GUJARAT TECHNOLOGICAL UNIVERSITY
BE- VIth SEMESTER–EXAMINATION – MAY- 2012

Subject code: 162902   **Date: 11/05/2012**
Subject Name: Advanced fabric structure & CAD
Time: 10:30 am – 01:00 pm   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Draw design and cross section of plain back velveteen using 5 thread sateen as pile weave and ground to pile ratio 1:5.	**07**
	(b)	Compare extra warp and extra weft figuring.	**07**
Q.2	**(a)**	Explain leno weaving with details of sheds.	**07**
	(b)	Explain how length, density and fastness of pile can be varied in weft pile structures with suitable design.	**07**
		OR	
	(b)	Explain factors affecting double cloth design.	**07**
Q.3	**(a)**	What are terry pile structures? How are they produced? Explain with diagram.	**07**
	(b)	Draw design and cross section of imitation weft backed structure derived from 2/2 twill.	**07**
		OR	
Q.3	**(a)**	Selecting your own weave and colour plan, develop step pattern and shepherd's check effect.	**07**
	(b)	Develop stripe effect in repeat area of 32 ends and 8 picks using 8 thread twilled hopsack in first half and 2/2 twill in second half with simple warping and simple wefting.	**07**
Q.4	**(a)**	Draw design and cross section of treble cloth using 3/3 1/1 twill for face, center and back cloth.	**07**
	(b)	Selecting your own spot of appropriate size, distribute it on 30* 30 repeat areas using 5 end sateen principle.	**07**
		OR	
Q.4	**(a)**	How warp pile structure is obtained with the help of wire? Explain with diagram.	**07**
	(b)	Explain the different methods of making double cloths.	**07**
Q.5	**(a)**	Discuss all the methods of removal of extra yarn in extra warp and extra weft fabric.	**07**
	(b)	Compare fully warp backed and weft backed structures.	**07**
		OR	
Q.5	**(a)**	Draw design and cross section of 5 pick reversible terry weave.	**07**
	(b)	Discuss principles of jacquard designing.	**07**

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