

17334

11920

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) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (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) With suitable example, explain the metric system of yarn numbering.
 - b) Enlist any four effect of twist on the properties of yarn.
 - c) Explain the significance of fabric testing.
 - d) State the method and procedure for determining the crease recovery angle of finished fabric.
 - e) Define ‘Serviceability’ and ‘Abrasion’ of fabric.
 - f) State the factors affecting the Air permeability of textile fabrics.
 - g) State the procedure of determining the bursting strength of given knitted fabric.

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- 2. Attempt any FOUR of the following:** **16**
- a) Define yarn twist with diagram, explain in brief the types of twist direction.
 - b) Define yarn evenness. State a note on the different types of variations in yarn.
 - c) Give the significance of fabric thickness and explain the procedure for determining the thickness of given fabric.
 - d) List the factors affecting the stiffness of given fabric. Give the significance of stiffness.
 - e) State the procedure of measuring the pilling property of fabric by ICI pilling box tester.
 - f) Differentiate between water proof and water repellent fabric (four points)
- 3. Attempt any FOUR of the following:** **16**
- a) State the procedure of determining the yarn twist by twist contraction principle.
 - b) Enlist the effect of yarn unevenness on yarn and fabric properties.
 - c) Explain the principle and write the procedure for determining yarn twist by untwisting principle.
 - d) Define 'Crimp'? Give the significance of crimp in warp and weft yarns.
 - e) State the method and procedure of determining the stiffness of given fabric.
 - f) State the principle and procedure of determining the tearing strength of fabric by falling pendulum method.

- 4. Attempt any TWO of the following:** **16**
- a) Define the term 'Drape'. Enlist the factors affecting the drape of fabrics. Also write the procedure of determining the drape coefficient of given fabric.
 - b) State the principle and procedure of determining the strength of single yarn and Lea.
 - c) Describe note on the different working principles for determining the tensile strength of fabrics.
- 5. Attempt any TWO of the following:** **16**
- a) State a detailed note on the different systems of yarn numbering? Give the significance of each.
 - b) Define the term 'wear'. Give two advantages and limitations each of wear test? Also write the procedure of determining the abrasion by martindale method.
 - c) Define the term 'Load', 'Tenacity', 'Work of rupture' and 'Elastic recovery'. Give the significance of each term.
- 6. Attempt any TWO of the following:** **16**
- a) State a detailed note on the different method of fabric sampling.
 - b) Define the terms 'Air permeability' and 'Air resistance'. Also enlist the factors affecting air permeability.
 - c) Define the term 'Cover factor' and give its significance. Also write the factors responsible for piling of fabrics in detail.
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