

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018****Subject Code:2162903****Date:16/11/2018****Subject Name:Physical Testing-II****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
Q.1	(a) Discuss the objectives of fabric testing.	03
	(b) Explain various ways in which samples from fabric are to be taken for testing.	04
	(c) With neat sketch explain fabric stiffness tester.	07
Q.2	(a) Explain the principle of CRL.	03
	(b) Briefly explain about the sample preparation for tensile strength testing.	04
	(c) Explain the fabric thickness gauge in detail.	07
	OR	
	(c) Write a short note on crease recovery test.	07
Q.3	(a) Define the terms Fabric assistance and Waisting & wear	03
	(b) Explain quadrant balance used for measuring fabric GSM	04
	(c) Explain fabric Drapemeter with a neat sketch.	07
	OR	
Q.3	(a) What is cover factor? Briefly explain it.	03
	(b) What is crimp rigidity? Explain briefly on the methods used to measure it.	04
	(c) With sketch explain the working of hydraulic busting strength tester.	07
Q.4	(a) Explain the factors responsible for pilling.	03
	(b) Explain the effect of crimp on fabric properties.	04
	(c) Explain in short the Bundesmann test for spray and drop penetration of water.	07
	OR	
Q.4	(a) Define air permeability, air resistance and air porosity.	03
	(b) Give the classification of abrasion test and mention the points required to be consider while performing abrasion resistance test.	04
	(c) Explain with a neat diagram the Martindale Abrasion Tester.	07
Q.5	(a) With graph explain relation between air permeability and cloth cover.	03
	(b) Define the term water proof, shower proof, water repellent and wettability.	04
	(c) Explain working of any one instrument for testing the tearing strength of fabric.	07
	OR	
Q.5	(a) Define the terms crimp amplitude, crimp % and crimp interchange.	03
	(b) Mention the purpose of fabric serviceability testing.	04
	(c) With sketch explain Beesley's instrument for count measurement from fabric sample.	07
