Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VIII • EXAMINATION - SUMMER 2013

Data: 13/05/2013

Subject Code: 182802 Date: 13/0		5/2013	
Sub	ject	Name: Technological Advances in Textile Processing	
		0:30 am TO 01:00 pm Total Marks:	70
Inst	2.	ns: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Discuss elaborately the application of biotechnology in textile desizing. Discuss the classification of enzymes with their different textile applications.	07 07
Q.2	(a) (b)	Explain the applications of biotechnology in bleaching of cellulosic materials. Justify the position of biotechnology in processing of polyester. OR	07 07
	(b)	Explain the mechanism of enzyme action. Discuss the bio polishing process of denim fabrics.	07
Q.3	(a) (b) (c)	Write a short notes on: Enzymatic antifelting of wool Write notes on: Enzymatic degumming of silk Explain the term õPlasmaö. Enlist the various techniques for generation of plasma and discuss the most used technique for its generation. OR	04 04 06
Q.3	(a) (b)	Justify the position of plasma technology in modification of cellulosics. Discuss the role of plasma technology in processing of polypropylene and polyester fibers.	07 07
Q.4	(a) (b)	Explain the technical aspects of Nano technology. Enlist various textile applications of nanotechnology. Discuss in detail the Lotus Leaf Effect. Describe the process for production of nano fibers. OR	07 07
Q.4	(a)		07
Q.4	(b)	What is super critical CO ₂ ? Discuss the application of super critical CO ₂ in dyeing of Polyolefin fibers.	07
Q.5	(a)	Describe with neat diagram the dyeing polyester process using super critical CO ₂ .	07
	(b)	Explain the concept of micro encapsulation. Describe the application of encapsulation using cyclodextrin for fragrance in textiles. OR	07
Q.5	(a)	Describe various technological aspects of foam dyeing. State its advantages over conventional processes.	07
	(b)	Discuss the probable use of electro chemistry in textile coloration.	07
