

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VIII • EXAMINATION – SUMMER 2014

Subject Code: 182903**Date: 03-06-2014****Subject Name: Technical Textiles II****Time: 10:30 am TO 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) Define the terms: i. Geosynthetics ii. Geotextiles **07**
 (b) Discuss in brief primary functions of Geotextiles. **07**
- Q.2** (a) Give the approximate breakdown of Main Textiles in an Average Modern Car and discuss in brief about tyre cord fabric. **07**
 (b) Discuss about OPW side curtain airbags and X-Tethers. **07**
- OR**
- (b) Discuss the enormous weight benefits thanks to use of textiles in automobiles. **07**
- Q.3** (a) What is Tissue Engineering? Discuss the advances in it. **07**
 (b) Discuss the use of nanotechnology for imparting anti-bacterial and wrinkle resistance property to textiles. **07**
- OR**
- Q.3** (a) What is the Lotus Effect? **07**
 (b) Discuss in brief about Aircraft Textiles. **07**
- Q.4** (a) Explain different types of blankets used in hospitals with the help of neat diagrams. **07**
 (b) State the object of conveyor belt. With the help of neat diagrams, explain different types used in industries. **07**
- OR**
- Q.4** (a) State and explain different structures of fabrics used as shoe liners along with detailed specifications and figures. **07**
 (b) State the properties and applications of carbon reinforced plastics. **07**
- Q.5** (a) State some of the applications of protective textiles. Explain in detail about the raw materials, characteristics and requirements of bullet-proof jackets. **07**
 (b) State and explain physical, environmental and economic considerations/requirements of protective textiles. **07**
- OR**
- Q.5** (a) Classify medical textiles depending upon the areas of application. Also, state the fibers which are used in the field of medical textiles. **07**
 (b) With the help of neat diagrams, explain different types of bandages. **07**
