

U.G. 4th Semester Examination - 2021

Environmental Science

[HONOURS]

Skill Enhancement Course (SEC)

Course Code : ENVS-H-SEC-L-2A&2B

Full Marks : 20

Time : 1 Hour

The figures in the right-hand margin indicate marks.

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

Answer all the questions from selected Option.

OPTION-A

ENVS-H-SEC-L-2A

(Environmental Impact and Risk Assessment)

1. Answer any **five** from the following: 1×5=5
 - a) State the rationale of EIA.
 - b) Why is EIS necessary?
 - c) Name four checklist elements of EMP.
 - d) Write the timeline of different stages of EIA process.
 - e) State two objectives of environmental monitoring.

[Turn Over]

- f) How life-cycle inventory is analysed?
- g) Write two benefits of ISO 14000.

2. Write short notes on any **one** of the following:

5×1=5

- a) Environmental appraisal
- b) Environmental planning
- c) Ecological risk assessment

3. Answer any **one** from the following: 10×1=10

- a) Elaborate on the different methods used for Environmental Impact Assessment (EIA). 10
- b) Explain the clauses of ISO 14000 in relation with PDCA cycle. 10
- c) Write a case study on LCA of a product. 10

OPTION-B

ENVS-H-SEC-L-2B

(Environmental Quality Monitoring and Assessment)

1. Answer any **five** of the following: 1×5=5
 - a) What are the chemical methods of environmental quality monitoring?
 - b) Define soil health.

- c) Define criteria pollutants with examples.
- d) Distinguish between accuracy and precision.
- e) What is role of GIS based mapping in environmental management?
- f) Write down the permissible limit of pH, TDS, hardness, and alkalinity in water as per IS 10500 : 2012.
- g) Distinguish between MLSS and MLVSS.

2. Answer any **one** of the following: $5 \times 1 = 5$

- a) Write down the role of legislative framework in controlling environmental pollution.
- b) State the principle of solid and hazardous waste management.
- c) Write down the strategies for mitigation of soil pollution.

3. Answer any **one** of the following: $10 \times 1 = 10$

- a) Distinguish between point-source and non-point source of pollution with examples. How air pollutants of any place can be estimated?

$4 + 6 = 10$

- b) Write down the role of planktons in monitoring of water quality. State the processes for recovery of nutrient resources from municipal wastewater with the help of a neat sketch.

$5 + 5 = 10$

- c) What are auto emission standards? State the impact of auto emission standards on urban air quality. Write a note on Indian emission standards for four-wheel vehicles.

$2 + 3 + 5 = 10$
