# 12425 3 Hours / 70 Marks

Seat No.								
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Instructions:

- (1) All Questions are *compulsory*.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

### 1. Attempt any FIVE :

10

- (a) List down the various methods of fabric forming systems.
- (b) State any four applications of Knitted fabric.
- (c) Enlist various types of stitches used in weft knitting.
- (d) State any four characteristics of Rib knit structure fabric.
- (e) Draw the thread line diagram of Interlook structure.
- (f) Define ways of knitting and weft knitting.
- (g) Define tightness factor with formulae.

# 2. Attempt any THREE:

12

(a) Differentiate between Weaving and Knitting with respect to its process and fabric properties.



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- (b) Enlist various types of knitting needles. Explain any one of them with neat sketch.
- (c) Enlist various knitting elements of plain single Jersey circular knitting machine. Explain any two of them with neat sketch.
- (d) Differentiate between single Jersey and Rib structure fabric with respect to its characteristics.

### 3. Attempt any THREE:

12

- (a) Differentiate between weft knitting and warp knitting (any 8 points).
- (b) Define the following terms:
  - (i) Course
  - (ii) Stitch length
  - (iii) Wales
  - (iv) Open loop
- (c) Draw the neat labelled sketch showing passage of yarn through flat knitting machine. Also list down various knitting elements of flat knitting machine.
- (d) Draw the loop diagram and graphical representation of Interlock structure.

  Also state the characteristics of Interlock structure.

#### 4. Attempt any THREE:

12

- (a) State the reason for the growth of knitting industries.
- (b) Classify the knitting machines in detail.
- (c) Explain overlap and underlap with diagrams.
- (d) Explain pillar stitch with lapping movement diagram.
- (e) Explain the effect of stitch length on the properties of knitted fabric.

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#### 5. Attempt any TWO:

12

- (a) A single jersey fabric is made on a machine with 2000 needles with 30 courses per inch from 20s cotton count yarn and 80 stitches per foot. Calculate the weight per linear meter.
- (b) Describe the passage of the yarn on Tricot Warp Knitting machine with neat sketch.
- (c) Describe the passage of the yarn through single jersey circular weft knitting machine, with neat sketch.

## 6. Attempt any TWO:

12

- (a) Explain the knitting elements of the Tricot warp knitting machine with neat sketch.
- (b) List down various knitted fabric defects. Explain any four of them with its cause and remedies.
- (c) Explain the ornamentation of plain single jersey fabric with respect to yarn count yarn colour, twist and material.

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