204/Bot. 22-23 / 21354

P.G. Semester-II Examination, 2023 BOTANY

Course ID: 21354 Course Code: BOT204C(T)

Course Title: Taxonomy of Angiosperms

Time: 2 Hours Full Marks: 30

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **four** of the following questions:

 $1\times4=4$

- a) What is Beta taxonomy?
- b) What do you mean by rules of priority in nomenclature of a taxon?
- c) What is cladogram?
- d) Define taxonomic hierarchy.
- e) Mention any two primitive features of the family Alismaceae(= Alismataceae).
- f) Where was the last IBC held? In chronological order mention its number.
- g) What are vicariads?

- h) Write the meaning of APG-III in plant classification.
- 2. Answer any **two** of the following: $5 \times 2 = 10$
 - Define Biosystematics. Write the different steps of biosystematic study. 2+3=5
 - b) Write down the importance of Botanical Survey of India (BSI) in taxonomic studies. Name one Botanic garden in India of International repute.

 4+1=5
 - c) What is numerical taxonomy? Describe the different steps involved in numerical taxonomy. 2+3=5
 - d) What are nomenclatural types? Describe the different situations lead to rejection of a name of a taxon. 1+4=5
- 3. Answer any **two** of the following: $8 \times 2 = 16$
 - a) What is a species? Briefly discuss the different concepts of a species. 2+6=8
 - b) What are the objectives of phytogeographic studies? Distinguish between static and dynamic approaches of phytogeography. State the theory of tolerance of Good to explain the distribution of plants.

 2+4+2=8

- c) Why is Centrospermae considered as a natural taxon? Give a taxonomic treatment and evolutionary trend of this taxon. 2+6=8
- d) Write the general features of Glumiflorae. Give a critical review of this taxon. 3+5=8
