Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–IV • EXAMINATION – WINTER 2013

Subject Code: 142901 Date: 19-12-2013

Subject Name: Yarn Manufacturing- 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)**	Write the objects of comber machine in brief. Explain the importance of combing process in details.	**07**
	(b)	In brief explain how breaker draw frame is different from finisher draw frame?	**07**
Q.2	**(a)**	With neat sketch, explain in details one complete combing cycle.	**07**
	(b)	Explain Sliver lap machine with suitable diagram.	**07**
		OR	
	(b)	State the objective of Draw frame and discuss how they are accomplished.	**07**
Q.3	**(a)**	In brief explain the influence of machine components and settings on Combing performance.	**07**
	(b)	Write short note on – 1) Combing Cylinder and 2) Top Comb.	**07**
		OR	
Q.3	**(a)**	With neat sketch, explain various types of gauges used for carrying out settings of comber.	**07**
	(b)	Describe the features of modern comber.	**07**
Q.4	**(a)**	Explain working of open and close loop autoleveller of draw frame.	**07**
	(b)	Discuss various types of roller weighing system of drafting section at draw frame.	**07**
		OR	
Q.4	**(a)**	A Laxmi rieter draw frame works with the following : Front roller diameter = 44 mm, Front roller rpm = 2000, number of delivery = 2; and Hank delivered = 0.16 If the Draw frame works at 75% efficiency what will be the production in Kg./delivery/shift?	**07**
	(b)	Describe various types drafting system arrangement at draw frame.	**07**
Q.5	**(a)**	Explain in detail about important parts of Speed frame.	**07**
	(b)	State the objects of builder mechanism and explain how to obtain all these objects on speed frame machine?	**07**
		OR	
Q.5	**(a)**	Following data refers to speed frame: Flyer speed = 1000 rpm, Sliver hank = 0.18, Roving hank = 1.6, T.M. = 1.2, Efficiency = 85 % Find (i) draft (ii) Production in pounds/shift/spindle	**07**
	(b)	What is differential motion? Explain use of differential motion on speed frame.	**07**

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