Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III • EXAMINATION – SUMMER 2013

Subject Code: 132901 **Date: 04-06-2013**

Subject Name: Textile Fibres

Time: 02.30 pm - 05.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Answer the following OBJECTIVE questions:	**07**
	i.	The solvent for cotton fibre is _____.	
	ii.	Name any two Polyolefin fibres.	
	iii.	The raw material used for manufacturing Polyester fibres apart from Ethylene Glycol is _____ or _____.	
	iv.	Name any two leaf fibres.	
	v.	What is meant by deaeration?	
	vi.	Natural fibres have lower melting points. True/False. Justify your answer.	
	vii.	Primary cellulose acetate is generally known as _____.	
	(b)	Explain the microscopic appearance of Cotton fibres.	**07**
Q.2	**(a)**	Explain the growth, production and properties of Jute fibres.	**07**
	(b)	Enlist the requisites for polymers to be a fibre. Describe any THREE in depth.	**07**
		OR	
	(b)	Depict the broad chips formation technique of Nylon 6, 6 fibres.	**07**
Q.3	**(a)**	Explain in detail about Ramie fibre.	**07**
	(b)	Write the manufacturing procedure for Polypropylene fibres showing its various properties.	**07**
		OR	
Q.3	**(a)**	Explain briefly the minor hair fibres.	**07**
	(b)	Depict the spinning and drawing operations to manufacture PET fibres with neat sketch.	**07**

Q.4		Describe the complete manufacturing process sequence of Viscose rayon along with the flow chart of the same.	**14**
		OR	
Q.4	**(a)**	Explain the physical and chemical properties of Wool fibres.	**07**
	(b)	Explain the growth and manufacture of Linen fibre.	**07**
Q.5	**(a)**	Elaborately discuss different steps involved in manufacturing of Acetate rayon. Also give numerous physical and chemical properties of the same.	**10**
	(b)	Give manufacturing and properties of Vinyon fibres.	**04**
		OR	
Q.5	**(a)**	Explain in detail the Pineapple leaf fibre.	**07**
	(b)	Explain the manufacture of spun silk fibres.	**07**

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