Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III(New) • EXAMINATION – WINTER 2016

Subject Code:2132904 **Date:09/01/2017**

Subject Name:Textile Processing - I

Time:10:30 AM to 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.**

			MARKS
Q.1		**Short Questions**	**14**
	1	Define the term " Saponification"	
	2	Give the objectives of scouring?	
	3	Define the term "Emulsification"	
	4	Give the name of various chemicals used in scouring process.	
	5	State the objectives of singeing.	
	6	Give the name of various singeing machine used for fabric singeing.	
	7	What is mercerizing process?	
	8	State the objectives of bleaching process.	
	10	State the important of desizing process.	
	11	Give the name of desizing methods.	
	12	Enlist types of beam dying m/c.	
	13	Enlist basic operation in chemical process.	
	14	Classification of direct dyes.	
Q.2	**(a)**	Explain about the gas singing machine with neat sketch.	**03**
	(b)	Explain rot steeping desizing.	**04**
	(c)	Explain enzyme desizing with continuous process.	**07**
		OR	
	(c)	Describe chainless padless mercerising machine with a neat sketch.	**07**
Q.3	**(a)**	Enlist various scouring process used for cotton fabric and discuss any one.	**03**
	(b)	Write a note on "Scouring of colored woven goods"	**04**
	(c)	Describe construction and working of a vertical kier.	**07**
		OR	
Q.3	**(a)**	What precautions to be taken during hypochlorite bleaching.	**03**
	(b)	Compare hypochlorite and peroxide bleaching.	**04**
	(c)	Describe the process of hypochlorite bleaching of cotton fabric with its merits and demerits	**07**
Q.4	**(a)**	What is stripping?	**03**
	(b)	Explain about the properties of Disperse Dyes.	**04**
	(c)	Describe the process of dyeing cellulosic with vat dyes with chemical reactions.	**07**
		OR	
Q.4	**(a)**	Explain the term color fastness.	**03**
	(b)	Give classification of coloring matter.	**04**
	(c)	Explain the following terms : 1. M.L.R 2. Shade percentage 3. Concentration and exhaustion of a dyeing bath. 4.Cross dyeing and Topping	**07**
Q.5	**(a)**	Give the properties of vat dyes.	**03**

	(b)	Describe the process of dyeing polyester fabrics in Jet Dyeing machines.	**04**
	(c)	Write short note on dyeing of polyester/cotton blend.	**07**
		OR	
Q.5	**(a)**	Write principles of dyeing.	**03**
	(b)	Explain the objectives of a dyeing department.	**04**
	(c)	Describe jigger dyeing machine with a neat sketch.	**07**

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