

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



M.Tech. (First Semester – Regular/Supplementary) Examinations, January 2026  
**24MCHPE11021 –Industrial Pollution and its Control**

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

	CO #	Blooms Level
a. Write the principle of bioassay test.	CO2	K2
b. What is principle of gas absorption method?	CO3	K2
c. Write the basic principle of vacuum flotation.	CO2	K1
d. Differentiate between incineration and pyrolysis .	CO4	K1
e. What is the role of biological method hazardous waste reduction?	CO3	K2

**PART – B**

**(10 x 5 = 50 Marks)**

Answer ALL the questions

	Marks	CO #	Blooms Level
2. a. What are the impacts of industrial activity on environment?	6	CO1	2
b. Briefly discuss about the contaminants present in industrial waste water.	4	CO2	3
(OR)			
c. Discus about the use of water in industrial purpose considering different sectors.	10	CO1	2
3.a. Derive the equation for atmospheric dispersion by using K-theory.	10	CO2	2
(OR)			
c. Explain the terms looping, coning and fanning with diagram for a gas coming from the tall chimney stack in an industry	6	CO2	2
d. How do you separate the gaseous pollutants present in air by condensation method.	4	CO3	4
4.a. Explain about the activated sludge treatment of waste water with neat diagram. Write its advantages and disadvantages	8	CO2	2
b. Write the pollution properties of industrial waste water.	2	CO3	3
(OR)			
c. Explain about the trickling filter with diagram for water purification. Write its advantages and disadvantages.	10	CO2	2
5.a. What are the different wastes generated in fertilizer plant. Explain the process of treatment of waste water generated in it.	10	CO2	3
(OR)			
b. What are the rules of storage and handling of hazardous waste.	10	CO4	5
6.a. Discus about the fluidized bed combustion method with neat diagram for the incineration of hazardous waste.	8	CO4	4
b. Name some land disposal method of hazardous waste.	2	CO4	3
(OR)			
c. What are the chemical methods of treating the hazardous waste. Explain briefly..	10	CO4	4

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