

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEMESTER– 7th EXAMINATION – SUMMER 2015

Subject Code: 172904

Date: 12/05/2015

Subject Name: Process & Quality Control in Spinning

Time: 02.30PM-05.00PM

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) What is importance of controlling cleaning at card?
How card waste is optimized? **07**
- (b) Describe determination of trash content and cleaning efficiency for blow room. **07**
- Q.2** (a) Describe following for Yarn realization:- **07**
- i. Allowance for hank-meter records
 - ii. Adjustment to stock in process
- (b) Explain in detail all know how of Instrumental evaluation for the formulation of mix. **07**
- OR**
- (b) Explain ATIRA approach to L.P. for cotton mixing. **07**
- Q.3** (a) Explain Following:- **07**
- i. Method of establishing norms or standards
 - ii. Need of modern process control in spinning
- (b) Discuss the method for routine check of comber waste. **07**
- OR**
- Q.3** (a) State the avoidable causes of loss in efficiency at ring frame and suggest remedial measures for each of them. **07**
- (b) Discuss implementation of the Machinery audit. **07**
- Q.4** (a) Explain the term LER. **07**
Hence discuss how LER can be controlled in spinning mill.
- (b) Discuss briefly problem of : **07**
- (i) slough off (ii) slubs
- OR**
- Q.4** (a) Explain the causes of periodic and quasi periodic component of yarn irregularity. **07**
- (b) Write short note on: **07**
- (i) Rkm Value (ii) Classimat faults
- Q.5** (a) 'Blow room and Carding do not affect within bobbin count variation' . **07**
Justify the statement.
- (b) Discuss the role of speed frame with reference to between bobbin count variation. **07**
- OR**
- Q.5** (a) Discuss the effect of various spinning machines on yarn unevenness. **07**
- (b) What is the significance of process control in a spinning mill ? **07**
Discuss how it can be implemented in a mill.
