

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE – SEMESTER – VI (NEW).EXAMINATION – WINTER 2016**

**Subject Code: 2162908****Date: 26/10/2016****Subject Name: Modern Yarn Production Technologies****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) Discuss history and objects of Rotor Spinning. **07**  
(b) Explain yarn formation with spinning nozzle in Air jet spinning. **07**
- Q.2** (a) Describe operating principle of Friction Spinning. Also discuss advantages and disadvantages of friction spinning system. **07**  
(b) Explain the term Compact Spinning. Discuss in detail its effect on various yarn properties. **07**
- OR**
- (b) Describe EliTe Compact Spinning with neat sketch. **07**
- Q.3** (a) Explain working principle of Rotor spinning with suitable diagram. **07**  
(b) Discuss in detail about Rotor along with parameters and configuration of it. **07**
- OR**
- Q.3** (a) Discuss Economics of Rotor Spinning in detail. **07**  
(b) Describe the features of modern rotor spinning machine. **07**
- Q.4** (a) Discuss yarn structure and physical textile characteristics of different spinning systems. **14**
- OR**
- Q.4** (a) Discuss about DREF-I, DREF-II and DREF-III Friction spinning systems with neat sketch. **14**
- Q.5** (a) Describe Bobtex spinning system with neat sketch. **07**  
(b) Explain operating principle of Air vortex spinning system. **07**
- OR**
- Q.5** (a) With a neat sketch, explain Wrap spinning process. **07**  
(b) Discuss about Siro spinning system. **07**

\*\*\*\*\*