

**B.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009**

Fourth Semester

**TEXTILE TECHNOLOGY (FASHION TECHNOLOGY)**

U07FT404: Fabric Structure and Design

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Identify the type of draft, the drafting order progresses successively from first to last heald frame.  
 A) Straight                      B) skip                      C) pointed                      D) broken
2. Assertion (A) A warp rib results from extending the plain weave in the warp direction  
 Reason (R) The plain weave may be modified by extending it in warp way only.  
 A) A is wrong, R is correct                      B) A is correct, R is wrong  
 C) A is wrong, R is wrong                      D) A is correct, R is correct
3. Find out the incorrect statement  
 A) The order of denting in a loom is found by counting the number of warp threads drawn through a dent wire of the reed  
 B) The peg plan can be checked by turning the hand wheel / index wheel of the loom by hand.  
 C) Straight draft is not most commonly used draft.  
 D) The design indicates the interlacement of warp and weft threads in the repeat of the design.
4. Match the following  
 P – Plain weave      -----      (i) more cloth thickness and mass per unit area  
 Q –Twill weave      ----      (ii) have poor seam strength  
 R -Satin weave      ---      (iii) highly irregular surface- puckered in appearance  
 S – Crepe weaves      ----      (iv) cloth thickness and mass per unit area are limited  
 A) P-iv, Q-i, R -ii ,S- iii                      B) P-i, Q-ii, R -iii ,S- iv  
 C) P-ii, Q-iii, R -iv, S- i                      D) P-iii, Q-iv, R -i, S- ii
5. Bedford cords used as  
 A) Worsted dress fabrics                      B) shirting      C) canvas cloth                      D) towels
6. The twill prominence ..... with the increase in warp and weft threads/inch/.  
 A) Increases                      B) decreases      C) has no influence      D) increases and then decreases
7. Identify which type of structure, which is a plain jersey derivative, is dimensionally with excellent comfort and drape  
 A) Satin                      B) knitted twill                      C) popcorn                      D) La—cast

8. Identify the type of stitch is used to get fancy effects by using coloured yarns.  
 A) Tuck                      B) knit                      C) miss                      D) both knit and miss
9. Identify the type of structure by knitting one yarn with a larger stitch than the others.  
 A) Seer sucker effect      B) plush                      C) plaited                      D) pop corn
10. If the magnitude of front guide bar and back guide bar is same, but the direction of movement is opposite----- structure could be produced.  
 A) Locknit                      B) Full tricot                      C) Queen's cord                      D) sharkskin

**PART B (10 x 2 = 20 Marks)**

11. Illustrate the straight draft and pointed draft with examples.
12. Mention the end uses of satin-sateen weaves.
13. State the standard quality particulars for Bedford cords.
14. Mention the end uses of warp pile fabrics.
15. Classify the double cloths.
16. State the methods of stitching in double cloth.
17. Enlist the derivatives of inter lock knits.
18. Give the feed repeat for Milano rib, French pique, bourrelet and ottoman rib.
19. Illustrate the warp notation for Queen's cord structure.
20. Give a brief note on Elastomeric yarn.

**PART C (5 x 14 = 70 Marks)**

21. (a) i) Give the design, draft and peg plan for 6 / 2 warp faced twills.  
 ii) Give the design, draft and peg plan for 4 / 3 matt rib and indicate the denting order.  
 (OR)
- (b) Give the design, draft and peg plan for a Brighton honey comb weave on a repeat.  
 Size 12 x 12 and also write quality particulars and end uses of Honey comb waves.
22. (a) i) Give the design, draft, peg plan and cross section for a twill faced Bedford cord. The ratio of face to cutting ends 8:2.  
 ii) Give the design, draft and peg plan for a weft way distorted mock leno on a repeat of 24 x 24. Assume that 8<sup>th</sup> and 17<sup>th</sup> picks are to be distorted over the respective ends.  
 (OR)
- (b) Discuss on the structures of weft pile.
23. (a) Explain in detail the principle of construction of various types of double cloth.  
 (OR)

(b) Give the design, draft; peg plan and cross section for a centre warp stitched double Cloth having the following particulars:

Face weave: 2 / 2 twill      Back weave: 2 / 2 twill

24. (a) Explain in detail the derivatives of plain knit structures.

**(OR)**

(b) Discuss on the structures of Rib gaiting and inter-lock gaiting.

25. (a) Explain in detail the principle stitches of warp knitting.

**(OR)**

(b) Write a detailed note on the following

(i) Queen's cord

(ii) Blind lap

(iii) Sand-flair net

(iv) Hexagonal net.

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