

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- VI (New) EXAMINATION - WINTER 2019

Subject Code: 2162903 Date: 04/12/2019

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)	Define the terms: handle, drape, stiffness.	03
	(b)	Explain various ways in which samples from fabric are to be taken for testing.	04
	(c)	Explain with a neat diagram the Spray test for fabric.	07
Q.2	(a)	Define the terms: crimp interchange, waisting and fabric assistance.	03
	(b)	What steps need to be taken to reduce the pilling tendency of woven or knitted fabric?	04
	(c)	Write a short note on crease recovery test.	07
		OR	
	(c)	Explain the principle of CRE, CRL and CRT in brief.	07
Q.3	(a)	Mention the purpose of fabric serviceability testing.	03
	(b)	Write short note on drape meter.	04
	(c)	Discuss the methods used for determining the fabric weight. OR	07
Q.3	(a)	State the various parameters affecting the tearing strength of the fabric.	03
	(b)	What is crimp rigidity? Explain briefly on the methods used to measure it.	04
	(c)	Explain with a neat diagram the principle and working tensile strength tester.	07
Q.4	(a)	How drapability of a fabric can be improved?	03
	(b)	Give the classification of Abrasion test and mention the points required to be consider while performing abrasion resistance test.	04
	(c)	With the help of neat sketch, explain the Thickness Gauge OR	07
Q.4	(a)	Define the term water proof, shower proof, water repellent	03
	(b)	Write short note on cloth cover.	04
	(c)	Define the term Bending Modulus & Flexural Rigidity. Also give their significance.	07
Q.5	(a)	Define air permeability, air resistance and air porosity	03
	(b)	- · · · · · · · · · · · · · · · · · · ·	04
	(c)	Explain the working of hydraulic busting strength tester with a neat sketch.	07
		OR	
Q.5	(a)	What are the objects of fabric testing?	03
	(b)	Define the terms: wear and pill. What will be the effect of pilling on fabric?	04
	(c)	Discuss the methods used for determining the threads per inch in fabric.	07
