

U.G. 4th Semester Examination - 2022**BOTANY****[HONOURS]****Course Code : BBOTCCHC402****Course Title : Plant Ecology and Phytogeography**

Full Marks : 30

Time : 2 Hours

*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 **ten** of the following questions:

1×10=10

- a) What is biosphere?
- b) What do you mean by megatherms plants?
- c) What is microclimate?
- d) Define hygroscopic water.
- e) What is biomagnification?
- f) Define Ecotone.
- g) Give an example of submerged hydrophytes.

- h) What do you mean by autogenic succession?
- i) What is biomass?
- j) What is standing crop'?
- k) What do you mean by commensalism?
- l) What is echard?
- m) Give an example of parasitism.
- n) What is food web?
- o) Give an example of endemic plant.

2. Answer any **five** from the following questions:

2×5=10

- a) Define apex consumers.
- b) Write two ecological adaptations of halophytic plants.
- c) Give one example of nitrifying and denitrifying bacteria.
- d) How habitat niche differ from the trophic niche?
- e) Mention the role of phytoplankton in hydrosere.
- f) What do you mean by biodiversity hotspots?
- g) Why energy flow is always unidirectional?
- h) What do you mean by detritus food chain?

3. Answer any **two** from the following questions:

5×2=10

- a) Describe with suitable diagram various morphological and anatomical adaptations of Xerophytes. Which type of plant shows vivipary? 4+1
 - b) What is Ecotypes? Describe the various stages of hydrosere type of succession. 1+4
 - c) Describe the master horizons of soil profile. Define pedon. 5
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