

CIVIL ENGINEERING

QUESTION BANK

Course Title : SOLIDWASTEMANAGEMENT

Course Code : 23CE716

Regulation : NR23

Course Outcomes: At the end of the course the student will be able to:

- Identify the physical and chemical composition of solid wastes.
- Analyze the functional elements for solid waste management.
- Understand the techniques and methods used in transformation, conservation, and recovery of materials from solid wastes.
- Identify and design waste disposal systems.

UNIT-I **Solid Waste**

S.No	Questions	BT	CO	PO
Part - A (Short Answer Questions)				
1	Define solid waste.	L1	CO1	2
2	Classify solid wastes based on source and composition.	L4	CO1	4
3	What are the major sources of municipal solid waste?	L1	CO1	6
4	Differentiate between biodegradable and non-biodegradable waste.	L1	CO1	2
5	What are the physical characteristics of solid waste?	L6	CO1	1
6	What is moisture content in solid waste?	L2	CO1	2
7	Explain the importance of waste sampling.	L6	CO1	2
8	List the functional elements of solid waste management.	L2	CO1	2
9	What is Integrated Solid Waste Management (ISWM)?	L1	CO1	2
10	State any four salient features of Solid Waste Management Rules, 2016.	L5	CO1	2
Part - B (Long Answer Questions)				
1 1	a) Define solid waste and explain its classification with suitable examples.	L4	CO1	2
	b) Discuss various sources of solid waste generation in urban and rural areas.	L2	CO1	4
1 2	a) Explain the physical, chemical, and biological characteristics of solid waste.	L5	CO1	6
	b) Describe the important properties of solid waste and their significance in waste management.	L2	CO1	5
1 3	a) Explain methods of sampling and analysis of solid waste.	L5	CO1	6
	b) Discuss the elements of solid waste management in detail.	L5	CO1	4
1 4	a) Explain the concept and objectives of Integrated Solid Waste Management.	L6	CO1	1
	b) Discuss the evolution and need for modern solid waste management practices.	L5	CO1	2
1 5	a) Explain the Solid Waste Management Rules, 2016 and their key provisions.	L1	CO1	2
	b) Discuss the responsibilities of waste generators and local authorities under SWM Rules, 2016.	L6	CO1	2
1 6	a) Compare traditional waste management practices with integrated waste management systems.	L5	CO1	2
	b) Explain the challenges and future perspectives of solid waste management in India.	L1	CO1	4