Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III • EXAMINATION – WINTER 2013

Subject Code: 132902 **Date: 03-12-2013**

Subject Name: Yarn Manufacturing-I

Time: 02.30 pm - 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 fully carding action with (a) transfer of fibres (b) heel and toe arrangement (c) functions of front plate and back plate.	**14**
Q.2	**(a)**	Describe rack mechanism on a scutcher.	**07**
	(b)	Explain ancillary equipments used in a blow room.	**07**
		OR	
	(b)	Describe lap length measuring motion on a scutcher.	**07**
Q.3		Describe principle, type of feed, beater speed, production, cleaning efficiency, position in blow room and working of the following machines.(any two) 1. Mono cylinder cleaner. 2. Zone IV machines. 3. Automatic bale opening machine.	**14**
		OR	
Q.3		What do you mean by mixing and blending? Why blending should take place in initial stages of spinning? Explain fully purposes and methods of multi fibre blending.	**14**
Q.4		Discuss fully features of a high production card.	**14**
		OR	
Q.4		Explain factors affecting card setting. State card setting in correct sequence for polyester and cotton. Discuss card setting effects on quality of card sliver and waste percentage.	**14**
Q.5	**(a)**	State the objectives of ginning and explain working of the roller gin with a neat sketch.	**07**
	(b)	Explain chute feed system.	**07**
		OR	
Q.5	**(a)**	Describe construction and working of a multimixer.	**07**
	(b)	State and explain important parameters of metallic card clothing for cylinder, doffer and licker –in.	**07**

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