## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2016

Subject Code:2162908 Date:17/05/2016

**Subject Name: Modern Yarn Production Technologies** 

Time: 10:30 AM to 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) (b)	With a neat sketch describe the passage of material on rotor spinning machine. Describe the mechanism of yarn formation inside the nozzles in Air jet spinning.	07 07
Q.2	(a)	With neat sketch, describe the structure of air jet yarn along with its classification.	07
	<b>(b)</b>	Discuss the advantages and disadvantages of rotor spinning technology. <b>OR</b>	07
	<b>(b)</b>	Discuss the latest developments in rotor spinning technology briefly.	<b>07</b>
Q.3	(a) (b)	Describe the major limitations of Ring frame spinning technology.  Compare air jet spinning and Vortex spinning.  OR	07 07
Q.3	(a) (b)	Discuss in detail the integration of fibres into rotor yarn with neat sketches.  Describe structure of rotor yarn briefly with neat sketch.	10 04
Q.4	(a) (b)	Describe Dref - III spinning system with neat sketch.  Discuss major advantages and disadvantages of friction spinning system.  OR	07 07
Q.4	(a) (b)	With a neat sketch describe Siro spinning system.  Describe the structure of wrap spun yarn with neat sketch.  Also state advantages and disadvantages of wrap spinning system.	07 07
Q.5	(a) (b)	With a neat sketch describe Bobtex spinning system.  Describe Comfor spinning system with a neat sketch.  OR	07 07
Q.5	(a) (b)	Explain the basic principle of compact spinning with neat sketch.  Describe Elite spinning system with neat sketch.	07 07

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