

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2162903****Date:10/05/2019****Subject Name:Physical Testing-II****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) What are the objects of fabric testing?	03
	(b) Mention the purpose of fabric serviceability testing.	04
	(c) Explain with neat sketch Elmendorf tearing tester.	07
Q.2	(a) Write short note on Bending Modulus.	03
	(b) Explain the principle of CRT.	04
	(c) Write short note on Shirley crease recovery tester.	07
	OR	
	(c) Explain the Fabric thickness gauge in detail.	07
Q.3	(a) Explain cantilever principle.	03
	(b) Briefly explain about the sample preparation for tensile strength testing.	04
	(c) With the help of neat sketch, explain the principle, construction and working of Drapemeter.	07
	OR	
Q.3	(a) Define the terms: Fabric assistance, Waistband and Wear.	03
	(b) Explain effect of crimp on fabric properties.	04
	(c) With the help of neat sketch explain Shirley air permeability tester.	07
Q.4	(a) Define the terms water proof, shower proof, water repellent.	03
	(b) Explain any one method to determine fabric weight.	04
	(c) With the help of neat sketch, explain the principle, construction and working of Pillbox Tester.	07
	OR	
Q.4	(a) Define the terms: Crimp amplitude, Crimp%, Crimp interchange.	03
	(b) Give the classification of Abrasion test and mention the points required to be consider while performing abrasion resistance test.	04
	(c) Discuss the methods used for determining the threads per inch in fabric.	07
Q.5	(a) Explain about the factors responsible for pilling.	03
	(b) Explain the quadrant balance for measuring Fabric GSM.	04
	(c) With the help of neat sketch, explain the principle, construction and working of Hydraulic Bursting Strength Tester.	07
	OR	
Q.5	(a) Write short note on cover factor.	03
	(b) What is shrinkage? How it is related with fabric width?	04
	(c) Explain with a neat diagram the Spray test for fabric.	07
