

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-III Examination December 2009

Subject code: 132901

Date: 19 / 12/ 2009

Subject Name: Textile Fibers

Time: 11.00 am – 1.30 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Draw neat sketches where it is required.

- Q.1** (a) Explain the morphological structure of Cotton fibre. Discuss about its Cutical and Primary Wall. **07**
(b) Discuss in detail about the continuous direct spinning process of Nylon 6. **07**
- Q.2** (a) Give the detail classification of Man-made fibres. **07**
(b) Give the steps involved in manufacturing of Polyester fibre. **07**
- OR**
- (b) Discuss essential properties of textile fibre. **07**
- Q.3** (a) Give some brief idea about Dry, Wet & Melt spinning. **07**
(b) Explain – Sericulture of Silk. **07**
- OR**
- Q.3** (a) Define: Monomer, Polymer, Co-polymer. Give the differences between Addition and Condensation polymerization. **07**
(b) Describe the manufacturing process of Acrylic fibre with a neat diagram. **07**
- Q.4** (a) Discuss the morphological structure of Wool fibre. **07**
(b) How the cultivation of Jute is being carried out? Give its properties. **07**
- OR**
- Q.4** (a) Describe the properties of Viscose rayon with its cross-section. **07**
(b) Write note on Tencel fibre. **07**
- Q.5** (a) How one can remove the Gum from Silk ? What do you mean by “Weighing of silk” ? **07**
(b) Give the properties of Bamboo & Soyaben fibres. **07**
- OR**
- Q.5** (a) Why fibres are fibrous? How one can produce Milk fibre? **07**
(b) Write notes on Sisal & Linen fibres. **07**
