

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025***Sixth Semester**Civil Engineering***CCE334 - Industrial Wastewater Management****Regulations – 2021****Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	Write the sources and types of industrial waste water.	L1	1	2
2.	Mention the major issues on water quality management.	L2	1	2
3.	Outline about the waste management hierarchy.	L1	2	2
4.	Define cost benefit analysis.	L1	2	2
5.	What are the controlling factors to be determined for the efficient operation of biological process?	L1	3	2
6.	Define electro dialysis.	L1	3	2
7.	What are the major characteristics of industrial effluents?	L1	4	2
8.	What is meant by sludge digestion?	L1	4	2
9.	State the various methods in industrial manufacturing process.	L2	5	2
10.	Specify any four wastes from tanneries.	L2	5	2

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

Q.No	Questions	BLT	CO	Marks
11. a i	Describe the sources and types of industrial waste water.	L2	1	8
	ii Write the impact of waste water on environment and how it can be mitigated?	L2	1	8
	Or			
b	What is meant by bioassay studies? Explain the significance of bioassay test in industrial waste management.	L2	1	16
12. a	Illustrate the preventive methods and control measures of various industrial pollution.	L2	2	16
	Or			
b	Discuss in detail about implementing & promoting pollution prevention programs in industries.	L2	2	16

13.	a	Define waste water treatment and elaborate the preliminary and primary treatment methods.	L2	3	16
		Or			
	b	Explain the biological treatment process and chemical oxidation process.	L2	3	16
14.	a	Describe the common effluent treatment plant along with unit processes with the help of a flow chart.	L3	4	16
		Or			
	b	Describe in detail about thickening, digestion, conditioning, dewatering and disposal of sludge.	L3	4	16
15.	a	Briefly describe the sources and treatment process of textile dying waste water with flow diagram.	L3	5	16
		Or			
	b	Enumerate the treatment methods in sugar industries and distilleries with a case study.	L3	5	16