Seat No.:	Enrolment No.
-----------	---------------

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering Semester –VI Examination Dec. - 2011

· ·	Subject Name: Environmental Engineering		Total Marks: 70	
•				
Instru	 Ma Fig 	tempt all questions. Aske suitable assumptions wherever necessary. Equipment of the right indicate full marks. Equipment of the properties of the considered of the properties of the considered of the conside		
Q.1	(1) (2) (3) (4)	Write short note on Requirement of wholesome water. Reverse osmosis process for desalination of water. Sources of solid waste. Collection and Handling of Bio-chemical waste.	14	
Q.2	(a) (b)	State the purpose of screenings. Explain bar screen with neat sketch. Explain requirements of good disinfection. OR	07 07	
Q.3	(b) (a) (b)	State methods of disinfection and explain any one method in details. What is purpose of sedimentation tanks? Where are they located? Explain the method of jar test for determining the optimum dosage of coagulant in raw water.	07 07 07	
Q.3	(a) (b)	OR State types of sedimentation tanks. Explain Hopper bottom tank with neat sketch. Explain various devices used to mix raw water with the coagulant.	07 07	
Q.4	(a) (b)	State various methods of sludge disposal. Explain any one method with neat sketch. State various methods of dewatering and gives suitability of them. OR	07 07	
Q. 4	(a) (b)	Write short note on the factors affecting sludge digestion. Write short note on (i) Gravity thickening. (ii) Sources of sludge.	07 07	
Q.5	(a) (b)	Compare Slow sand filter and Rapid sand filter Write short note on the softening of water. OR	07 07	
Q.5	(a) (b)	Write short note on pressure filter. State the advantages and disadvantages of Lime-soda method.	07 07	
