Botany (P.G.)
[CBCS]
M.Sc. Second Semester End Examination-2024
(Regular & Supplementary Paper)
PAPER- BOT-201
[Plant Taxonomy and Biosystematics]

Full Marks: 40   *Time: 02 Hrs*

The figures in the right hand margin indicate marks.
Candidates are required to give their answers in their own words as far as practicable.
*   *Illustrate the answers wherever necessary.*

Group-A

1. Answer any four question from the followings: 4x2=8

   a) Name two major herbaria of the world in terms of collection size.

   b) Define acronym. Cite exemples.

   c) What is basionym?

   d) What is PhyloCode?

   e) Explain the difference between floristic and revisionary study.

   f) What are Eudicots?

   g) When and where was the 1st International Botanical Congress held?

h) Name two primitive orders of Angiosperms according to APG IV system of classification?

Group-B

2. **Answer any four questions from the following:** 4x4=16

a) What type of botanical names are rejected by the ICN? Explain with examples.

b) What do you understand by Ethnobotany? Mention two plants that have ethnobotanical importance. [2+2]

c) Write a short note on palaeoherbs.

d) Write briefly about features of Magnolidae. .

e) What are the different methods of controlling pest in herbarium?

f) Explain the different levels of biodiversity. What are the causes of biodiversity loss? [2+2]

Group -C

3. **Answer any two questions of the following:** 2x8 = 16

a) What is Biosystematics and how is it different from traditional taxonomy? Explain with examples how cytology and phytochemistry has been used to resolve taxonomic problems. [4+4]

b) Explain the difference between artificial system, natural system and phylogenetic system of classification with

examples. Discuss the different types of taxonomic literature and explain their importance. [4+4]

c) Give an outline classification of Cronquist (1988) upto sub-uasses. Discuss its merits and demerits [5+2+1]

d) What is Numerical taxonomy and what are the principles of numerical taxonomy? Differentiate between phenogram and cladogram. What is Similarity Index and how is it used for constructing a phenogram? [3+2+3]