Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (New) EXAMINATION – WINTER 2015

Sub	ject	Code:2132806 Date:21/12/201	15
Sub	ject	Name: Textile Manufacturing - I	
	-	30pm to 5:00pm Total Marks:	7 0
	uctio		
	1.	1 1	
	2.	Make suitable assumptions wherever necessary.	
0.4	3.	Figures to the right indicate full marks.	_
Q.1		Short Questions	14
	1	List any two cleaning machine used in blow room.	1
	2	State primary function of spinneret.	1
	3	Edge crimped textured yarns have zig-zag configuration. True or false?	1
	4	False twisting means introducing equal and opposite twist. True or false?	1
	5	Most dominant man-made fibre used in the world is	1
	6	In spinning department, machine is responsible for producing fibre hooks in material.	1
	7	In which spinning system, Directly sliver is converted into the yarn form?	1
	8	On draw frame machine, how many numbers of slivers are doubled together?	1
	9	Tensile strength of ring spun yarn is than rotor spun yarn.	1
	10	Define following terms: 1) Splicing, 2) Trash, 3) Doubling, 4) Noil and 5) lap	5
Q.2	(a)	State and justify the objects of ginning.	03
	(b)	Explain principle of drafting of sliver material.	04
	(c)	Explain construction and working of hopper bale opener with suitable diagram. OR	07
	(c)	Explain knife roller ginning machine with diagram.	07
Q.3	(a)	State objects of card machine.	03
	(b)	How do you calculate production of speed frame machine? Explain with suitable example.	04
	(c)	Illustrate with neat and labeled sketch, working principle of rotor spinning. OR	07
Q.3	(a)	Explain working principle of friction spinning.	03
	(b)	State and justify advantages of open end spinning over conventional spinning.	04
	(c)	Illustrate with neat and labeled sketch, working principle of air jet spinning.	07
Q.4	(a)	Show passage of material through ring frame with neat and labeled sketch.	03
	(b)	Explain functions of cylinder comb, top comb, detaching roller of comber.	04
	(c)	Explain passage of material through drum winding machine with diagram OR	07
Q.4	(a)	Draw DREF II friction spinning machine with neat and labeled sketch.	03
	(b)	Recall the importance of clearers? Explain mechanical type clearers of winding machine.	04
	(c)	Describe working of ordinary pirn winding machine with neat sketch.	07
Q.5	(a)	What are the objects of winding machine?	03
Q.S	(b)	Explain multiplicative type of tensioner briefly.	04
	(c)	Explain in detail texturising process used in textile.	07
	(0)	OR	0.
Q.5	(a)	List the different yarn faults present in ring spun yarn.	03
V.	(b)	How do you calculate production of winding machine? Explain with suitable example.	04
	(c)	State and explain man-made yarn production methods. ***********************************	07