

CBCS SCHEME

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BME306D

Third Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024 Waste Handling and Management

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Define Waste Management. Explain the importance and objectives of waste management.	10	L2	CO1
	b.	Identify the human and technological components of waste management. Illustrate with an example.	10	L3	CO2
OR					
Q.2	a.	State and explain the environmental aspects of waste collection system.	10	L2	CO1
	b.	How do you create awareness for public about waste management? Analyze with an example.	10	L3	CO2
Module – 2					
Q.3	a.	Explain the different types of solid wastes and compare about their recycling methods.	10	L2	CO3
	b.	What are the primary methods used in the processing and treatment of solid wastes and how do they contribute environmental sustainability? Provide examples to analyze the methods.	10	L3	CO4
OR					
Q.4	a.	Explain the process of composting as a method for managing solid waste. Identify its potential challenges or limitations.	10	L3	CO3
	b.	Discuss the fundamental principles behind gasification process, its advantages in waste treatment compared to traditional methods.	10	L3	CO4
Module – 3					
Q.5	a.	What is Industrial Waste? Explain the different types of industrial waste.	10	L2	CO2
	b.	What is plastic pollution? Enumerate the sources of plastic pollution.	10	L3	CO3
OR					
Q.6	a.	Explain the sources of bio-medical waste and analyze the problems associated with it.	10	L3	CO3
	b.	Write a short note on E-waste collection and its disposal.	10	L2	CO2
Module – 4					
Q.7	a.	Explain the remedial action for the hazardous waste contaminated sites.	10	L2	CO2
	b.	Briefly discuss about the entrepreneurship activities for waste management.	10	L2	CO3
OR					
Q.8	a.	Waste management and waste handling entrepreneurs in India have important role. Explain with a case study.	10	L3	CO3
	b.	With a case study, compare the domestic composting and centralized composting.	10	L3	CO3
Module – 5					
Q.9	a.	Briefly explain Environmental Protection Act, Hazardous Waste Rules 2008.	10	L3	CO4
	b.	Explain briefly the Plastic Waste Rules, 2011.	10	L2	CO3
OR					
Q.10	Write short notes the following:		20	L2	CO2
	a.	Biomedical Waste Rule 1998			
	b.	Duties of Constitutional Bodies			
		b. The Batteries Rules 2011			
		d. E-Waste Rules 2011			