Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER – VI EXAMINATION – WINTER 2015

Subject Code:162804 **Date:14/12/ 2015**

Subject Name: Technology of Printing - I

Time:2:30pm to 5:00pm **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 the printing paste formulation of direct dye to print on cotton with process sequence involved.	**07**
	(b)	Enlist different printing ingredients. Discuss about any two (except oxidising & reducing agents) in detail with suitable examples.	**07**
Q.2	**(a)**	Enlist various printing methods for cotton using solubilised vat dye. Discuss any one in detail with suitable recipe, ingredients and process sequence.	**07**
	(b)	Give the techno-chemical aspects behind the formation of Antidiazotates with the process involved.	**07**
		OR	
	(b)	State the primary difference between discharge and resist style of printing. Explain about resist style in detail with technical significance involved.	**07**
Q.3	**(a)**	Depict the construction of Roller printing machine with neat sketch.	**10**
	(b)	Write a note on basic discharge on direct ground on cotton.	**04**
		OR	
Q.3	**(a)**	Describe about various flow behavior involved with printing thickeners.	**10**
	(b)	Give detailed classification of printing thickeners.	**04**
Q.4	**(a)**	State the suitable print paste formulation for white discharge on direct ground with sequence.	**04**
	(b)	Discuss possible combinations to print vat dye on cotton fabric by direct style of printing.	**10**
		OR	
Q.4	**(a)**	Explain the colloresin process of printing vat dyes on cotton with technical significance and various fixation methods.	**07**
	(b)	Give the printing recipe and sequence to develop mineral khaki colours on cotton textiles.	**07**
Q.5	**(a)**	Elaborately discuss the printing of cotton fibre fabric with aniline black colours with suitable recipe, sequence and fixation methods.	**10**
	(b)	Differentiate between printing and dyeing from technical point of view.	**04**
		OR	
Q.5	**(a)**	Elaborately discuss about any two printing thickeners.	**07**
	(b)	Discuss the role of oxidising & reducing agents in print paste with suitable example.	**07**

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