GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION - WINTER 2013

Subject Code: 172901 Date: 30-11		-2013	
	-	Name: Modern Spinning Technology	Λ
	Time: 10:30 TO 01:00 Total Marks:		U
IIISt	1.	Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	List out the modifications of Schalfhrost autocoro360 to improve yarn quality. Discuss the terms: spinning in coefficient and maximum spinning time.	07 07
Q.2	(a) (b)	Briefly explain the integration of fibres into yarn in rotor spinning system. Elaborately discuss the method of production of Twilo twistless spinning process.	07 07
		OR	
	(b)	Explain the working of DREF2 and DREF3000 friction spinning system with neat sketch.	07
Q.3	(a)	Write a note on wrap spinning system.	07
	(b)	Give classification of the air jet spun yarn structure.	07
		OR	
Q.3	(a) (b)	Why condensed spun yarn is better than ring spun yarn? Explain. With neat sketch compare the principle of air jet and vortex spinning system.	07 07
Q.4		Discuss: (1) α min and PTE in rotor spinning system (2) spinning stability (3) fibre migration (4) packing fraction OR	14
Q.4		How microdust affect rotor spun yarn quality and efficiency? What corrective action should be taken to minimize it? Also discuss automatic cleaning devise in rotor spinning system.	14
Q.5	(a)	What are the advantages and disadvantages (limiting factor) of high rotor speed?	07
	(b)	Write a note on siro spinning system.	07
		OR	
Q.5	(a) (b)	Describe features of latest blowroom line and ring frame. How back doubling affects rotor yarn quality and derive formula for calculating number of back doubling.	07 07
