

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)

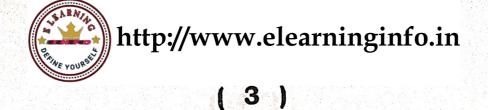
- 3. Who developed the concept of food chain?
- 4. State one difference between ecology and environmental science.
- 5. Mention the different types of food chain.

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?



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.

SECTION—B

Answer *five* questions, selecting *one* from each
Unit: 2×5=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

- 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: 8×5=40

UNIT-I

- **36.** Elaborate on the multidisciplinary nature of the subject Ecology and Environmental Science.
- 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.

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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