

TDC (CBCS) Odd Semester Exam., 2023

ECOLOGY AND ENVIRONMENTAL SCIENCE

(Honours)

(3rd Semester)

Course No. : EESHCC-303T

(Atmosphere and Global Climate Change)

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. Describe the atmosphere composition.**
- 2. Define greenhouse effect.**
- 3. Name four greenhouse gases.**

(2)

UNIT—II

4. Describe Western disturbances briefly.
5. Define microclimate.
6. Define any two meteorological parameters.

UNIT—III

7. What is the impact of climate change on sea level?
8. Mention two drivers of global warming.
9. Define atmospheric windows.

UNIT—IV

10. Define Chapman cycle.
11. Mention two effects of ozone depletion.
12. Mention one importance of the ozone layer.

UNIT—V

13. Define clean development mechanism.
14. Mention two salient features of Montreal protocol.
15. Define carbon trading.

(3)

SECTION—B

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

UNIT—I

16. What is the significance of atmosphere in making the biosphere?
17. Write short notes on the following : 3×2=6
(a) Milankovitch cycles
(b) Greenhouse gases

UNIT—II

18. Describe El Niño and La Niña with diagrams.
19. Write short notes on the following : 3×2=6
(a) Atmospheric stability and mixing heights
(b) Temperature inversion

UNIT—III

20. Describe the impact of climate change on weather patterns. Give examples to support your answer. 5+1=6
21. Discuss the role of greenhouse gases in climate change. How can we reduce the emission of greenhouse gases? 3+3=6

UNIT—IV

22. Describe the process of spring time ozone depletion over Antarctica.
23. Discuss the mitigation measures for depletion of ozone layer.

UNIT—V

24. Discuss the salient features of convention on climate change.
25. Discuss the carbon credits and its role in carbon trading.

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