Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (NEW) - EXAMINATION - SUMMER 2017 Subject Code: 2151306 Date: 12/05/2017 Subject Name: Municipal Engineering

Ti	me:	02:30 PM to 05:00 PM Total Marks: 7	70
In	struc	tions:	
		1. Attempt all questions.	
		2. Make suitable assumptions wherever necessary.	
2.1		3. Figures to the right indicate full marks.	1.4
Q.1	4	Short Questions	14
	1	What do you mean by Municipal engineering?	
	2	What is Intake work?	
	3	What is Trap?	
	4	Enlist Surface water sources.	
	5	Enlist types of water distribution system.	
	6	Define Sewage.	
	7	What is Sullage?	
	8	What is Lamphole?	
	9	What is self-cleaning velocity?	
	10	Give expression for Manning's formula.	
	11	What is Conservancy system of sanitation?	
	12	Define Porosity.	
	13	What is Design Period?	
	14	What is Gully trap?	
Q.2	(a)	What is Time of Concentration?	03
	(b)	What is the importance of Water supply scheme?	04
	(c)	Draw a neat sketch of River intake work and explain its working.	07
		OR	
	(c)	Explain construction and functions of Drop Manhole with neat sketch.	07
Q.3	(a)	Enlist the factors affecting selection of site for Intake work.	03
	(b)	Give classification of Pumps.	04
	(c)	Enlist different types of materials for Sewers. Explain any two in detail.	07
	(-)	OR	
Q.3	(a)	Enlist the factors affecting design of Intake work.	03
Q.C	(b)	Enlist various factors affecting the Demand of water.	04
	(c)	Enlist different Storm relief works and explain any one with sketch.	07
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Q.4	(a)	What do you mean by Anti-siphonage pipe?	03
	(b)	Differentiate between Combined and Separate Sewerage system.	04
	(c)	Explain construction and working of Gate Valve with neat sketch. OR	07
0.4	(-)		02
Q.4	(a)	What do you mean by Invert?	03
	(b)	Differentiate between Storm water and Sanitary sewage.	04
	(c)	Write a short note on maintenance and cleaning of Sewers.	07
Q.5	(a)	What do you mean by the Coefficient of Runoff?	03
-	(b)	Explain Dead-end system of water distribution.	04
	(c)	Enlist various systems used in House Plumbing. Explain any one in detail.	07
		OR	
Q.5	(a)	Enlist various types of Sewer joints.	03
-	(b)	Enlist the factors affecting the quantity of Storm water.	04
	(c)	Write down the procedure for laying of Sewer Pipes.	07
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