

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – WINTER • 2014****Subject Code: 152905****Date: 08-12-2014****Subject Name: Textile Manufacturing Processes****Time: 10.30 am - 01.00 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) Draw the process flow chart of carded and combed ring spun yarn. **07**
(b) With neat sketch show the passage of warp through plain power loom and mentions function of different parts of loom. **07**
- Q.2** (a) Give classification of convention and modern spinning techniques. **07**
(b) Enlist objects of ring frame. Show the passage of material through ring frame. **07**
- OR**
- (b) Explain construction and working principle of rotor spinning machine. **07**
- Q.3** (a) With neat sketch, discuss Air jet spinning process. **07**
(b) Describe the operating principle of Murata Jet Spinner with the help of a neat sketch. **07**
- OR**
- Q.3** (a) Give classification of weaving machine. Briefly discuss on principles of each loom. **07**
(b) With Friction spinning principle, Explain the working of Dref-3 spinning system with a neat sketch **07**
- Q.4** (a) Explain Primary, Secondary and Auxiliary motions of Plain loom. **07**
(b) Define the following terms, each term carry one mark: **07**
i. Drafting ii. Yarn Count iii. Warp iv. EPI or PPI
v. Shuttle vi. Wale vii. course
- OR**
- Q.4** (a) Explain principle and working of any one shuttleless weaving machine in brief. **07**
(b) Define the term Knitting and Explain manufacturing techniques of weft knitting machine. **07**
- Q.5** (a) Define – Nonwoven fabric. Give the classification of nonwoven techniques **07**
(b) Give comparison between shuttle and shuttleless loom. **07**
- OR**
- Q.5** (a) Give the sequence of operation in Garment manufacturing process and state the objective of each operation **07**
(b) Write a brief note on the following: (i) Cutting (ii) Spreading **07**
