

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-III Regular / Remedial Examination December 2010

Subject code: 132803

Subject Name: SCOURING & BLEACHING-I

Date: 16 /12 /2010

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) What is singeing? Describe with neat diagram the most conventional method of singeing. **07**

(b) Enlist various ingredients used in scouring. Describe with proper illustration the functions of surface active agents in scouring process. **07**

Q.2 (a) Describe the scouring of coloured woven cotton fabric. **07**

(b) State merits and demerits of chemicking and peroxide bleaching. **07**

OR

(b) Explain in detail various impurities present in grey cotton fabric **07**

Q.3 (a) Discuss elaborately the oxidative degradation of cotton in hypochlorite bleaching as a function of pH. **10**

(b) State characteristic features of OBA. **04**

OR

Q.3 Enumerate different types of continuous bleaching ranges. Describe with neat diagram the working of 'J-box' **14**

Q.4 (a) Describe with neat diagram the working of tight and slack rope washing machines. **08**

(b) What is difference between scouring and souring? Explain the souring process in detail. **06**

OR

Q.4 Discuss in detail the bleaching process with sodium chlorite. State drawbacks of sodium chlorite bleaching. **14**

Q.5 (a) What is Desizing? Explain 'Enzymatic Desizing' process in detail. **10**

(b) Describe the solvent scouring process. **04**

OR

Q.5 Give a critical review on bleaching of cotton fabric with hydrogen peroxide. **14**
