Seat No.:	Enrolment No

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## ME - SEMESTER- I• EXAMINATION - WINTER 2014

Subject Code: 2712509 Subject Name: Textured Yarn Technology			Date:12/01/ 2015	
Tiı	ne:02	2:30 p.m. to 05:00 p.m. Total Marks: 70 as:		
		Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a)	Explain the principle of intermingling process. Which factors affect the intermingling process? How?	14	
	(b)	Show zone wise function and process variables of modern air jet texturing process.	07	
Q.2	(a) (b)	Write shortly on BCF-draw texturing machine Discuss the texturing process by torque change of filament on twist hysteresis curve.	07 07	
	<b>(b)</b>	OR Explain heat setting and texture development with stress and strain energy Es.	07	
Q.3		Elaborately discuss parts of converging and diverging nozzles with further design developments in nozzle.	14	
Q.3		OR Explain the effect of air pressure, over feed %, texturing speed and type of material on air jet texturing yarn quality.	14	
Q.4	(a) (b)	With neat sketch explain working of simultaneous false twist texturing process. What are the merits of high temperature heaters over the conventional vapour phase heater?	07 07	
Q.4	(a)	OR Which are the different types of hard discs used in draw texturing industry? List	07	
	(b)	out the advantages and disadvantages each type. What is surging in draw texturing process? What are the causes of surging?	07	
Q.5		Write a note on testing of instability % and physical bulk % of air jet textured yarn.	14	
Q.5		OR  How to measure boil water shrinkage %, spin finish by oil extraction method and crimp contraction force by textured yarn tester.	14	

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