

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III • EXAMINATION – SUMMER 2013

Subject Code: 132901

Date: 04-06-2013

Subject Name: Textile Fibres

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) Answer the following OBJECTIVE questions: **07**

- i. The solvent for cotton fibre is _____.
- ii. Name any two Polyolefin fibres.
- iii. The raw material used for manufacturing Polyester fibres apart from Ethylene Glycol is _____ or _____.
- iv. Name any two leaf fibres.
- v. What is meant by deaeration?
- vi. Natural fibres have lower melting points. True/False. Justify your answer.
- vii. Primary cellulose acetate is generally known as _____.

(b) Explain the microscopic appearance of Cotton fibres. **07**

Q.2 (a) Explain the growth, production and properties of Jute fibres. **07**

(b) Enlist the requisites for polymers to be a fibre. Describe any THREE in depth. **07**

OR

(b) Depict the broad chips formation technique of Nylon 6, 6 fibres. **07**

Q.3 (a) Explain in detail about Ramie fibre. **07**

(b) Write the manufacturing procedure for Polypropylene fibres showing its various properties. **07**

OR

Q.3 (a) Explain briefly the minor hair fibres. **07**

(b) Depict the spinning and drawing operations to manufacture PET fibres with neat sketch. **07**

Q.4 Describe the complete manufacturing process sequence of Viscose rayon along with the flow chart of the same. **14**

OR

Q.4 (a) Explain the physical and chemical properties of Wool fibres. **07**

(b) Explain the growth and manufacture of Linen fibre. **07**

Q.5 (a) Elaborately discuss different steps involved in manufacturing of Acetate rayon. Also give numerous physical and chemical properties of the same. **10**

(b) Give manufacturing and properties of Vinyon fibres. **04**

OR

Q.5 (a) Explain in detail the Pineapple leaf fibre. **07**

(b) Explain the manufacture of spun silk fibres. **07**
