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



B. Tech (Seventh Semester - Regular) Examinations, November – 2024
21BCHPE47002 – Integrated Solid Waste Management
(Chemical)

Time: 3 hrs

Maximum: 70 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. Differentiate between community bins and curbside waste collection.	CO2	K2
b. Write the impacts of hazardous-waste on the living organisms.	CO4	K1
c. Why mismanagement of battery waste is harmful?	CO3	K2
d. Define category No. 3 biomedical waste.	CO3	K1
e. What are the challenges for solid waste management?	CO1	K3

PART – B**(15 x 4 = 60 Marks)**Answer **ALL** the questions

	Marks	CO #	Blooms Level
2. a. Describe about the different solid waste collection systems with neat sketch.	8	CO1	K2
b. Explain the thermal treatment process of solid waste processing.	7	CO1	K2
(OR)			
c. Explain in details about the causes of solid waste generation.	8	CO1	K3
d. Explain the different characteristics of solid waste.	7	CO1	K3
3.a. Describe the design and operation of a sanitary landfill with a neat sketch.	10	CO2	K4
b. State the key role of public in solid waste management.	5	CO2	K2
(OR)			
c. Describe the composting process in details with neat sketch.	10	CO1	K3
d. Explain the adverse health and environmental impacts due to improper handling of e-waste.	5	CO2	K1
4.a. Explain about the waste minimization techniques.	8	CO3	K3
b. Write down the characteristics of hazardous waste.	7	CO4	K2
(OR)			
c. Describe in details about the transportation process of hazardous waste.	8	CO4	K3
d. Explain the disposal methods of hazardous waste.	7	CO4	K2
5.a. Explain the segregation process of biomedical waste.	8	CO3	K2
b. Explain the collection methods of biomedical waste.	7	CO3	K2
(OR)			
c. Explain the proper disposal method of e-waste.	8	CO3	K3
d. Write in details about the effects of e-waste on environment and health.	7	CO3	K4

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