Seat No.:	Enrolment No.
-----------	---------------

Subject Code: 171303

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – SUMMER 2013

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. (a) Explain the causes and effects of oil pollution from industries. 07 0.1 **(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 07 explain its advantages. (b) Highlight the primary and secondary benefits of pollution control. **07 (b)** What are the consequences when the limits for following parameters are exceeded: 07 (i) BOD (ii) Oil & grease (iii) pH (a) Differentiate between 'Stream standards' and 'Effluent Standards' giving the **Q.3** 07 advantages and disadvantages of both. **07 (b)** Explain the phenomena of stratification and overturn in lakes. (a) Enlist and explain briefly the points to be considered for discharge of effluents 0.3 07 in to a river. **(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 07 explain any two. 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 06 industrial wastewater. 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 10 for any one of the following industries: Textile (ii) Pulp and paper (iii) Sugar 04 **(b)** Write a note on 'Waste management hierarchy'.