

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

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Course Code

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First Semester B.E. Degree Examinations, April/May 2023

**WASTE MANAGEMENT**

Duration: 3 hrs

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. Missing data, if any, may be suitably assumed

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBTL:CO: PI)</u>
<b>MODULE – 1</b>			
1.	a. Classify solid waste management based on source and type.	08	2:1:1.2.1
	b. Explain the elements of solid waste management.	06	2:1:1.2.1
	c. List and explain Environmentally Sound technologies.	06	2:1:1.2.1
<b>OR</b>			
2.	a. Point out the progress in Municipal Solid Waste Management in India.	08	3:1:1.2.1
	b. Explain factors affecting Solid waste Management.	06	2:1:1.2.1
	c. Explain the Environmentally Sound Solid Waste Management.	06	2:1:1.2.1
<b>MODULE – 2</b>			
3.	a. Illustrate Waste generation and Composition.	10	3:2:1.2.1
	b. Explain the Comparative assessment of waste generation and composition of developing and developed nations	10	2:2:1.2.1
<b>OR</b>			
4.	a. Explain Health and Environmental effects during the waste management process.	10	2:2:1.2.1
	b. Illustrate the case study results from an Indian city.	10	3:2:1.2.1
<b>MODULE – 3</b>			
5.	a. Explain the types of collection system with advantages and	10	2:3:1.2.1
	b. Explain the Types of collection services	10	2:3:1.2.1
<b>OR</b>			
6.	a. Explain the important factors to be considered for design of transfer station include.	10	2:3:1.2.1
	b. Write the factors affecting the location of transfer station and list out the points to be considered for route optimization of waste collection vehicle.	10	2:3:1.2.1
<b>MODULE – 4</b>			
7.	a. Explain the purpose of waste processing.	08	2:4:1.2.1

b. Explain Mechanical volume reductions. 06 2:4:1.2.1

c. Explain Mechanical size reductions. 06 2:4:1.2.1

OR

8. a. Explain the basics and implementations of source reductions 08 2:4:1.2.1

b. Explain the monitoring and Evaluation of source reductions 06 2:4:1.2.1

c. Explain Significance of recycling and planning of recycling 06 2:4:1.2.1

MODULE – 5

9. a. Identify and classify the Hazardous waste 10 2:5:1.2.1

b. Explain the Hazardous waste treatment 10 2:5:1.2.1

OR

10. a. Explain the pollution prevention and waste minimization methodologies 10 2:5:1.2.1

b. Explain how the Hazardous wastes management is done in india. 10 2:5:1.2.1

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