

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – IV • EXAMINATION – WINTER 2012

Subject code: 142901**Date: 27/12/2012****Subject Name: Yarn Manufacturing - II****Time: 02.30 pm - 05.00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is combing? What are the objects of comber machine? Why combing process is important in spinning department? **07**
- (b) What are the objectives of Draw frame and Speed frame? Explain in brief. **07**

- Q.2** (a) Discuss the combing cycle of any combing machine. **07**
- (b) Compare forward feed and backward feed comber briefly. **07**

OR

- (b) Discuss various developments in loading arrangement at draw frame. **07**
- Q.3** (a) Describe the influence of machine components and settings on Combing performance. **07**
- (b) How to find out the noil percentage of given comber machine and explain comber waste extraction system **07**

OR

- Q.3** (a) Describe various types of gauges used for carrying out settings of comber. **07**
- (b) Write on the modern developments in Combing. **07**

- Q.4** (a) What is autoleveller? Explain working of autoleveller draw frame with its types. **07**
- (b) Discuss the factors affecting drafting force. **07**

OR

- Q.4** (a) Describe the features of modern Draw frame. **07**
- (b) Describe briefly construction of modern top rollers and bottom rollers at draw frame. **07**

- Q.5** (a) Explain the function of following parts with diagram of speed frame machine in briefly: **07**
(i) condenser (ii) spacer (iii) Apron (iv) Flyer
- (b) What are flyer lead and bobbin lead machines in speed frame? Discuss their advantages and disadvantages. **07**

OR

- Q.5** (a) Write the objects of builder mechanism and explain how to obtain all these objects on speed frame machine? **07**
- (b) What is differential motion? Explain use of differential motion on speed frame. **07**
