Seat N	No.:	Enrolment No.	
		GUJARAT TECHNOLOGICAL UNIVERSITY	
		BE - SEMESTER-V(New) • EXAMINATION - WINTER 2016	
Subj	ect (Code:2152606 Date:22	2/11/2016
Subj	ect l	Name:Latex Processing & its application	
Time	e:10	:30 AM to 01:00 PM Total 1	Marks: 70
Instru			
		Attempt all questions. Make suitable assumptions wherever necessary.	
		Figures to the right indicate full marks.	
		2 -94-2 00 000 1-9-10 1-14-10-10-10-10-10-10-10-10-10-10-10-10-10-	(14)
Q. 1		swer the following.	
	1	What do you mean by Webbing?	
	2	List any one way to achieve solidification of latex foam.	
	3	Name any two paper coating process by using latex.	
	4	Mention the advantages of Latex based surface coating over othe water thinnable paints.	er
	5	Write the function of Uncooked starch in Latex-based Adhesives.	
	6	List out basic polymers used for latex- based surface coating.	
	7	Write the purpose for latex incorporation in Textile.	
	8	List any two types of latices used for latex-cement compositions.	
	9	Name the equipment used for bathwise mechanical foaming of latex.	
	10		
	11	Suggest the type of latex for bonding of two different Polarit Adherends.	y
	12		
	13	State the difference between Beater addition and paper saturatio method.	n
	14	Give the composition of latex-modified cement mortars.	
Q. 2	(a)		(03)
	(b)		(04)
	(c)	Discuss about Surface Halogenation technique as an Additional treatment for latex dipped products. OR	al (07)
	(c)	Name the dipping technique by which relatively thick-walled rubbe	er (07)
	. ,	products are manufactured. Explain this process in detail.	, ,
Q. 3	(a)	Write about the principal types of Non-woven fabric.	(03)
	(b)	What do you mean by latex spreading? Explain any one late spreading method with schematic diagram.	x (04)
	(c)	importance of processing variables in manufacturing of latex thread. OR	
Q. 3	(a)	P.T.O Draw the schematic diagram of Lick-roll method for manufacturing of carpet backing.	
	(b)	-	n (04)

	(c)	Discuss about latex extrusion process in detail.	(07)
Q. 4	(a)	State the reasons for incorporation of Mineral fillers in latex-based adhesive formulation.	(03)
	(b)	Mention the advantages and disadvantages of latex based adhesive relative to other types of adhesives.	(04)
	(c)	Describe the Wet-end Addition process for modification of paper by using latex.	(07)
		OR	
Q. 4	(a)	List the adhesion modifiers used in compounding of latex-based adhesive with their function.	(03)
	(b)	Write about the selection of polymer in latex based adhesive formulation for bonding of Porous substrates.	(04)
	(c)	Give comparison between two basic paper saturation methods. Explain the procedure of paper saturation process using latices with schematic diagram.	(07)
Q. 5	(a)	Write about the use of latex-cement compositions for repair of damaged concrete.	(03)
	(b)	Mention the advantages of latex- cement compositions over Conventional concrete in flooring applications.	(04)
	(c)	Discuss about different criteria for comparison of various polymer types in latex based surface coatings. OR	(07)
Q. 5	(a)	How rubber latex improve the strength of cementitious materials?	(03)
Q. 3	` '	•	, ,
	(b)	Write about any two problems associated with the incorporation of latices in cementitious compositions.	(04)
	(c)	Describe the principal components of latex surface coating compositions and explain the function of any two.	(07)
