

17334

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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following: **20****
- a) Define:
 - (i) Tex
 - (ii) English count system
 - b) Compare direct numbering system and indirect yarn numbering system.
 - c) Enlist the different types of variation in yarn.
 - d) Enlist the different fabric sampling method and explain any one.
 - e) Define the “Drape” and give the formula to calculate drape coefficient.
 - f) Define:
 - (i) Serviciability
 - (ii) Wear
 - g) Define air permeability and air porosity.
 - h) Enlist the various tensile properties of yarn.

P.T.O.

2. Attempt any TWO of the following:**16**

- a) (i) Define yarn twist and draw the “L” twist, “S” twist.
(ii) State the effect of yarn twist on yarn properties.
- b) Describe the method to measure the twist by contraction principle.
- c) (i) State the concept of yarn evenness.
(ii) Enlist the various expression used for measuring the unevenness.

3. Attempt any TWO of the following:**16**

- a) Define:
 - (i) E.P.I.
 - (ii) P.P.I.
 - (iii) Cover factor
 - (iv) Crimp.l
- b) (i) State the concept of crimp and give the formula to calculate the same.
(ii) What is “G.S.M.” and give the formula to calculate the same.
- c) (i) Enlist the various methods to calculate the threads / unit length.
(ii) Enlist various types of abrasion.

- 4. Attempt any TWO of the following:** **16**
- a) Describe the method to find the drape co-efficient of fabric.
 - b) Define the following term:
 - (i) Overhanging length
 - (ii) bending length
 - (iii) Flexural rigidity
 - (iv) Bending modulus
 - c) (i) What is pilling? Enlist the factors responsible for pilling of fabric.
(ii) Enlist the methods to assess the abrasion of fabric.
- 5. Attempt any TWO of the following:** **16**
- a) Describe the method to measure the water repellency by spray method.
 - b) Draw the schematic figure of air permeability tester and state the function of each element.
 - c) Draw the schematic diagram of tearing strength tester and label the parts.
- 6. Attempt any TWO of the following:** **16**
- a) State the principle of bursting strength tester and draw its diagram.
 - b) (i) What is “C.S.P”? State the method to determine the same.
(ii) State the difference between single yarn strength and lea strength.
 - c) Define following term:
 - (i) Tenacity
 - (ii) Elongation
 - (iii) Mass stress
 - (iv) Elastic recovery
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