Seat No.:	Enrolment No

		GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VIII EXAMINATION – SUMMER 2016	
Subi	ect co	de: 182802 Date:05/05/2016	
•		ame: Technological Advances in Textile Processing	
Time	e:10:3	0 AM to 01:00 PM Total Marks: 70	
Insti	ructio	ns:	
		ttempt all questions.	
		lake suitable assumptions wherever necessary.	
	3. Fi	igures to the right indicate full marks.	
Q.1	(a)	Describe with technical details the application of super critical carbon	07
Q.1	(a)	dioxide in polyester dyeing.	U/
	(b)	Discuss various techno chemical aspects of oxido-reductase enzymes and	07
	(6)	their applications in textile processing.	07
		mon upproduced in terrain processing.	
Q.2	(a)	Discuss the classification of enzymes with their different textile	07
•	. ,	applications.	
	(b)	Explain the applications of biotechnology in preparatory processes of	07
		cellulosic materials.	
		OR	
	(b)	Explain the mechanism of enzyme action. Discuss indetail the bio-	07
		polishing process of denim fabrics.	
Q.3	(a)	Enlist various compounds that can be used as super critical fluid with	07
		their critical properties. Explain why super critical carbon dioxide is	
	(L.)	mostly preferred for textile application.	07
	(b)	Explain the importance of ultra sound technology in textile processing.	07
		Discuss its application in textile coloration. OR	
Q.3	(a)	Describe various technological aspects of foam dyeing. State its	07
Q.J	(a)	advantages over conventional processes.	07
	(b)	Discuss the probable use of electro chemistry in textile coloration.	07
	(6)	Discuss the producte use of electro elicinistry in textile coloration.	07
Q.4	(a)	Explain fundamental concepts of nano technology. Enlist various textile	07
•	(32)	applications of nanotechnology. Discuss in detail the lotus leaf effect.	
	(b)	Describe the process for production of nano fibers.	07
	, ,	OR	
Q.4	(a)	Explain the enzymatic degumming of silk and antifelting of wool	07
	(b)	Give a brief review on recent developments in biotechnology.	07
Q.5	(a)	Justify the position of plasma technology in modification of cellulosics.	07
	(b)	Explain the concept of micro encapsulation. Describe the application of	07
		encapsulation using cyclodextrin for fragrance in textiles.	
c -		OR	c=
Q.5	(a)	Explain the term "Plasma". Enlist the various techniques for generation	07
		of plasma and discuss the most used technique for its generation.	

(b) Discuss the technological aspects of atmospheric pressure types of

plasma treatment.

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