

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2142901****Date: 06/06/2017****Subject Name: Yarn Manufacturing - II****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

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

Q.1	Short Questions	14
	1 What is drafting?	
	2 Mention the names of different types of drafting systems.	
	3 Give the diameter of the top roller at the drafting system.	
	4 What is the approximate delivery speed of a high performance Drawframe.	
	5 Give the range of draft in a high performance Drawframe.	
	6 Which are the different types of Comber?	
	7 Give the formula for noil percentage in the forward feed at the Comber.	
	8 What is the number of doubling commonly given at Comber?	
	9 Give the delivery hank of sliver at Comber.	
	10 In what manner are the bobbins arranged in a Speedframe machine?	
	11 Name the different types of flyers at Speedframe.	
	12 Give the number of spindles present per Speedframe machine.	
	13 What is the range of draft given at Speedframe machine?	
	14 Give the formula for turns per metre with reference to Speedframe.	
Q.2	(a) Discuss the special features of rollers used in the drafting system at Drawframe.	03
	(b) Write on the care taken during the preparation of lap for the combing operation.	04
	(c) Write a short note on modern lap preparation systems.	07
	OR	
	(c) Write a short note on the doffing arrangement present in the Speedframe machine.	07
Q.3	(a) Draw the passage of material on a Drawframe machine.	03
	(b) Write on the various problems or defects occurring during the processing of material on Drawframe.	04
	(c) Explain the working of Autoleveller on Drawframe.	07
	OR	
Q.3	(a) Discuss the advantages of doubling that takes place at Drawframe.	03
	(b) Write on the processing of manmade fibres on Drawframe.	04
	(c) Discuss the latest developments on a Drawframe	07

- machine.
- Q.4** (a) Give the formula for calculation of production at Comber. **03**
- (b) Discuss the objectives of Comber. **04**
- (c) Explain the sequence of operation in a Rectilinear comber. **07**
- OR**
- Q.4** (a) Give the special features of top comb at Comber. **03**
- (b) Explain the noil elimination with backward feed at Comber. **04**
- (c) Discuss the various parameters influencing combing operation. **07**
- Q.5** (a) State the objectives of Speedframe. **03**
- (b) Write a short note on Cone transmission drive at Speedframe. **04**
- (c) Write on the latest developments in the Speedframe machine. **07**
- OR**
- Q.5** (a) Write on the monitoring devices present on Speedframe machine. **03**
- (b) Explain the formula for calculation of production at Speedframe. **04**
- (c) State the objectives of builder motion at Speedframe and explain how it is achieved with a neat sketch. **07**
