

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III(NEW) EXAMINATION – SUMMER 2023

Subject Code:3132902

Date:26-07-2023

Subject Name:Yarn Manufacture I

Time:02:30 PM TO 05:00 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.

		MARKS
Q.1	(a) What are the objectives of Ginning and Blow room process?	03
	(b) What are the objectives of carding process?	04
	(c) With a suitable sketch explain the material passage in Card.	07
Q.2	(a) What are the importance of the baling and packaging?	03
	(b) Write the functions of the Automatic bale opener and coarse cleaner machine.	04
	(c) With suitable sketch explain the construction and working of the Macarthy Ginning machine.	07
OR		
Q.3	(c) With suitable sketch explain the construction and working of the Knife Roller Ginning machine.	07
	(a) What are the functions of the Coarse cleaning machine? List out the name of various coarse cleaning machines.	03
	(b) With suitable sketch explain construction and working of any one coarse cleaning machine.	04
	(c) Write the importance of the blending and mixing machine in blow room line. With a suitable diagram explain any one mixing machine used in the modern Blow room line.	07
OR		
Q.3	(a) What are the functions of the Fine cleaning machine? List out the name of various fine cleaning machines.	03
	(b) With suitable sketch explain construction and working of any one fine cleaning machine.	04
	(c) Write the importance of Dust Removal system. With a labeled diagram explain the working of any one dust removal system.	07
Q.4	(a) What is the carding action?	03
	(b) Explain the working of Automatic Bale opening machine.	04
	(c) Give the name of different types of metal extractor used in Blow room. Explain the working of any one type of metal extractor.	07
OR		
Q.4	(a) Draw the various types of card sliver coiling arrangements.	03
	(b) Discuss the modern advancement in the Card feed section.	04
	(c) Write the functions of Grid bars? Draw different types of the Grid bars and also show the various possible settings of Grid bars.	07
Q.5	(a) Write the precautionary measures to be considered while processing the synthetic fibers in Card?	03
	(b) Draw a flow chart showing the sequence of various parts arranged in a tandem Card.	04

- (c) List out the different types of Card clothing. Explain the construction of different types of Card clothing. **07**

OR

- Q.5** (a) With a suitable sketch show the construction of flats. **03**
(b) Explain the working of Autoleveller used in Card. **04**
(c) Define: (i) Grinding, and (ii) Stripping process. With sketches discuss the construction of various tools used for grinding process. **07**
