Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER I (NEW) – • EXAMINATION	N – SUMMER 2017
Subject Code: 2711701	Date:08/05/2017
Subject Name: Application Based Systems for Transp	oort of Water & Wastewater
Time:02:30 p.m. to 05:00 p.m.	Total Marks: 70
Instructions:	

- Attempt all questions.
 Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a) (b)	Define continuity principle, energy principle and momentum principle. Enlist minor energy losses in pipe flow with their formula.	07 07
Q.2	(a) (b)	Write short note on centrifugal pumps with its merits and demerits. What are the various methods of conveyance of water? Describe. OR	07 07
	(b)	Define Water hammer and explain its causes.	07
Q.3	(a) (b)	Explain Grid – Iron system with its advantages and disadvantages. What is ESR? How storage capacity of ESR is determined? OR	07 07
Q.3	(a) (b)	Describe components of water distribution systems. Write short note on minimization of water losses.	07 07
Q.4	(a) (b)	Enlist types of Intakes and explain any one in detail. Explain location, requirements and safety measures for sewage pumping stations	07 07
		OR	
Q.4	(a) (b)	Explain manholes in detail with neat sketch. Explain inspection & maintenance of sewers.	07 07
Q.5	(a) (b)	Explain necessssity of combined and separate storm water drainage system. Write short note on rainfall intensity curves.	07 07
		OR	
Q.5	(a)	Explain the rational Method.	07
	(b)	Discuss factors affecting on storm Sewage.	07
