

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech II Semester Regular/Supplementary Examinations, June/July-2024

WASTE MANAGEMENT

(COMMON TO EEE, ME, ECE & CSE)

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 the quality requirements of boiler and cooling water?	CO1	L1	2M
2. Define the term neutralization and equalization	CO1	L2	3M
3. What are the problems associated with industrial waste water discharges into water bodies?	CO2	L1	2M
4. List out various uses of municipal waste water in industries?	CO2	L2	3M
5. What are the effects of paper and pulp waste?	CO3	L1	2M
6. Write the components of manufacturing process of thermal power plant?	CO3	L2	3M
7. What are the characteristics of dairy waste water?	CO4	L1	2M
8. What the waste is produced from fertilizers plant?	CO4	L1	3M
9. Write the advantages of common effluent treatment plant?	CO5	L2	2M
10. List out the effluent disposal methods?	CO5	L1	3M

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

11. A) Explain the basic theories of industrial waste water management and give examples each	CO1	L3	10M
OR			
B) Analyze the joint treatment of industrial wastes and domestic sewage.	CO1	L3	10M
12. A) How are industrial waste water treated? what are the effects of this effluent when discharges into streams and lakes?	CO2	L3	10M
OR			
B) What do you understand about recirculation of industrial wastes? Explain in detail.	CO2	L3	10M
13. A) What is the manufacturing process and design of liquid waste from textile industry?	CO3	L3	10M
OR			
B) Explain briefly about treatment process of tanneries mill waste?	CO3	L2	10M
14. A) Explain the method of manufacturing process of sugar industry with flow chart?	CO4	L3	10M
OR			
B) Draw a flow sheet for operations in an integrated steel plant? And identify the sources of pollution and their characteristics.	CO4	L3	10M
15. A) What is the common effluent treatment plant? Explain in detail	CO5	L3	10M
OR			
B) i) What are the limitations of common effluent treatment plant? ii) What are the suitability of common effluent treatment plant?	CO5	L3	5M 5M