

2025

M.Sc. 3rd Semester Examination

PAPER : M250312 (MOOCS)

ENVIRONMENTAL ISSUES

Full Marks : 100

Time : Three Hours

The figures in the margin indicate full marks.

*Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *nine* questions : $2 \times 9 = 18$

1. What do you mean by primary and secondary air pollutants?
2. Write three parts to the ultraviolet (UV) spectrum and their corresponding wavelength.
3. What are photochemical smog? Name two pollutants that causes photochemical smog.
4. Define greenhouse gases. Give examples.
5. Define eutrophication and its types.
6. Define marine pollution and its types.

P.T.O.

7. Give the reason of creation of ozone hole in the atmosphere.
8. What is *in-situ* (on spot) conservation?
9. What do you mean by the radioactive pollution? Give examples.
10. Give the name of two international organization working for species conservation.
11. Explain the potential impacts of invasive species to native ecosystem.
12. Write down the full form of 'FAO' and 'IUCN'.
13. Name two global biodiversity hotspots in India.
14. How oil spills affect the sea?

Group - B

Answer any *five* questions : 4×5=20

15. (i) Why is the ozone layer important?
(ii) Write down the applications of chlorofluorocarbons (CFCs). 3+1
16. Describe sources of volatile organic compounds (VOC) and their impact on human health.
17. Discuss the causes and impact of climate change.
18. Give the name of different anthropogenic sources of heavy metals which cause health hazards.

19. Describe different causes of inland water pollution.
20. Discuss various causes of biodiversity loss.
21. Briefly write on the outcome of Ramsar Convention on Wetlands, 1971.
22. Describe air pollution management techniques.

Group - C

Answer any *four* questions : $8 \times 4 = 32$

23. (i) Describe the factors influencing the concentrations of tropospheric ozone.
(ii) Explain the causes of soil pollution due to mining and manufacturing activities. $4+4$
24. What is agricultural intensification? What are the effects of agricultural intensification? Discuss the challenges in alleviating malnutrition. $2+3+3$
25. Briefly describe the physical, chemical and biological processes of soil remediation.
26. Discuss beach debris and benthic marine debris. What are the ecological consequences of deep-sea mining?
27. (i) How does soil pollution affect humans?
(ii) Explain the types and role of biodiversity. $4+4$

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(4)

28. (i) Write down different human interventions through which radioactive pollutants enter the environment.
- (ii) Summarize the size of air pollutants and their description in a table. 3+5

Internal Assessment : 30 marks
