Seat No.: Enrolment No. GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII (NEW) - EXAMINATION - SUMMER 2017 Date: 02/05/2017 Subject Code: 2171303 **Subject Name: Industrial Water Pollution & Control** Time: 02.30 PM to 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. 0.1 (a) Enlist the different processes & Equipments to remove oil & grease from waste **07** water. Explain any one with the help of neat sketch. (b) Difference between effluent standards and stream standards. Give advantages **07** and disadvantages. **Q.2** Justify "why there are different discharge standards for different environmental 07 sinks". Write a note on self purification of streams. 07 **(b)** OR **(b)** With the help of neat sketch write a note on "DO sag curve". **07** Q.3 What is Evaporation? How it is useful for treatment of strong industrial waste. (a) **07** Enlist the methods for Neutralization. Explain any two in detail. **07 (b)** Q.3 Write down the limitations of land disposal of sewage. **07** (a) What are the objectives of proportioning in industrial waste? **07 (b)** 0.4 How does segregation reduce the strength of waste water? Give an example. **07** (a) What is usually the greatest factor influencing an industry to reuse its waste **07 (b)** water. OR Suggest the measure to reduce the strength of waste water. **07 Q.4** (a) What is Volume reduction? Enlist different technique of volume reduction. **07 (b)** Explain any one in detail. Write a short note on "Basic water quality parameters required for boiler feed **Q.5 07** (a) water & cooling water." Explain the basic objective of setting up a CETP. Describe limitations of CETP. **07** OR Derive the equation for steady state concentration of pollution in a lake. **07** Q.5 (a) Write down waste water characteristic of effluent generated from textile **07** industries. Also draw suitable waste water treatment plant for the same.