question carries 15 marks.

9. (a) Role of pigments in the classification of Algae.

 \mathbf{Or}

- (b) Significant role of Cynophyceae in present day Agriculture and Industry.
- 10. (a) Detail account of evolution in the reproduction pattern of Bryopsida.

 \mathbf{Or}

(b) Differentiate Hepaticopsida and Bryopsida Thallus structures.

11. (a) Evolution in Vascular system of Pteridophytes.

Or

- (b) Give a detail account of Psilotopsida and its Fossil records.
- 12. (a) Discuss the evolution among Gnetales.

Or

(b) Give a detail account of classification of Gymnosperms.

(DBOT 02)

M.Sc. (Previous) DEGREE EXAMINATION, MAY 2009.

First Year

Botany

Paper II — SYSTEMATICS OF ANGIOSPERMS AND PLANT ECOLOGY

Time: Three hours Maximum: 100 marks

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

Answer any FIVE of the following.

Each question carries 8 marks.

- 13. Besseyan order relationship.
- 14. Thorne.
- **15.** Chromosomal structure.
- 16. Intraspecific ranks.
- 17. Ecological Niche.
- 18. Atmospheric Nitrogen fixation.
- 19. Earth summit.
- 20. Solar thermal energy.

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

Answer ALL questions.

Each question carries 15 marks.

2 (DBOT 01)