

HALL TICKET NUMBER

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PACE INSTITUTE OF TECHNOLOGY &amp; SCIENCES::ONGOLE

(AUTONOMOUS)

IV B.TECH I SEMESTER END SUPPLEMENTARY EXAMINATIONS, MARCH-2023

ENVIRONMENTAL ENGINEERING

(CE Branch)

Time: 3 hours

Max. Marks: 60

Note: Question Paper consists of Two parts (Part-A and Part-B)

**PART-A**Answer **all** the questions in Part-A (5X2=10M)

Q.No.	Questions	Marks	CO	KL
1.	a) Define the term 'per capita demand'?	[2M]	1	1
	b) How to select the suitable site for a reservoir?	[2M]	2	1
	c) What are Pathogens?	[2M]	3	1
	d) List the names of Coagulants?	[2M]	4	1
	e) List the names of Pipe Appurtenances?	[2M]	5	1

**PART-B**Answer **One** Question from each UNIT (5X10=50M)

Q.No.	Questions	Marks	CO	KL
UNIT-I				
2.	Discuss the factors affecting the per capita demand?	[10M]	1	4
OR				
3.	Summarize the importance and necessity of protected water supply systems?	[10M]	1	2
UNIT-II				
4.	Explain about the flow pattern in an infiltration gallery with neat sketch?	[10M]	2	2
OR				
5.	Briefly explain about the gravity and pressure conduits?	[10M]	2	2
UNIT-III				
6.	Analyze the biological characteristics of water?	[10M]	3	4
OR				
7.	Write about WHO guidelines for drinking water?	[10M]	3	1
UNIT-IV				
8.	Explain about lime-soda process for removing Hardness from water?	[10M]	4	2
OR				
9.	How to remove iron and manganese from water?	[10M]	4	1
UNIT-V				
10.	Discuss the sluice valves, with neat sketch?	[10M]	5	2
OR				
11.	Write short notes about laying and testing of pipe lines?	[10M]	5	2

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