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Gandhi Institute of Engineering and Technology University, Odisha, Gunupur (GIET University)



M.Tech. (Second Semester - Regular) Examinations, May - 2026
24MISEPE12001– Pollution Control and Waste Management
(Industrial Safety Engineering)

Time: 3 hrs

Maximum: 60 Marks

Answer ALL questions**(The figures in the right hand margin indicate marks)****PART – A****(2 x 5 = 10 Marks)**Q.1. Answer **ALL** questions

- a. Explain how noise pollution affects human health and daily life.
- b. Identify the major pollutants emitted by vehicles.
- c. Describe the role of microorganisms in secondary wastewater treatment.
- d. Explain the purpose of landfilling in waste disposal.
- e. Explain the concept of recycling and its environmental benefits.

CO #	Blooms Level
CO1	K2
CO2	K2
CO3	K2
CO4	K2
CO5	K2

PART – B**(10 x 5 = 50 Marks)**Answer **ALL** the questions

2. a. Apply the concepts of Reduce, Reuse, and Recycle in educational institutions to minimize waste generation.

Marks	CO #	Blooms Level
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10	CO1	K3
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(OR)

- b. Analyze the importance of proper waste management in controlling different types of pollution.

10	CO1	K4
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- 3.a. Explain the construction and working principle of an Electrostatic Precipitator (ESP).

10	CO2	K2
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(OR)

- b. Analyze the various sources of air pollution and discuss their environmental and health effects.

10	CO2	K4
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- 4.a. Analyze the environmental problems caused by untreated industrial wastewater.

10	CO3	K4
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(OR)

- b. Analyze the major causes of water pollution and discuss their effects on human health and aquatic life.

10	CO3	K4
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- 5.a. Explain the composting process and its advantages in solid waste management.

10	CO4	K2
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(OR)

- b. Explain the processes involved in waste collection, transportation, and disposal in urban areas.

10	CO4	K2
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- 6.a. Explain the concept and principles of integrated and sustainable waste management.

10	CO6	K2
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(OR)

- b. Explain the concept of Extended Producer Responsibility (EPR) and its role in waste management.

10	CO5	K3
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