

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

October 2024 Supplementary Examinations**Programme: B.E.****Branch: Common to all Branches****Course Code: 22CV1ESWMT / 22CV2ESWMT****Course: Waste Management****Semester: I / II****Duration: 3 hrs.****Max Marks: 100**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I	CO	PO	Marks
	1	a)	Explain the classification of solid waste based on source and type.	CO1	PO6	10
		b)	Discuss the functional elements of solid waste management.	CO1	PO6	10
			UNIT - II			
	2	a)	Explicate the effect on solid waste on human health and on environment.	CO1	PO6	10
		b)	Discuss the physical and chemical characteristics of solid waste.	CO1	PO6	10
			UNIT - III			
	3	a)	Discuss the followings: i. Solid waste collection components ii. Transfer station	CO1	PO7	10
		b)	Explain the criteria for selection of site for a municipal landfill construction.	CO2	PO7	10
			OR			
	4	a)	Elucidate various options available for scientific disposal of solid waste.	CO2	PO7	10
		b)	With a neat sketch explain the construction and operation of a municipal landfill.	CO2	PO7	10
			UNIT - IV			
	5	a)	Explain the significance of 3R's (Reduce, Recycle and Recovery) in solid waste management.	CO3	PO7	10
		b)	Discuss the followings related to solid waste processing techniques: i. Volume reduction ii. Size reduction	CO3	PO7	10
			OR			
	6	a)	Explain key elements of solid waste recycling programme.	CO3	PO7	10

		b)	Explicate commonly recycled materials and processes in solid waste management.	CO3	PO3	10
			UNIT - V			
	7	a)	Discuss the classification of hazardous wastes based on characteristics with examples.	CO4	PO3	10
		b)	Explain various technologies for treatment of hazardous waste.	CO4	PO3	10

SUPPLEMENTARY EXAMS 2024