Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII • EXAMINATION - SUMMER 2014** 

Subject	Cod	le: 182802 Date: 31-05-2014	
Subject	Nan	ne: Technological Advances in Textile Processing	
		am TO 01:00 pm Total Marks: 70	
Instruction		empt all questions.	
	2. Make suitable assumptions wherever necessary.		
3.		ures to the right indicate full marks.	
0.1	(a)	Answer the following objective questions.	07
Q.1	(a)	i) Enzyme works by and mechanism.	U/
		ii) Papain is type of enzyme.	
		iii) Lipases act upon	
		iv) What are peroxide killer enzymes?	
		v) Which type of plasmas can improve hydrophilicity?	
		vi) Corona treatment is high pressure type of plasma, true or false? Correct if false.	
		vii) Give two examples of nano technology in nature.	
	<b>(b)</b>	Give the sources of amylases, lipases, proteases with their applications.	07
Q.2	(a)	Discuss the application of amylases in processing of cotton.	07
<b>C</b>	<b>(b)</b>		07
	` ′	OR	
	<b>(b)</b>	Explain the suitability of cellulases in processing of denims.	07
Q.3	(a)	Discuss about biotechnology and plasma technology in context to their sustainability and eco friendliness.	07
	<b>(b)</b>	Discuss the general applications of plasma technology.  OR	07
Q.3		Write notes on:	14
Q.C		a) Modification of cellulosics by plasma treatment	
		b) Atmospheric pressure plasma	
<b>Q.4</b>		Discuss the production techniques, properties and applications of:	14
		a) Nano fibers	
		b) Nano emulsions	
0.4		OR	
<b>Q.4</b>	(a)	•	07
	<b>(b)</b>	advantages and disadvantages.  Discuss the properties of supercritical carbon dioxide and its phase diagram.	07
	(D)	Discuss the properties of supereritieal carbon dioxide and its phase diagram.	U7
Q.5	(a)	With neat sketch, explain the dyeing of polyester with supercritical carbon dioxide.	07
	<b>(b)</b>	Give the method for micro encapsulation and discuss its textile application.	07
		OR	
Q.5		Throw light on scope of using ultra sound waves and electrochemistry in textile coloration, with the equipmentation used, their advantages and limitations.	14

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