Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V • EXAMINATION – WINTER 2013

Subject Code: 152905 **Date: 09-12-2013**

Subject Name: Textile Manufacturing Processes

Time: 10.30 am - 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)**	Explain briefly the principles of various techniques utilized for spinning a yarn.	**07**
	(b)	Compare the properties of Woven, Non-woven and Knitted fabric.	**07**
Q.2	**(a)**	Explain the objectives of Spreading, Cutting and Marker planning process in manufacturing of Garment.	**07**
	(b)	Discuss briefly the special features of Rapier, Air-jet and Projectile loom.	**07**
		OR	
	(b)	Compare Shuttle and Shuttleless weaving.	**07**
Q.3	**(a)**	Discuss how twisting and winding is carried out simultaneously on a Ring frame.	**07**
	(b)	Explain the principle of Friction spinning.	**07**
		OR	
Q.3	**(a)**	Explain the functioning of rotor in an Open End spinning machine.	**07**
	(b)	Discuss the features of Dref-2 and Dref-3 spinning.	**07**
Q.4	**(a)**	Discuss the objectives of Shedding, Picking and Beat-up process on loom.	**07**
	(b)	Explain the various stages involved in manufacturing of Non-woven fabric.	**07**
		OR	
Q.4	**(a)**	Discuss the various problems that might occur during weaving process and explain how it can be overcome.	**07**
Q.4	**(b)**	Name the various bonding methods for production of Non-wovens and explain any one in detail.	**07**
Q.5	**(a)**	Write short note on Seams and Stitches.	**07**
	(b)	Discuss the various quality check points during the manufacturing of garments.	**07**
		OR	
Q.5	**(a)**	Name the various parts of sewing machine and state their objectives.	**07**
	(b)	Explain the sequence of operation followed for manufacturing of Knitted fabric.	**07**

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