

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-III (NEW) EXAMINATION – SUMMER 2021****Subject Code:3132902****Date:08/09/2021****Subject Name:Yarn Manufacture 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.
4. Simple and non-programmable scientific calculators are allowed.

		<b>MARKS</b>
<b>Q.1</b>	(a) What are the objectives of Blow room?	<b>03</b>
	(b) With suitable sketches explain the any two opening devices used in Blow room.	<b>04</b>
	(c) Explain the passage of material in Carding machine with a neat sketch.	<b>07</b>
<b>Q.2</b>	(a) What are the objects of Card?	<b>03</b>
	(b) Why card is known as “Heart of Spinning Mill”?	<b>04</b>
	(c) What are the functions of the Automatic Bale opening machine? With a suitable sketch explain the construction and working of the automatic bale opening machine.	<b>07</b>
<b>OR</b>		
	(c) With the suitable sketch explain a Mixing machine used in Blow room line.	<b>07</b>
<b>Q.3</b>	(a) Define the following terms: (i). tex and, (ii). denier.	<b>03</b>
	(b) Draw the machine sequence flow chart for cotton carded ring spun yarn and cotton combed ring spun yarn.	<b>04</b>
	(c) With the suitable diagram explain the construction and working of the Macarthy Ginning machine.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) What are the objective of ginning?	<b>03</b>
	(b) What is baling? Also, mention the advantages of Baling.	<b>04</b>
	(c) With a suitable diagram explain the construction and working of the Knife roller ginning machine.	<b>07</b>
<b>Q.4</b>	(a) What are the function of the pre-cleaner machine in Blow room line? Give the name of any three pre-cleaner machine used in Blow room.	<b>03</b>
	(b) Explain the construction of Cleanomat CL-C1.	<b>04</b>
	(c) With suitable sketches discuss the various types of grid bars and also discuss its setting.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) List out any two modern developments in blow room line.	<b>03</b>
	(b) With a neat sketch explain the working of an Electronic metal detector.	<b>04</b>
	(c) With the suitable sketch explain the construction and working of the Step cleaner.	<b>07</b>
<b>Q.5</b>	(a) Define the various types of grinding tools used for sharpening wire points of card clothing.	<b>03</b>
	(b) With the suitable sketch explain the carding action.	<b>04</b>
	(c) Write a short note on Card Clothing.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) What is Tandem card?	<b>03</b>
	(b) With a suitable sketch explain Stripping action.	<b>04</b>
	(c) Give the classification of Autollever used in card. With a suitable diagram explain any one autollever used in card.	<b>07</b>

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