GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V (NEW) - EXAMINATION – SUMMER 2018

Subject Code:2152907   **Date:09/05/2018**

Subject Name:Man Made Fibre Technology

Time:02:30 PM to 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)**	Give classification of textured yarns.	**03**
	(b)	Explain linearity and orientation characteristics of fibre forming	**04**
	(c)	Explain briefly knit-de-knit texturising process.	**07**
Q.2	**(a)**	Describe role of spin finish.	**03**
	(b)	Describe briefly about aramid fibres.	**04**
	(c)	Describe turbo stapler with neat sketch.	**07**
		OR	
	(c)	Write short note on glass fiber.	**07**
Q.3	**(a)**	Write in brief about thermal transitions.	**03**
	(b)	Enlist possible ways to make antistatic polyester yarn.	**04**
	(c)	Explain any two techniques of spin finish with suitable diagram.	**07**
		OR	
Q.3	**(a)**	Mention applications of carbon fibres.	**03**
	(b)	Describe fibers with microvoids and microcrates.	**04**
	(c)	Explain briefly different methods to make flame retardant polyester yarn.	**07**
Q.4	**(a)**	Mentions advantages of hollow fibres.	**03**
	(b)	Discuss in brief chemical modification of nylon 6 by poly(acrylamide) during polymerization.	**04**
	(c)	Describe method to produce super micro filament yarns by conjugated bicomponent yarn spinning.	**07**
		OR	
Q.4	**(a)**	State advantages of sequential draw texturising.	**03**
	(b)	How to make antistatic nylon yarn by adding electrical conductive material.	**04**
	(c)	Explain in brief about draw texturing.	**07**
Q.5	**(a)**	Discuss in brief about contactless heaters.	**03**
	(b)	State developments in air jet texturising.	**04**
	(c)	Explain in detail about gear crimping.	**07**
		OR	
Q.5	**(a)**	Mentions advantages of textured yarns.	**03**
	(b)	Enlist desirable properties of spin finish.	**04**
	(c)	Explain working of stuffer box texturising with diagram.	**07**

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