

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (OLD) - EXAMINATION – SUMMER 2017

Subject Code:181301

Date:04/05/2017

Subject Name: Municipal and Hazardous Solid Waste 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.

- Q.1** (a) Define the following terms: collection, refuse, leachate, sanitary landfill, Hazardous waste **07**
(b) Give classification of materials comprising municipal solid waste **07**
- Q.2** (a) Explain the methods to determine generation of solid waste. **07**
(b) Describe in detail Solid waste collection systems **07**
OR
(b) Explain the properties of solid waste **07**
- Q.3** (a) What do you mean by the term Landfill mining? **07**
(b) Explain in detail classification of hazardous solid waste **07**
OR
- Q.3** (a) With reference to hazardous waste management explain waste exchange and recycling **07**
(b) Discuss the important characteristics of hazardous waste **07**
- Q.4** (a) Explain the factors that must be considered in evaluating potential landfill site **07**
(b) Enlist the processing techniques for municipal solid waste and explain any two in detail. **07**
OR
- Q.4** (a) Explain landfilling methods and operations **07**
(b) Write a short note: recovery of biological conversion products **07**
- Q.5** (a) Draw only the sketches of hardware used for the sampling of hazardous waste **07**
(b) Write a short note: Stabilization and solidification of hazardous waste **07**
OR
- Q.5** (a) Explain the biological treatment for hazardous waste with example. **07**
(b) Explain the means of treatment for biomedical waste. **07**
