

GUJARAT TECHNOLOGICAL UNIVERSITY**M.E Sem-I Regular Examination January / February 2011****Subject code: 711802N****Subject Name: Industrial Wastewater Management****Date: 01 /02 /2011****Time: 02.30 pm – 05.00 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) Explain in Details Classification of reducing the volume of Wastewater is to be treated. **07**
(b) Write Down Common Point which Industry can adopt to conserve water & reduce Wastewater volume. **07**

- Q.2** (a) Describe Advantages & Limitations of CETP. **07**
(b) Enumerate the Basic Theories of Industrial Wastewater Management and Explain the proportioning. **07**

OR

- (b) How the samples of Industrial Wastewater are collected for finding the Characteristic and How are they Preserved? **07**

- Q.3** (a) What is Equalization? Why is its required? List & Explain any four methods of the Equalization. **07**
(b) Describe in brief the manufacturing process, sources of waste water & line of treatment for Dairy industry. **07**

OR

- Q.3** (a) Explain the concept of “Neutralization”. What are the benefits of neutralization. **07**
(b) Write down the manufacturing process, sources & treatment of Wastewater from Textiles Industry (Cotton Base Industry). **07**

- Q.4** (a) It is decided to plan a water reuse system in “Metro Politian Cities”. You are asked to do ‘Characterization of sources’. What aspects will you consider for this purpose? **07**
(b) Explain Any two water reclamation technology in context to reuse of water. **07**

OR

- Q.4** (a) Describe in details Primary and Secondary recycling of Industrial Wastewater. **07**
(b) Why Should one consider reuse of water? What are the potential uses of Reclaimed Water? **07**

- Q.5** (a) Write a short note on **07**
(i) Membrane Process Classification
(ii) Locating Sources of reclaimed water
(b) Explain Industrial Effluent Standards. **07**

OR

- Q.5** (a) Write a note on “The steps involved in Waste minimization exercise”. **07**
(b) Explain by Means of examples how adoption of Clean Technology is more Economical than a clean up technology in industrial waste treatment. **07**
