

Roll No. ....

Total Pages : 3

**13051/N****K-24/2111****FABRIC SCIENCE-I**

Paper-1101T

Semester-I

Time Allowed : 3 Hours] [Maximum Marks : 74

**Note :** The candidates are required to attempt **two** questions each from Sections A and B carrying 11 marks each and the entire Section C consisting of 10 short answer type questions carrying 3 marks each.

**SECTION—A**

1. What is Polymer? What are different types of polymers? Discuss Polymerization process in fibers. 11

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2. Write the manufacturing process, Physical and Chemical properties of Polyester in detail. 11
3. Write notes on the following : 11
  - (a) Nano Fiber.
  - (b) Sustainable Fibers.
4. Differentiate between Thermal conductivity, Air permeability and Porosity of Fabrics. 11

**SECTION—B**

5. Explain different types of Weaves in detail. 11
6. What are the characteristics and advantages of Woven, Knits and Non-woven fabrics? 11
7. What is Knitting? Explain different type of Knits in detail. 11
8. Write a note on Integral Garments. 11

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### SECTION—C

9. Write short notes on the following :  $10 \times 3 = 30$

- (i) Properties of Spandex.
- (ii) Braiding.
- (iii) Hollow fibers.
- (iv) Yarn numbering system.
- (v) Carded and Combed yarns.
- (vi) Uses of Acrylics.
- (vii) Molecular structure of Fibers.
- (viii) Water jet looms.
- (ix) Laundry shrinkage.
- (x) Difference between Silk and Linen Fiber.