

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION – WINTER • 2014

Subject Code: 162905

Date: 03-12-2014

**Subject Name: Energy Conservation and
Pollution Control in Textile Industry**

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.

- Q.1** (a) Discuss the energy management and energy audit. **07**
(b) Explain in brief about energy & environment. **07**
- Q.2** (a) With suitable data, explain the national energy situation in India. **07**
(b) In textile industry, how energy can be conserved in humidification? **07**
- OR**
- (b) Define – “Energy”. Also give justification for need to conserve energy. **07**
- Q.3** (a) What is ISO 14000? How ISO 14000 can be implemented in textile industry? **07**
(b) Discuss different parameters to conserve energy in wet processing. **07**
- OR**
- Q.3** (a) Write short note on – Use of solar energy as an alternative in textile mill. **07**
(b) Explain noise pollution in a textile mill with steps to control higher noise pollution in spinning and weaving section of a mill. **07**
- Q.4** (a) Write Short note on – Waste heat recovery Systems. **07**
(b) Explain in detail about motor efficiency and power consumption. **07**
- OR**
- Q.4** (a) Discuss in brief, in-plant modification to minimize water pollution in textile processing unit. **07**
(b) What is dust pollution and why it is higher in spinning mill? How modern equipments in spinning mill minimize this problem? **07**
- Q.5** (a) Enlist good quality lighting criteria. Also mention different ways to conserve energy in lighting. **07**
(b) Discuss energy conservation measures in sizing department with reference to novel techniques of sizing and development in sizing ingredients. **07**
- OR**
- Q.5** (a) Explain the causes and remedies of air pollution in textile mill. **07**
(b) Discuss Hazardous solid waste and its management. **07**
