

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VII EXAMINATION – WINTER 2015**

**Subject Code: 171303**

**Date: 09/12/2015**

**Subject Name: Industrial Water Pollution & Control**

**Time: 10:30am to 1:00pm**

**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) Highlight the Secondary & Tertiary Benefits of Pollution Control along with the appropriate Example? **07**  
(b) Write a Short note on "Waste Management Hierarchy." **07**
- Q-2** (a) Explain how industrial waste water differs from Domestic Waste Water. **07**  
(b) What are the factors to be kept in mind when selecting river as a disposal sink? **07**
- OR**
- (b) Write a short note on **07**  
(1) Self Purification of Stream.  
(2) DO Sag curve.
- Q-3** (a) What is Volume Reduction? Enlist the Different Techniques of Volume Reduction & Explain any one in detail. **07**  
(b) Justify "Why there are Different Discharge Standards for Different Environmental Sinks?" **07**
- OR**
- Q-3** (a) What is Strength Reduction? Prepare a list of Strength reduction Techniques & Explain any two. **07**  
(b) Give the Classification of Lakes based on Productivity & biological Zones. **07**
- Q-4** (a) Write a short note on Causes & Effects of Oil Pollution. **07**  
(b) Suggest some common measures which an industry can adopt to Conserve water & reduce Waste Water Volume. **07**
- OR**
- Q-4** (a) Enlist the Different Processes & Equipments to remove oil & Grease from Waste Water. Explain any one With the help of neat Sketch. **07**  
(b) Highlight the Concept, Significance & advantages of Common Effluent Treatment Plants. **07**
- Q-5** (a) (1) What is proportioning? **07**

(2) Explain with the help of an Example “population Equivalent”.

(b) Highlight the need for Neutralization of Waste water. Enlist & Explain the methods of Neutralization. **07**

OR

**Q-5** (a) Write down the manufacturing process, sources & Treatment of waste water for any one industry. **07**

(1) Fertilizer (2) Sugar (3) Textile.

(b) Write a short note on Equalization of Waste Water. **07**