

GUJARAT TECHNOLOGICAL UNIVERSITY**DIPLOMA ENGG.- VI SEMESTER-EXAMINATION – MAY/JUNE - 2013****Subject code: 2360607/360607****Date:17/09/2013****Subject Name: Environment Engineering****Time: 3:00 pm – 5:30 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic

- Q.1** (a) Explain wholesome water & list out the requirement of the same. **07**
 (b) Write a Short note **07**
 1. Impurities of water,
 2. Characteristics of water
- Q.2** (a) List out the types of screen & explain bar screen with neat sketch. **07**
 (b) Enlist types of Coagulant & Explain various devices used to mix raw water with the coagulant. **07**
- OR**
- (b) Write short note on following. **07**
 (1) General waste and Hazardous waste
 (2) Rapid sand filter
- Q.3** (a) Explain methods of dewatering and their suitability. **07**
 (b) Explain the theory of sedimentation **07**
- OR**
- Q.3** (a) State classification of sedimentation tank for water treatment plant **07**
 (b) Define disinfection. List out the methods used for disinfection. **07**
- Q.4** (a) Explain Slow sand filter with neat sketch. **07**
 (b) Describe methods of sewage disposal in detail. **07**
- OR**
- Q. 4** (a) Define Solid Waste and list sources of it. **07**
 (b) List out the methods used for desalination & Explain any one method neat sketch. **07**
- Q.5** (a) Write short note on the softening of water and wastewater. **07**
 (b) Explain with neat sketch working of imhoff tank. **07**
- OR**
- Q.5** (a) What is Chlorination? Discuss various forms of Chlorination. **07**
 (b) Write short note on following. **07**
 (1) Chemical precipitation
 (2) Vacuum filtration
