



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.
i) Concentration and mass standards
ii) Effluents and stream standards. (10 Marks)

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.
i) Pollution control and pollution prevention
ii) Cleaner production and clean technology (10 Marks)

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)

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)

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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)

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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.