Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII • EXAMINATION – SUMMER • 2014

Subject Code: 172904 **Date: 05-06-2014**

Subject Name: Process and Quality Control in Spinning

Time: 02.30 am - 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)**	Discuss in detail role and scope of process control in spinning.	**07**
	(b)	Explain in detail how control of mixing quality is carried out through fibre characteristics.	**07**
Q.2	**(a)**	Describe all the records required for estimating yarn realization.	**07**
	(b)	Discuss in brief how, performance assessment of blow-room is done.	**07**
		OR	
	(b)	Why and how control of waste and cleaning is carried out in carding.	**07**
Q.3	**(a)**	Discuss importance of pre-comber draft and method of lap preparation in control of comber waste.	**07**
	(b)	Explain object and procedure of Bale management in spinning.	**07**
		OR	
Q.3	**(a)**	Briefly explain all the changes carried out in modern process control activity in spinning.	**07**
	(b)	What is machinery audit? With neat sketch explain construction and working of peri-microscope.	**07**
Q.4	**(a)**	Explain the terms MPI & LER with respect to productivity of mill. Also discuss how they are measured.	**07**
	(b)	'Mills having same PI value need not be having same profitability'. Explain the statement in detail	**07**
		OR	
Q.4	**(a)**	Classify the end breaks taking place at ring frame and discuss each of them with examples.	**07**
	(b)	Discuss the factors affecting within bobbin count variation.	**07**
Q.5	**(a)**	Discuss various types of yarn faults briefly.	**07**
	(b)	Explain the quasi periodic component of yarn irregularity.	**07**
		OR	
Q.5	**(a)**	Discuss in detail various factors affecting yarn strength.	**07**
	(b)	Discuss various factors to be considered for implementation of process control in spinning mill.	**07**

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