

K 1273

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2004.

Seventh Semester

Textile Technology

TT 448 — KNITTING TECHNOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Classify the basic weft knitted structures.
2. Differentiate between needle loop and sinker loop.
3. What do you mean by linear and non-linear cams?
4. What are the fundamental requirements for interlock knitting?
5. Give the symbolic notations for 1 × 1 rib and 1 × 1 purl structures.
6. What are the basic stitches of weft knitting?
7. Name the elements of warp knitting.
8. What do you mean by over lap and under lap?
9. Define the terms : Rack and Run-in.
10. Name any four basic stitches of warp knitting.

PART B — (5 × 16 = 80 marks)

11. (i) Give a detailed comparison of woven and knitted fabrics. (8)
- (ii) Discuss the yarn quality requirements for weft knitting. (8)

12. (a) With suitable diagrams, compare the knitting cycle for the three types of needles.

Or

- (b) Draw the line diagrams of the basic structures of weft knitting and give their diagrammatic and symbolic notation.

13. (a) With neat sketches, explain one complete knitting cycle for rib knitting.

Or

- (b) Give a detailed account on the various faults in weft knitted fabrics, their causes and remedies.

14. (a) Explain the following double knit structures with suitable diagrams :

- (i) Single pique (5)
- (ii) Milano rib (5)
- (iii) Punto-di-roma (6)

Or

- (b) (i) With a neat sketch, explain the passage of yarn in a flat knitting machine. (8)
- (ii) Draw and explain the cam arrangements in flat knitting machine. (8)

15. (a) Give a detailed classification of warp knitting machines with respect to machine types, products and end uses.

Or

- (b) With neat sketches, explain the salient features of a direct warping machine for warp knitting.