21819

3 Hours / 70 Marks   Seat No. ☐☐☐☐☐☐☐☐

Instructions :   (1)   All Questions are *compulsory.*

(2)   Answer each next main Question on a new page.

(3)   Illustrate your answers with neat sketches wherever necessary.

(4)   Figures to the right indicate full marks.

(5)   Assume suitable data, if necessary.

(6)   Use of Non-programmable Electronic Pocket Calculator is permissible.

(7)   Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.   Attempt any FIVE of the following :   **10**

(a)   Define yarn breaking strength.

(b)   Define Textile fibre.

(c)   Define Resultant count.

(d)   Define warp and weft.

(e)   Define GSM, give formula for fabric GSM.

(f)   Draw design, peg plan and draft for plain weave.

(g)   Define crimp and crimp percentage.

2.   Attempt any THREE of the following :   **12**

(a)   Explain objects of pre-ginning and ginning process.

(b)   Explain objects of Blow-room and Carding.

(c)   Explain objects of winding and warping process.

(d)   Explain manufacturing process of needle punch non-woven fabric with help of a neat diagram.

3. **Attempt any THREE of the following :** 12

   (a) Explain objects of Baling and Pressing.

   (b) Explain process flow chart for manufacturing combed yarn.

   (c) Explain process flow chart for manufacturing denim fabric.

   (d) Explain passage of material through sizing machine with neat diagram.

4. **Attempt any THREE of the following :** 12

   (a) Calculate Tex and Worsted yarn number if 120 yards yarn weighs 2.24 grams.

   (b) Develop design, draft and pegplan for sateen weave on 8 ends and 8 picks with two different move numbers.

   (c) Define cloth cover and give formulae for warp cover factor, weft cover factor and cloth cover factor.

   (d) Give classification of looms.

   (e) Give classification of Textile fibre with examples.

5. **Attempt any TWO of the following :** 12

   (a) Explain objects of primary, secondary and auxiliary motions of woven fabric manufacturing also list them.

   (b) Develop design, draft and peg plan for satin and 2/1 'S' twill weave.

   (c) Describe passage of material through Ring frame machine with the help of a neat diagram.

6. **Attempt any TWO of the following :** 12

   (a) Calculate yarn number in English and Denier count if 1,50,000 meters of yarns weighs 1.845 kgs.

   (b) Describe passage of material through sliver lap machine with neat labelled diagram.

   (c) Calculate length of yarn in yards and meters if a cone of 80^s English count weighs 5.4 pound. Also convert 80^s Ne into Tex and Denier.

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