

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-III Examination-Dec.-2011

Subject code: 132803**Date: 17/12/2011****Subject Name: Scouring & Bleaching-I****Time: 2.30 pm -5.00 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) Enlist various unit operations of preparatory processes. Describe with neat diagram one mechanical method of removing protruding fibres fabric surface. **07**
- (b) Describe the functions of sodium silicate and sodium bisulphite in kier boiling. **07**
- Q.2** (a) Describe with neat diagram the working of pressure kier. **10**
- (b) State characteristic features of OBA. **04**

OR

- (b) Describe machine chemicking in pits. **04**
- Q.3** Discuss elaborately the stability of sodium hypochlorite as a function of pH. **14**

OR

- Q.3** Enumerate different types of continuous bleaching ranges. Describe with neat diagram the working of open width continuous bleaching range **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** Give a critical review on bleaching of cotton fabric with hydrogen peroxide. **14**
- Q.5** (a) What is Desizing? Explain 'Enzymatic Desizing' process in detail. **10**
- (b) State merits and demerits of chemicking and peroxide bleaching. **04**

OR

- Q.5** Discuss in detail the bleaching process with sodium chlorite. State drawbacks of sodium chlorite bleaching. **14**
