

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- VIth SEMESTER-EXAMINATION – MAY- 2012****Subject code: 160403****Date: 15/05/2012****Subject Name: Environmental Biotechnology****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.

- Q.1** (a) Enlist effective sources of Biomass in India. **07**
(b) What are the uses of anaerobic fermentation of semidry garbage waste fractions? **07**
- Q.2** (a) Write a Note on: Fuel and Microbes **07**
(b) Give main points for waste gas purification. **07**
OR
(b) Discuss rotating Biological contactors with figure. **07**
- Q.3** (a) Explain: Micropropagation for reforestation. **07**
(b) How soil fertility can be improved by Microbes? **07**
OR
- Q.3** (a) Explain Trickling Filters. **07**
(b) Write a note on toxic site reclamation. **07**
- Q.4** (a) Give an elaborate view of impact of various heavy metals on environment. **07**
(b) What could be the role of Biosensors in monitoring environment? **07**
OR
- Q.4** (a) Briefly discuss the concept of Phytoremediation for environmental biotech applications. **07**
(b) What is SPIC strategy for bio-treatment? **07**
- Q.5** (a) Discuss main aspects of secondary treatment of wastewater. **07**
(b) How methane gas is produced by anaerobic treatment of wastewater? **07**
OR
- Q.5** (a) Give an account of different methods to produce Biogas. **07**
(b) What steps do you suggest to reduce water pollution by looking all kinds of contaminants, as an engineer? **07**
