Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER - VI EXAMINATION - WINTER 2015** 

	•	Code:162903 Date:08 /12/ 2015 Name: Physical Testing	
Ti	-	30pm to 5:00pm Total Marks: 70	
	1. 2. 3.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a)	Answer the following:  i. What do you mean by CRL, CRE, CRT and CRS.  ii. Define Modulus & Yield point.	07
	<b>(b)</b>	What do you mean by span length? With the help of the fibrograph explain 50% SL, 2.5% SL, ML and UHML.	07
Q.2	(a) (b)	Explain the working of Lea strength testing instrument with neat sketch.  Define: basic irregularity, index of irregularity, random sample and bias sample  OR	07 07
	<b>(b)</b>	Explain the instrument working on air flow principle to measure fibre fineness.	07
Q.3	(a) (b)	Write a note on maturity of cotton Explain the working of Shirley stiffness tester.  OR	07 07
Q.3	(a)	With the help of baer sorter diagram, explain various length parameters of cotton fibre.	07
	<b>(b)</b>	Explain the measurement of yarn count using Knowles Balance	07
Q.4	(a) (b)	Explain in detail about stelometer.  Write features of any one modern electronic evenness measurement instrument.  OR	07 07
Q.4	(a) (b)	Explain with neat diagram any one twist tester. Explain with neat sketch Shirley trash analyser.	07 07
Q.5	(a) (b)	Define the term water proof, Shower proof, water repellent and wettability. Classify the different types of abrasion. Explain any one abrasion testing instrument.	07 07
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Q.5	(a) (b)	Write in detail about pilling of fabric.  Define Drape and explain Drapemeter in detail with neat diagram.	07 07

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