

# GUJARAT TECHNOLOGICAL UNIVERSITY

## B. E. SEMESTER: VI

### TEXTILE TECHNOLOGY

Subject Name: **Physical Testing**

Subject Code: **162903**

Teaching Scheme				Evaluation Scheme		
Theory	Tutorial	Practical	Total	University Exam (Theory) (E)	Mid Sem Exam (Theory) (M)	Practical (I)
4	0	4	8	70	30	50

Sr. No	Course Content	Total Hrs.	Text Books
1.	Aims and scope of testing, sampling, Moisture relations and testing.	3	Principles of Textile Testing Booth J.E.
2.	Fibre length, fineness, strength, Maturity and trash content for cotton fibres, Fibre Crimp,	6	Principles of Textile Testing Booth J.E.
3.	Various instruments for testing fibre properties—their principle of operation and inter-relations between different instruments used for testing each property, testing of slubs	3	Principles of Textile Testing Booth J.E.
4.	Yarn count, Twist, Instruments used for testing.	3	Principles of Textile Testing Booth J.E.
5.	Strength testing of fibre, yarn and fabrics.	5	Principles of Textile Testing Booth J.E.
6.	Yarn Unevenness and Imperfections testing	5	Principles of Textile Testing Booth J.E.
7.	Fabric Testing : Tensile, Tear & Bursting strength, Abrasion Resistance pilling, Crease recovery, Air permeability, Water repellency, Warp and Weft crimp, Stiffness, Handle and drape of fabric.	6	Principles of Textile Testing Booth J.E.
8.	Test for man-made staple fibres and filaments.	3	Principles of Textile Testing Booth J.E.

9.	Testing of Technical textiles.	3	The Nonwovens Giovanni Tanchis
10.	Introduction to International Standards with specific reference to denim, bottomweights, suiting etc.	2	Various Websites & Company Literature.

### Reference Books:

1. Physical Testing - Saville, B.P.
2. Textile Testing -Angappan