

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

Subject code: 132901**Date: 24/12/2011****Subject Name: Textile Fibers****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) Discuss in detail about the Essential properties of textile fibers. **07**
(b) Give broad classification of Textile fibers. **07**
- Q.2** (a) Why fibers are fibrous? Compare between addition & condensation polymerization. **07**
(b) State the advantages of TPA over DMT. **07**
- OR**
- (b) How one can obtain Caprolacam & Adipic acid. **07**
- Q.3** (a) How degumming of silk is being carried out ? **07**
(b) Explain morphological structure of wool fibre with a neat sketch. **07**
- OR**
- Q.3** Give composition of cotton fibre and explain it's morphological structure with a neat diagram. What do you mean by Mature and Immature cotton fibers? **14**
- Q.4** (a) Give steps involved in manufacturing of Polyester fibre. **07**
(b) Explain spinning of Viscose rayon fiber with a neat diagram. **07**
- OR**
- Q.4** (a) Describe spinning of Nylon 6,6 fibre. **07**
(b) Discuss the manufacturing process of Acrylic fibre with a neat sketch. **07**
- Q.5** (a) Give physical & chemical properties of Cotton & Polyester. **07**
(b) Write shortnotes on Milk & Mohair fibers. **07**
- OR**
- Q.5** (a) Discuss physical & chemical properties of Wool & Viscose rayon fibers. **07**
(b) Briefly discuss about Coir & Cashmere fibers. **07**
