Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III • EXAMINATION – SUMMER 2013

Subject Code: 132904 **Date: 29-05-2013**

Subject Name: Textile Processing - I

Time: 02.30 pm - 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.**

Q.1	**(a)**	Explain the significance of singeing process. Enlist the methods of singeing. Describe in detail, the process of Gas singeing.	**07**
	(b)	What is desizing and why it is needed? Describe the method of enzymatic desizing of cellulosic fabrics with its merits and demerits.	**07**
Q.2	**(a)**	Explain in detail classification of coloring matters with chart.	**07**
	(b)	Describe any one method of oxidative desizing of cotton fabrics with its merits and demerits.	**07**
		OR	
	(b)	Discuss the terms Saponification and emulsification in context to scouring.	**07**
Q.3	**(a)**	Describe the process of pressure kiering for scouring of cotton fabrics with its merits and demerits.	**07**
	(b)	i) Write a note on ñScouring of colored woven goodsò. ii) Explain the terms ñSurface tensionò and ñWettingò.	**07**
		OR	
Q.3	**(a)**	What is bleaching? Enlist various bleaching agents. Describe in detail, the process of bleaching cotton fabrics with sodium hypochlorite with its merits and demerits.	**07**
	(b)	Describe the process for bleaching of cotton fabrics with hydrogen peroxide. Compare hypochlorite and peroxide bleaching.	**07**
Q.4	**(a)**	Describe in detail application of direct dyes on cotton.	**07**
	(b)	Describe any two after treatment for improving fastness properties of direct dye.	**07**
		OR	
Q.4	**(a)**	Describe in detail application of azoic dyes on cotton.	**07**
	(b)	Explain in detail application of vat dyes on cellulosic material.	**07**
Q.5	**(a)**	Give principle, construction and working of cop & cheese dyeing machines.	**07**
	(b)	Define following terminologies in dyeing (i)Percentage shade (ii)MLR(iii) Percentage Exhaustion	**07**
		OR	
Q.5	**(a)**	What are reactive dyes? Describe the method for application of hot brand reactive dyes on cotton.	**07**
	(b)	Give principle, construction and working of jigger dyeing machine with neat sketch.	**07**

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