

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE SEM-VIII Examination May 2012****Subject code: 182804****Subject Name: Quality Control in Wet Processing (Department Elective II)****Date: 08/05/2012****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) Answer the following OBJECTIVE questions: 07**

- i. \_\_\_\_\_ test can be performed to predict water proofing of textiles.
- ii. Barium activity number for precisely mercerized cotton fabric is \_\_\_\_\_.
- iii. State the specifications for washing fastness of polyester fabrics.
- iv. What is Plate method used for?
- v. How can the solution to assess colour fastness to sea water be prepared?
- vi. Which test the azoic coloured cotton textiles should mainly subjected to?
- vii. Write the main role of Q.C.S. in any organization.

**(b) Describe the detailed test method to evaluate whiteness of textiles with principle and purpose involved. 07****Q.2 (a) Answer the following OBJECTIVE questions: 07**

- i. Define 'process control'.
- ii. Which thermal process is employed to overcome hazy appearance?
- iii. Suggest a qualitative test for the evaluation of desizing efficiency.
- iv. The object of scouring is to impart \_\_\_\_\_ to the fabric.
- v. What should be the caustic concentration in feed tank and in recuperator during mercerization?
- vi. Enlist possible defects that arise in package dyeing.
- vii. Warp way streaks dyeing may be caused due to presence of \_\_\_\_\_ in mercerizing cloth.

**(b) Give a critical review on importance, advantages and functions of process control. 07****OR****(b) Discuss elaborately the process control measures to be observed strictly during H<sub>2</sub>O<sub>2</sub> bleaching. Also explain various quantitative tests involved in 07**

H<sub>2</sub>O<sub>2</sub> bleaching.

- Q.3** (a) Discuss the test method involved to measure ash content of textiles in detail. **07**  
(b) What is meant by quality control? Enlist their functions, advantages and requirements in detail. **07**

**OR**

- Q.3** (a) Write in detail on Impact penetration test with proper sketch. **07**  
(b) Explain about BAN and lustre number as a measure of mercerization efficiency of cotton textiles. **07**

- Q.4** (a) Give a detailed grading system in finished fabric. Explain each with example. **10**  
(b) Discuss the importance and advantages of automation. **04**

**OR**

- Q.4** (a) Describe classification of damages and explain each in detail. **07**  
(b) Enlist different types of thermometers. Describe with neat diagram the working of vapour pressure thermometer. **07**

- Q.5** (a) What is need to adopt ISO 9000 quality system? Enlist their advantages in detail. **07**  
(b) Write a note on grey inspection. **07**

**OR**

- Q.5** (a) Describe the test method to assess washing fastness of cotton textiles dyed with reactive dyes according to AATCC test method with all the technical parameters involved. **07**  
(b) Describe various process control measures in finishing. **07**

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