

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III • EXAMINATION – SUMMER • 2014****Subject Code: 132901****Date: 04-06-2014****Subject Name: Textile Fibers****Time: 02.30 pm - 05.00 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) State the advantages & disadvantages of natural and manmade fibers. **07**
(b) Give physical & chemical properties of polyester & cotton fiber. **07**
- Q.2** (a) Give detailed classification of Textile fibers. **07**
(b) Explain Secondary wall and Lumen of cotton fiber in detail. **07**
- OR**
- (b) State the advantages of TPA over DMT. **07**
- Q.3** (a) Discuss in detail about the Essential properties of Textile fibers. **07**
(b) Write short notes on Linen & Mohair fibers. **07**
- OR**
- Q.3** (a) Briefly discuss about sericulture of silk. **07**
(b) Discuss in detail about morphological structure of wool fiber. **07**
- Q.4** (a) Explain spinning of viscose rayon with a neat sketch. **07**
(b) Why fibers are fibrous? Compare between addition and condensation polymerization. **07**
- OR**
- Q.4** (a) Discuss the manufacturing process of polyester fiber in detail. **07**
(b) How one can obtain caprolactum & adipic acid. **07**
- Q.5** (a) Give the spinning of nylon 6, 6 fibers in detail. **07**
(b) Discuss the manufacturing process in detail of acrylic fiber. **07**
- OR**
- Q.5** (a) Describe various spinning techniques for manmade fibers. **07**
(b) Enlist various properties of jute & nylon 6 fibers. **07**
