Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III (NEW) EXAMINATION – SUMMER 2019

Subject Code: 2132904 Date: 18/06/2019

Subject Name:Textile Processing - I

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)**	Explain the following terms: i. M.L.R ii. Shade percentage	**03**
	(b)	Write in short on grey fabric inspection.	**04**
	(c)	Write shorts notes: i. Scouring of colored Woven Goods ii. Exhausting Agents	**07**
Q.2	**(a)**	Draw process flow of textile wet processing department.	**03**
	(b)	Explain the following terms : i. Concentration and exhaustion of a dyeing bath. ii. Cross dyeing and Topping	**04**
	(c)	Justify the significance of J-box in scouring of cellulosic fibres and their blends with the help of proper sketch and process sequence and parameters.	**07**
		OR	
	(c)	Discuss yarn dyeing machines with sketch, process parameters and the precautionary measures.	**07**
Q.3	**(a)**	What is singeing and why it is required to be carried out for some of the fabrics?	**03**
	(b)	Provide meaning of following terms: i. Saponification ii. Surfactant iii. Mercerization iv. Emulsification	**04**
	(c)	Write short notes on i. Shearing Process ii. Padding Mangle	**07**
		OR	
Q.3	**(a)**	Give the advantages of dyeing loose cotton.	**03**
	(b)	Describe the process of dyeing Polyester fabrics by carrier dyeing.	**04**
	(c)	Define Dyeing. Classify the Coloring matter. Also write about different types of dyes used for different fibres.	**07**
Q.4	**(a)**	Explain the objectives of desizing.	**03**
	(b)	Discuss the process of rot steeping desizing.	**04**
	(c)	Describe Stepwise dyeing of Disperse dyes.	**07**
		OR	
Q.4	**(a)**	Give the classification of dyes along with fiber types.	**03**
	(b)	Write a note on scouring of colored woven goods.	**04**
	(c)	Discuss, with neat sketch and principle, Jigger Dyeing Machine with its positive and negative aspects.	**07**
Q.5	**(a)**	What is stripping?	**03**
	(b)	Compare hypochlorite and peroxide bleaching.	**04**
	(c)	Discuss Hydrogen Peroxide bleaching in relation to its recipe and process conditions.	**07**
		OR	
Q.5	**(a)**	Give the properties of vat dyes.	**03**
	(b)	Describe the process of dyeing nylon material.	**04**
	(c)	Explain why desizing is necessary. Enlist various desizing processes. Describe the process of Acid desizing.	**07**

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