

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – WINTER 2013****Subject Code: 162905****Date: 04-12-2013****Subject Name: Energy Conservation and Pollution Control in Textile****Industry****Time: 02:30 pm to 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) What is Energy? Why should we save energy? **07**
(b) What are different forms of energy? Also explain in brief about National energy situation. **07**
- Q.2** (a) Write in detail about Energy Audit. **07**
(b) What is ISO 14000? Also explain different steps to implement it. **07**
- OR**
- (b) Discuss in brief about energy conservation through Motor efficiency and Motor rating at Ring Frame. **07**
- Q.3** (a) Write in detail about Spindle power and energy conservation. **07**
(b) What is Humidification? How we can conserve energy through Humidification? **07**
- OR**
- Q.3** (a) Define - Waste Heat Recovery systems. Explain any one WHR system in detail. **07**
(b) Explain in detail about Foam Sizing and Solvent Sizing. **07**
- Q.4** (a) Write brief note on – Energy conservation in Lighting. **07**
(b) Discuss Hazardous waste and its generation. **07**
- OR**
- Q.4** (a) Discuss various types of pollution in textile industry. **07**
(b) Write major operations causing excessive Water pollution. **07**
- Q.5** (a) Explain in detail about Disposal of Waste water. **07**
(b) State various types of Air pollution control equipments. Discuss any one in detail. **07**
- OR**
- Q.5** (a) Explain in brief about cotton dust pollution in textile industry. **07**
(b) Discuss different parameters to conserve energy in Wet processing. **07**
