

GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER-II EXAMINATION – SUMMER 2015

Subject Code: 2722513**Date: 01/06/2015****Subject Name: Process & 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.

- Q.1** (a) Elaborately discuss the role of statistical process control (SPC) in quality improving of textile manufacturing process. **10**
(b) When-t₀ test, -F₀ test and chi-square method used in interpretation of data? **04**
- Q.2** (a) Which would be the correct strategy to enhance quality of blowroom process (opening, cleaning and mixing)? **07**
(b) How loom productivity and efficiency play an important role to enhance fabric quality? **07**
- OR**
- (b) Write a note on automatic fabric inspection system. **07**
- Q.3** How to improve spreading and cutting quality for excellent finish product appearances? **14**
- OR**
- Q.3** Write a note on process control in sewing. **14**
- Q.4** (a) List out the yarn quality characteristics which influenced by blowroom operation. **07**
(b) Discuss the factors which control card waste. **07**
- OR**
- Q.4** (a) How to optimized opening intensity of opening devices in blowroom with least deterioration of fibre quality? **07**
(b) Explain the effect of card cylinder region parameters on card sliver quality. **07**
- Q.5** (a) Express any three indices which represent relationship between fibre quality parameters and spinning process. **10**
(b) Explain quick style change (QSC) **04**
- OR**
- Q.5** (a) Discuss the influence of traveler mass, ring diameter and balloon height on ring yarn quality. **09**
(b) List out the limitations of textile manufacturing process in better control of it. **05**
