Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V • EXAMINATION – WINTER 2013

Subject Code: 152802 **Date: 29-11-2013**

Subject Name: Technology of Dyeing - I

Time: 10.30 am - 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.**

Q.1	**(a)**	Explain Continuous and semi continuous dyeing methods of Reactive dyes.	**10**
	(b)	Classify the reactive dyes on their reactivity and substantivity.	**04**
Q.2	**(a)**	Describe in detail dyeing of cotton with Direct dye.	**07**
	(b)	Explain in detail factors affecting dyeing of cotton with direct dye.	**07**
		OR	
	(b)	Why direct dyed materials are after treated? Enlist different after treatments. Explain any two in details.	**07**
Q.3	**(a)**	Describe various steps involved in application of vat dyes with chemistry and technical aspects.	**10**
	(b)	Describe classification of vat dyes.	**04**
		OR	
Q.3		Discuss, elaborate the chemistry, properties and application of Indigosol dyes to cotton fabrics, with advantages and disadvantages.	**14**
Q.4		With all technical details discuss different steps in the developments of azoic colours on cotton.	**14**
		OR	
Q.4		Discuss properties and application methods of sulphur dyes on cotton.	**14**
Q.5		Write a short note on any TWO:	**14**
	(a)	Fast salts	
	(b)	Vinyl sulphone reactive dyes	
	(c)	Mineral colours	
	(d)	Aniline black colours	

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