

GUJARAT TECHNOLOGICAL UNIVERSITY**B. E. Sem. – IV - Examination –June- 2011****Subject code: 142804****Subject Name: Scouring & Bleaching II****Date:15/06/2011****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) Describe the mechanism of caustic reduction of polyester 07
(b) Discuss the effect of caustic concentration and catalyst on weight reduction of polyester. 07

- Q.2** (a) Enumerate different methods of scouring of wool. Describe Enzymatic and emulsion scouring method. 07
(b) Explain various factors affecting the luster of cotton due to mercerization in detail. 07

OR

- (b) Enlist various methods for yarn mercerization. Describe any one yarn mercerizing machine with neat sketch. 07

- Q.3** (a) Explain the effect of pH on degumming of silk. Describe any two methods of silk degumming. 07
(b) Explain Carbonization of wool in detail. 07

OR

- Q.3** Discuss theory of swelling in detail. 14

- Q.4** (a) Discuss scouring and bleaching of synthetic fibers in detail 07
(b) Discuss silk bleaching in detail. 07

OR

- Q.4** Describe chainless - pad less fabric mercerizing machine in detail with neat sketch. 14

- Q.5** Discuss the various properties of aminolysed polyester in detail. 14

OR

- Q.5** (a) Discuss mercerizing wetting agents in detail. 07
(b) Write short note on hot mercerization. 07
