

**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
<b>Q.1</b>	(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
<b>Q.2</b>	(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 Mention Various Types Of Drafting System Used In Draw Frame. With A	4
	(C) Suitable Diagram Explain The 3 Over 3 Roller Drafting System Used In Draw Frame.	7
<b>OR</b>		
	(C) Explain Various Comber Settings.	7
<b>Q.3</b>	(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
<b>OR</b>		
<b>Q.3</b>	(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
<b>Q.4</b>	(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
<b>OR</b>		
<b>Q.4</b>	(A) Enlist Object Of Speedframe Calculate Speed Frame Production In Pound/Shift/Spindle And Draft From Following Data: Flyer Speed: 1200rpm	3
	(B) Sliver Hank: 0.16 Roving Hank: 2 T.M: 1.2 Efficiency: 85%	4
	(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:  
1) Spacer; 2) Condenser; 3) Flyer Tops **3**
- Calculate Comber Production In Kg/Day/Machine From The Following Data:  
Type Of Feed: Backward.
- (B)** Feed/Nip 6 Mm **4**  
Waste Percentage: 16  
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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