

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering Sem. - V - Examination – June- 2011

Subject code: 351303

Subject Name: Industrial Water Pollution

Date: 22/06/2011

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.**
- 4. English version is Authentic**

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|-------------|-----|---|-----------|
| Q.1 | (a) | What are Criteria and standards? Differentiate between Effluent standards & Stream standards. | 07 |
| | (b) | Explain quality of water required for Boiler Feed Water. | 07 |
| Q.2 | (a) | Explain By-product recovery in detail. | 07 |
| | (b) | Write short note on “Cost of Pollution Control”. | 07 |
| | | OR | |
| | (b) | What should be the quality of water for cooling water? | 07 |
| Q.3 | (a) | What is the need of Equalization in control of water pollution? | 07 |
| | (b) | Write about “Segregation of wastes” and “Proportioning of Wastes”. | 07 |
| | | OR | |
| Q.3 | (a) | Describe “Elimination of Batch or Slug Discharge of Process wastes”. | 07 |
| | (b) | Explain i) Classification of Wastes, ii) Conservation of wastewater | 07 |
| Q.4 | (a) | Explain Caustic-soda Treatment for Acid Wastes. | 07 |
| | (b) | Write about i) Proper Distribution & Baffling, ii) Mechanical Agitation, iii) Aeration of Equalizing basins. | 07 |
| | | OR | |
| Q. 4 | (a) | Explain Sulfuric-Acid Treatment for Alkaline Wastes. | 07 |
| | (b) | Explain the Manufacturing process, Sources of wastewater from process and Treatment of wastewater for Textile industry. | 07 |
| Q.5 | (a) | Explain the Sources of wastewater from process and Treatment of wastewater with Treatment flow diagram for Pharmaceutical industry. | 07 |
| | (b) | Explain the Manufacturing process and process flow diagram for Sugar industry. | 07 |
| | | OR | |
| Q.5 | (a) | Explain the Manufacturing process, Sources of wastewater from process and Treatment of wastewater for Dairy industry. | 07 |
| | (b) | Explain the Manufacturing process and process flow diagram for Fertilizer industry. | 07 |
