Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-VIII • EXAMINATION - WINTER • 2014**

Subject Code: 182903		Code: 182903 Date: 02-12-201	Date: 02-12-2014	
Ti	•	Name: Technical Textiles II 2:30 pm - 05:00 pm Total Marks: 7	70	
	1. 2. 3.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a) (b)	Classify medical textiles on the basis of fibres used in their production. State and explain the applications of some of the important fibres in medical textiles. State and explain some of the non-implantable materials, in detail, with the help	07 07	
		of neat diagrams, wherever necessary.		
Q.2	(a) (b)	Compare carbon reinforced plastics with glass reinforced plastics. Also, explain some of the important applications of carbon reinforced plastics.  Give classification of belts. With the help of neat diagrams, explain any 3	07 07	
	(~)	varieties of conveyor belts in detail.	0.	
	<b>(b)</b>	<b>OR</b> With the help of neat diagrams, explain different types of blankets used for cardiologists and cardiac surgeons.	07	
Q.3	(a)	What are protective textiles? State and explain characteristics, properties and applications of fire proof fabrics.	07	
	<b>(b)</b>	Explain different types of industrial fabrics used for electrical cables with the help of neat diagrams.	07	
Q.3	(a)	<b>OR</b> What are implantable materials? Explain, in detail, some of the important implantable materials, with the help of neat diagrams, wherever necessary.	07	
	(b)	State the object of power transmission belts. With the help of neat diagrams, explain at least 3 types of said belts in detail.	07	
Q.4	(a)	State and explain the criteria for selection of fibres and fabrics for different geotextiles applications.	07	
	<b>(b)</b>	State and explain some of the important applications of textiles in cars and other road vehicles.	07	
Q.4	(a)	OR  Explain the role and importance of nano fibres in different applications of	07	
	<b>(b)</b>	technical textiles with the help of suitable examples.  What do you mean by self-cleaning fabrics. Explain the same in detail with the help of suitable examples.	07	
Q.5	(a)	Discuss in detail about the applications of textiles in aircrafts.	07	
V.S	(a) (b)	State and explain different types and applications of geosynthetics.  OR	07	
Q.5	(a)	State the most preferred fibre used for the manufacturing of air-bag and justify the same, in detail, with the help of proper reasoning.	07	
	<b>(b)</b>	What are smart textiles? With the help of neat diagrams, explain some of the smart textiles used in the field of medical textiles.	07	

\*\*\*\*\*