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8. Comment on the following : (2×7½=15)

(a) Ecosystem services are essential for human survival

(b) Biodiversity is essential for ecosystem services

(200)

30/11/22 Morning
X X

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 1008

C

Unique Paper Code : 32181501

Name of the Paper : Biodiversity and Conservation

Name of the Course : B.Sc. Hons. Environmental Sciences - Core

Semester : V

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **five** questions.
3. **All** questions carry equal marks.

1. Write short notes on **any three** : (3×5=15)

(a) Speciation

P.T.O.

- (b) Community diversity
 - (c) Primary productivity
 - (d) Habitat fragmentation
 - (e) IUCN Red List
2. Man-wildlife conflicts have been linked with anthropogenic activities and animal behaviour. Explain the statement using suitable examples. (15)
3. (a) Elaborate on the spatial patterns of biodiversity and causal factors responsible for it. Shed light on the factors that govern the patchy distribution of biodiversity. (8)
- (b) "Biodiversity and ecosystem functions serve as foundation to ecosystem services." Justify the statement.
4. Differentiate between the following (**any three**): (3×5=15)
- (i) Social forestry vs Agro forestry

- (ii) RFLP and AFLP
 - (iii) Ethical value of biodiversity vs Social value of biodiversity
 - (iv) Flora vs Fauna
 - (v) DNA banks and Seed banks
5. How can traditional knowledge contribute to biodiversity conservation? Does recognizing an area as a 'biodiversity hotspot' help conserve biodiversity? (15)
6. Describe various phytogeographic zone of India and elaborate on their characteristic features. Ecosystems services are essential for human survival, and biodiversity is important for ecosystem services." Justify the statement. (15)
7. Describe the potential of various biotechnological techniques in estimating population and community diversity? Also, discuss the merits and demerits of the two techniques of your choice. (15)