

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
