

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGG.- VI<sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNE- 2012

Subject code: 360607/2360607

Date: 30/05/2012

Subject Name: Environment Engineering

Time: 10:30 am – 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.
4. English version is considered to be Authentic

- Q.1** (a) Mention the various impurities in water which should be taken in to account in deciding the potability of water. **07**
- (b) Draw a neat sketch for sewage treatment showing the location and functions in sewage treatment. **07**
- Q.2** (a) Write a Short note (Any TWO) **07**
1. Solid waste management
  2. Grit removal
  3. Desalination
- (b) Explain principal and purpose of coagulant in purification of water. **07**
- OR**
- (b) State classification of solid waste. **07**
- Q.3** (a) Explain theory of sedimentation. **07**
- (b) Discuss dewatering and state common method. **07**
- OR**
- Q.3** (a) Define :- 1. Aeration **07**
2. Elluration
- (b) Discuss the chemical precipitation. **07**
- Q.4** (a) Explain clarifocculator and its advantages. **07**
- (b) Discuss the theory of filtration. **07**
- OR**
- Q. 4** (a) State various steps involved in purification. **07**
- (b) Explain disposal of sludge. **07**
- Q.5** (a) Write short note of refuse. **07**
- (b) Discuss sludge digestion. **07**
- OR**
- Q.5** (a) Explain with neat sketch working of imhoff tank. **07**
- (b) Discuss why coagulants are added and state devices for adding coagulant in water treatment. **07**

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