

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII EXAMINATION – WINTER 2015

Subject Code: 172904**Date:09/12/2015****Subject Name: Process &Quality Control in Spinning****Time: 10:30am to 1:00pm****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) | Explain role and scope of process control in spinning with the help of chart. | 07 |
| | (b) | Discuss control of mixing quality through fibre characteristics. | 07 |
| Q.2 | (a) | Explain in detail i. Adjustment to stock-in process and
ii. chart for Yarn Realization. | 07 |
| | (b) | Explain waste control at card. Also discuss how to optimised it. | 07 |
| OR | | | |
| | (b) | Explain Peri-microscope with neat sketch. | 07 |
| Q.3 | (a) | Explain, with the help of necessary sketches how poor performance of blow room can be improved using gravity trap and grids in suction pipe. | 08 |
| | (b) | Write brief note on Bale management in spinning. | 06 |
| OR | | | |
| Q.3 | (a) | Explain Technological considerations involved in control of comber waste. | 10 |
| | (b) | Briefly explain need of modern process control in spinning. | 04 |
| Q.4 | (a) | Discuss various causes of end breakages at ring frame with classification. | 08 |
| | (b) | Explain briefly the method of snap study. | 06 |
| OR | | | |
| Q.4 | (a) | Discuss in detail various causes of Within bobbin count variation. | 08 |
| | (b) | 'Two mills having same PI need not have same level of Profitability'. Justify the statement. | 06 |
| Q.5 | (a) | Discuss in detail random component of yarn irregularity. | 07 |
| | (b) | Discuss influence of various spinning machines on nep generation. | 07 |
| OR | | | |
| Q.5 | (a) | Discuss the factors affecting yarn strength. | 07 |
| | (b) | Discuss the problem of Hairiness and slub briefly. | 07 |
