

B.Sc./4th Sem (H)/BOT/24(CBCS)

2024

4th Semester Examination BOTANY (Honours)

Paper: C 9-T

(Ecology and Phytogeography)

[CBCS]

Full Marks: 40

Time: Two Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

Group - A

Answer any five questions:

 $2 \times 5 = 10$

- 1. What do you mean by hygroscopic water?
- 2. Which of the ecological pyramid is inverted and why?
- 3. What is parapatric speciation? Why it named so?
- 4. What is 'standing crop'?
- 5. Name any unidirectional model of energy flow.
- 6. Why denitrification process is a key step in Nitrogen cycle?

P.T.O.

- 7. What do you know about 'keystone' species? Give an example.
- 8. What is commensalism? Give an example.

Group - B

Answer any *four* questions: $5 \times 4 = 20$

- 9. Briefly describe phosphorus cycle with diagram. Mention two importance of phosphorus cycle.
- 10. State the role and types of physical and chemical factors of soil.
- 11. Describe the ecotone zone of desert and sea ecosystem.
- 12. State a secondary succession with proper example.
- 13. With proper example describe the process of a sympatric speciation with example.
- 14. What is endemism describe with an endemic area?

Group - C

Answer any *one* question : $10 \times 1 = 10$

- Describe a tropical biome with it's proper features. Differ primary and secondary succession.
- 16. Define phytogeography. Who first coined this term? 1+1+6+2