Seat No.:	Enrolment No.
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## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-III (New) EXAMINATION – WINTER 2015

Subject Code :2132902 Date:18/12/2015

Subject Name: Yarn Manufacturing - I

Time: 2:30pm to 5:00pm 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	What is a popular term used for cotton?	1
	2	What is raw fiber called after ginning?	1
	3	How many pounds are in a bale?	1
	4	Why are huge dryers used in the ginning process?	1
	5	State name of the ginning process for short staple lint.	1
	6	Dedusting in the blowroom happens by,	1
		either between the machines or within the machines.	
	7	Plucking springs serve as forwarding devices in bale openers	1
	8	and hopper feeders True or False?  In Blowroom, free flight feeding is carried out with gentle,	1
	o	but treatment of the fibers.	1
	9	The action of is used for the transport of material	1
		within the blowroom.	1
	10	In Blowroom, cleaning line removes only about%	1
		of the trash and dust in the material.	-
	11	State any two objects of Carding.	1
	12	The card eliminates fewer than% of short fibers.	1
	13	Card sliver has a hank ranging fromKtex.	1
	14	Latest carding machines achieve the production rate	1
		of approx kgs / hr.	
Q.2	(a)	With neat sketch, show "Tower Drier".	03
	(a)	Discuss construction and working of Tower Drier.	04
	<b>(b)</b>	Describe working principle of Knife roller gin with suitable	07
		diagram.	
	<b>(3.</b> )	OR	0=
0.0	<b>(b)</b>	Discuss "Baling and packing of cotton".	07
Q.3	(a)	With neat sketch, show "Step Cleaner".	03
	<b>(b)</b>	Discuss objects of Blow room.	04
	(c)	Explain the Piano feed mechanism.  OR	07
Q.3	(a)	Explain in brief about "The Grid".	03
Q.J	(a) (b)	Bottom calendar roller dia = 7 inch, rpm = 10 & wt. of every	03
		yards lap is 12 oz and cleaning efficiency 75%. Find out the	<b>U</b> - <b>T</b>
		production of Blow room per hour.	
	(c)	Explain Multiple Mixer.	07
	` /	1	

<b>Q.4</b>	<b>(a)</b>	Discuss i) Action of opposing spikes & (ii) Beating action at	03
		Blowroom.	
	<b>(b)</b>	State various lap defects and remedial measures for the same.	04
	(c)	Explain Lap formation and automatic doffing system of Blow room with suitable diagrams.	07
		OR	
Q.4	(a)	Describe Tandem cards.	03
	<b>(b)</b>	Explain carding action and stripping action.	04
	<b>(c)</b>	Discuss working principle of Carding machine with suitable	07
		diagram.	
Q.5	(a)	Describe Grinding.	03
	<b>(b)</b>	Explain Flexible clothing.	04
	(c)	Discuss in detail about "Chute feed system".	07
		OR	
Q.5	(a)	State features of a high production card.	03
	<b>(b)</b>	Write short note on "Card setting".	04
	<b>(c)</b>	With neat sketch, explain principle of Short term Autolevelling.	07

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