Seat No.:	Enrolment No.

Subject code: 712505N

Time: 02.30 pm - 05.00 pm

Subject Name: Texturising Technology

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Date: 16/01/2013

Total Marks: 70

Insti	ructio	ns:	
	1. At	ttempt all questions.	
	2. M	ake suitable assumptions wherever necessary.	
	3. Fi	gures to the right indicate full marks.	
Q.1	(a)		07
	(b)	production speed? State the air mingling yarn channel process factors. Also explain working of heberlein jet.	07
Q.2	(a)	Explain the physical process phases involved to texture the filament yarn.	07
	(b)		07
	()	development in heating medium OR	
	(b)	Calculate draw ratio to be set on machine with following data:	07
		Input yarn – 156d / 24	
		Over feed – 14%	
		Oil add-on -2%	
		Final yarn – 76d / 24	
Q.3	(a)	What are the prime purposes of filament yarn texturing? Classify the	07
		texturing processes based on types of texturing yarn with respective applications.	
	(b)	Write important developments in frictional disc used in twisting unit.	07
	()	OR	
Q.3	(a)	Write a note on creel design and its management on texturing machine.	07
	(b)	Explain important input variables of frictional twisting unit and its effect on yarn quality.	07
Q.4	(a)	Write shortly on: textured stabilization, and sizing of textured yarn.	07
	(b)	Which parameters of textured yarns should test to understand its behavior in fabric? Discuss the methods and tester use to test it. OR	07
Q.4	(a)	Explain in brief on the effects of molecular structure variables on Tg. and Thermal transitions.	07
Q.4	(b)	With neat sketch explain principle of air jet texturing involved the tangling	07
	` '	effect given by high turbulent air flow acting on filament feed yarn.	
Q.5	(a)	Discuss the feed material characteristics which affect the textured yarn properties.	07
	(b)	• •	07
	. ,	in texturing.	
		OR	
Q.5	(a)	Compare functions of sub sections of simultaneous and sequential false twist texturing process.	07
	(b)	Write a note on requirements and application methods of coning oil.	07
