Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (NEW) - EXAMINATION - SUMMER 2016 Date: 17/05/2016 Subject Code:2152007

Subject Code:2152907	Date:1//05/2	
Subject Name: Man Made Fibre Technology		

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Time:02:30 PM to 05:00 PM	Total Marks: 70
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Instructions:

1.	Attempt al	ll questions.

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a) (b) (c)	Discuss in brief production of the fibre-forming polymer. Write in brief about Thermal transitions. Describe with neat sketch Courtauld's design Tow-to-Top Converter.	02 05 07
Q.2	(a) (b) (c)	Enlist the desirable properties of a Spin finish. Discuss in brief the mechanism of Permanent set. Discuss production of nylon for making ultra-deep dyeable yarns when dyed with acid dyes.	04 03 07
	(b)	OR Write a short note on fibres with non-circular cross-section & hollow fibres.	07
Q.3	(a)	Discuss the steps involved in the production of electro-conductive nylon-6	04
	(b)	filaments. Give the routes by which polyester & polyamide fibres can be made flame retardant.	03
	(c)	Discuss in brief about Aramid fibres. OR	07
Q.3	(a)	Discuss in brief chemical modification of nylon 6 by poly(ethylene glycol) during polymerization.	04
	(b) (c)	Discuss in brief about fibres with microvoids & microcrates. Discuss the applications of Carbon fibres.	03 07
Q.4	(a) (b) (c)	Give classification of textured yarns. State the advantages of textured yarns. Discuss in brief about Contact heaters. OR	03 04 07
Q.4	(a)	Explain in brief about Draw texturing.	07
	(b)	Discuss the developments in Air Jet Texturing.	07
Q.5	(a) (b)	Explain principle of False twist texturing. Explain in detail about Gear Crimping. OR	07 07
Q.5	(a)	Explain in detail about Stuffer box crimping.	07
•	(b)	Explain in detail about Knit-de-Knit texturising process.	07

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