Seat No: Enrolment No:----

GUJARAT TECHNOLOGICAL UNIVERSITY B. E. Sem – VI - Examination –Summer 2015		
Subject code: 161301 Subject Name: Municipal Engineering Time:10.30AM-01.00PM Total Marks: 70 Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		
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Q-1	(a) Draw a neat flow diagram of water supply scheme. Also enlist the duties of water works engineers.	07
Q-2	(b)Enlist the surface water sources. Discuss each with respect to their Quality and Quantity(a) Define the following terms:[i] Porosity [ii] Water Bearing stratum [iii] Aquifer [iv] Per capita Demand [v]	07 07
	Design Period [vi] Sewage [vii] Manhole (b) Give the breakup of per capita demand. Explain each type of water demand. OR	07
	(b) Enlist and explain the factors affecting the demand of water.	07
Q-3	(a) Draw a neat sketch and explain construction & working of sluice valve.	07
	(b) Enlist the distribution systems and explain Dual system with its advantages. OR	07
Q-3	(a)Prepare a list of pumps used in water supply and explain any two.	07
Q-4	(b) What are the factors on which location of intake work depends? Explain canal intake with its working.(a) Enlist the types of reservoir & explain any one detail.	07 07
	(b) With the help of a neat sketch, write down the construction &function of a Manhole.	07
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Q-4	(a) Write a short note on 'Laying of Sewer'.(b)Explain the following with neat sketch:[1] Spigot & Socket joint	07 07
Q-5	[2] Expansion Joint (a) Enlist the different types of material for sewer. Explain any two in detail.	07

(b)Explain the system of Plumbing.

OR

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(b) Enlist and explain the factors affecting the quantity of storm water.

(a) Explain the followings: [1] Hydrants [2] Meters

Q-5