

U.G. 4th Semester Examination - 2021**BOTANY****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) Define endemism.
- b) What do you mean by biological hotspot?
- c) What is water table?
- d) Define standing state.
- e) What do you mean by hypervolume niche?
- f) Define thermocline.
- g) What do you mean by keystone species?
- h) What is natality?

- i) What is ecad?
- j) Name one tropical biome.
- k) Define allelopathy.
- l) Define synecology.
- m) What do you mean by commensalism?
- n) Give an example of a rooted-submerged hydrophyte.
- o) What do you mean by pedogenesis?

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

2×5=10

- a) Distinguish between r- and k- selected species.
- b) Write the role of decomposer in an ecosystem.
- c) What do you mean by polyclimax theory?
- d) Distinguish between alluvial soil and eolian soil.
- e) What is ecological efficiency?
- f) Differentiate between allopatric and parapatric speciation.
- g) What is the law of tolerance?

h) What do you mean by continental drift?

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

5×2=10

a) Give an account on the vegetation of Indian Sundarbans.

b) With the help of a diagram explain briefly various stages of a Hydrarch succession.

c) What is biogeochemical cycle? Mention the role of forest and ocean in cycling carbon.

1+4
