## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2163608 Date: 08/05/2017

**Subject Name: Technology of Dyeing** 

Time: 10:30 AM to 01:00 PM 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 block printing?					
	2	Write any two wetting agents					
	3	Write any two bleaching agents					
	4	What are different styles of printing?					
	5	What is screen printing?					
	6	Write any two thickeners					
	7	Which gas is used in singeing for burning off neps?					
	8	What is desizing?					
	9	What is scouring?					
	10	Which chemical agents can be used for desizing?					
	11	Name factors affecting rate of dyeing					
	12	At which stages cotton can be dyed?					
	13	<b>5</b>					
	14	Dispersed dyes are dyed on which kind of fibre?					
Q.2	(a)	What is singeing? Explain singeing process with diagram	03				
	<b>(b)</b>	Explain with neat exam Clauder-Weldon loose cotton	04				
	` /	dyeing machine					
	(c)	•	07				
	(0)	enzymatic desizing process.					
	OR						
	(-)	<del></del>	07				
	(c)	Explain in detail the process of scouring.	07				
Q.3	(a)	On which fibres vate dyes are dyed? Explain with	03				
		reasons.					
	<b>(b)</b>	What are advantages and disadvantages of vat dyes?	04				
	(c)	Explain how structure of dye is related to the	07				
	(-)	applicability of dye on fibre.					
	OR						
Q.3	(a)	Name three new methods of dyeing.	03				
Q.5	` ′	Write a short note on infrared dyeing technology.	03				
	(b)		07				
	(c) What is ultrasonic dyeing method? Write principal and						
		working mechanism of ultrasonic dyeing.					

Q.4	(a)	What is high temperature high pressure dyeing method for dyeing of polyester fibres?	03	(R/U/A)
	<b>(b)</b>	What are advantages and disadvantages of dyeing of	04	(U/A)
	(c)	loose cotton What is electrochemical dyeing? Which dyes can be used for electrochemical dyeing? Why?	07	(U/A)
		OR		
<b>Q.4</b>	(a)	Write a short note on cop dyeing.	03	( <b>R/U/A</b> )
	<b>(b)</b>	What is process of bleaching? Explain on detail.	04	(U/A)
	<b>(c)</b>	Give classification of textile fibers	07	(U/A)
Q.5	(a)	Write a short note on single padding process of hot brand reactive dyes.	03	(R/U/A)
	<b>(b)</b>	Which type of steamers are used in dyeing process? Explain their importance in dyeing process.	04	(U/A)
	(c)	Briefly explain exhaust dyeing of vinyl sulfone reactive dyes.	07	(U/A)
		OR		
Q.5	(a)	Write a short note on hot flue drier.	03	( <b>R/U/A</b> )
	<b>(b)</b>	Write a short note on 'after-treatment' of dyeing for remazol dyes.	04	(U/A)
	(c)	Briefly explain batch wise dyeing of cellulosic fiber materials for cold brand reactive dyes.	07	(U/A)

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