

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (OLD) - EXAMINATION – SUMMER 2017****Subject Code: 152901****Date: 10/05/2017****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.
- 4.

- Q.1** (a) Discuss in detail about Top arm drafting systems. **07**
(b) What is “Balloon Collapse”? Which factors contribute to it on a Ring frame? State different ways adopted to minimize it on Modern ring frame. **07**
- Q.2** (a) Explain builder mechanism on a ring frame for building of bobbin. **07**
(b) Discuss the factors affecting tension in yarn. **07**
- OR**
- (b) Enlist the commonly used winds for spinning & explain any one of them with neat figure. **07**
- Q.3** (a) Explain different kinds of ring and traveller combinations. **07**
(b) Discuss about Top roller cots. **07**
- OR**
- Q.3** (a) Discuss latest features incorporated with modern spindles on ring frame. **07**
(b) Enlist the types of motor used in Ring Spinning mills. Explain features, advantages and disadvantages of any one. **07**
- Q.4** (a) Discuss in detail spinning geometry with implications of spinning triangle. **14**
- OR**
- Q.4** (a) Discuss in detail fancy yarns with methods of manufacturing. **14**
- Q.5** (a) Discuss spindle drive in detail with neat sketches. **07**
(b) Write note on “Doubling systems”. **07**
- OR**
- Q.5** (a) Discuss in detail about concept and manufacturing process of Compact yarn. **07**
(b) Explain Two-for-one twisting with suitable diagram. **07**
