

22463

23242

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) Define course and wale.
- (b) Define weft knitting.
- (c) State the characteristics of single jersey fabric.
- (d) Enlist various basic warp knit structure.
- (e) State the characteristics of Purl structure fabric.
- (f) Enlist various knitting elements of tricot warp knitting machine.
- (g) Define tightness factor with formulae.



- 2. Attempt any THREE :** **12**
- (a) State the reason for the growth of knitting industry.
 - (b) Differentiate between latch needle and bearded needle.
 - (c) Explain needle arrangement and cam arrangement on interlock machine. Explain features of interlock structure.
 - (d) Explain rib structure with graphical representation diagram. State features, properties of rib fabric.
- 3. Attempt any THREE :** **12**
- (a) Differentiate between weaving and knitting with respect to fabric properties, process and structure.
 - (b) Explain latch needle with neat sketch. It is called as self-acting needle – Justify.
 - (c) Differentiate between single jersey and double jersey fabric.
 - (d) State the function of guide bar and sinker bar in tricot warp knitting machine.
- 4. Attempt any THREE :** **12**
- (a) Define – face loop, back loop, needle loop, sinker loop, stitch length, course length, open lap and close lap.
 - (b) Enlist various knitting elements of Double jersey circular knitting machine. Explain their functions.
 - (c) Draw neat labelled sketch of tricot warp knitting machine and label the parts.
 - (d) Enlist various weft knit fabric defect. Also state the causes and remedies for any two fabric defects.
 - (e) Define stitch length. Also explain how stitch length affects the knitted fabric properties.

5. Attempt any TWO :**12**

- (a) A circular weft knitting machine having 18 feeders running at a speed of 30 rpm, is knitting fabric with a stitch length of 0.15 inch with 760 needles in the machine, count of yarn – 30^S, course/inch – 32. The efficiency of machine is 85%. Calculate the production in yard's and pound's per hour.
- (b) Draw lapping movement and chain link notations for following structures :
 - (i) Tricot
 - (ii) Locknit
 - (iii) Atlas
- (c) Draw neat labelled sketch showing passage of yarn through flat knitting machine. Also explain various knitting elements of flat knitting machine.

6. Attempt any TWO :**12**

- (a) Explain the knitting cycle of beard needle on tricot machine with neat sketch.
 - (b) Explain the ornamentations of single jersey fabric by using various methods.
 - (c) Enlist various warp knit fabric defects. Explain causes and remedies for any three defects.
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