Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII • EXAMINATION – WINTER • 2014

Subject Code: 172901 **Date: 06-12-2014**

Subject Name: Modern Spinning Technology

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)**	Why wrap spinning system is known as cover spinning? With neat sketch explain working of it.	**07**
	(b)	With neat sketch classify air jet spinning yarn.	**07**
Q.2	**(a)**	Explain the working of DREF3 and DREF2000 friction spinning system with neat sketch.	**07**
	(b)	Discuss the term: spinning stability and maximum spinning time	**07**
		OR	
	(b)	Discuss: Influence of PTE on rotor yarn property and bipartite structure	**07**
Q.3		With neat sketch explain working of SIRO spinning system. How strand spacing and twist influence the SIRO yarn property?	**14**
		OR	
Q.3		Briefly explain integration of straight and hooked fibre into yarn in rotor spinning system.	**14**
Q.4	**(a)**	Discuss the method of production of integrated composite twist less spinning process.	**07**
	(b)	Explain the principle of Murata vortex spinning with neat sketch.	**07**
		OR	
Q.4	**(a)**	Write a note on twilo spinning system.	**07**
	(b)	Compare the structure of ring, rotor and fascinated spinning system yarn.	**07**
Q.5	**(a)**	Discuss the working procedure of COM4condensed spinning system.	**07**
	(b)	Write a note on self cleaning rotor.	**07**
		OR	
Q.5	**(a)**	With neat sketch explain ROCOS spinning system.	**07**
	(b)	What are the limitations of rotor spinning system and elaborately discuss why rotor spinning is not suitable to spun finer count.	**07**

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