Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION - SUMMER • 2014

Subject Code: 142901		Code: 142901	Date: 16-06-201	Date: 16-06-2014	
Sub	ject	Name: Yarn Manufacturing- II			
Tin	ie: 10	0:30 am - 01:00 pm	Total Marks: 7	7 0	
Instr	uction	ns:			
	1. 2. 3.	Attempt all questions. Make suitable assumptions wherever necess. Figures to the right indicate full marks.	ary.		
Q.1	(a)	Explain the principle of roller drafting. Discuss the functions and featur various parts of draw frame machine.		07	
	(b)	State the objectives of combing. Discuss of this process.	the advantages and disadvantages	07	
Q.2	(a)	Explain the passage of material on modern Speed frame with a neat sketch.		07	
	(b) Discuss the factors influencing drafting force on Draw frame. OR			07	
	(b)				
Q.3		Discuss the factors considered while preparing the lap for Comber, and write on the lap preparation systems			
0.0		OR		07	
Q.3	(a) (b)				
Q.4	(a)	a) Write a short note on Autolevellors used on Draw frame.		07	
(b)				07	
		Detachment setting - 12 mm	Weight of lap - 7550 gms		
		Comber speed - 300 nips/min	Length of lap - 200 yards		
		Waste % - 12	Efficiency - 87%		
		No of heads- 2			
Q.4	(a)	OR OR Calculate production of draw frame in kg/day/machine from the following:			
Q. 4	(a)	Hank of sliver - 0.17	Efficiency - 83%	07	
		No of heads - 2	Tension draft - 1.01		
		Surface speed of front roller - 650 yds/ mir			
Q.4	<u>*</u>			07	
		Spindle speed - 1000 rpm	Roving hank - 1.8		
		T.M 1.2	Efficiency - 90%		
		No of spindles - 120			
Q.5		State the functions of builder motion and differential motion and discuss		14	
		how it is achieved on modern Speed frame. OR	•		
Q.5	(a)	Write on the arrangement of roving bobbin on Speed frame and explain th		07	
	construction of flyer.(b) Discuss the technological design changes on modern Speed frame.		un modern Speed frame	07	
	(0)	Discuss the technological design changes on modern speed frame.			
