

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III(NEW) EXAMINATION – SUMMER 2023****Subject Code:3132906****Date:28-07-2023****Subject Name:Textile Materials****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.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
Q.1	(a) Define the terms: Yarn, Fibre and Degree of polymerization.	03
	(b) State difference between condensation and addition polymerization.	04
	(c) Draw classification of textile fibers with examples.	07
Q.2	(a) What is density and moisture regain value of cotton fibre? Draw cross sectional shape of cotton fibre.	03
	(b) With neat sketch explain silk reeling.	04
	(c) Write a note on types of cotton fibre.	07
	OR	
	(c) Explain in detail manufacturing process of acrylic fibre.	07
Q.3	(a) Write a note on ramie fibre.	03
	(b) Briefly describe cultivation of cotton fibre.	04
	(c) Explain in detail about different steps involved in Manufacturing of Viscose rayon with neat diagram.	07
	OR	
Q.3	(a) Write short note on hemp.	03
	(b) Write a note on types of wool fibre.	04
	(c) Discuss in detail physical and chemical properties of cotton fibre.	07
Q.4	(a) Write short note on Glass fibre.	03
	(b) State the cultivation and production of linen fibre.	04
	(c) Discuss in detail physical and chemical properties of polyester fibre.	07
	OR	
Q.4	(a) Describe the physical properties of nylon fibre	03
	(b) Explain dry spinning process with neat sketch.	04
	(c) Discuss in detail about VK tube method for Nylon fibre.	07
Q.5	(a) What is density, moisture regain and cross section shape of viscose rayon?	03
	(b) Describe the properties of jute fibre.	04
	(c) How spinning of viscose rayon carried out? Explain with neat sketch.	07
	OR	
Q.5	(a) Write short note on Spandex.	03
	(b) Enlist various applications of coir fibre.	04
	(c) Give the advantages of TPA over DMT route for Polyester	07
