Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (NEW) EXAMINATION – WINTER 2022

Subject Code:3172917   **Date:16-01-2023**
Subject Name:Process and Quality Control in Textile
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.**

			MARKS
Q.1	(a)	State the need for Process Control in Weaving.	03
	(b)	Discuss about control of mixing quality through fibre characteristics.	04
	(c)	Explain, in detail, the contamination removal techniques.	07
Q.2	(a)	State different types of yarn irregularities.	03
	(b)	Discuss control of variability of lea strength.	04
	(c)	Explain, in detail, influence of modern developments on nep removal in card and comber.	07
		OR	
	(c)	Explain the principle of working of Digital online systems for yarn clearing and quality control in modern winding.	07
Q.3	(a)	Explain control of blowroom waste.	03
	(b)	Discuss about control of within & between bobbin count variation.	04
	(c)	Explain, in detail, influence of preparatory processes on yarn hairiness.	07
		OR	
Q.3	(a)	Preparation of warp yarn for weaving is essential- Justify.	03
	(b)	Discuss any two wound package faults with their causes and remedial measures with the help of neat diagrams.	04
	(c)	State and explain Control of Productivity in Winding, in detail.	07
Q.4	(a)	State few important check points to assure the quality of pirns on any high speed pirn winding machine.	03
	(b)	Explain the parameters to control the productivity of warping.	04
	(c)	Explain, in detail, points to be considered to improve the quality of warping beams.	07
		OR	
Q.4	(a)	State the objectives of sizing.	03
	(b)	State various zones of stretch control on modern sizing machines. How do you measure the stretch % ?	04
	(c)	Explain, in detail, about factors influencing size pick up %.	07
Q.5	(a)	State the main requirements of carrying out drawing-in process properly and efficiently.	03
	(b)	Discuss about the principle of working of Automatic Drawing-in machine.	04
	(c)	Explain the role of machinery and labour on productivity of a weaving mill.	07

Q.5 **(a)** State the factors affecting loom efficiency. How to maximize loom efficiency? **03**

(b) Give classification of fabric defects. **04**

(c) State different Fabric Inspection systems. Explain the causes and remedial measures for following fabric defects with the help of neat diagrams – Float, Missing Picks **07**

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