573/Bot UG/4th Sem./BOT-H-CC-T-09/21 U.G. 4th Semester Examination - 2021 BOTANY [HONOURS]

Course Code : BOT-H-CC-T-09

Full Marks : 20 Time : 1 Hour

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 **five** of the following questions:

 $1 \times 5 = 5$

- a) With a flow chart indicate level of organization of biotic components in ecosystem.
- b) Differentiate between soils of barren land and denuded land.
- c) How does precipitation in high altitude differ from lower altitude?
- d) Explain adaptation by mentioning fitness of a species, natural selection, and gene pool.
- e) Define successional species.

- f) Differentiate between resistance and resilience of a plant community.
- g) Define biogeochemical cycle.
- h) Mention the causes of confinement of a biotic and ecological unit.
- 2. Answer any **one** of the following questions: $5 \times 1=5$
 - a) Write a short note on vertical stratification of soil profile in arid zone.
 - b) With suitable examples write the roles of soil moisture in distribution of species across the biomes.
 - c) Briefly discuss about why edges of plant communities are both structural and functional units.
- 3. Answer any **one** of the following questions: $10 \times 1=10$
 - a) Define meta-population. In comparative manner, discuss about early and late successional species considering their morphology, phenology and life history strategies. 2+(2+2+4)=10

[Turn Over]

573/Bot

 b) Define plant community. In brief discuss about measureable attributes of a plant community. Do climax communities really occur?

2+6+2=10

c) What is meant by Continental drift? How continental drift helps in disjunction of angiosperm? Name two disjunct angiosperm taxa. 2+6+2=10