

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – SUMMER 2013****Subject Code: 171303****Date: 28-05-2013****Subject Name: Industrial Water Pollution and Control****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 the causes and effects of oil pollution from industries. **07**
(b) Write a note on “Conservation of water in industries”. **07**

- Q.2** (a) Write a note on concept of Common Effluent Treatment Plant (CETP). Also explain its advantages. **07**
(b) Highlight the primary and secondary benefits of pollution control. **07**

OR

- (b) What are the consequences when the limits for following parameters are exceeded: **07**
(i) BOD (ii) Oil & grease (iii) pH

- Q.3** (a) Differentiate between ‘Stream standards’ and ‘Effluent Standards’ giving the advantages and disadvantages of both. **07**
(b) Explain the phenomena of stratification and overturn in lakes. **07**

OR

- Q.3** (a) Enlist and explain briefly the points to be considered for discharge of effluents in to a river. **07**
(b) (i) What is “Proportioning”? **07**
(ii) Explain with the help of an example “Population Equivalent”.

- Q.4** (a) Explain how industrial wastewaters differ from domestic wastewater. **07**
(b) Define Strength Reduction. Prepare a list of strength reduction techniques and explain any two. **07**

OR

- Q.4** (a) Enlist and explain the different techniques of volume reduction. **08**
(b) Explain the importance of equalization and neutralization in treatment of industrial wastewater. **06**

- Q.5** (a) With the help of a neat sketch write a short note on “DO sag curve” **07**
(b) Write a note on Self purification of streams. **07**

OR

- Q.5** (a) Write down the manufacturing process, sources and treatment of wastewater for any one of the following industries: **10**
(i) Textile (ii) Pulp and paper (iii) Sugar
(b) Write a note on ‘Waste management hierarchy’. **04**