

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – VI • EXAMINATION – WINTER 2012

Subject code: 162903

Date: 04/01/2013

Subject Name: Physical Testing

Time: 02.30 pm - 05.00 pm

Total Marks: 70

Instructions:

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

- Q.1** (a) Explain in detail the objectives of Testing. **07**
 (b) Explain in detail the zoning technique for raw cotton with neat diagram. **07**
- Q.2** (a) Define Moisture regain, Moisture content, Relative humidity and Absolute humidity. Also write factors affecting regain of textile materials. **07**
 (b) Explain in detail about Maturity of cotton. **07**
- OR**
- (b) Explain measurement of trash content by Shirley Analyser. **07**
- Q.3** (a) Write in detail about – Analysis of the sorter diagram. **07**
 (b) Describe in detail about Fibrograph. **07**
- OR**
- Q.3** (a) Explain Air flow methods for fiber fineness. **07**
 (b) With neat diagram explain measurement of fineness by Vibroscope. **07**
- Q.4** (a) Define Tenacity, The Initial Young's Modulus, Yield Point, The 'work of rupture' & Elastic Recovery. **07**
 (b) Explain in detail the 'Take up' twist tester with neat diagram. **07**
- OR**
- Q.4** (a) Write in detail with neat diagram the Beesley Balance. **07**
Q.4 (b) Describe in detail The W.I.R.A. Crimp meter. **07**
- Q.5** (a) Explain in detail The "Shirley Stiffness Tester". **07**
 (b) Explain in detail with neat diagram the Drapemeter. **07**
- OR**
- Q.5** (a) Explain in detail the 'Pilling' of Fabrics. **07**
 (b) Explain in detail the 'The Spray test' with the help of neat diagram. **07**
