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

V 4582

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2008.

Fifth Semester

Textile Technology (Fashion Technology)

FT 1305 — TESTING AND QUALITY CONTROL OF TEXTILES AND APPARELS

(Regulation 2004)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the recommendations made while testing fabric samples, during sampling?

2. What do you mean by yarn singeing?

3. State the relation between yarn diameter and yarn count.

4. What are objectionable yarn faults?

5. Define cover factor.

6. State the purpose of serviceability testings of the fabric.

7. Give the difference between crease resistance and crease recovery.

8. How will you test air permeability of fabrics?

9. State the principle of testing seam strength.

10. What are the reasons for fabric shrinkage?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the factors affecting moisture regain of textile material.

Or

(b) Explain a method of yarn twist measurement by microscope. How will you determine twist of plied yarn? (10 + 6)

12. (a) Give various methods of determining yarn count. Describe the wrap reel and Knowles balance in this regard. (4 + 6 + 6)

Or

(b) Explain the principle of capacitance type yarn evenness instrument. How will you measure unevenness, imperfection and hairiness of the spun yarn? (8 + 8)

13. (a) Explain the method of strip test to determine the tensile strength of the fabric. How will you measure the bursting strength of the knitted fabric? (8 + 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) Describe a method of determining bending length and flexural rigidity of fabrics. Explain the term "Fabric Stiffness". (12 + 4)

Or

(b) What do you understand by the terms "Air permeability and water permeability"? Explain a method of determining water permeability of a fabric. (4 + 12)

15. (a) What are the possible causes of seam failure? Explain a method of determining seam strength. (4 + 12)

Or

(b) Write short notes on :

(i) Effect of moisture on dimensional stability of fabrics

(ii) Spirality in weft knitted fabrics

(iii) Felting shrinkage

(iv) Methods of determining dimensional stability of a fabric.

(4 + 4 + 4 +4)
