2023/TDC(CBCS)/ODD/SEM/
EESHCC-501T/396

TDC (CBCS) Odd Semester Exam., 2023

ECOLOGY AND ENVIRONMENTAL SCIENCE

(Honours)

(5th Semester)

Course No. : EESHCC-501T

(Biodiversity and Conservation)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

SECTION—A

Answer *ten* questions, selecting any *two* from each Unit : 2×10=20

UNIT—I

1. What do you mean by patterns of biodiversity?

2. State the difference between spatial and temporal patterns of biodiversity.

3. What do you mean by biological diversity? Who first coined the term 'biodiversity'?

UNIT—II

4. What is NCBI database?

5. What do you mean by frequency of species?

6. Why is biodiversity estimation important?

UNIT—III

7. Define primary productivity.

8. What is nutrient cycling and why is it important?

9. Give four examples of ecosystem services.

UNIT—IV

10. What do you mean by the term 'habitat fragmentation'?

11. Define invasive species. Give example.

12. Mention he causes of deforestation in Northeast India.

UNIT—V

13. What is tissue culture?

14. Explain ecological restoration.

15. Write a short note on biosphere reserve.

SECTION—B

Answer *five* questions, selecting *one* from each Unit : 6×5=30

UNIT—I

16. Give a detailed account on the seasonal fluctuations in biodiversity patterns.

17. Write a note on the importance of biodiversity patterns in conservation.

UNIT—II

18. Give a brief account on the sampling strategies for biodiversity estimation.

19. Give an account of qualitative methods of biodiversity estimation.

UNIT—III

20. Write a note on values of biodiversity.

21. Write a note on biogeochemical cycling with an example.

UNIT—IV

22. Explain intermediate disturbance hypothesis with example.

23. How do land use change and climate change affect biodiversity? Write a note on the consequences of biodiversity loss. 4+2=6

UNIT—V

24. Write a detailed account on agroforestry.

25. What do you mean by traditional knowledge? Write a note on the role of local communities and traditional knowledge in conservation. 2+4=6

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