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Paper Id: 161206   **Roll No.** [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

B TECH
(SEM-IV) THEORY EXAMINATION 2018-19
PRINCIPLES OF FABRIC MANUFACTURE

Time: 3 Hours   *Total Marks: 70*

Note: **1.** Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. **Attempt *all* questions in brief. Describe Briefly.**   **2 x 7 = 14**
   a.   Textile
   b.   Fiber
   c.   Yarn
   d.   Winding
   e.   Warping
   f.   Sizing
   g.   Drawing-in

SECTION B

2. **Attempt any *three* of the following:**   **7 x 3 = 21**
   a.   What are objectives of winding? Write down Difference between Precision and Drum winding.
   b.   What are objectives of Warping? State the salient features of Direct warping & sectional warping machines.
   c.   What are objectives of Sizing process? Describe with neat diagram Multi Cylinder Slasher sizing Machine.
   d.   What are objectives of Drawing-in process? What are different kinds of draft used in drawing in process briefly?
   e.   What are primary & secondary motions of loom? Describe briefly

SECTION C

3. **Attempt any *one* part of the following:**   **7 x 1 = 7**
   (a)   Mention types of winding faults & their remedies?
   (b)   Which warping machine is suitable for beam preparation of stripe effect fabric? Explain

4. **Attempt any *one* part of the following:**   **7 x 1 = 7**
   (a)   What different kinds of ingredients are used during Sizing of cotton & synthetic yarns? Mention at least 2 examples of each.
   (b)   With the help of a diagram, explain passage of material through power loom?

5. **Attempt any *one* part of the following:**   **7 x 1 = 7**
   (a)   Explain types of warper beam defects & their remedies?
   (b)   Mention classification of looms on basis of weft insertion technique? Explain any 3 in detail.

6. **Attempt any *one* part of the following:**   **7 x 1 = 7**
   (a)   Find out length of yarn on a package, weight of yarn is 3 kg and yarn count is 20,S Ne.
   (b)   Explain types of Size beam defects & their remedies?

7. **Attempt any *one* part of the following:**   **7 x 1 = 7**
   (a)   Explain the basic flow chart of weaving process.
   (b)   Calculate GSM of a fabric having following particulars:
          Warp Count : 60ˢ cotton   Weft Count : 52ˢ viscose
          Ends Per Inch : 80   Picks Per Inch : 60