Register Number:……..

KUMARAGURU
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B.TECH. DEGREE EXAMINATIONS: APRIL / MAY 2023

(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)

1.	Enlist the derivatives of plain weave.	CO1	[K_2]
2.	Calculate the angle of twill if the move outwards is 1, move inwards is 1, EPI is 60 and PPI is 60.	CO1	[K_2]
3.	Classify bedford cord structures.	CO2	[K_2]
4.	What do you mean by half drop design?	CO2	[K_2]
5.	Distinguish between extra warp figuring and extra weft figuring weave structures.	CO3	[K_2]
6.	Classify backed fabrics.	CO3	[K_2]
7.	What is the difference between face to back self-stitching and back to face self-stitching in double cloth design?	CO4	[K_2]
8.	List end uses of multi-layer (ply fabrics) fabrics.	CO4	[K_2]
9.	Classify corduroy structures.	CO5	[K_2]
10.	List out any two differences between warp pile and weft pile woven structure.	CO5	[K_2]

Answer any FIVE Questions: -
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11. Illustrate the design of crepe weave constructed by using the reversing motif concept, the repeat size of the design is 8 ends and 8 picks. The motif is given below. CO1 [K4]

x	x	x	x
	x	x	

12. Illustrate the design, draft, peg plan and cross section of twill faced bedford cord constructed on alternate pick principle if the cutting: face end ratio is 1:6 and the face weave is 1/2 twill. CO2 [K5]

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]

L			X	X			X	X
L		X	X			X	X	
L	X	X			X	X		
L	X			X	X			X
D			X	X			X	X
D		X	X			X	X	
D	X	X			X	X		
D	X			X	X			X
	D	D	D	D	L	L	L	L

L: light colour, D: dark colour

14. Design a double cloth using the following details: CO4 [K5]
Face weave: 2/2 twill, Back weave: 3/1 twill, Face: Back ratio: 1:1 (For both warp and weft way), Type of stitch: warp centre stitch.

15. Illustrate with the design, uncut cross section and cut cross section of plain back velveteen constructed with pile weave of 1/2 twill and the Ground pick: Pile pick ratio is 1:3 CO5 [K5]

16. Illustrate the design, draft and peg plan of ordinary honeycomb weave structure repeating on 8 ends and 8 picks. CO1 [K4]

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