



SE-7487

B. E. - IV (Sem - VII) (TT & TP) Examination
May / June - 2011
Textile Testing - II

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दृष्टावेव निशानीवाणी विगतो उत्तरवडी पर अवश्य लपववी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. E. - IV (Sem - VII) (TT & TP)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Textile Testing - II"/>	<input type="text"/>
Subject Code No. : <input type="text" value="7"/> <input type="text" value="4"/> <input type="text" value="8"/> <input type="text" value="7"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....): <input type="text" value="1"/> <input type="text" value="2"/>	

- (2) Answers to the two sections should be written in separate answer books.
- (3) Figure to the right indicate full marks.
- (4) Tie two sections separately.

SECTION - I

- 1 (a) State true or false : 10
- The nodes are a measure of drape.
 - Maximum drape coefficient is 0.
 - Shirley stiffness tester is based on cantilever principle.
 - In the pill box test 10 tubes are used.
 - Martindale abrasion tester measure pilling in fabrics.
 - In the pill box test 18000 cycles are made.
 - Resiliency can be measured using thickness gauge.
 - Sand paper is used as abradant for abrasion tests for fabrics.
 - Pilling is more in polyester fabrics.
 - Dupont pill tester has 6 circular boxes.
- (b) Explain in detail the measurement of stiffness of fabrics. 10

- 2 (a) Explain in detail the measurement of fabric ends per inch. 8
 (b) Explain in detail the measurement of drape using drapemeter. 7

OR

- 2 (a) Explain in detail the measurement of fabric GSM. 8
 (b) Explain in detail the working of WIRA Crimp tester. 7
- 3 Write short notes on any **three** : 15
 (a) CAPACITANCE PRINCIPLE for measuring yarn unevenness.
 (b) Shirley crease recovery tester.
 (c) Shirley thickness gauge.
 (d) Photoelectric evenness tester.

SECTION - II

- 4 (a) Write True or False : 5
 (i) The MANRA crimp tester is meant for filament yarns.
 (ii) The Shirley STIFFNESS TESTER measures resilience.
 (iii) The Uster Evenness Tester is based on cutting and weighing method.
 (iv) The Whitaker lap meter is used to measure evenness of yarn.
 (v) The crease recovery of the fabric can be measured in millimeters.
- (b) Do as directed : 5
 (i) Define the term Breaking Length.
 (ii) Name any two instruments used to measure strength of the fabric.
 (iii) Illustrate CRL condition for Tensile testing of textile material.
 (iv) The Presley Index (P.I.)=_____ /Bundle weight in milligram.
 (v) What do you mean by fabric assistance.
- (c) Explain in detail the Shirley Stiffness Tester with neat diagram. 10

- 5 (a) Explain the strain gauge principle. Hence, explain the construction and working of Instron. 10
- (b) With the help of next diagram, explain Ballistic strength tester. 5

OR

- 5 (a) Explain the pendulum lever principle with CRL. Thus explain the instrument working on it. 10
- (b) Describe briefly the constant tension winding test. 5

- 6 Write short notes on : (any **three**) 15
- (i) Stress strain curve.
- (ii) Methods of measuring tearing strength.
- (iii) Balance principle.
- (iv) Importance of fibre and yarn strength testing.
