



17459

11819

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**.

Marks

1. Attempt **any ten** :

20

- a) Define the term knitting.
- b) Define the “stitch length”.
- c) Enlist the various types of creels.
- d) Draw the loop diagram of single jersey fabric.
- e) State the concept of multifeeder machines.
- f) Mark the needle arrangement diagram for 1 × 1 Rib Fabric.
- g) Why purl fabrics are known as link to link fabric.
- h) Draw the loop diagram for 1 wale miss stitch.
- i) State the application of stripper mechanism.
- j) State the construction of plush (pile) fabric.
- k) Define the fabric barre.
- l) How to determine the G.S.M. of knitted fabric ?
- m) Define warp knitting.
- n) Draw the schematic diagram for double hooked needle.

2. Attempt **any four** :

16

- a) Define and draw the diagram of weft knitting.
- b) Draw the schematic figure of positive feeder and label its parts.
- c) Explain the knitting cycle of latch needle.
- d) Describe the feature of Rib machine w.r.t.
 - i) Trick arrangement
 - ii) Needle arrangement

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- e) Draw the diagrammatic notation of 2×2 interlock fabric.
- f) Mark diagrammatic notation for Punto-di-roma design.

Marks

3. Attempt any four :

16

- a) Define the following terms.
 - i) Course
 - ii) Wale
 - iii) Needle loop
 - iv) Sinker loop
- b) Draw the schematic diagram for latch needle and label its parts.
- c) Describe the needle transfer technique in purl machine.
- d) Enlist various types of principal stitches and draw its symbolic notation.
- e) Write the steps to fix the needle order.
- f) Draw your ottoman rib design and fix needle order and cam order.

4. Attempt any four :

16

- a) Mark the design for following fabric
 - i) Cross tuck
 - ii) satin
- b) State the "Need of jacquard" with one example.
- c) Enlist the advantage of "Relanit technique".
- d) Draw the "Needle and cam" diagram for relanit technique.
- e) Calculate the course length in meter if stitch length is 3 mm and total no-of needles are 2000.
- f) Determine the total no.of needles if
 - i) Cylinder diameter :- 30 inch
 - ii) Cylinder gauge :- 14€

5. Attempt any four :

16

- a) Find the production in yards/8 hr if knitting machine running with
 - 1) R.P.M. :- 30
 - 2) C.P.I. :- 20
 - 3) M.P.I. :- 26
 - 4) efficiency :- 85%
 - 5) stitch length :- 2 mm
 - 6) Total no. of feeders : 106
- b) Describe the knitting cycle of Raschel machine.
- c) State the objects of patterning.



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- d) Enlist the function of cutting department.
- e) State the concept of “Block Pattern”.
- f) Enlist the objects of fabric spreading.

6. Attempt any four :

16

- a) Compare between Warp and Weft knitting.
 - b) Draw the schematic figure of passage of yarn through flat knitting machine.
 - c) Give the classification of flat knitting machine.
 - d) Enlist various parts of flat knitting machine and give its function.
 - e) Draw the lapping diagram for
 - i) $0 - 1/2 - 1//$
 - ii) $1 - 0/1 - 0//$
 - f) Enlist various types of single bar fabrics.
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