

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.E. Sem-III Remedial Examination May 2011****Subject code: 132803****Subject Name: Scouring & Bleaching - I****Date: 28-05-2011****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 are Enzymes? Explain enzymatic desizing in detail with lock & key mechanism. **07**

**(b)** Give detailed classification of desizing methods. Explain oxidative desizing methods in brief. **07**

**Q.2 (a)** What is singeing process? Describe with neat diagram, the working of Gas singeing machines. **07**

**(b)** Explain grey inspection & stitching. **07**

**OR**

**(b)** Explain Shearing and Cropping in detail with neat sketch. **07**

**Q.3 (a)** Describe chemicking in Jigger. **07**

**(b)** Explain the function of surface active agents, solvents and chelating agents in scouring bath. **07**

**OR**

**Q.3 (a)** Explain the functions of caustic soda, soda ash and sodium silicate in scouring bath. **07**

**(b)** Discuss Kier boiling in detail with neat sketch. **07**

**Q.4** Explain Vaporloc system for continues scouring & bleaching process with neat diagram. **14**

**OR**

**Q.4** Explain construction and working of J-box in detail with neat sketch. **14**

**Q.5 (a)** Describe the scouring of coloured woven fabrics. **07**

**(b)** Explain in brief the object of oxidative treatments. **07**

**Q.5** Explain in detail, the effect of pH on the stability of sodium hypochlorite **14**

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