

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2182907****Date:13/05/2019****Subject Name:Process & Quality Control in Spinning****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.

		MARKS
Q.1	(a) Define yarn realization? Write the formula to calculate yarn realization.	03
	(b) Discuss the key variables for process control in spinning.	04
	(c) Write a short note on HVI.	07
Q.2	(a) Define the term Quality.	03
	(b) How to establish norms and standards for process control in spinning?	04
	(c) Discuss the contribution of blow room, card and comber in generation of neps.	07
OR		
Q.3	(c) Discuss the factors affecting PI of mill.	07
	(a) What is random irregularity in yarn?	03
	(b) Give the causes and remedies for Slough off.	04
	(c) Explain the causes and remedies for spinner's double and crackers.	07
OR		
Q.3	(a) Explain in brief about concept of Bale Management.	03
	(b) Give the reasons for hairiness generation in yarn.	04
	(c) Discuss the various factors affecting between bobbin count variation.	07
Q.4	(a) Why single yarn strength are not preferred as a measure of yarn quality?	03
	(b) With a neat sketch explain working of gravity trap used in blow room line.	04
	(c) Write a short note on Machinery Audit.	07
OR		
Q.4	(a) What is instrumental evaluation?	03
	(b) Write in brief about yarn grading system.	04
	(c) Explain how optimization of cleaning and waste is done at card.	07
Q.5	(a) How to reduce end breakage rate in ring frame machine?	03
	(b) Write suitable steps for controlling comber waste at comber.	04
	(c) Write a short note on Nilo meter.	07
OR		
Q.5	(a) What is quasi periodic irregularity in yarn?	03
	(b) What is slub? How it is generated in yarn?	04
	(c) Explain simultaneous control of mixing cost & quality by graphical method.	07
