

B.Sc. Semester-IV Examination, 2022-23**BOTANY**[Honours]

Course ID : 41312 Course Code : SH/BOT/402/C-9

Course Title : Plant Ecology & Phytogeography

Time : 1 Hour 15 Minutes Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I**1. Answer any **five** questions from the following:

1×5=5

- What is ecotone?
- Define commensalism.
- What is detritus food chain?
- What is ecological niche?
- Differentiate between autecology and synecology.
- Define hekistotherm.
- What is Allopatric speciation?
- Mention any two biological hotspots in India.

UNIT-II2. Answer any **two** of the following questions:

5×2=10

- Briefly describe any two theories regarding the origin of endemic plant. $2\frac{1}{2}+2\frac{1}{2}=5$
- Explain with examples the different types of ecological pyramids. 5
- Define 10% law. Distinguish between food chain and food web. 1+4=5
- Describe vegetation of Sunderban with examples. 5

UNIT-III3. Answer any **one** of the following questions:

10×1=10

- Describe with suitable cyclic representation of Phosphorus cycle in nature. Why it is called incomplete cycle? 8+2=10
- Give the difference between primary succession and secondary succession. Describe different stages of succession in Hydrosere with examples. 3+7=10
