

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2014

Subject code: 1721702

Date: 18-06-2014

Subject Name: Industrial Water And Wastewater Treatment

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) What are the different treatments given to water for various industrial activities? **07**
(b) What different treatments are given to major industrial wastes? **07**
- Q.2** (a) What different techniques are used for treatment of saline water? **07**
(b) Explain in detail biological process used to treat industrial wastewater. **07**
- OR**
- (b) Explain in detail quality of water required for different industrial activities. **07**
- Q.3** (a) Explain in detail physico-chemical process for wastewater treatment. **07**
(b) What are the different methods used for volume reduction in wastewater treatment? **07**
- OR**
- Q.3** (a) Explain in detail application of electro dialysis in saline water conversion **07**
(b) What are the different methods for strength reduction in wastewater plants? **07**
- Q.4** (a) Explain in detail sedimentation for waste water treatment. **07**
(b) What is significance of neutralization in wastewater treatment? **07**
- OR**
- Q.4** (a) Explain in detail primary treatments in industrial wastewater plants. **07**
Q.4 (b) Explain adsorption methods for wastewater treatment. **07**
- Q.5** (a) What is CETP? Does CETP provide economical way of effluent treatment or not? **07**
(b) Explain treatments given to water for steam generation. **07**
- OR**
- Q.5** (a) Explain in detail if joint treatment of industrial and domestic waste is feasible or not? **07**
(b) Explain in detail treatments given to water for cooling and water for heating in industry. **07**
