

**(DBOT 02)**

M.Sc. DEGREE EXAMINATION, MAY 2011.

First Year

Botany

Paper II — SYSTEMATICS OF ANGIOSPERMS AND  
PLANT ECOLOGY

Time : Three hours

Maximum : 100 marks

SECTION A — (5 × 8 = 40 marks)

Answer any FIVE questions.

Each question carries 8 marks.

1. Vegetations types in India.
2. Natural system of classification.
3. Binomial nomenclature.
4. Taxonomic categories.
5. Ecosystem concept.
6. General factors for regulation of populations.
7. Cause of Heavy metal pollution.
8. Endemism.

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

Answer ALL questions.

Each question carries 15 marks.

9. (a) Describe Huchnisons classification system and elaborate its merits and demerits.

Or

- (b) Compare and contrast natural and phylogenetic classification systems, which one should be preferred and why.

10. (a) Write an essay on different criterion for classification and evolution of taxonomic categories critically.

Or

- (b) Write an essay on the importance of cytology and photochemistry in taxonomy. Also elaborate, how the recent developments in molecular biology can be helpful in arriving at a better phylogenetic classification.

11. (a) Write an essay on carbon cycle, and critically discuss the contribution of global warming in modifying the carbon cycle.

Or

- (b) Write an essay on succession in plant communities. Critically discuss the concept of climax.
12. (a) Write an essay on environmental pollution, critically discuss the various approaches for bioremediation.

Or

- (b) Write an essay on floristic regions of the world.
-