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GIET UNIVERSITY, GUNUPUR - 765022
M. Tech (First Semester) Examinations, January - 2024
MPECH1041 - Industrial Pollution Control
(Chemical Engineering)

Time: 3 hrs

Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A**(2 x 10 = 20 Marks)**

Q.1. Answer all questions

	CO#	Blooms Level
a. What are the major industries in for economic growth?	CO1	K1
b. Name the different types of industrial waste water.	CO2	K1
c. What is the importance of population equivalent in waste water?	CO1	K2
d. Draw the temperature profile for fumigating.	CO3	K2
e. What is the basic principle of cyclone separator?	CO1	K1
f. What are the four type equalization in waste water pre-treatment?	CO2	K1
g. Differentiate coagulation and flocculation.	CO1	K1
h. What is the need of recycling sludge in activated sludge treatment?	CO2	K1
i. Differentiate between incineration and pyrolysis .	CO4	K1
j. Write four major sources of hazardous waste generation	CO3	K2

PART – B**(10 x 5=50 Marks)**Answer ANY FIVE questions

	Marks	CO#	Blooms Level
2. a. What are the impacts of industrial activity on environment?	6	CO1	K2
b. Briefly discuss about the contaminants present in industrial waste water.	4	CO2	K3
3.a. Discuss about the different sources of industrial waste water with examples.	6	CO1	K2
b. Briefly discuss the industrial scenario in India.	4	CO2	K3
4. a. Explain the terms looping, coning and fanning with diagram for a gas coming from the tall chimney stack in an industry.	6	CO2	K2
b. How do you separate the gaseous pollutants present in air by condensation method.	4	CO3	K4
5.a. Discuss about the waste minimization techniques for solid waste management.	10	CO4	K5
6. a. Discuss about the fluidized bed combustion method with neat diagram for the incineration of hazardous waste.	8	CO4	K4
b. Name some land disposal method of hazardous waste.	2	CO4	K3
7.a. Explain about the trickling filter with diagram for water purification. Write its	10	CO2	K2

advantages and disadvantages.

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| 8. a. | Discuss about the fluidized bed combustion method with neat diagram for the incineration of hazardous waste. | 8 | CO4 | K4 |
| b. | Name some land disposal method of hazardous waste. | 2 | CO4 | K3 |

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