

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – WINTER 2018****Subject Code: 2142901****Date: 05/12/2018****Subject Name: Yarn Manufacturing - II****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(A) What Is The Objects Of Draw Frame?	3
	(B) With Neat Sketch Explain The Passage Of Material On Draw Frame Machine.	4
	(C) Explain The Sequence Of Operation In A Rectilinear Comber.	7
Q.2	(A) Write Down The Formula To Calculate The Production Of Draw Frame In Kgs/Shift.	3
	(B) What Is Bobbin Lead And Flyer Lead. Discuss	4
	(C) Mention Various Types Of Drafting System Used In Draw Frame. With A Suitable Diagram Explain The 3 Over 3 Roller Drafting System Used In Draw Frame.	7
OR		
	(C) Explain Various Comber Settings.	7
Q.3	(A) Briefly Explain Suction System For Drafting Arrangement In Drawframe	3
	(B) Which Parameters Are Influence In The Feed Stock On Combing?	4
	(C) Write Short Note On Drafting Wave. Also Suggest Steps To Control The Problem.	7
OR		
Q.3	(A) Why Even Number Of Machines Are Used Between Card And Comber?	3
	(B) Discuss The Latest Developments On A Drawframe Machine.	4
	(C) Write Short Note On 1) Open Loop Autoleveller 2) Close Loop Autoleveller.	7
Q.4	(A) What Is Forward Feed And Backward Feed In Comber.	3
	(B) Explain The Working Of Autoleveller On Drawframe.	4
	(C) Write A Short Note On Modern Lap Preparation Systems.	7
OR		
Q.4	(A) Enlist Object Of Speedframe	3
	Calculate Speed Frame Production In Pound/Shift/Spindle And Draft From Following Data: Flyer Speed: 1200rpm	
	(B) Sliver Hank: 0.16	4
	Roving Hank: 2	
	T.M: 1.2	
	Efficiency: 85%	
	(C) State The Objectives Of Builder Motion At Speedframe And Explain How It Is Achieved With A Neat Sketch.	7

- Q.5** (A) Write The Function Of The Following Elements Used In Roving Frame: **3**
1) Spacer; 2) Condenser; 3) Flyer Tops

Calculate Comber Production In Kg/Day/Machine From The Following Data:

Type Of Feed: Backward.

Feed/Nip 6 Mm

- (B) Waste Percentage: 16 **4**

Comber Speed: 425 Nips/Min

Comber Lap Hank :- 0.0125

Efficiency: 88%

Maximum Fiber Length (Fm): 40mm

- (C) Discuss The Various Parameters Influencing Combing Operation. **7**

OR

- Q.5** (A) Write The Function Of Pressure Bar Used In Drafting System Of Draw Frame Machine. **3**

- (B) Write On The Latest Developments In The Speedframe Machine. **4**

- (C) Explain Passage Of Material On Super Lap Former. **7**

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