

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***M.E DEGREE END SEMESTER THEORY EXAMINATIONS, APR /MAY 2025***Second Semester**Environmental Engineering***EV4001/PEVE2401 – Solid and Hazardous Waste Management****Regulations – 2021/2024****Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	State the importance of demolition waste management.	1	1	2
2.	What are the applications of waste management system?	1	1	2
3.	Define corrosivity tests.	1	2	2
4.	Illustrate about the TCLP tests.	2	2	2
5.	Enlist any four transport vehicles with their capacities for transporting municipal waste.	1	3	2
6.	Write the precautions to be taken during handling of solid waste.	1	3	2
7.	What are the off-site processes?	1	4	2
8.	What are the end products of Pyrolysis?	2	4	2
9.	What is land farming?	1	5	2
10.	List the various gases generated in sanitary landfill.	1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a Explain the seven elements and seven step approach to integrated solid waste management planning.	2	1	16
	Or			
	b i Explain the various source and types of hazardous wastes.	2	1	8
	ii Discuss the role of stakeholders to integrated waste management.	2	1	8
12.	a i Explain in detail the waste generation rates and variation in quantity calculation.	2	2	8
	ii Explain the characteristics of solid waste management.	2	2	8
	Or			
	b Discuss the segregation and onsite storage of wastes.	2	2	16

13.	a	Explain the various methods of collection of municipal solid waste.	2	3	16
		Or			
	b i	Explain the storage and handling of hazardous wastes.	2	3	8
	ii	Explain the various factors to be considered for finalizing a collection route.	2	3	8
14.	a	Explain the term composting. Give the different types of composting in use and describe any one with the aid of sketches their working.	2	4	16
		Or			
	b	Explain the working of an incinerator with a neat sketch.	2	4	16
15.	a i	Describe the operation issues involved in sanitary landfills.	2	5	8
	ii	Explain in detail the collection and treatment of leachate in the landfill.	2	5	8
		Or			
	b	Explain the important factors that must be considered in the site selection, design and operation of sanitary landfill.	2	5	16