

**TEXTILE TESTING AND QUALITY CONTROL**

**Unit I: - Humidity:**

Definition and its influence on fiber properties Standard atmospheric condition, Standard testing atmosphere. Standard regain, Moisture content and regain. Measurement of atmospheric condition – wet and dry bulb Hygrometer and sling Hygrometer.

**Unit II: - Fiber Testing**

Fiber Testing: Fiber length – Bear sorter and Fibrograph, Fiber strength – Stelometer, Fiber fineness – Micronaire, Fiber maturity, Trash content - Trash analyzer.

**Unit III: - Yarn testing**

Yarn testing: Determination of yarn count – quadrant & Beesley balance. Twist – Measurement of twist, Twist effect on fabric properties. Strength of yarn- Single yarn strength tester. Crimp – Shirley crimp tester. Yarn appearance tester. Evenness – Uster Evenness tester, Hairiness – Uster Hairiness tester.

**Unit IV: Fabric Testing**

Fabric Testing: Fabric strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester.

**Unit V: Drape**

Drape – Drape meter, Fabric stiffness - Shirley stiffness Tester, crease recovery – Shirley crease recovery tester.

**Reference:**

1. Principles of textile testing by J.E. Booth., C.B.S., publishers & distributors, New Delhi, 1996.
2. Sabville B.P. Physical Testing of Textils, The Textile Testing Institute, woove head Publishing Ltd., Cambridge,