

Exam. Code : 210003

Subject Code : 4870

M.Sc. (Botany) Semester—III

DIVERSITY AND BIOLOGY OF ANGIOSPERMS

Paper—BOT-C 611

Time Allowed—3 Hours]

[Maximum Marks—50

SECTION—A

Note :—Attempt **all** parts. Answer to any part should not exceed 4 lines. 8×1=8

1. (a) Define Phylogeny.
- (b) Chemotaxonomy
- (c) Important herbaria of the world
- (d) GIS
- (e) Polyploid complexes
- (f) Plant invasions
- (g) Endemism
- (h) Hotspots of biodiversity.

SECTION—B

Note :—Attempt any **SEVEN** parts. Answer to any part should not exceed 2 pages. 7×3=21

2. Discuss the salient features of numerical taxonomy.
3. Write a concise note on plant explorations.

4. Give the principles of Hutchinson's system of classification of angiosperms.
5. Explain in brief the role of herbarium and flora in taxonomy.
6. Discuss in brief about the historical perspective of plant classification.
7. Define modern taxonomy. Discuss in brief various anatomical features used in taxonomy.
8. Discuss the phylogeny of Amentiferae and their treatment in modern system of classification.
9. Discuss the socio-economic importance of biodiversity.
10. Explain in brief about the various factors which determine the type of vegetation.
11. Give the salient features of Engler and Prantl's system of classification.

SECTION—C

Note :—Attempt any **THREE** parts. Answer to any part should not exceed 4 pages. $3 \times 7 = 21$

12. Explain the salient features of ICBN covering principles, priority, typifications, ranks of taxa and author citation.
13. Explain the following :—
 - (a) Cytotaxonomy
 - (b) Phylogenetic trees.

14. Define phylogenetic system of classification. Discuss the salient features and merits and demerits of Cronquist's system of classification.
15. Write notes on :—
 - (a) Biosystematics approaches in taxonomy
 - (b) Inter-relationships of dicots and monocots.
16. Enlist the phytogeographical regions of World. Explain about phytogeographical regions of India.