

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Textile) (2011 Onwards) (Sem.-5)

TEXTILE TESTING

Subject Code : BTTE-505

Paper ID : [A2734]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer in brief :

- a) Write down the factors on which sampling method depends on.
- b) Define moisture regain and moisture content of fibre.
- c) What is span length? What is its significance?
- d) Define maturity ratio of cotton fibre.
- e) Define creep with graphical illustration.
- f) Define elastic recovery.
- g) Arrange following textile material as per the diminishing crease resistance: cotton, polyester, wool, silk, and flax.
- h) Define index of irregularity and limit irregularity.
- i) What do you understand by count strength product? What is its desirable value for good quality yarn suitable for weaving?
- j) Define drape coefficient. What is its ideal value for a sheet of paper?

SECTION-B

2. Describe zoning sampling technique and core sampling technique for assessing fibre properties.
3. Describe moisture measurement method of textile by Shirley moisture meter in brief.
4. Draw typical comb sorter pattern of cotton fibre and explain how to estimate effective length and short fibre percentage.
5. Draw stress-strain diagram of a textile fibre and hence define initial modulus and yield point.
6. What is the significance of measurement of yarn hairiness? Describe a method of measuring yarn hairiness in brief.

SECTION-C

7. What do you understand by fibre fineness? Write down the methods of measurement of fibre fineness? Describe any one method in detail. (2+2+6)
8. What are the factors affecting tensile properties of textiles? Describe a method of measurement of single fiber strength in brief. (5+5)
9. What do you understand by yarn unevenness? What are the methods of its measurement? Describe any one method. (2+3+5)