

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Sixth Semester

Chemical Engineering

CH3019–SOLID WASTE MANAGEMENT

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART – A(ANSWER ALL QUESTIONS) (Marks 10*2=20)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	What is called Waste generation?	RE	1	2
2.	List out the MSWM principles.	RE	1	2
3.	What is the importance of onsite handling of solid waste?	RE	2	2
4.	List types of containers that can be used to store solid waste.	RE	2	2
5.	What are types of collection services?	RE	3	2
6.	List two types of routing system.	RE	3	2
7.	Write any two objectives of waste processing.	RE	4	2
8.	List the various techniques involved in resource recovery.	RE	4	2
9.	Name any four Solid waste disposal methods.	RE	5	2
10.	What are the points to be considered before selection and locating sites for open dumping?	RE	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Explain in detail about the Solid Waste Characteristics. Or b Write a brief note on the Public Education and involvement in MSWM.	UN	1	13
12.	a i Mention onsite solid waste handling methods? ii Explain the objectives of on-site solid waste processing. Or Explain briefly about Public health and economic aspects of open storage.	RE UN UN	2 2 2	5 8 13
13.	a Briefly explain the methods of Residential and commercial waste collection. Or b Outline the types of Transfer Stations with examples.	UN UN	3 3	13 13
14.	a List and explain key concepts in municipal solid waste processing. Or b Describe types of materials recovered from municipal solid wastes.	AN AN	4 4	13 13

15.	a	What are the advantages of sanitary land fill over incinerator?	AN	5	13
		Or			
	b	Compare resource recovery from solid waste composting and bio methanation.	AN	5	13

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Outline the sources and types of solid wastes.	UN	1	15
		Or			
	b	Explain the various types of solid waste processing methods	UN	4	15