

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2013****Subject code: 1722104****Date: 07-06-2013****Subject Name: Energy Conservation and Management****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) Discuss various principles of energy conservation. **07**
(b) Explain general procedure for cooling load calculation. **07**
- Q.2** (a) Explain how power factor improvement helps to save energy. **07**
(b) Future power development trend in India ñ Discuss. **07**
- OR**
- (b) Explain Green house concept. **07**
- Q.3** (a) What is the importance and role of energy management? **07**
(b) Layout general procedure in Energy Audit. **07**
- OR**
- Q.3** (a) What are the advantages of co-generation power plant? **07**
(b) With neat sketch explain working of óCyclone Burnerô. **07**
- Q.4** (a) With the help of neat sketch explain working of Fluidized Bed **07**
Combustion.
(b) What are the advantages of Diesel Generator set for power generation? **07**
- OR**
- Q.4** (a) What are the advantages of Renewable energy? **07**
Q.4 (b) With help of neat sketch explain working of Floating Dom-KVIC **07**
Biogas plant.
- Q.5** (a) Explain payback period for energy conservation. **07**
(b) What is the importance of Energy Audit? **07**
- OR**
- Q.5** (a) Why energy storage is required? State the types of energy storage and **07**
explain any one.
(b) Explain working of Back pressure steam turbine. **07**
