

C 3248

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Fifth Semester

Textile Technology (Fashion Technology)

FT 1304 — KNITTED FABRIC STRUCTURE

(Regulation 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Give the symbolic notations for the basic weft knit stitches.
2. State the advantages of multi-cam tracks.
3. What do you mean by needle gating in double knitting machines.
4. State the basic requirements of interlock Knitting.
5. What do you mean by eight-lock?
6. What do you mean by the term tightness factor?
7. Differentiate between overlap and underlap.
8. Define the terms :
 - (a) run-in.
 - (b) rack.
9. Draw the guide bar lapping diagram for the following notation.
 - (a) 1-0/0-1
 - (b) 1-0/1-2.
10. What are the basic stitches of warp knitting.

PART B — (5 × 16 = 80 marks)

11. (a) Draw the symbolic and diagrammatic notations for the basic structures of weft knitting such as single jersey, rib, purl and interlock.

Or

- (b) With suitable diagrams, give a brief account on the various patterning principles used in the circular weft knitting machines.

12. (a) With suitable point paper designs, give a detailed account on the various derivatives of the plain knitted fabrics.

Or

- (b) Discuss in detail the various aspects to be considered in the design development single jersey fabrics.

13. (a) Compare the characteristics of the basic weft knitted structures with respect to their appearance, extension, thickness, strength, weight and dimensional stability.

Or

- (b) Explain the following double knit structures with suitable diagrams.

- (i) single pique
- (ii) French pique
- (iii) Bourrelet
- (iv) Milano-rib.

14. (a) Give a detailed account on the various guide bar lappings used for the production of warp knitted structures.

Or

- (b) With the help of guide bar lappings, discuss the following two bar Tricot warp knit structures.

- (i) reverse lock knit.
- (ii) shark skin.

15. (a) Discuss the production principles of the following warp knit fabrics with the help of guide bar lappings.
- (i) Net fabrics.
 - (ii) Lace fabrics.

Or

- (b) Discuss in detail the production of Raschel elasticated warp knitted fabrics meant for various applications.
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