

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-III Regular / Remedial Examination December 2010

Subject code: - 132901
Subject Name: - Textile Fibers

Date: 14 /12 /2010

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 in detail about the morphological structure of cotton fibre. **07**
(b) Why molecular chain can not be seen? Give comparison between addition and condensation polymerization **07**
- Q.2** (a) Give broad classification of textile fibres. **07**
(b) State the advantages and disadvantages of Natural fibres. **07**
- OR**
- (b) How one can obtain TPA (Terephthalic acid) and caprolactum? **07**
- Q.3** (a) State the advantages of TPA over DMT. **07**
(b) Give steps involved in manufacturing polyester fibre. **07**
- OR**
- Q.3** (a) Describe the VK tube method for Nylon 6 spinning and give its properties. **07**
(b) Explain the spinning of Viscose rayon with a neat diagram. **07**
- Q.4** (a) Discuss in detail about the Sericulture of silk. **07**
(b) With a neat sketch explain morphological structure of wool fibre. **07**
- OR**
- Q.4** (a) How silk reeling and silk throwing processes are carried out? **07**
(b) Give composition and properties of wool fibre. **07**
- Q.5** (a) Describe the manufacturing process of acrylic fibre with a neat sketch. **07**
(b) Discuss in detail about coir fibre. **07**
- OR**
- Q.5** (a) Write notes on sisal and milk fibre. **07**
(b) Describe the spinning of Nylon 6,6 fibre. **07**
