Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (OLD) - EXAMINATION – SUMMER 2017 Subject Code:180606 Date:06/05/2017			
Subject Name: Irrigation Water Management (Department Elective-II) Time:10:30 AM to 01:00 PM Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.			
			Q.1
	(b)	Describe drip irrigation giving layout and describing each component	07
Q.2	(a)	A stream of 160 liters per second was diverted from a canal and 140 liters per second were diverted to field. The field was 2.5 hecatre. Irrigation was done for 10 hours . Runoff and other losses 500 cu.m. The root zone is 2.0 m . Available moisture holding capacity is 22 cm per meter depth of soil calculate water conveyance efficiency, Application and water storage efficiencies.	07
	(b)	Explain border irrigation system.	07
	(b)	OR Describe how irrigation water management can be efficiently be utilized using	07
	(D)	remote sensing.	U/
Q.3	(a) (b)	Describe different types of drains to be provided to prevent water logging Describe water use organization . Describe water cooperative society and its role in water management .	07 07
		OR	
Q.3	(a) (b)	Describe land grading survey and design Describe check basin and ring basin method	07 07
Q.4	(a)	Describe following terms(i) Field capacity(ii) Wilting point (iii) Hygroscopic water (iv) Root zone	07
	(b)	Give classification of sprinkler irrigation system . OR	07
Q.4	(a)	Explain sub surface irrigation system.	07
	(b)	Describe causes of water logging and its remedial measure	07
Q.5	(a) (b)	Describe irrigation scheduling Describe maintenance problems of drip irrigation system	07 07
Q.5	(a)	OR Give design aspect of sprinkler irrigation system	07
Q.J	(b)	Explain Furrow irrigation system.	07
