

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER 2013****Subject Code: 162903****Date: 28-05-2013****Subject Name: Physical Testing****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain with a neat diagram the water spray test for fabrics. **07**
(b) Explain with a neat diagram the Uster Evenness Tester. **07**
- Q.2** (a) Explain with a neat diagram the Martindale Abrasion Tester. **07**
(b) Explain fibre length measurement using Baer Sorter. **07**
- OR**
- (b) Explain measurement of Moisture Regain using Shirley Moisture meter. **07**
- Q.3** (a) Explain the principle and working of lea strength tester. **07**
(b) Explain in detail the Shirley Trash Analyser. **07**
- OR**
- Q.3** (a) Explain in detail the Zoning Technique for raw cotton. **07**
(b) Explain the measurement of yarn count using Knowles Balance. **07**
- Q.4** (a) Explain the measurement of yarn twist using the straightened fibre principle. **07**
(b) Explain in detail the Shirley stiffness tester. **07**
- OR**
- Q.4** (a) Explain in detail the Shirley air permeability tester. **07**
(b) Explain in detail the Stelometer. **07**
- Q.5** (a) Explain the Shirley crease recovery tester. **07**
(b) Explain in detail the Wira Crimp Tester. **07**
- OR**
- Q.5** (a) Explain measurement of fibre fineness using Sheffield micronaire. **07**
(b) Explain the measurement of drape using drapemeter. **07**
