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Name:	
Roll No.:	To Demonty Knowledge 2nd Conflored
Invigilator's Signature :	

CS/M.Tech(TT/CPT)/SEM-2/MTT-203/2012 2012

TECHNOLOGY OF YARN FORMING

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any five questions. $5 \times 14 = 70$

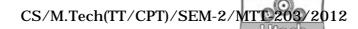
- a) Explain different mechanisms of fibre transfer from the opening rollers.
 - b) What changes have been observed in the configuration of the fibres entering the rotor by changing the tubular feed channel to rectangular feed channel?
- 2. Explain in detail the mechanisms of wrapper fibre formation in rotor spinning.
- 3. a) Explain why selection of twist is more critical in rotor spinning than in ring spinning.6
 - b) Describe a method for determining the twist level inside the rotor.8

30092 (M.Tech)

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CS/M.Tech(TT/CPT)/SEM-2/MTT-203/2012

- 4. a) Describe the system of spinning from which the basic principle of air jet spinning been derived.
 - b) Explain why two nozzle system is better than single nozzle system.6
 - c) Discuss about the importance of preparatory processes
 on the spinning performance and quality of air jet spun
 yarns.
- 5. a) What improvement have been made in Dref-5 over Dref-3 and why?
 - b) Describe how the twist in friction spinning can be determined theoretically.10
- 6. a) Explain the importance of two.to.top converter in commercial and technological aspects.
 - b) Discuss the different fundamental principles of methods used in two-to-top conversion process along with their relative advantages and disadvantages.
 - c) Differentiate process flow charts between pacificconverter and Turbo-stapter machines.6



- 7. a) Explain theoretical quality and technical quality. Which one of them is associated with process control techniques?
 - b) Discuss two fundamental aspects in context with process control in spinning.
 - c) Elaborate different factors affecting the control of raw materials in short staple spinning system with suitable example.
- a) Describe the mechanism of off-line count control and off-line control of end breakage in spinning. On-line process control of above mentioned parameter is more appropriate. Explain.
 - b) Illustrate different waste control measures in yarn formation processes.