Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

ME Semester –I Examination Feb. - 2012

Subject code: 712505N **Date: 21/02/2012**
Subject Name: Texturising 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)**	Elaborately discuss the feed material characteristics which are affects the textured yarn properties.	**07**
	(b)	"The main behavior of air jet inside depends upon the nozzle geometrical configuration" explain and derive.	**07**
Q.2	**(a)**	What are the prime purposes of filament yarn texturing? Classify the texturing processes based on types of texturing yarn with respective applications.	**07**
	(b)	Write shortly on: the effects of molecular structure variables on Tg., and Thermal transitions.	**07**
		OR	
	(b)	Write shortly on: textured stabilization, and sizing of textured yarn.	**07**
Q.3	**(a)**	Which parameters should be considered to get uniform dyeing on polyester textured yarn?	**07**
	(b)	Write briefly on heat setting chambers of texturing process.	**07**
		OR	
Q.3	**(a)**	List out the requirements of spin finish for texturing process.	**07**
	(b)	Explain effect of time and heater temperature on textured yarn property.	**07**
Q.4	**(a)**	"Texturing yarn properties are evaluated by extensibility, degree of crimpiness and bulikiness" explain.	**07**
	(b)	Elaborately discuss the friction textured yarn defects.	**07**
		OR	
Q.4	**(a)**	What are the new developments were done in friction texturing process to overcome the conventional problems.	**07**
	(b)	What are the advantages of draw texturing process over other texturing process? Also with neat sketch explain working of simultaneous draw texturing process.	**07**
Q.5	**(a)**	Explain principle of air jet texturing involved the tangling effect given by high turbulent air flow acting on filament feed yarn.	**07**
	(b)	Explain the physical process phases involved to texture the filament yarn.	**07**
		OR	
Q.5	**(a)**	Which parameters of textured yarns should test to understand its behavior in fabric? Discuss the methods and tester use to test it.	**07**
	(b)	What is the role of water and coanda bar in air jet texturing process.	**07**

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