GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) - EXAMINATION - SUMMER 2017

Subject Code: 2132806 Date: 07/06/2017

Subject Name: Textile Manufacturing - I

Time: 10:30 AM to 01:00 PM Total Marks: 70

Instructions:

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

MARKS Q.1 Short Questions 14 1 Pirn contains warp yarn. – True or False? For the same yarn count, rotor yarn is more bulky than ring spun yarn. – True or False? In Ring spinning, imparts twist to the yarn and 3 enables winding of the yarn on the cop. 4 Twist imparts in the yarn. Polyester is produced with dry spinning. – True or False? 5 Texturising removes impurities. – True or False? 6 Rotor speed is 2000 rpm. – True or False? 7 DREF-2 works under _____ principle. 8 Speed frame delivery material is _____. 9 Draw frame delivery material is_____. 10 In Rotor spinning, feed material is in form of 11 Winding process removes objectionable yarn faults. – True or 12 False? 13 Cleaning is the first operation in the spinning process. – True or 14 Conventional Blowroom line delivers material in form of **Q.2** (a) Discuss objects of Carding. 03 Show passage of material in Carding machine. 04 State objects of Comber. How these objects are fulfilled at **07** Comber? OR State objects of Speed frame. How these objects are fulfilled at **07** Speed frame? Discuss in detail about Reeling process. 0.3 (a) 03 Show passage of material in Ring Frame. 04 **(b)** Discuss different types of drafting systems. (c) 07 OR Show flow of material in DREF-II machine. 0.3 (a) 03 **(b)** Discuss in detail about "Splicing". 04 Explain DREF-3 with suitable diagram. **07** (c)

Q.4	(a)	Discuss formation of yarn in Air jet spinning.	03
	(b)	Compare Ring spinning & Rotor spinning systems.	04
	(c)	Describe working principle of Rotor with suitable diagram.	07
		OR	
Q.4	(a)	Write short note on "Warp Winding".	03
	(b)	Discuss different yarn tensioning devices.	04
	(c)	Explain in detail about "Pirn Winding".	07
Q.5	(a)	Discuss objects of Winding. How do you calculate production of winding machine?	03
	(b)	Explain about Mechanical yarn clearers.	04
	(c)	Write short note on "Melt Spinning and Dry Spinning".	07
		OR	
Q.5	(a)	Discuss about texturising and types of textured yarns.	03
	(b)	Write short note on – "Yarn Faults".	04
	(c)	Explain False twist texturising in detail.	07
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