



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Mid - Term Examinations – March 2026

Date: 12- 03- 2026

Time: 09:30am – 11.00am

School: SOE	Program: B. Tech		
Course Code: CIV2515	Course Name: Water Infrastructure System		
Semester: IV	Max Marks: 50	Weightage: 25%	

CO - Levels	C01	C02	C03	C04	C05
Marks	24	26	-	-	-

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	What is average daily per capita demand and maximum hourly demand?	2 Marks	L1	C01
2	Define potable water and wholesome water.	2 Marks	L1	C01
3	Name any four physical water quality parameters.	2 Marks	L1	C02
4	What is permanent hardness of water?	2 Marks	L1	C02
5	Give the widely used method to remove fluoride in drinking water with standard limits.	2 Marks	L1	C02

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Describe losses and wastage of water in a water supply system and suggest control measures.	10 Marks	L2	C01
----	----	---	----------	----	-----

Or

7.	a.	Differentiate comparative graphical and master plan methods, adopted for estimating future populations	10 Marks	L2	CO1
----	----	--	----------	----	-----

8.	a.	Describe the various types of water demand in a town with neat sketches/examples.	10 Marks	L2	CO2
----	----	---	----------	----	-----

Or

9.	a.	Describe the function, types and factors affecting intake structure in safely withdrawing water from the source and conduits to the water treatment plant.	10 Marks	L2	CO2
----	----	--	----------	----	-----

10.	a.	Infer the significance and determination of chlorides and nitrates in water.	10 Marks	L3	CO2
-----	----	--	----------	----	-----

Or

11.	a.	Infer the significance and determination of alkalinity and hardness in water.	10 Marks	L3	CO2
-----	----	---	----------	----	-----

12.	a.	<p>The census record of a city show population as follows</p> <p>present population = 50000</p> <p>before one decade =47100</p> <p>before two decades =43500</p> <p>before three decades =41000</p> <p>Find the population after one, two, three decades by using arithmetic increase method.</p>	10 Marks	L3	CO2
-----	----	---	----------	----	-----

Or

13.	a.	<p>Predict the population for the year 2031,2041,2051 from the population data using arithmetic increase method.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Year</td> <td>1971</td> <td>1981</td> <td>1991</td> <td>2001</td> <td>2011</td> <td>2021</td> </tr> <tr> <td>Population</td> <td>858545</td> <td>1015672</td> <td>1201553</td> <td>1691538</td> <td>2077820</td> <td>2585862</td> </tr> </table>	Year	1971	1981	1991	2001	2011	2021	Population	858545	1015672	1201553	1691538	2077820	2585862	10 Marks	L3	CO2
Year	1971	1981	1991	2001	2011	2021													
Population	858545	1015672	1201553	1691538	2077820	2585862													