

U.G. 4th Semester Examination - 2021

Environmental Science

[HONOURS]

Course Code : ENVS-H-CC-L-08

(Biosystematics and Biogeography)

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** from the following: $1 \times 5 = 5$

- a) Define formal taxonomy.
- b) What is an ecospecies?
- c) Define genecology.
- d) What is Alpha diversity?
- e) What is convergent evolution?
- f) Define co-adaptation.
- g) What is mutation?

2. Answer any **one** from the following: $5 \times 1 = 5$

- a) Explain the scope of biosystematic study.

b) Give a brief account of classification system of Bentham and Hooker.

c) Write a short note on ecological diversification.

3. Answer any **one** from the following: $10 \times 1 = 10$

a) What is molecular systematics? Explain briefly the operational taxonomic units. What is DNA bar coding? $3+4+3$

b) Explain briefly the rules followed in zoological nomenclature. What is Angiosperm Phylogeny Group (APG – III) of classification? $5+5$

c) What is bio-geographical dynamics? Briefly explain the bio-geographical realms and their fauna. $3+(4+3)$
