| Seat No.: | Enrolment No. |
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VI • EXAMINATION - WINTER 2013** 

| Subje                    | ect Na         | ame: Energy Conservation and Pollution Control in Textile   |          |
|--------------------------|----------------|---|----------|
| Indus<br>Time<br>Instruc | : 02:3 ctions: | 30 pm to 05:00 pm Total Marks: 70   |          |
|                          | 2. M           | ttempt all questions.<br>Take suitable assumptions wherever necessary.<br>Igures to the right indicate full marks.                        |          |
| Q.1                      | (a)<br>(b)     | What is Energy? Why should we save energy? What are different forms of energy? Also explain in brief about National energy situation.     | 07<br>07 |
| Q.2                      | (a)<br>(b)     | Write in detail about Energy Audit. What is ISO 14000? Also explain different steps to implement it.  OR                                  | 07<br>07 |
|                          | <b>(b)</b>     | Discuss in brief about energy conservation through Motor efficiency and Motor rating at Ring Frame.                                       | 07       |
| Q.3                      | (a)<br>(b)     | What is Humidification? How we can conserve energy through Humidification?  | 07<br>07 |
| Q.3                      | (a)            | OR  Define - Waste Heat Recovery systems. Explain any one WHR system in detail.   | 07       |
|                          | <b>(b)</b>     | Explain in detail about Foam Sizing and Solvent Sizing.   | 07       |
| Q.4                      | (a)<br>(b)     | Write brief note on – Energy conservation in Lighting. Discuss Hazardous waste and its generation.  OR                                    | 07<br>07 |
| Q.4                      | (a)<br>(b)     | Discuss various types of pollution in textile industry. Write major operations causing excessive Water pollution.                         | 07<br>07 |
| Q.5                      | (a)<br>(b)     | Explain in detail about Disposal of Waste water.  State various types of Air pollution control equipments. Discuss any one in detail.     | 07<br>07 |
| Q.5                      | (a)<br>(b)     | OR  Explain in brief about cotton dust pollution in textile industry.  Discuss different parameters to conserve energy in Wet processing. | 07<br>07 |

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