

CORE COURSE IX (CC) - TEXTILE TESTING

Unit I: Quality control: Definition and its importance.

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 length – Baer sorter and Fibrograph, Fiber strength – Stelometer, Fiber fineness – Micronaire, Fiber maturity, Trash content - determination – Trash analyzer.

Unit III:

Yarn testing: Determination of yarn count – quadrant, Analytical & Beesley balance. Twist – Direction of twist and amount 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 strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester.

Unit V:

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. Mishra S.P and Kesavan B.K, “Fibre Science”, Kumarapalayam, S.S.M. Institute of Textile Technology