

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER- VIII • EXAMINATION – SUMMER 2015

Subject Code:182903**Date:13/05/2015****Subject Name: Technical Textiles-II****Time:10.30AM:01.00PM****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) State some of the extra-corporeal materials. With the help of neat diagrams, explain these materials in detail. **07**
- (b) State some of the objects of protective textiles. Explain, in detail, some of the characteristics, properties, raw materials and applications of chemical protection clothing. **07**
- Q.2** (a) What is glass fiber reinforced plastic (GRP)? Explain, in detail, some of the fabric weaves used for the production of GRP. Also, state some of the applications and properties of GRP. **07**
- (b) State and explain some of the varieties of fabrics used as shoe liners with the help of neat diagrams. **07**
- OR**
- (b) With the help of neat diagrams, explain different types of blankets used for operating room and intensive care unit. **07**
- Q.3** (a) Give classification of medical textiles based on their areas of applications. With the help of neat diagrams, explain some of the applications of Teflon fibres in the field of medical textiles. **07**
- (b) Classify bandages. Explain, in detail, some of the reinforced elastic bandages with the help of neat diagrams, wherever necessary. **07**
- OR**
- Q.3** (a) Compare conveyer belt with power transmission belt. With the help of neat diagrams, explain steep angle conveyor belts in detail. **07**
- (b) With the help of neat diagrams, explain some of the intelligent textiles used in the field of medical textiles. **07**
- Q.4** (a) State the techniques used to apply the nano-particles and hence explain any one of the techniques in detail. **07**
- (b) Explain, in detail, some of the recent developments taken place in the field of tissue engineering. **07**
- OR**
- Q.4** (a) With the help of neat diagrams, explain different types of geosynthetics and their applications in detail. **07**
- (b) With the help of suitable examples, explain different forms of textiles used in the field of transportation. **07**
- Q.5** (a) What do you mean by self-cleaning effect ? Discuss in detail about the self-cleaning fabrics. **07**
- (b) Why Nylon 6,6 is most preferred fibre to be used for the production of air-bags. Justify. **07**

OR

- Q.5** (a) State and explain some of the important applications of textiles in aircrafts in detail. **07**
- (b) State and explain some of the implantable materials, in detail, with the help of neat diagrams, wherever necessary. **07**
