

**2023/TDC(CBCS)/ODD/SEM/
EESDSE-501T/398**

TDC (CBCS) Odd Semester Exam., 2023

ECOLOGY AND ENVIRONMENTAL SCIENCE

(5th Semester)

Course No. : EESDSE-501T

(Energy and Environment)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

SECTION—A

Answer *fifteen* questions, selecting any *three* from
each Unit : $1 \times 15 = 15$

UNIT—I

1. What are non-renewable resources?
2. What do you mean by bioenergy?

(2)

3. Name few future technologies for energy capture.
4. Give two examples of global energy resources.

UNIT—II

5. Define agriculture.
6. What do you mean by global energy demand?
7. Mention two major energy sources used in domestic sector.
8. What is environmental cost?

UNIT—III

9. Define air pollution.
10. What is nuclear energy?
11. Give two examples of greenhouse gases.
12. What is spent fuel?

UNIT—IV

13. Define environmental pollution.

24J/393

(Continued)

(3)

14. What are the sources of energy production?
15. Mention two environmental impacts due to nuclear accidents.
16. What do you mean by environmental change?

UNIT—V

17. What is green energy?
18. Define sustainable development.
19. Mention two uses of wind energy.
20. Define solar energy.

SECTION—B

Answer *five* questions, selecting *one* from each Unit : 2×5=10

UNIT—I

21. What is the importance of energy conservation?
22. Why is requirement of energy more in urban setups?

24J/393

(Turn Over)

(4)

UNIT—II

23. What is the importance of energy subsidy?
24. Mention the sources of energy used in transportation sector.

UNIT—III

25. How are radioactive wastes classified?
26. Mention various strategies for combatting global warming.

UNIT—IV

27. Mention two strategies to reduce over-consumption of energy.
28. What was the impact of Chernobyl nuclear accident?

UNIT—V

29. Name the different generations of biofuels with example.
30. Mention two advantages of using tidal energy.

24J/393

(Continued)

(5)

SECTION—C

Answer *five* questions, selecting *one* from each Unit : 5×5=25

UNIT—I

31. Describe briefly the present-day energy scenario of urban India.
32. Write a note on distribution and availability of global energy resources in India.

UNIT—II

33. Give a detailed account on the role of energy in industrial sector.
34. Explain briefly the demand of energy in agricultural sectors of India.

UNIT—III

35. Explain briefly the causes and effects of urban heat island. What are the mitigating strategies for urban heat island? 3+2=5
36. What are the pollutants released due to fossil fuel burning? How do they affect the environment? 1+4=5

24J/393

(Turn Over)

UNIT—IV

37. Describe briefly the probable disadvantages of construction of dams and its impact on environment. $2\frac{1}{2}+2\frac{1}{2}=5$
38. Give a detailed account of the Fukushima nuclear accident.

UNIT—V

39. Explain the production of biodiesel with diagrammatic representation.
40. What is geothermal energy? How is geothermal energy generated? Mention the uses of geothermal energy. $1+2+2=5$
