Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 152905 **Date: 15/05/2017**

Subject Name: Textile Manufacturing Processes(Institute Elective - II)

Time: 02:30 PM to 05:00 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 passage of yarn through ring frame with a neat sketch.	**07**
	(b)	State the function of following parts of plain power loom: Back rest, lease rod, heald shaft, reed, shuttle, temple and emery roller.	**07**
Q.2	**(a)**	What is nonwoven? Briefly write applications of nonwoven fabric.	**07**
	(b)	Explain the working of DREF III spinning with a neat sketch.	**07**
		OR	
	(b)	State the classification of looms. Compare shuttle and shuttleless loom.	**07**
Q.3	**(a)**	Explain how a rotor spun yarn produce on rotor spinning with a neat sketch.	**07**
	(b)	Compare convention and new spinning technology.	**07**
		OR	
Q.3	**(a)**	Explain passage of yarn through air jet spinning with a neat sketch.	**07**
	(b)	What are objectives of ring frame? Compare yarn characteristics of rotor and ring spun yarn.	**07**
Q.4	**(a)**	Draw the passage of warp through plain power loom and list out different motions involve in fabric construction.	**07**
	(b)	Give the importance of accumulator in shuttleless loom? Explain any one shuttleless loom with a neat sketch.	**07**
		OR	
Q.4	**(a)**	Explain tappet shedding mechanism of plain power loom with a neat sketch.	**07**
	(b)	Write short note on marker planning and spreading.	**07**
Q.5	**(a)**	Write flow chart of sequence of operation of garment manufacturing process and state the function of each operation.	**07**
	(b)	What is knitting? Explain weft knitting machine with a neat sketch.	**07**
		OR	
Q.5	**(a)**	Give the classification of nonwoven. Explain in brief needle punching nonwoven techniques.	**07**
	(b)	Write short note on types of seam and stitches.	**07**

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