

**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE  
(AUTONOMOUS)**

**III-B.Tech II-Semester Regular Examinations (BR23), April - 2026**

**ENVIRONMENTAL ENGINEERING**

**(CIVIL ENGINEERING)**

Time: 3 hours

Max. Marks: 70

*Question Paper consists of Part-A and Part-B  
Answer ALL the question in Part-A and Part-B*

PART-A (10X2 = 20M)

		Marks	CO	BL
1. a)	What are water borne diseases?	(2M)	CO1	BL1
b)	What is meant by per capita demand?	(2M)	CO1	BL1
c)	Discuss the importance of water quality standards like Indian and WHO ?	(2M)	CO2	BL6
d)	What is a man hole?	(2M)	CO2	BL1
e)	What are the objectives of waste water treatment?	(2M)	CO3	BL1
f)	Name any four types of settling?	(2M)	CO3	BL1
g)	Name the few important sewer appurtenances?	(2M)	CO4	BL1
h)	Discuss the importance Grit chamber in treatment process?	(2M)	CO4	BL6
i)	What are the various disposal methods of treated sewage?	(2M)	CO5	BL1
j)	Write about Oxygen Sag Curve?	(2M)	CO5	BL1

PART-B (5X10 = 50M)

2a.	Discuss about importance of public water supply system?	10(M)	CO1	BL6
(OR)				
3a.	Differentiate between per capita demand and design period?	5(M)	CO1	BL4
b.	What are the various type's pipes and joints?	5(M)		BL1
4a.	What are water quality parameters and their importance?	10(M)	CO2	BL1
(OR)				
5a.	Explain about the laying and testing of pipes w.s.r .to leakages?	10(M)	CO2	BL2
6a.	Discuss in brief about the unit operations and unit process?	10(M)	CO3	BL6
(OR)				
7a.	Explain about the process of coagulation and the importance disinfection?	10(M)	CO3	BL2
8a.	What are the various characteristic features of sewage?	10(M)	CO4	BL1

(OR)				
9a.	What is the importance of street inlets and flushing tanks?	5(M)	CO4	BL1
b.	Write a short note on design aspects of a septic tank?	5(M)		

10a	Discuss the secondary treatment process with special reference to trickling filters?	10(M)	CO5	BL6
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(OR)				
11a	What are the different types of disposal methods of waste water?	10(M)	CO5	BL1

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