

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) EXAMINATION – WINTER 2018

**Subject Code: 2182907**

**Date: 19/11/2018**

**Subject Name: Process & Quality Control in Spinning**

**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) Enlist Parameters Contributing Cleaning Efficiency In Blow Room	3
	(B) Explain The Effect Of Quality Of Drafting On Yarn Strength.	4
	(C) State The Avoidable Causes Of Loss In Efficiency At Ring Frame And Suggest Remedial Measures For Each Of Them.	7
<b>Q.2</b>	(A) State The Methods To Measure Fractionating Efficiency Of A Comber.	3
	(B) Discuss Implementation Of The Machinery Audit.	4
	(C) Describe Determination Of Trash Content And Cleaning Efficiency For Blow Room.	7
<b>OR</b>		
	(C) How Machinery Audit Is Different Than Routine Maintains. Explain With Neat Diagram Any One Instrument Used For Machinery Audit.	7
<b>Q.3</b>	(A) What Is The Importance Of Process Control In Spinning	3
	(B) Explain In Brief Modern Process Control In Spinning.	4
	(C) Describe Performance Assessment Of Comber.	7
<b>OR</b>		
<b>Q.3</b>	(A) What Is Yarn Realisation, Enlist Parameters Affecting It.	3
	(B) Write Brief Note On Bale Management In Spinning.	4
	(C) Explain AFIS And Discuss Its Advantages.	7
<b>Q.4</b>	(A) How Can Soft Waste Be Controlled?	3
	(B) Explain Briefly The Concept Of Hypothetical Mill.	4
	(C) Explain Waste Control At Card. Also Discuss How To Optimised It.	7
<b>OR</b>		
<b>Q.4</b>	(A) Enlist Steps To Improve Any One Machine Productivity	3
	(B) How Can Yarn Appearance Be Measured?	4
	(C) Discuss The Role Of Speed Frame With Reference To Between Bobbin Count Variation.	7
<b>Q.5</b>	(A) What Is Classmate Faults	3
	(B) Blow Room And Carding Do Not Affect Within Bobbin Count Variation'. Justify The Statement.	4
	(C) Discuss Remedial Measures For Controlling Loss In Efficiency Due To Following Causes In Ring Frame Department Of A Spinning Mill : (I) Waiting For Doffing (Ii) Waiting For Empty Bobbins (Iii) Idle Spindles	7
<b>OR</b>		
<b>Q.5</b>	(A) Enlist Parameters That Prevent Yarn Hairiness	3
	(B) Discuss Random Component Of Yarn Irregularity In Detail.	4
	(C) Discuss Various Factors Affecting Yarn Strength.	7

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