

**ANURAG Engineering College**

(An Autonomous Institution)

IV B. Tech I Semester Regular/Supplementary Examinations, Dec-2024

**SOLID WASTE MANAGEMENT**

(CIVIL ENGINEERING)

**Time: 3 Hours****Max. Marks: 75****Section – A (Short Answer type questions)****(25 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. What are different types of hazardous waste?	CO1	L1	2M
2. Discuss the factors that affect the generation of solid wastes.	CO1	L2	3M
3. What is meant by pyrolysis?	CO2	L1	2M
4. What are the common techniques for material separation?	CO2	L2	3M
5. What are the categories of biomedical wastes?	CO3	L1	2M
6. What are the main characteristics of hazardous wastes?	CO3	L2	3M
7. What is the pollution prevention measures?	CO4	L1	2M
8. List out the biological methods.	CO4	L2	3M
9. What is bioremediation?	CO5	L1	2M
10. What is subsurface characterization?	CO5	L2	3M

**Section B (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

11. A) Explain in detail about the classification of solid waste based on sources, types and composition.	CO1	L2	10M
<b>OR</b>			
B) Describe various methods of collection of municipal solid wastes. What are the common types of vehicles used in collection of MSW.	CO1	L3	10M
12. A) What is the difference between solid waste landfill and hazardous landfill? Discuss the recycling and reuse of hazardous waste.	CO2	L3	10M
<b>OR</b>			
B) Describe the sanitary land filling process in detail with a neat sketch.	CO2	L3	10M
13. A) What is the source of biomedical waste? Discuss classification and their characteristics of biomedical waste.	CO3	L3	10M
<b>OR</b>			
B) Illustrate in detail method of collection, treatment and disposal of hazardous waste.	CO3	L3	10M
14. A) Explain the main objectives and functions of environmental audits.	CO4	L2	10M
<b>OR</b>			
B) Discuss the relative advantages and disadvantages of various leachate treatment systems.	CO4	L3	10M
15. A) List salient criteria for selecting a landfill site. Which of these criteria you think is critical for city zone? Give reasons.	CO5	L3	10M
<b>OR</b>			
B) Explain the physical and thermal treatment methods in remedial technologies.	CO5	L2	10M