

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2022****Subject Code:3172917****Date:14/06/2022****Subject Name:Process and Quality Control in Textile****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) State the need for process control in spinning.	03
	(b) Define yarn realization. Write the formula to calculate yarn realization.	04
	(c) Write briefly about the determination of trash content and cleaning efficiency.	07
Q.2	(a) What are the key variables for process control in spinning?	03
	(b) What is random irregularity in yarn?	04
	(c) Discuss in detail about reducing within bobbin count variation.	07
OR		
Q.3	(c) Discuss the factors affecting yarn strength.	07
	(a) Write suitable steps for controlling comber waste at comber.	03
	(b) Give the reasons for hairiness generation in yarn.	04
	(c) Write short note on yarn faults.	07
OR		
Q.3	(a) How size take up can be increased? Explain role of machine speed & size viscosity.	03
	(b) What are the causes & remedies for starting mark type fabric defects?	04
	(c) Explain effect of immersion roller, squeezing roller & level of size paste on average size pick up.	07
Q.4	(a) Write three points to control small weft loop (Phurkies) damage.	03
	(b) Explain any two factors helps to minimize end breaks at warping.	04
	(c) Write a short note on quality of warping beam.	07
OR		
Q.4	(a) What are the control measures related with yarn content on pirn?	03
	(b) What it means by “Machinery Audit” ?	04
	(c) Explain various aspects of controlling unwinding tension at winding process.	07
Q.5	(a) State the causes of weft breaks on loom and suggest it’s remedies.	03
	(b) Explain about the common defects in drawing-in process.	04
	(c) Discuss on control of yarn stretch at sizing.	07
OR		
Q.5	(a) How one can control hard waste in weaving department?	03
	(b) State some of the factors that must be considered in yarn preparation process.	04
	(c) Explain the factors affecting productivity in a weaving mill in detail.	07
