Reg. No. : | | | | | | | | | | | |

J 3258

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2009.

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. Name the basic stitches of weft knitting.

2. What are the different representation methods for the weft knit structures?

3. Differentiate between the face loop and back loop by simple loop sketches.

4. What do you mean by needle gating in weft knitting machines?

5. What do you mean by plating in weft knitting?

6. State the basic requirements for interlock knitting.

7. Differentiate between swinging and shagging in warp knitting.

8. Name the dimensional properties of knitted fabrics.

9. State the two basic lappings of warp knitting.

10. Draw guide bar lapping diagram for the following notations.
    (a) 1 – 0 / 1 – 2
    (b) 0 – 1 / 2 – 1.

PART B — (5 × 16 = 80 marks)

11. (a) Discuss the importance of standard RH and temperature for testing. Also discuss the sampling techniques for fibre, yarn and fabrics. (6 + 10)

Or

(b) Explain a method of measuring single yarn twist with a neat sketch. How will you determine twist of plied yarn? (10 + 6)

12. (a) Explain a simple method of measuring yarn count. How will you measure yarn diameter? Relate yarn diameter and yarn count. (6 + 6 + 4)

Or

(b) What are the different methods of measuring mass variation? How will you measure mass variation in the yarn? Distinguish between yarn evenness and yarn imperfection. (2 + 8 + 6)

13. (a) What are the causes of cotton cloth to tear? Explain the effect of weave and cloth structure on tear strength. State the principle of measuring tearing strength of a fabric using Ballistic tester. (2 + 6 + 8)

Or

(b) What are the factors to be considered before abrasion resistance of a fabric to be carried out? Describe a method of determining abrasion resistance of a fabric. (6 + 10)

14. (a) Define fabric Drape. Give the relation between bending length and drapability. Explain the working principle of drape meter. (2 + 6 + 8)

Or

(b) Explain the relation between cloth cover factor and air resistance. How will you determine the air permeability of a fabric? (8 + 8)

15. (a) Identify the various types of shrinkage experienced by wollen materials and explain, how the relaxation shrinkage could be measured? (8 + 8)

Or

(b) What are the possible causes of seam failure? Discuss in detail, the various factors of controllable quality in sewing department. (6 + 10)

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