Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 152904 **Date: 27/04/2017**

Subject Name: Modern Yarn Production

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

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1		Explain principle of Friction Spinning? Enlist merits & demerits of it. Explain in brief about DREF- III with neat sketch.	**14**
Q.2	**(a)**	With a neat diagram describe Courtauld's design Tow-to-Top Converter.	**07**
	(b)	What is texturising? Write advantages of Textured yarns.	**07**
		OR	
	(b)	Write in brief about heaters and false twist units used in False twist texturising.	**07**
Q.3	**(a)**	Describe principle of Air jet texturing. Also give classification of Air textured yarns.	**07**
	(b)	Write a note on opening unit and navel of rotor spinning.	**07**
		OR	
Q.3	**(a)**	Is compact yarn better than ring spun yarn? Write a note on com4 spinning process.	**07**
	(b)	List out advantages and disadvantages of modern yarn production system over ring spun system.	**07**
Q.4	**(a)**	Discuss the Variable cut unit on Pacific Converter.	**07**
	(b)	Explain in detail about effect of variables on False twist textured yarn quality.	**07**
		OR	
Q.4	**(a)**	Discuss in detail with curves, the effects of temperature & stretch ratio on yarn quality in Heat-Stretch zone of a Turbo Stapler.	**07**
	(b)	Write a note on about simultaneous Draw Texturing.	**07**
Q.5	**(a)**	Explain principle of edge crimping process with neat sketch.	**07**
	(b)	How to reduce slub-like thick faults for P/C blend?	**07**
		OR	
Q.5	**(a)**	Explain the factors which considered for the control of yarn hairiness during processing of man-made and its blend on Ring frame.	**07**
	(b)	Write a note on stuffer box crimping process.	**07**

****