

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (New) EXAMINATION – WINTER 2018****Subject Code: 2132901****Date: 28/11/2018****Subject Name: Textile Fibres****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 the terms: Fibre, Filament, Count.	03
(b) Compare natural and manmade fibres.	04
(c) Give broad classification of Textile Fibers.	07
Q.2 (a) Draw cross sectional shape of polyester ,cotton and silk fibre	03
(b) Explain addition polymerization and condensation polymerization.	04
(c) Give the advantages of TPA over DMT route for Polyester.	07
OR	
(c) Discuss in detail about VK tube method for Nylon Fiber.	07
Q.3 (a) Define : Mature, Immature and Dead cotton fiber	03
(b) Discuss on crystalline and amorphous region of fiber.	04
(c) With neat sketch explain silk reeling and silk throwing process.	07
OR	
Q.3 (a) Write short note on mineral fibre.	03
(b) Write note on properties of jute fibre.	04
(c) Explain the dry, wet and melt spinning methods.	07
Q.4 (a) Discuss about the production of milk fibre.	03
(b) Give physical and chemical properties of cotton fiber.	04
(c) Explain with neat sketch manufacturing process of acrylic fibre.	07
OR	
Q.4 (a) Discuss about Degree of Polymerization.	03
(b) Explain in detail the growth, production, harvesting of linen fibre.	04
(c) Explain with neat sketch morphological structure of wool.	07
Q.5 (a) Write a short note on ramie fibre.	03
(b) Write note on manufacturing process of glass fibre.	04
(c) Explain briefly any three desirable properties.	07
OR	
Q.5 (a) Write a note on application of coir fiber.	03
(b) Write short note on aramid fibres.	04
(c) Give detail manufacturing of viscose rayon with flow diagram.	07
