

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024

Subject Code:3172917

Date:15-05-2024

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 objectives of winding process.	3
(b) What is yarn realization? Explain in brief	4
(c) Justify the importance of Process and Quality control in textiles.	7
Q.2 (a) What is random irregularity in yarn?	3
(b) State and explain the importance of minimizing end breaks during warping process.	4
(c) Discuss in detail about causes and remedies of within bobbin count variation.	7
OR	
(c) What is size take up? How it can be controlled with machine speed, size viscosity etc.	7
Q.3 (a) Explain the term operative efficiency and machine efficiency.	3
(b) Give classification of different grades of fabrics.	4
(c) State warp way and weft way defects in the fabrics. Explain the causes and remedial measures for following fabric defects – Weft bars and Floats.	7
OR	
Q.3 (a) Explain control of blowroom waste.	3
(b) Discuss about control of mixing quality through fibre characteristics.	4
(c) Discuss the importance of lea strength. Explain the control of variability in it.	7
Q.4 (a) Discuss the contribution of yarn clearer in winding process.	3
(b) Discuss any two wound package faults with their causes and remedial measures with the help of neat diagrams.	4
(c) Explain, in detail about influence of preparatory processes on yarn hairiness.	7
OR	
Q.4 (a) Discuss the importance of Automatic Drawing-in machine.	3
(b) Give classification of fabric defects.	4
(c) State and explain the steps involved in process control. Also, state the technical requirements of pirn winding process	7
Q.5 (a) Write three points to control small weft loop (Phurkies) damage	3
(b) State the factors affecting loom efficiency. How to maximize loom efficiency?	4

- (c) Explain the factors affecting productivity & Efficiency in a weaving mill. 7

OR

- Q.5** (a) Discuss suitable steps for controlling comber waste at comber. 3
(b) State various zones of stretch control on modern sizing machines. How do you measure the stretch % ? 4
(c) Explain the term Machinery Audit with suitable examples.. 7
