Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V EXAMINATION - WINTER 2015

	•	Code: 152904 Date:05/12/2015	
Ti		Attempt all questions.	
	3.	Figures to the right indicate full marks.	
Q.1	(a) (b)	Draw a schematic diagram of the Turbo Stapler. Explain the principle of yarn formation in Rotor Spinning with a neat diagram.	04 10
Q.2	(a) (b)	Explain the construction of parts of Spin box in detail. What do you mean by Friction Spinning? Enlist merits & demerits of it. OR	07 07
	(b)	Discuss the applications of Friction Spun yarn.	07
Q.3	(a) (b)	Describe with a neat diagram Courtauld's design Tow-to-Top Converter. Discuss the Variable cut unit on Pacific Converter. OR	10 04
Q.3	(a) (b)	Explain in brief about Draw Texturing. Discuss in detail with curves, the effects of temperature & stretch ratio on yarn quality in Heat-Stretch zone of a Turbo Stapler.	07 07
Q.4	(a) (b)	Explain in detail Gear Crimping process. Suggest actions for reducing Slub-like thick faults for P/C blend. OR	08 06
Q.4	(a) (b)	Explain how Air Jet Spinning produces quality yarn with outstanding cost performance. Discuss the remedial measures to avoid cracker formation at Ring frame.	07 07
Q.5	(a) (b)	What is the purpose of Crimping synthetic fibres? Discuss the developments in Air Jet Texturing. OR	04 10
Q.5	(a) (b)	Explain in detail about the operating principle of Wrap Spinning. Explain in detail Stuffer box crimping.	07 07
