



# 17465

16172

3 Hours / 100 Marks

Seat No.

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- Instructions :** (1) *All questions are compulsory.*  
(2) *Answer each next main question on a new page.*  
(3) *Illustrate your answers with neat sketches wherever necessary.*  
(4) *Figures to the right indicate full marks.*  
(5) *Assume suitable data, if necessary.*  
(6) *Use of Non-programmable Electronic Pocket Calculator is permissible.*

**Marks**

1. Attempt any ten :

20

- Define "Serviceability" and "Wear".
- Define "Crimp" and crimp percentage in fabric.
- Enlist the factors responsible for pilling of fabric.
- Define cover factor and give its formulae.
- Define "Drape".
- Enlist various methods of measurement of "Threads per unit length".
- State effect of crimp on fabric properties.
- Enlist the methods for measurement of water repellent fabric.
- Define "Air-permeability".
- Explain term "Tearing Strength" and "Tensile Strength".
- Compare any four points of Tenso-jet and Tenso-rapid yarn testing equipment.
  - State the advantages of High Volume Instrument (HVI).
- What is "Seam Strength".
- Define "Shrinkage".

2. Attempt any two :

16

- State mathematical relation between yarn count and yarn diameter and also state the expression for cloth cover factor.
- Describe determination of drape coefficient by drape meter.
- Describe in brief working of High Volume Instrument (HVI) used for determination of fibre properties.

**P.T.O.**

**3. Attempt any two :****16**

- a) Describe fabric sampling method with sketch.
- b) Explain the Stiffness tester with neat sketch.
- c) Describe in brief Advanced Fibre Information System (AFIS).

**4. Attempt any two :****16**

- a) Explain measurement of pilling by ICE pill box tester.
- b) Give eight point comparison between water proof and water repellent fabrics.
- c) Describe the methods for measurements of colour fastness to light for textile fabrics.

**5. Attempt any two :****16**

- a) Define the following
  - 1) Serviceability
  - 2) Wear
  - 3) Abrasion.
- b) Describe with neat sketch method for measuring tearing strength of fabric.
- c) Describe method of measurement of seam slippage.

**6. Attempt any two :****16**

- a) Describe a method for determination of crease recovery angle of fabric.
  - b) Draw neat sketch of Bursting Strength Testor and describe measurement of the Bursting strength of fabric.
  - c) Explain the principle of Tenso-jet instrument. Explain use of scatter plot.
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