Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEMESTER– 7th EXAMINATION – SUMMER 2015

Subject Code: 172901 **Date:14/05/2015**

Subject Name: Modern Spinning Technology

Time: 02.30PM-05.00PM **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)**	Discuss the technical limitation of Rotor spinning with respect to count range. Hence explain why it is suitable for only coarse counts.	**07**
	(b)	Describe important features of Spin box of modern rotor machine.	**07**
Q.2	**(a)**	Describe the structure of yarn obtained by air jet spinning with suitable sketches.	**07**
	(b)	Describe passage of material on Vortex Spinning machine with neat sketch.	**07**
		OR	
	(b)	Describe nozzles used for Airjet spinning and that used for Vortex spinning with suitable sketch. Hence compare them briefly.	**07**
Q.3	**(a)**	Write a short note on automation on modern rotor spinning machine.	**07**
	(b)	Discuss the major disadvantages of airjet spinning.	**07**
		OR	
Q.3	**(a)**	With a neat sketch, describe process of Siro spinning.	**07**
	(b)	Discuss the various advantages offered by shortening of spinning line with development of open end spinning.	**07**
Q.4	**(a)**	With a neat sketch, describe friction spinning system which works with two drafting systems.	**07**
	(b)	Describe Wrap spinning system with neat sketch.	**07**
		OR	
Q.4	**(a)**	Discuss the major advantages of friction spinning.	**07**
	(b)	Discuss advantages and disadvantages of Hollow spindle spinning.	**07**
Q.5	**(a)**	Describe spinning triangle in normal ring spinning and in compact spinning with suitable sketch. Discuss its influence on yarn properties.	**08**
	(b)	Describe Twilo spinning system with neat sketch.	**06**
		OR	
Q.5	**(a)**	Describe Rocos spinning system with suitable sketch.	**06**
	(b)	Describe Bob tex spinning system with neat sketch. Also draw the structure of yarn obtained.	**08**

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