A 1400

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2006.

Fifth Semester

Textile Technology

TT 337 — FABRIC STRUCTURE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define cover factor.

2. Define light theory of colours.

3. State the plain derivatives.

4. What do you understand mock leno.

5. Define Damasks.

6. Give the classification of double cloth.

7. Name any two types of special Jacquards.

8. State the significance of ornamentation.

9. What do you understand by half-drop designs?

10. State any two weaves suitable for suitings.

PART B — (5 × 16 = 80 marks)

11. (i) With neat sketch explain the functioning of any one type of special jacquard. (10)

(ii) Critically state the significance of the above special jacquard. (6)

12. (a) With the help of plain weave cloth geometry derive an expression for cover factor.

Or

(b) State the various types of colour and weave patterns and show the development of two such patterns using point paper designs.

13. (a) (i) Give different methods of producing crepe fabrics.

(ii) Give the design of construction of crepe by

(1) Imposing one weave on another

(2) Reversing of a motif.

Or

(b) Give the design, draft and peg plan of the following twill derivatives

(i) Herring bone twill

(ii) Transpored twill

(iii) Wavy twill

(iv) Broken twill.

(4×4)

14. (a) Explain the formation of warp pile fabrics and give the design draft, peg plan and cross section diagram of double sided terry fabric.

$(6 + 2 + 2 + 2 + 4)$

Or

(b) Design the double cloth using the following data

Face weave : 5 end sateen

Back weave : 2/3 twill

F: B ratio : 1 : 1 regular

Stitch type :Self stitch.

15. (a) Explain the extra warp design concept using a double colour motiff.

Or

(b) Explain the swivel system of ornamentation with the help of a design.
