

B. TECH DEGREE EXAMINATIONS: NOV / DEC 2024

(Regulation 2018)

Fourth Semester

TEXTILE TECHNOLOGY

U18TXI4203: Woven Fabric Structure and Design

COURSE OUTCOMES

- CO1:** Design various weave structures.
CO2: Draw corded structures.
CO3: Illustrate colour and weave effects.
CO4: Draw and analyses the double cloth structures.
CO5: Draw pile structures.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions: -

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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|---|-----|-------------------|
| 1. What are the plain weave derivatives? | CO1 | [K ₂] |
| 2. Find out the cover factor of the cloth if the warp cover factor is 16 and weft cover factor is 12. | CO1 | [K ₂] |
| 3. What do you mean by bedford cord? | CO2 | [K ₂] |
| 4. What is half drop design? | CO2 | [K ₂] |
| 5. Compare warp backed and weft backed fabric. | CO3 | [K ₂] |
| 6. Give any two methods of producing colour and weave effects by woven design. | CO3 | [K ₂] |
| 7. Classify double cloth. | CO4 | [K ₂] |
| 8. Enlist the application of multi-layer fabrics. | CO4 | [K ₂] |
| 9. Classify corduroy structures. | CO5 | [K ₂] |
| 10. What are the factor governing the pile height and density in a weft pile fabric? | CO5 | [K ₂] |

Answer any FIVE Questions: -

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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| 11. Draw the design, draft and peg plan of a pointed twill repeating on 12 ends and 6 picks. Consider the parent twill as 3/3 twill. | CO1 | [K ₄] |
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12. Draw the design, draft and peg plan for the plain faced bedford cord constructed on pair of pick principle. The cutting: Face end ratio is 1:4. Draw the cross-section diagram also. CO2 [K4]
13. Illustrate the Dog's Tooth Or Hound's Tooth Pattern (8 x8) colour weave effect using the colour pattern and design given below. Illustrate the final design repeating on 16 end and 16 picks. CO3 [K4]

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D	D	D	D	L	L	L	L									

L: light colour, D: dark colour

14. Illustrate the design of a double cloth using the following details: CO4 [K4]
 Face weave 2/2 twill, Back weave: 3/1 twill, Face: Back ratio= 1:1 (on both warp and weft way), Type of stich: back to face self-stich.
15. Draw the design, uncut cross section and cut cross section of plain back velveteen constructed CO5 [K5]
 with pile weave of 1/2 twill and the Ground pick: Pile pick ratio is 1:3
16. Draw the design, draft and peg plan for the Brighton honeycomb repeating on 12 ends and 12 CO1 [K4]
 picks.
