

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- IV<sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNE- 2012****Subject code: 142804****Date: 02/06/2012****Subject Name: Scouring & Bleaching II****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) Discuss the bleaching of nylon and acrylic in detail. **07**  
(b) Enumerate different methods of scouring of wool. Describe enzymatic and emulsion scouring method. **07**
- Q.2** (a) Discuss the effect of caustic concentration and catalyst on weight reduction of polyester. **07**  
(b) Give a brief account of surface modification of polyester by amine treatment and explain the reactivity of amines. **07**
- OR**
- (b) Describe the effect of treatment temperature and time on caustic reduction of polyester. **07**
- Q.3** (a) Describe hot mercerization in detail. **07**  
(b) Discuss semi mercerization in detail. **07**
- OR**
- Q.3** (a) Discuss effect of different alkalis on mercerization with neat chart. **07**  
(b) Discuss various factors affecting the luster of mercerized cotton in detail. **07**
- Q.4** Describe chainless fabric mercerizing machine in detail with neat sketch. **14**
- OR**
- Q.4** Describe chainless – pad less fabric mercerizing machine in detail with neat sketch. **14**
- Q.5** Give critical review on recent development of preparatory processing machineries. **14**
- OR**
- Q.5** (a) Write short note on BAN. **07**  
(b) Write short note on caustic recovery. **07**

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