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GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER III (NEW) – • EXAMINATION – SUMMER 2016 Subject Code: 2731806 Date: 03/05/2016 **Subject Name: Industrial Wastewater Management** Time: 10:30 am to 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. (a) Explain how equipment modification can reduce the strength of wastewater with **Q.1** 07 the help of relevant examples. **(b)** Enlist the primary and secondary benefits of pollution control. **07 Q.2** (a) Write a note on Equalization and proportioning. **07 (b)** Explain why the discharge standards are different for different sinks. **07** OR (b) Given an option which environmental sink will you prefer for discharge of 07 treated effluent from dairy industry? Justify your selection. 0.3 Can leak detection be considered a tool for volume reduction? Justify your 07 (a) answer with suitable examples. What is volume reduction? Enlisting the different techniques of volume reduction 07 **(b)** , explain any one in detail. OR (a) How can the application of Cleaner Production tools lead to reduction of 07 0.3 volume/strength of wastewater? Elaborate your answer with relevant examples. (b) What factors should be considered for design of CETP? Explain any one in 07 detail. (a) Give the classification of lakes based on productivity and biological zones. **Q.4** 07 Compare and explain the drawbacks of effluent standard system and stream **07** standard system. OR What is the difference between disposal of liquid wastewater and radioactive 07 **Q.4**

(b) Enlist and explain the factors to be considered while selecting river as the 07

wastewater in to the ocean?

ultimate point of discharge.

Q.5 (a) Write down the manufacturing process, sources and treatment of 14 wastewater for Pulp & Paper industry.

OR

Q.5 (a) Write down the manufacturing process, sources and treatment of 14 wastewater for leather industry.
