

A 505

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Fifth Semester

Textile Technology

TT 337 — FABRIC STRUCTURE

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the complimentary colours?
2. Give the design of a satinette weave.
3. Find the angle formed by the twill, if the rate of advancement of twill upwards is 1 and step outwards is 2. Ends per cm : 64 and picks per cm : 32.
4. Write short note on drill fabric.
5. What are the advantages of double cloth?
6. Give any two applications of multi-ply fabrics.
7. What is a fancy basket weave?
8. What are the special features of banister jacquard?
9. Give the design of Buckskin weave.
10. Write short note on Denim.

PART B — (5 × 16 = 80 marks)

11. Discuss about
- (i) Pigment theory of colours. (8)
 - (ii) Modification of colours. (8)

12. (a) Construct twill faced wadded Bedford cord having uniform cord width with base twill as 2/2. The base twill repeats 3 times in a cord with total 2 wadding ends in between the repeats. Construct the draft.

Or

- (b) (i) Construct crepe weave by reversing of motif and insertion of one weave on other. (8)
 - (ii) Construct a reversible warp backed fabric with face weave as 6 end warp satin and back weave as 1/5 twill. Assume $F : B :: 1 : 1$. (8)
13. (a) Construct the extra weft figuring for a motif of 15×15 with double colour. $G : F :: 1 : 1$, ground is plain. Show the binding on the sides of figuring. (16)

Or

- (b) Construct a double cloth having its face and back weaves as plain with $F : B :: 1 : 1$. Make the stitches by (i) lifting the back ends on the face pick and (ii) dropping of face ends on back picks. Draw the interlacement diagram showing stitches. (16)
14. (a) Explain the system of designing, functioning and application of pressure harness. (16)

Or

- (b) Explain the system of designing, functioning and application of self-twill jacquard. (16)
15. (a) What is lappet weaving? Discuss on the basic principle of lappet weaving with suitable design. (16)

Or

- (b) Write short note with suitable design for
 - (i) Stripe colour and weave effects (4)
 - (ii) Wire pile fabrics (4)
 - (iii) Piques and any one type of welts. (8)