

2021

ENVIRONMENTAL SCIENCE— HONOURS

Paper : CC-11

(Biodiversity and Conservation Biology)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer **any five** questions: 2×5
- (a) What is bioprospecting?
 - (b) 'India is a megadiversity nation'—Explain.
 - (c) Define Cryopreservation.
 - (d) What is IUCN Red List for threatened species?
 - (e) Name two Biosphere Reserves of India.
 - (f) Briefly explain Common Property Resource.
 - (g) What is 'Simpson's Index'? Give the mathematical expression of it.
2. Write short notes on **any two**: 5×2
- (a) Agroforestry
 - (b) Threats to biodiversity
 - (c) Biodiversity Hotspot
 - (d) Ecological Restoration.
3. Answer **any three** questions:
- (a) Why is it important to conserve biodiversity? What is the role of remote-sensing in biodiversity conservation? 5+5
 - (b) Explain different levels of biodiversity. Differentiate between alpha and gamma diversity. State species richness and species evenness. 4+3+3

Please Turn Over

- (c) Discuss the impact of hydropower development on biological diversity. Name any two phytogeographic zones of India and describe them in brief. 5+5
- (d) What is sacred grove? Give the ecological significance of a sacred grove. State the role of local communities in conservation of biodiversity. 2+4+4
- (e) Explain intermediate disturbance hypothesis with suitable examples. What is 'National Park' in India? How does it differ from the Wildlife Sanctuary? 6+2+2
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