GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI (NEW) EXAMINATION – WINTER 2023

Subject Code:3162913   **Date:13-12-2023**
Subject Name: Advanced Fabric Structure and CAD
Time:02:30 PM TO 05:00 PM   **Total Marks:70**

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

			MARKS
Q.1	(a)	State the features and end use of backed cloth.	03
	(b)	Compare warp backed and weft backed structures.	04
	(c)	Construct design, draft and peg-plan for warp back cloth.	07
Q.2	(a)	Draw only design for open width double cloth.	03
	(b)	Explain the Principle of tying or stitching in double cloth	04
	(c)	Draw design and cross sections of reversible self stitched double cloth.	07
		OR	
	(c)	Draw design and cross sections of treble cloth.	07
Q.3	(a)	Explain importance of wedding threads in double cloth.	03
	(b)	Draw design and cross section of wire warp pile.	04
	(c)	Give only designs for the following:	07
		(i) Hound's tooth effect (ii) Bird's eye effect	
		OR	
Q.3	(a)	State the difference between velvet and velveteen.	03
	(b)	Discuss the special mechanisms required for weaving terry fabrics.	04
	(c)	Draw design and cross sections for plain back velveteen.	07
Q.4	(a)	Discuss factors affecting pile density.	03
	(b)	Write notes on damasks fabrics.	04
	(c)	Draw design, cross section of 3 pick double sided terry weave.	07
		OR	
Q.4	(a)	Explain the principle of leno weave.	03
	(b)	Write notes on tapestry fabrics.	04
	(c)	Explain in detail all the stages of constructing Jacquard design.	07
Q.5	(a)	State the features and end use of leno fabric.	03
	(b)	Draw design, draft and peg plan of gauge leno weave.	04
	(c)	Discuss briefly the features of any CAD software used for developing woven designs.	07
		OR	
Q.5	(a)	What do you mean by gauge and leno weaving?	03
	(b)	Draw design for counter leno.	04
	(c)	With the help of suitable designs, explain the basic sheds formed while producing leno fabrics.	07

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