Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Su	bject	Code: 172904 Date: 07-12-2013	
	_	Name: Process and Quality Control in Spinning	
		0.30 am - 01.00 pm Total Marks: 70	
ins	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Explain the importance of formulation of mix and describe how, simultaneous control of mixing cost and quality is achieved?	07
	(b)	What are the technological considerations involved in controlling the comber waste?	07
Q.2	(a)	Why waste and cleaning should be control at blow room? How poor performance of the blow room can be improved?	07
	(b)		07
	(b)	Which factors are influencing the optimization of waste at card?	07
Q.3	(a)	Explain Following:-	07
		 i. Bale management ii. Considerations involved in deciding Key variables in process control in spinning 	
	(b)	Discuss the method for routine check of comber waste.	07
0.2	(a)	OR What is difference between Machinery Audit and Boutine maintaines 2 with	07
Q.3	(a)	neat diagram explain any one instrument used in machinery audit.	07
	(b)	Explain Following:- i. Defination of Quality & Control	07
		ii. Ring Data System on Ring Frame for Modern Process Control in spinning.	
Q.4	(a) (b)	Explain the important steps for measuring Productivity Index of a mill. Discuss the factors affecting between bobbin count variation. OR	07 07
Q.4	(a) (b)	Discuss in detail effect of various machines in spinning line on nep generation. Discuss the various factors affecting yarn strength.	07 07
Q.5	(a)	Discuss the causes for following factors causing loss in efficiency at ring frame (i) Idle spindles (ii) waiting before and after doffing Also suggest remedial measures.	08
	(b)	Explain the random component of yarn irregularity in detail.	06
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Q.5	(a)	Discuss briefly the problem of (i) Yarn Hairiness (ii) Slubs	08
	(b)	What is Snap study? Explain briefly how it is conducted to improve productivity.	06

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