

Roll No.

Total Pages : 5

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BT-6/M-24

TEXTILE TESTING-II

Paper-PCC-TEX-302A

Time : Three Hours]

[Maximum Marks : 75

Note : (i) All questions carry equal marks. Question No. 1 is compulsory.

(ii) Attempt *five* questions in total, selecting at least *one* question from each unit.

Compulsory Question

1. (i) Crease recovery varies with fabric thickness :

- (a) Directly
- (b) Indirectly
- (c) Unaffected
- (d) None of these. (1)

(ii) Heat setting of polyester fabric is carry out to :

- (a) Control the dimensional stability
- (b) Impart softness
- (c) To impart thermal insulation properties
- (d) To increase tensile strength of fabric. (1)

(iii) Drape coefficient of textile fabric is always :

- (a) Greater than 1
- (b) Less than 1
- (c) Equal to 1
- (d) None of the above. (1)

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(iv) Which one of the following is not covered under performance property of a fabric?

- (a) Tensile Strength
- (b) Shower-Proofness
- (c) Drape
- (d) Flame resistance. (1)

(v) In SI system unit of bending rigidity of a fabric is :

- (a) $(\mu\text{N-m})$
- (b) g/cm
- (c) N-m^2
- (d) g/cm^2 . (1)

(vi) Bursting strength is important for :

- (a) Garment
- (b) Parachute fabric
- (c) Furnishing fabric
- (d) Apparel grade fabric. (1)

(vii) A breathable fabric :

- (a) allow the water droplets to pass through
- (b) allow the water vapour to pass through but not the water droplet
- (c) does not allow to be water vapour and water droplets
- (d) allow only air to pass through. (1)

(viii) Which one of following does not have any link with?

- (a) Japan
- (b) Australia
- (c) Objective Measurement
- (d) CSIRO. (1)

- (ix) What do you mean by AQL? (1)
- (x) What is work of rupture? What is its unit? (1)
- (xi) What do you mean by tensile hysteresis? (1)
- (xii) What does a sewing thread of 60 TKT indicate? (1)
- (xiii) What is crimp interchange? (1)
- (xiv) What is air resistance? (1)
- (xv) What do you mean by weak-link effect? (1)

UNIT-I

- 2. (a) Why does shrinkage occur in cotton fabrics? How is it measured? Describe. Why is it necessary to measure fabric thickness? (7)
- (b) What is cloth-cover? Which factors influence it? How will you compute cloth-cover of a simple plain woven fabric? (8)
- 3. (a) Highlight the technological considerations involved in assessment of fabric abrasion. Describe with a neat diagram. Also outline the various methods used to judge the damage of textile materials. (10)
- (b) Explain the principle of measuring fabric crease. Also mention the factors which influence crease recovery of fabric. (5)

UNIT-II

- 4. (a) What do you mean by grab test and strip test of fabric tensile strength testing? Define the breaking strength and elongation and discuss their importance. (10)

- (b) Give a brief review of the techniques which are commonly used for measurement of the tear strength of fabrics. (5)
5. (a) What do you mean by bending rigidity? Why it is important? Narrate the factors which affect the bending rigidity of a fabric. (7)
- (b) What is Drape Coefficient? How is it measured? (8)

UNIT-III

6. Define the term comfort of a fabric and classify comfort properties of fabric. Discuss the importance of following properties in determining thermo-physiological comfort .
- (a) Moisture vapour permeability.
- (b) Wicking.
- (c) Air permeability. (15)
7. (a) Give a brief outline of Handle-Evaluation by KAWABATA evaluation system. (8)
- (b) Outline the principle of measuring compression of a fabric using FAST. (4)
- (c) What is water-proofing? What is its importance? (3)

UNIT-IV

8. (a) Which tests are generally performed for assessment of garment performance? Name at least *one* instrument to be used for each test. (8)

- (b) State important properties of sewing threads. Also highlight some sewing defects. (5)
- (c) What are important quality check for zippers? (2)

9. (a) With reference of quality parameters explain following term and their importance (a) Quality (b) Quality Control (c) Reproducibility and (d) Repeatability. (8)
- (b) Enlist ASTM quality parameter for any class of women's garment you are familiar with. (7)

