Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEM-III Remedial Examination May 2011

Subject code: 132903 **Subject Name: Weaving – I**

Date: 27/05/2011 **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		Write in detail on package build and patterning conditions for drum and spindle driven winding machines.	**14**
Q.2	**(a)**	With diagram explain heald reversing mechanism (for negative shedding) for 4 shaft plain and 3/1 twill weave.	**07**
	(b)	Write a short note on grooved drum type traverse mechanism.	**07**
		OR	
	(b)	Write a short note on different types of tensioners.	**07**
Q.3	**(a)**	Draw the passage of yarn through any modern winding machine. Write names of the parts and explain function of balloon breaker.	**05**
	(b)	Give answers in short i) What is meant by accelerated and uniform drums? Draw diagrams. ii) What is multiplicative tension? Calculate tension T2 if incoming tension T1 is 18 g, coefficient of friction is 0.26 and wrap angle is 36 degrees. iii) How patterning damage is avoided on precision winding machine? What is "gain"?	**09**
		OR	
Q.3	**(a)**	Discuss causes and remedies for any three package faults occurring on winding machine.	**05**
	(b)	Give answers in short i) Differentiate between random and precision wind. ii) Write on different wound packages. iii)What are the causes of stitches damage on wound packages?	**09**
Q.4		With neat sketch explain construction and working of seven wheel take up mechanism. What is dividend of the mechanism and how picks per inch is set for the same.	**14**
		OR	
Q.4		With neat sketch explain construction and working of cone over pick mechanism. Also give timing for the mechanism.	**14**
Q.5		Write short note on following a. Shuttles b. Side weft fork stop motion	**14**
		OR	
Q.5		Write short note on following a. Crank type beat up mechanism b. Negative let off mechanism	**14**

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