



17336

21415

3 Hours/100 Marks

Seat No.

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- Instructions :** (1) **All questions are compulsory.**  
(2) **Figures to the right indicate full marks.**  
(3) **Assume suitable data, if necessary.**
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MARKS

1. Attempt any ten :

20

- Define cover factor. Give an expression for fabric cover factor.
- Give characteristic features of corduroy and voile.
- Define English count and give an expression for the same.
- State the characteristics of plain fabric.
- List down various derivatives of plain weave.
- What are characteristics of twill weave ? Draw  $\frac{2}{z}$  twill weave.
- Draw a left hand twill.
- State characteristics of Sateen weave. Draw all possible designs of Sateen weave on 5 ends.
- Draw irregular Sateen weave on 6 ends.
- Draw a design, draft, peg plan and denting order of mock leno weave.
- What are the characteristics of crepe fabric ? List down various methods of constructing crepe weave.

P.T.O.

**MARKS**

- l) List down various double cloths you are aware of.
- m) State characteristics of backed cloth. Draw design of the same.
- n) Draw design and cross section of 3 pick terry structure.
- o) State the principle of leno structure with the help of a sketch of basic leno structure.

**2. Attempt any four :****16**

- a) Draw design, draft, peg-plan and denting order of plain weave.
- b) Draw design, draft, peg plan and cross section of a regular and irregular warp rib structure and state its characteristics.
- c) Describe how plain weave can be ornamented by using coloured yarn ? Explain with help of example how warp pattern can be balanced ?
- d) Construct a pointed twill design on 6 heald shafts.
- e) What is the difference between Satin and Sateen weave ? Illustrate your answer with an example ?
- f) Draw structure of huck-a-back weave on 12 end 12 picks. What are the characteristics of it ? Where it is used ?

**3. Attempt any four :****16**

- a) Calculate the weight/sq. mt. in grams (GSM) using following data :
  - i) epi = 80
  - ii) ppi = 64
  - iii) warp count =  $\frac{2}{32}$  s
  - iv) Weft count =  $\frac{2}{40}$  s
  - v) Warp crimp = 5%
  - vi) Weft crimp = 6%.
- b) Draw design, draft, peg-plan and cross section of regular and irregular weft rib. State the characteristics of the same.



**MARKS**

- c) Describe how plain weave can be ornamented using variation in twist and count.
- d) Draw design, draft and peg-plan of a herringbone twill using 6 heald shafts.
- e) Draw all possible Sateen weaves on 9 ends and 9 picks.
- f) Draw design of a honey comb weave on 5 heald shafts. State characteristics of this weave ? In which fabric this weave is used ? Why ?

4. Attempt **any four** : **16**

- a) Calculate the warp cover factor, weft-cover factor and cloth cover factor from following data :

$$\frac{72 \times 64}{25^s N_e \times 16^s N_e}$$

- b) Draw design, draft, peg-plan of regular Matt Weave.
- c) Describe in detail how Seersucker effect is obtained in plain weave fabric. In which fabrics it is used ?
- d) Draw design of transposed twill on 8 heald shafts.
- e) Draw structure of crepe weave produced using Sateen base.
- f) Draw design, draft, peg-plan and cross-section of a plain face bed ford cord.

5. Attempt **any two** : **16**

- a) i) Describe the concept of balanced and unbalanced cloth with an example.  
ii) Draw design, draft, peg-plan and cross section of a irregular matt weave.
- b) Draw design, draft and peg-plan of diamond weave on 8 heald shafts.
- c) Draw design of Brighton Honey comb on 16 ends and 16 picks.

6. Attempt **any four** : **16**

- a) State the characteristics of Pique structure. Draw design of wadded pique. What is the objective of wadding picks ?
- b) Draw design of extra warp figure using (assuming) your own motif.



c) Draw design of self-stitched double cloth using following data :

i) Face weave –  $\frac{3}{3} \frac{1}{1}$  twill

ii) Back weave –  $\frac{3}{3} \frac{1}{1}$  twill

iii) Arrangement of warpaud weft – 1 face, 1 back

iv) Both types of stitchings to be used.

d) Give detailed classification of double cloth.

e) Draw structure of a plain back velveteen. Draw cross section.

f) Describe the concept of warp pile production on face to face principle with help of a neat sketch.

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