Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII • EXAMINATION – SUMMER 2013

Subject Code: 182804 Date: 09/05/2013

Subject Name: Quality Control in Wet Processing (Department Elective II)

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.**

Q.1 **(a)** Answer the following OBJECTIVE questions: **07**

i. Write the main advantage to implement ISO system in an organization.

ii. State the specification to assess washing fastness of cotton fabrics dyed with reactive dyes according to AATCC test method.

iii. What is the main purpose to incorporate steel balls / plates to evaluate any fastness property of any kind of textile?

iv. What does the ash content of any textile signify?

v. Lustre number is dependent on physical state and surface characteristics of textile. True / False, Justify if false.

vi. _____ test can be performed to predict the probable rain penetration resistance of fabrics.

vii. The permissible limit for oil and wax content for cotton textiles is _____.

(b) Enlist various test methods to assess colour fastness of textiles to water. Discuss any two in detail. **07**

Q.2 **(a)** Answer the following OBJECTIVE questions: **07**

i. State various unit operations of wet processing.

ii. State important points of process control laboratory to produce a product of laid standards.

iii. How are rust stains removed?

iv. How can air removal from the pressure kier ensured?

v. What is bowing and skewing?

vi. How are pin holes formed during peroxide bleaching?

vii. Which fibre often shows barriness?

(b) Describe in detail the control checks in dyeing in Jigger. Also explain evaluation methods for vat dye bath. **07**

OR

	(b)	Give process control measures during kiering.	**07**
Q.3		Describe the detailed test method to evaluate tensile loss occurred due to chlorine retained onto cotton textiles with principle, purpose, instrumentation and other parameters involved.	**14**
		OR	
Q.3		Introduce blue wool standards for light fastness testing. Discuss the method to evaluate light fastness of any textiles with all the technical parameters involved.	**14**
Q.4	**(a)**	Explain various defects and their causes & remedies in polyamide dyeing.	**07**
	(b)	Explain process control measures in continuous dyeing.	**07**
		OR	
Q.4		Give an overview on various types of faults and their causes & remedies in different methods of polyester dyeing.	**14**
Q.5	**(a)**	Explain the principle, purpose and detailed method to assess colour fastness to dry cleaning with suitable instrumentation.	**07**
	(b)	Discuss various process control measures during drying.	**07**
		OR	
Q.5	**(a)**	Discuss the quality control measures in scouring.	**07**
	(b)	Explain about thermocouples in detail.	**07**

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