CULLARAT TECHNOLOCICAL UNIVERSITY

GUJARAT TECHNOLOGICAL UNIVERSITY be - semester-vii examination – summer 2016			
Subject Code:172901 Date:12/0			6
Subject Name:Modern Spinning Technology			
Time:02:30 PM to 05:00 PM Total Marks			70
Ins	tructio 1. 2. 3.	Attempt all questions.Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	Give classification of structure of Air jet spun yarn with neat sketch. Hence discuss how air jet spun yarn with higher strength can be produced. 'Rotor spinning is suitable only for coarser counts'. Justify the statement.	07 07
Q.2	(b) (a) (b)	Describe the important features of automation at rotor spinning machine. Discuss the problem of rotor deposit and its effect in rotor spinning briefly. OR	07 07 07
	(b)	Compare important properties of yarn obtained by Air jet spinning with that of Ring frame and Rotor yarns.	07
Q.3	(a)	With a neat sketch of nozzle, explain the mechanism of yarn formation inside nozzle in Air jet spinning.	07
	(b)	With a neat sketch describe the working of Vortex spinning . OR	07
Q.3	(a) (b)	Describe Wrap spinning system with neat sketch. Also draw and explain the yarn structure obtained by wrap spinning. Compare Airjet spinning and Vortex spinning system.	09 05
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Q.4	(a) (b)	With a neat sketch describe DREF – I spinning system. State the major advantages and disadvantages of Friction spinning. OR	07 07
Q.4	(a) (b)	With a neat sketch describe DREF – III spinning system. Describe the process of Siro spinning briefly with neat sketch. Also state the applications of Siro spun yarn.	07 07
Q.5	(a) (b)	Explain what is 'Compact spinning'. Hence discuss its effect on yarn properties. With neat sketch, describe a twistless spinning system working with permanent adhesion.	07 07
05	(a)	OR Describe ROCOS spinning system with next sketch	07
Q.5	(a) (b)	Describe ROCOS spinning system with neat sketch. With neat sketch, describe a twistless spinning system working with temporary adhesion.	07 07
