

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 171303

Date: 04-12-2014

Subject Name: Industrial Water Pollution and Control

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) Explain how industrial waste water differs from Domestic Waste Water. **07**
(b) Enlist & Explain the Primary & Secondary Benefits of Pollution Control. **07**
- Q-2** (a) Write a Short note on "Waste Management Hierarchy." **07**
(b) Write a short note on Causes & Effects of Oil Pollution. **07**
- OR
- (b) Enlist the Different Processes & Equipments to remove oil & Grease from Waste Water. Explain any one With the help of neat Sketch. **07**
- Q-3** (a) Write a short note on "Conservation of Water in Industries". **07**
(b) Explain the Phenomena of Stratification & overturn of Lakes. **07**
- OR
- Q-3** (a) Derive the equation for steady state Concentration of Pollutant in a lake. **07**
(b) Justify "Why there are Different Discharge Standards for Different Environmental Sinks?" **07**
- Q-4** (a) Highlight the Concept, Significance & advantages of Common Effluent Treatment Plants. **07**
(b) What is Volume Reduction? Enlist the Different Techniques of Volume Reduction & Explain any one in detail. **07**
- OR
- Q-4** (a) What is Strength Reduction? Prepare a list of Strength reduction Techniques & Explain any two. **07**
(b) Write a short note on Equalization of Waste Water. **07**
- Q-5** (a) Write a short note on **07**
(1) Self Purification of Stream.
(2) DO sag curve.
(b) Differentiate between the "stream standards & Effluent Standards" giving the Advantages & disadvantages of both. **07**
- OR
- Q-5** (a) What is proportioning? **07**
(2) Explain with the help of an Example "population Equivalent"
(b) Suggest some common measures which an industry can adopt to Conserve water & reduce Waste Water Volume. **07**
