

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – WINTER • 2014****Subject Code: 172901****Date: 06-12-2014****Subject Name: Modern Spinning Technology****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) Why wrap spinning system is known as cover spinning? With neat sketch explain working of it. **07**
- (b) With neat sketch classify air jet spinning yarn. **07**
- Q.2** (a) Explain the working of DREF3 and DREF2000 friction spinning system with neat sketch. **07**
- (b) Discuss the term: spinning stability and maximum spinning time **07**
- OR**
- (b) Discuss: Influence of PTE on rotor yarn property and bipartite structure **07**
- Q.3** With neat sketch explain working of SIRO spinning system. How strand spacing and twist influence the SIRO yarn property? **14**
- OR**
- Q.3** Briefly explain integration of straight and hooked fibre into yarn in rotor spinning system. **14**
- Q.4** (a) Discuss the method of production of integrated composite twist less spinning process. **07**
- (b) Explain the principle of Murata vortex spinning with neat sketch. **07**
- OR**
- Q.4** (a) Write a note on twilo spinning system. **07**
- (b) Compare the structure of ring, rotor and fascinated spinning system yarn. **07**
- Q.5** (a) Discuss the working procedure of COM4condensed spinning system. **07**
- (b) Write a note on self cleaning rotor. **07**
- OR**
- Q.5** (a) With neat sketch explain ROCOS spinning system. **07**
- (b) What are the limitations of rotor spinning system and elaborately discuss why rotor spinning is not suitable to spun finer count. **07**
