

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025

Third Semester

Civil Engineering

CE3303 - Water Supply and Waste Water Engineering

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

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

Q.No	Questions	BLT	CO	Marks
1.	Define water borne disease.	L1	1	2
2.	Write the standards for potable water.	L1	1	2
3.	Write a short note on disinfection.	L2	2	2
4.	Write the objectives of water treatment.	L2	2	2
5.	What are the fittings available in pipes?	L2	3	2
6.	What is meant by leak detection?	L2	3	2
7.	Define population equivalent.	L1	4	2
8.	How to prevent and control the sewers?	L2	4	2
9.	What is meant by UASB?	L2	5	2
10.	How to select the treatment methods?	L2	5	2

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

Q.No	Questions	BLT	CO	Marks
11.	a Explain briefly about characteristics of water.	L3	1	16
	Or			
	b i Write the estimation of surface and subsurface water resources.	L2	1	8
	ii Write about Intake and its types.	L2	1	8
12.	a Mention the types of sand filters and explain it.	L2	2	16
	Or			
	b Design a six slow sand filter beds from the following data: Population = 50000 persons Per capita demand = 150 L/h/day Rate of filtration = 180 L/hr/m ² Length of each bed = twice the breadth	L4	2	16

13.	a	Explain in detailed about distribution of pipes.	L3	3	16
Or					
	b i	Write a short note on pumping stations and explain their operations.	L2	3	8
	ii	Explain briefly about house service connections.	L3	3	8
14.	a i	Explain the plumbing system of sewage.	L3	4	8
	ii	Write about hydraulics of flow in sanitary sewers.	L2	4	8
Or					
	b i	How to estimate the sanitary sewage flow?	L2	4	8
	ii	Write a short note on sewer design.	L2	4	8
15.	a	Explain briefly about trickling filter.	L3	5	16
Or					
	b	Explain the term SBR and UASB.	L2	5	16