

Seat No:- \_\_\_\_\_

Enrolment No:- \_\_\_\_\_

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**B. E. Sem. – IV - Examination – June- 2011**

**Subject code: 141304**

**Subject Name: Water Pollution and Control**

**Date: 13/06/2011**

**Time: 10.30 am – 01.00 pm**

**Total Marks: 70**

### **Instructions:**

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

- Q-1** (a) Give Consequences of overusing ground water and surface Water. **07**  
(b) What is coagulation process and explain its important in waste water treatment. **07**
- Q-2** (a) Explain the Application of different Chemical Unit process used in water pollution. **07**  
(b) (i) Write a Short note on Suspended Growth Process **07**  
(ii) write a shot note on Grit Chamber
- OR
- (b) (i) Write a short note on sedimentation process **07**  
(ii) What is Screening? Gives its application and classification in brief.
- Q-3** (a) Draw a chart of Effluent Treatment plant and Explain its unit. **07**  
(b) Explain Advance Waste water Treatment. Explain Filtration process in detail with their unit. **07**
- OR
- Q-3** (a) Explain the different Sources of Water Pollution and also gives idea about Pathological and Toxic Effect. **07**  
(b) Explain the Sources and Effect of Following Parameters in Waste Water treatment. (1) Colour (2) solids (3) organic matter (4) pH **07**
- Q-4** (a) What is Disinfection Process. Explain its Application on Water pollution. **07**  
(b) What is Anaerobic Treatment and based on that Explain anaerobic Reactors. **07**
- OR
- Q-4** (a) What is Softening Process. Explain its Application on Water pollution. **07**  
(b) What is Aerobic Treatment? Explain Attached Growth Process. **07**
- Q-5** (a) What is Thermal pollution? What are the methods to prevent the thermal pollution. **07**  
(b) Explain the Working Principle of trickling Filter. **07**
- OR
- Q-5** (a) Explain the Sources and Effect related to Oil pollution. **07**  
(b) Explain the Working Principle of Rotating Biological Filter. **07**

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