

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014****Subject Code: 142804****Date: 27-06-2014****Subject Name: Scouring and 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 effect of caustic concentration and catalyst on weight reduction of polyester. **07**
(b) Describe the effect of treatment temperature and time on caustic reduction of polyester. **07**
- Q.2** (a) Enumerate different methods of scouring of wool. Describe Enzymatic and emulsion scouring method. **07**
(b) Describe 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) Discuss effect of different alkalis on mercerization with neat chart. **07**
(b) Explain Carbonization of wool in detail. **07**
- OR**
- Q.3** Discuss theory of swelling in detail. **14**
- Q.4** (a) Describe scouring and bleaching of synthetic fibers in detail **07**
(b) Write a note on OBA treatment for synthetic fibers. **07**
- OR**
- Q.4** Describe chainless - pad less fabric mercerizing machine in detail with neat sketch. **14**
- Q.5** Discuss about recent development of preparatory processing machineries with examples. **14**
- OR**
- Q.5** (a) Discuss mercerizing wetting agents in detail. **07**
(b) Write short note on hot mercerization. **07**
