

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE – SEMESTER V • EXAMINATION – WINTER - 2012****Subject code: 152901****Date: 11-01-2013****Subject Name: Yarn Manufacturing - III****Time: 02:30 pm to 05:00 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) What do you mean by Spinning Geometry? Discuss in brief the implication of Spinning Triangle. **07**
- (b) Discuss in detail various factors affecting tension in yarn during Ring spinning. **07**
- Q.2** (a) Explain the mechanism for building the base in Ring Spinning with a neat sketch. **07**
- (b) Discuss in brief about Compact Spinning. **07**
- OR**
- (b) Discuss in detail the essential requirements of Modern Spinning spindles and their practical solutions. **07**
- Q.3** (a) Discuss the significance of Traveller mass. **07**
- (b) Discuss in brief about Automatic Doffing in Ring frame. **07**
- OR**
- Q.3** (a) Discuss the limitations of conventional ring and C-shaped traveller system. **07**
- (b) Discuss in brief Running-in of Rings. **07**
- Q.4** (a) Discuss in brief possibilities of automation in Ring spinning. **07**
- (b) Discuss Scotch system of Doubling. **07**
- OR**
- Q.4** (a) Define the terms : i. Ply yarn ii. Cabled yarn iii. Doubled yarn. **07**
- Q.4** (b) Discuss the defects and remedies in Doubler frame. **07**
- Q.5** (a) Discuss in brief the snarling and associated problems. **07**
- (b) Compare “Z” on “Z” and “S” on “Z” Doubled yarns. **07**
- OR**
- Q.5** (a) Discuss in brief about Loop yarn. **07**
- (b) Explain in brief Two-For-One system of Twisting. **07**

\*\*\*\*\*