

BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE

(AUTONOMOUS)

III -B.Tech II-Semester Regular Examinations (BR23), APRIL/MAY - 2026

WATER SUPPLY SYSTEMS

COMPUTER SCIENCE & ENGINEERING

Time: 3 hours

Max. Marks: 70

Question Paper consists of Part-A and Part-B
Answer ALL questions in Part-A and Part-B

PART-A (10X2 = 20M)

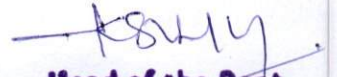
Question		Marks	CO	BL
1. a)	State about dilution of waste water	(2M)	CO1	BL2
b)	Explain shortly on transportation water	(2M)	CO1	BL1
c)	Brief note on precipitation	(2M)	CO2	BL2
d)	What is desalination	(2M)	CO2	BL2
e)	List out the waterborne diseases	(2M)	CO3	BL2
f)	Draw the treatment flow chart for waste water	(2M)	CO3	BL6
g)	Explain briefly on fire systems	(2M)	CO4	BL1
h)	Write short note on service reservoirs	(2M)	CO4	BL2
i)	What are the characteristics of waste water	(2M)	CO5	BL2
j)	Draw the any industrial layout	(2M)	CO5	BL6

PART-B (5X10 = 50M)

2.a)	What is water demand? State its types and Explain.	5M	CO1	BL1
b)	Explain about sanitation and its importance.	5M	CO1	BL1
OR				
3.a)	Explain about fire protection systems in varies buildings.	5M	CO1	BL1
b)	Explain about irrigation and its importance.	5M	CO1	BL1
OR				
4.a)	Explain varies sources of water.	5M	CO2	BL1
b)	Describe the components of the hydrologic cycle with a neat sketch.	5M	CO2	BL2
OR				
5.a)	Explain recycling of waste water with neat sketch.	5M	CO2	BL3
b)	What are the types of aquifers and its recharge process? Explain with neat sketch.	5M	CO2	BL3
OR				
6.a)	Differentiate between portable and non portable water.	5M	CO3	BL3
b)	What are the main causes of water-borne diseases? Give some example.	5M	CO3	BL1

OR				
7.a)	Explain about grey water and black water.	5M	CO3	BL1
b)	Explain about sewage irrigation.	5M	CO3	BL1
OR				
8.a)	Explain gravity, pumping, and combined distribution systems.	5M	CO4	BL2
b)	List different types of valves used in distribution systems and briefly explain each.	5M	CO4	BL3
OR				
9.a)	Compare dead-end, grid iron, ring, and radial distribution systems.	5M	CO4	BL2
b)	Explain the importance of emergency water supply during fire accidents.	5M	CO4	BL1
OR				
10.a)	Explain the importance of surface water sources in selecting the location of an industry.	5M	CO5	BL1
b)	How do wastewater characteristics influence treatment process selection?	5M	CO5	BL2
OR				
11.a)	How does surface water quality influence industrial processes.	5M	CO5	BL1
b)	Explain the general standards for discharge of industrial effluents into surface waters.	5M	CO5	BL1

K. S. M. , Asst. Prof.


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