Printed Pages: 01 **Sub Code: RTT601**

Paper Id: **161208** **Roll No.** | | | | | | | | | | |

B. TECH.
(SEM VI) THEORY EXAMINATION 2018-19
TEXTILE TESTING-II

Time: 3 Hours ***Total Marks: 70***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2 x 7 = 14**

(a) Define Work factor > 1/2
(b) Differentiate between load and breaking load. Also express its units.
(c) Define Hookean Region of the curve. Also mention its significance.
(d) What is the test length of the specimen in stelometer.
(e) On stretching a yarn of 20 cm, if elongation is 2 cm. Calculate extension %.
(f) What is the standard angle of deflection in Shirley Stiffness Tester?
(g) Define thick places (+50%), thin places (-50%) and neps (+200%)

SECTION B

2. Attempt any *three* of the following: **7 x 3 = 21**

(a) How to measure imperfections by electronic capacitance method (USTER Tester 3 or 4) and define imperfections.
(b) Give stress- strain curve of flax, nylon 66, rayon, acetate and dacron fibre.
(c) How to calculate load on the specimen by the inclined plane principle?
(d) How to calculate water repellency by spray tester?
(e) Give all the methods to measure tearing strength

SECTION C

3. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Differentiate the strip and grab test with diagram.
(b) Give working principle of Ballistic Tester.

4. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Give working principle of Shirley Air permeability Apparatus
(b) Explain procedures to calculate color fastness test to light and rubbing

5. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Draw Uster CLASSIMAT defect classification matrix II
(b) Define Pilling and methods to measure it.

6. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Briefly explain FAST and KAWABATA.
(b) Give working procedure to measure color fastness to light and rubbing.

7. Attempt any *one* part of the following: **7 x 1 = 7**

(a) What are the factors affecting tensile properties of textiles?
(b) Give example of conversion of load- elongation curve to stress strain curve.