

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – 7 SEMESTER (Old) – • EXAMINATION – SUMMER 2018

Subject Code:172901

Date:05/05/2018

Subject Name: Modern Spinning Technology

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) Describe basic principle of yarn formation of DREF spinning with neat sketch. **07**
(b) Discuss advantages and disadvantages of friction spinning. **07**
- Q.2** (a) Explain why rotor spinning is suitable for only coarser counts. **07**
(b) State the advantages of rotor spinning. **07**
- OR**
- (b) Describe the features of modern rotor spinning machines. **07**
- Q.3** (a) With a neat sketch, describe the passage of material on vortex spinning. **07**
(b) Discuss the major limitations of air jet spinning. **07**
- OR**
- Q.3** (a) With neat sketch describe the structure of yarn obtained by airjet spinning. **07**
(b) Compare airjet spinning and vortex spinning. **07**
- Q.4** (a) Describe Siro spinning with neat sketch. **07**
(b) State the advantages and disadvantages of Siro spinning. **07**
- OR**
- Q.4** (a) Describe wrap spinning system with neat sketch. **07**
(b) State the advantages and disadvantages of wrap spinning. **07**
- Q.5** (a) Describe twistless spinning system working with temporary adhesion, with neat sketch. **07**
(b) Describe Rocos spinning system briefly with neat sketch. **07**
- OR**
- Q.5** (a) Describe twistless spinning system working with permanent adhesion, with neat sketch. **07**
(b) Explain compact spinning briefly. Hence discuss the advantages of compact spun yarn over conventional yarn. **07**
