Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III (New) EXAMINATION – WINTER 2015

Subject Code:2132901 **Date:23/12/2015**

Subject Name: Textile Fibres

Time: 2:30pm to 5:00pm **Total Marks: 70**

Instructions:

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

			MARKS
Q.1		**Short Questions**	**14**
	1	What is a Textile fibre?	
	2	Enlist the names of bast fibres.	
	3	_____ is a non-flammable and heat resisting fibre.	
	4	Give the end uses of Jute materials.	
	5	Enlist the names of animal fibres	
	6	Retting is done for _____ fibres. (Jute/Kapok/silk)	
	7	_____ type of wool is best and finest quality of wool fibre.	
	8	Polyester is repeating unit of _____.	
	9	Fibre obtained by chemical treatment of wood pulp is called _____.	
	10	_____ is popular polyester.	
	11	What is the full form of PVC and PET.?	
	12	Nylon-6 is manufactured from _____	
	13	_____ resins are produced by the condensation polymerisation of formaldehyde with urea or melamine.	
	14	Viscose is regenerated form of _____.	
Q.2	**(a)**	Write in brief the end uses of Coir fibre.	**03**
	(b)	Discuss in brief the properties of asbestos fibre.	**04**
	(c)	Give in detail classification of Textile fibre.	**07**
		OR	
	(c)	Describe the essential properties of Textile fibre in detail.	**07**
Q.3	**(a)**	Draw the cross-section for Jute, Silk and cotton	**03**
	(b)	Write a note on Pineapple fibre.	**04**
	(c)	How degumming of silk is being carried out?	**07**
		OR	
Q.3	**(a)**	Explain the morphological structure for cotton fibre.	**03**
	(b)	Describe the properties of sisal fibre.	**04**
	(c)	Draw cross-section of wool fibre and discuss its physical & chemical properties.	**07**
Q.4	**(a)**	Discuss in brief about the manufacturing process of jute fibre.	**03**
	(b)	State the properties of Alpaca animal fibre	**04**
	(c)	Describe the manufacturing process for cotton fibre.	**07**
		OR	
Q.4	**(a)**	Why fibers are fiborous?	**03**

	(b)	Compare between addition & condensation polymerization.	**04**
	(c)	Describe the properties of Viscose rayon with its cross-section.	**07**
Q.5	**(a)**	Discuss about the production of milk fibre.	**03**
	(b)	Write note on Tencel fibre.	**04**
	(c)	Give the steps involved in manufacturing of Polyester fibre.	**07**

OR

Q.5	**(a)**	Define: Monomer, Polymer, Co-polymer.	**03**
	(b)	Write in brief physical and chemical properties of nylon 6, 6.	**04**
	(c)	Discuss in detail about the continuous direct spinning process of Nylon 6.	**07**

****