

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.E. Sem-III(Textile Technology)Examination December 2009****Subject code: 132902****Date: 17 / 12/ 2009****Subject Name: Yarn Manufacturing-I****Time: 11.00 am – 1.30 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) What is Autoleveller? Explain close loop and open loop principle in Autoleveller with neat sketch. **07**  
(b) Explain flexible card clothing in brief. **04**  
(c) Only state the objects of carding. **03**
- Q.2** (a) Describe the process of ginning briefly. **07**  
(b) With a neat sketch explain construction and working of Hopper Bale Opener. **07**
- OR**
- (b) Describe briefly construction and working of any modern automatic Bale Opener. **07**
- Q.3** (a) Explain working of Step Cleaner with neat sketch. **07**  
(b) Explain working of Vertical Opener with neat sketch. **07**
- OR**
- Q.3** (a) Explain Multimixer briefly. **07**  
(b) Describe Piano feed mechanism with neat sketch. **07**
- Q.4** (a) What is stripping of card clothing, state its importance? Explain stripping by “plain stripping roller” with neat sketch. **07**  
(b) What is the problem with web doffing by doffer comb? Hence describe any two developments in card web doffing with neat sketch. **07**
- OR**
- Q.4** (a) What is chute feed system on card? Discuss advantages and disadvantages of chute feed system over lap feeding system on card. **07**  
(b) What is importance of grinding for card clothing? Hence explain any one type of grinding roller with neat sketch. **07**
- Q.5** (a) What are limitations of conventional card and how they are overcome in modern card? **07**  
(b) Discuss lap defects and remedial measures required in brief. **07**
- OR**
- Q.5** (a) Describe steps to be taken for processing manmade fibres in Blow Room. **07**  
(b) What is Tandem card? Give the advantages and disadvantages of Tandem card. **04**  
(c) Write the formula to calculate the production of card in kgs/shift. Also write the formula to calculate mechanical draft and actual draft on card. **03**

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