Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER – V (NEW) EXAMINATION – WINTER 2015

Subject Code: 2152907 Subject Name: Man Made Fibre Technology Time:10:30am to 1:00pm Instructions: Total Man			
Q.1	(a) (b) (c)	Give Yang's Classification of manufactured fibres. Write in brief about polymers as Rubbers. Describe with neat sketch Turbo Stapler.	2 4 8
Q.2	(a) (b) (c)	Discuss the role of Spin Finish. Discuss heat setting behavior of Polyamide and Polyester fibres. Discuss the steps involved in the production of electro-conductive nylon 6 filaments.	5 4 5
	(c)	Write short note on Super micro filament yarns by conjugated bicomponent yarn spinning.	5
Q.3	(a) (b)	Discuss the production of nylon for making ultra-deep dyeable yarns when dyed with acid dyes. Write in brief about antistatic polyester yarns.	7 3
	(c)	The TPA process route presents greater difficulties compared with the DMT process – Give reasons. OR	4
Q.3	(a)	Discuss in brief chemical modification of nylon 6 by poly(acrylamide) during polymerization.	4
	(b) (c)	Discuss in brief about fibres with microvoids and microcrates. Discuss manufacturing process of Glass fibre.	3 7
Q.4	(a) (b)	Discuss different types of Twisting units used in False twist texturising. Write short note on $-(1)$ Contact Heaters & (2) Contactless Heaters. OR	07 07
Q.4	(a)	With neat sketch, explain sequential and simultaneous Draw texturing process.	07
	(b)	Discuss effect of process and material variables on False twist Textured yarn quality.	07
Q.5	(a) (b)	Discuss modern developments in Air jet texturising. Write short note on – Gear Crimping process. OR	07 07
Q.5	(a)	With neat sketch, discuss working of Stuffer box texturising.	07
	(b)	Explain principle of Edge crimping process with suitable diagram.	07
