U.G. 3rd Semester Examination-2020 ENVIRONMENTAL SCIENCE [HONOURS]

Course Code: ENVS-H-CC-L-T-06
(Biodiversity and Conservation)

Full Marks : 40 Time : $2\frac{1}{2}$ 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 **five** of the following: $2 \times 5 = 10$
 - a) What is meant by biodiversity?
 - b) Define species richness.
 - c) Name two biosphere reserves in India.
 - d) Define ecological restoration.
 - e) Define exotic species.
 - f) Write down ethical values of biodiversity.
 - g) Differentiate between *in-situ* conservation and *ex-situ* conservation.
 - h) What is restriction fragment length polymorphism (RFLP)?
- 2. Answer any **two** of the following: $5 \times 2 = 10$
 - a) Explain organic evolution through geographic time scale.

- b) Write a short note on molecular techniques of biodiversity identification.
- c) Explain Intermediate Disturbance Hypothesis with illiustration
- d) Describe in brief the role of remote sensing in biodiversity management.
- 3. Answer any **two** of the following: $10 \times 2 = 20$
 - biodiversity? Explain nitrogen cycle with the help of a neat sketch.

 What are the ecosystem services of biodiversity? Explain nitrogen cycle with the help of a neat sketch.

 4+6=10
 - b) Describe briefly different types of forest in India with their characteristic features. Write down the impact of hydropower development on biological diversity.

 5+5=10
 - c) Differentiate between habitat loss and habitat fragmentation. State some consequences of biodiversity loss. Write a note on prevailing man-animal conflict in West Bengal.

3+3+4=10

d) Discuss in brief the importance of local communities and traditional knowledge in conservation. Write a short note on joint forest management. Differentiate between social forestry and agroforestry.
