

**2023/FYUG/ODD/SEM/  
EESIDC-101T/046**

**FYUG Odd Semester Exam., 2023  
( Held in 2024 )**

**ECOLOGY AND ENVIRONMENTAL SCIENCE**

**( 1st Semester )**

Course No. : EESIDC-101T

**( Basic Concepts of Ecology and  
Environmental Science )**

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

**SECTION—A**

Answer *twenty* questions, selecting any *four* from  
each Unit : 1×20=20

**UNIT—I**

1. Who coined the term 'ecology'?
2. Define environmental science.

( 2 )

3. Who developed the concept of 'food chain'?
4. State one difference between ecology and environmental science.
5. Mention the different types of food chain.

UNIT—II

6. What is an ecosystem?
7. What are the different components of an ecosystem?
8. What is population?
9. Define biosphere.
10. What is species?

UNIT—III

11. What is atmosphere?
12. Mention the different layers of atmosphere.
13. What is the percentage of oxygen in the atmosphere?

( 3 )

14. What is monsoon?
15. What is atmospheric pressure?

UNIT—IV

16. What is hydrosphere?
17. Define freshwater.
18. Give two examples of lentic ecosystem.
19. What is an estuary?
20. What is groundwater?

UNIT—V

21. What is lithosphere?
22. What is soil profile?
23. What is mantle?
24. What is humus?
25. Mention the composition of core.

( 4 )

SECTION—B

Answer *five* questions, selecting *one* from each  
Unit :  $2 \times 5 = 10$

UNIT—I

26. Mention any two objectives of studying ecology.
27. Mention any two approaches of studying ecology.

UNIT—II

28. Mention the difference between food chain and food web. Give at least one example.
29. What is the difference between population and community? Give at least one example.

UNIT—III

30. Give two characteristic features of stratospheric ozone.
31. What is the difference between weather and climate?

( 5 )

UNIT—IV

32. What are the differences between marine and estuarine system?
33. What are the differences in the characteristics of lotic and to lentic system?

UNIT—V

34. Give two importances of lithosphere.
35. Give any two importances of water holding capacity of soil.

SECTION—C

Answer *five* questions, selecting *one* from each  
Unit :  $8 \times 5 = 40$

UNIT—I

36. Elaborate on the multidisciplinary nature of the subject Ecology and Environmental Science.
37. Discuss elaborately the need for environmental awareness.

( 6 )

UNIT—II

38. Describe with suitable examples the energy flow in an ecosystem.
39. What is biogeochemical cycle? Describe the nitrogen cycle with suitable diagrammatic illustration.

UNIT—III

40. Discuss briefly the climate of NE India.
41. Discuss the tropical monsoon climate.

UNIT—IV

42. Describe briefly, with suitable diagrammatic illustration, the hydrologic cycle.
43. Describe briefly the various physical, chemical and biological pollutants that affect our surface water.

( 7 )

UNIT—V

44. What is soil? Write notes on the composition of soil and formation of soil. 2+6=8
45. Describe the physical properties of soil and the role played by such properties in soil ecosystem.

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