Seat No.:	Enrolment No
GUJARAT TECHNOLO	GICAL UNIVERSITY
BE - SEMESTER-III(New) • EXA	AMINATION – WINTER 2016
Subject Code:2132902	Date:06/01/2017
Subject Name: Yarn Manufacturing-I	
Time:10:30 AM to 01:00 PM	Total Marks: 70

**Instructions:** 

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

<b>Q.1</b>		Short Questions	14
	1	Name the different types of Ginning machine.	
	2	What are the impurities removed at the Blowroom	
		machine?	
	3	What is the range of percentage of removal of impurities	
		in Blowroom machine?	
	4	What is tuft weight in mg to which the material can be	
		reduced to in Blowroom machine?	
	5	Give the formula for calculating cleaning efficiency at	
		Blowroom.	
	6	Name the different types of opening devices.	
	7	Name the elements that can be used in the grid.	
	8	Which are the four machines that are the basic	
		requirements of a high performance Blowroom line?	
	9	What is the working width of Card?	
	10	State the objectives of feed device to the Licker in.	
	11	What is the rotating speed of Doffer at Card.	
	12	What is the function of mote knives?	
	13		
	14	•	
Q.2	(a)	_	03
•	<b>(b)</b>		04
	<b>(c)</b>	Explain the working of any one type of a Ginning	07
		machine with a neat sketch.	
		OR	
	<b>(c)</b>	Discuss the latest developments in Ginning and Baling	07
		machine.	
Q.3	(a)	· ·	03
	<b>(b)</b>		04
		cleaning.	
	<b>(c)</b>	-	07
0.1	(.)	OR	0.2
Q.3	(a)	Define mixing and blending.	03
	<b>(b)</b>		04
	(a)	Blowroom department.	07
	(c)	Write a short note on processing of manmade fibre at	07
$\Omega A$	(a)	Blowroom. Write briefly on Card clothing	03
Q.4	(a) (b)	Write briefly on Card clothing.  Explain the working of Rieter B 12 Uniclean machine.	03 04
		÷	
	(6)	· · · · · · · · · · · · · · · · · · ·	07
	(c)	Explain the use of (i) Gravity trap (ii) Metal detectors and (iii) Dust separators in blow-room.	07

## OR

<b>Q.4</b>	(a)	What is tandem card?	03
	<b>(b)</b>	Write a short note on machines used for blending at	04
		Blowroom.	
	<b>(c)</b>	Explain fully the carding action with (a) Transfer of	07
		fibres (b) Heel and toe arrangement and (c) Functions of	
		front plate and back plate.	
Q.5	(a)	Give the route of passage of material in the Carding	03
		machine.	
	<b>(b)</b>	Explain the formula for calculation of production at Card.	04
	<b>(c)</b>	Explain the necessity and importance of auto levelling at	07
		card in high production carding. Briefly discuss the	
		different types of auto levellers used.	
		OR	
Q.5	(a)	What is IGS at Card?	03
<b>~</b>	(b)	Write briefly on the Chute feed system.	04
	(c)	Discuss the Common defects and remedies in product	07
	(0)	delivered at Carding machine.	07
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