

# GUJARAT TECHNOLOGICAL UNIVERSITY

## TEXTILE TECHNOLOGY

### B. E. SEMESTER: VII

Subject Name: **Advanced Physical Testing (Department Elective - I)**

Subject Code: **172907**

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam (E)		Mid Sem Exam (Theory) (M)	Practical (Internal)
				Theory	Practical		
4	0	2	6	70	30	30	20

Sr. No.	Topic	Total Hrs	Text Book
1	Advanced material testing like NMR, XRD, Infrared Spectrum, DSC, birefringence, sonic modulus, etc.	7	Physical Properties of Textile Fibres- Morton & Hearle
2	Single fibre strength testers, testing for filaments.	7	Testing & Quality management V.K.Kothari
3	Advanced testing for yarns like friction of yarn, applications of Tensojet, Classimat etc. Modern methods of Testing for irregularities and interpretation of data.	7	Testing & Quality management V.K.Kothari
4	Advanced fabric testing. Serviceability testing, testing for comfort properties,	7	Fabric Testing Hu Science of Clothing Comfort Apurva Das
5	Fabric Objective evaluation methodologies like Kawabata & FAST	6	Physical Testing-Saville
6	Testing for Technical textiles	8	Handbook of Technical Textile- Horrocks Handbook of Nonwoves
7	Quality management in textiles	4	Testing & Quality management V.K.Kothari

## **Reference Books:**

1. Spinning in '70s –P.Lord
2. Rotor Spinning- Dyson
3. Open-end spinning- R.Nield
4. Rotor Spinning- F.A. Lawrence
5. Modern Spinning Systems –W.Klein Vol.V
6. New Spinning Systems - R.V.Mahendra Gowda (NCUTE)