Q.P. Code: 16CE133

## Reg. No:

## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

## B.Tech IV Year I Semester Supplementary Examinations November-2020 ENVIRONMENTAL ENGINEERING

	(Civil Engineering)	
Time: 3 hours Max. M		ks: 60
	(Answer all Five Units $5 \times 12 = 60$ Marks)	
	UNIT-I	
1	a Explain the factor affecting the per capita demand.	<b>6M</b>
	<b>b</b> Explain the variation in the demand.	<b>6M</b>
	OR	
2	<b>a</b> Explain any one method of forecasting the population of town.	<b>4M</b>
	<b>b</b> Explain the sources of water.	<b>8M</b>
	UNIT-II	
3	<b>a</b> What are the methods of removal of Hardness?	<b>4M</b>
	<b>b</b> Explain lime soda and zeolite process with advantages and disadvantages.	<b>8M</b>
	OR	
4	a List out the requirements of good disinfectant.	6M
	<b>b</b> What are the differences of slow sand filter and rapid sand filter?	6M
	UNIT-III	
5	a Compare between conservancy system and water carriage system	<b>8M</b>
	<b>b</b> Explain the causes of pipe corrosion.	<b>4M</b>
	OR	
6	a Write a note on different types of sewer.	6M
	<b>b</b> What should be the characteristics of materials to be used for sewers?	6M
	UNIT-IV	
7	Draw the schematic diagram of typical sewage treatment plant.	12M
	OR	
8	Explain, with the help of neat sketch, the construction and working of a conventional	12M
	tickling filter.	
	UNIT-V	
9	a Explain the factors affecting of sludge digestion.	6M
	<b>b</b> What do you understand by sludge thickening?	6M
10	OR	1084
10	Design a septic tank for 200 persons assuming water supply as 120 LPCD.	12M

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