

GUJARAT TECHNOLOGICAL UNIVERSITY
ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016

Subject Code: 2722513**Date: 31/05/2016****Subject Name: Process & 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.

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|------------|---|------------------------|
| Q.1 | Define and explain the effect loom productivity and efficiency play an important role to enhance fabric quality. | 14 |
| Q.2 | (a) Discuss the factors affecting on yarn tension in rotor.
(b) What are the impacts of drawing in yarn quality? | 07
07 |
| OR | | |
| | (b) Discuss the common problems of drawing during process control. | 07 |
| Q.3 | (a) List out the common faults and their causes in knitting.
(b) What is the importance of automatic fabric inspection system. | 09
05 |
| OR | | |
| Q.3 | (a) Discuss the common defects and their causes during the combing process.
(b) Which would be the correct strategy to enhance quality of blowroom process (opening, cleaning and mixing)? | 07
07 |
| Q.4 | (a) In ring spinning which factors are responsible for more number of end breakage.
(b) Discuss the key elements of process control in comber. | 07
07 |
| OR | | |
| Q.4 | (a) Which factors are responsible for the twist variation in ring spinning?
(b) Write a note on process control in sewing. | 07
07 |
| Q.5 | (a) What is the role of statistical process control (SPC) in quality improving of textile manufacturing process.
(b) Define \bar{x} -test and \bar{F} -test. | 10
04 |
| OR | | |
| Q.5 | (a) What is the effect of card cylinder region and licker in region parameters on card sliver quality?
(b) Explain quick style change (QSC). | 10
04 |
