Subject Code:162904

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI- EXAMINATION - SUMMER 2016

Date:17/05/2016

Subject Name: Technical Textiles -I Time: 10:30 AM to 01:00 PM Total Marks: 70			
	structio	ons: . Attempt all questions. . Make suitable assumptions wherever necessary.	70
Q.1	(a)	Classify nonwoven fabric forming techniques. With the help of neat diagrams, explain the foam bonding process in detail.	07
	(b)	Discuss the requirements of carding process for production of nonwoven fabrics. With the help of neat diagram, explain the passage of material through different parts of a 2 doffer card.	07
Q.2	(a) (b)	Briefly discuss the important stages of Nylon Tyre cord production. What is web? Give classification of web. With the help of neat diagrams, explain continuous filament web formation methods in detail. OR	07 07
	(b)	With the help of neat diagrams, explain the principle & manufacturing of Wetlaid nonwovens in detail. Also discuss their advantages & disadvantages.	07
Q.3	(a)	Explain the needle punching and stitch bonding methods in detail with the help of neat diagrams.	09
	(b)	Give the process line for Thermal Bonded Fabrics. OR	05
Q.3	(a)	Discuss important parameters to be considered for designing a filter fabric for a given application.	07
	(b)	Discuss briefly the textiles used as implantable and Non implantables.	07
Q.4	(a)	Discuss the application & advantages of natural & synthetic rubber as coating material.	07
	(b)	Mention the factors influencing the effectiveness of the coating done on a given fabric and describe any two of them in detail. OR	07
Q.4	(a)	What is meant by fluid coating? Describe any one method which involves fluid	07
	(b)	coating in detail. What is the difference between lamination and coating? With the help of neat figures, describe hot & cold lamination process on textile substrate.	07
Q.5	(a)	Write Short notes on:	09
	(b)	(i) Metal Fibers (ii) Kynol Fibers Briefly discuss various products used as Automotive Textiles. OR	05
Q.5	(a)	Write Short notes on :	09
	(b)	(i) Carbon Fibers (ii) Basofil Fibers Write a short note on Protective Textiles	05
