



Seventh Semester B.E./B.Tech. Degree Examination, June/July 2025 Environmental Protection and Management

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain about the abatement of pollution and conservation of resources. (10 Marks)
- b. Explain any five key principles of environmental management. (10 Marks)

OR

- 2 a. Discuss various drivers and barriers for sustainable development (any five in each) (10 Marks)
- b. Explain the concept of environmental stewardship and steps taken in the stewardship process. (10 Marks)

Module-2

- 3 a. Explain any ten environmental quality objectives in managing the environment. (10 Marks)
- b. Explain the following concepts as per the standards. (10 Marks)
 - i) Concentration and mass standards
 - ii) Effluents and stream standards.

OR

- 4 a. Explain in detail the environmental performance evolution and performance indicators. (10 Marks)
- b. Explain the following concepts for maintaining environmental objectives in Industry. (10 Marks)
 - i) Pollution control and pollution prevention
 - ii) Cleaner production and clean technology

Module-3

- 5 a. Explain the basic elements of EMS. (10 Marks)
- b. Explain ten components in a successful environmental management system. (10 Marks)

OR

- 6 a. What are the benefit of an ISO 14001 certification and barrier associated with EMS's? (10 Marks)
- b. Explain the pollution prevention and continuous improvement with sketch and example. (10 Marks)

Module-4

- 7 a. Explain the environmental management system audit program as per ISO 19011 with flow diagram. (10 Marks)
- b. Explain the seven principles of International Standard Organization auditing. (10 Marks)

OR

- 8 a. Explain the contents of environmental statement (Form V) (10 Marks)
- b. Discuss the phases in waste minimization planning in an industry. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-5

- 9 a. Explain the pollution prevention and control activities in tanning and textile industry. (10 Marks)
b. Explain the waste generation and environmental management in pulp and paper industry. (10 Marks)

OR

- 10 a. Explain the waste minimization measures in tannery sector. (10 Marks)
b. Explain the pollution prevention and control activities in electroplating industry. (10 Marks)
