22246

24225

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

Marks

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

(a) State the objects of warp preparatory process in wearing.

(b) Define yarn numbering system DENIER.

(c) State the objects of winding process.

(d) Classify the winding machines.

(e) A spun yarn of 8400 yds length is weighing 1 lb. Determine the English count of yarn.

(f) Give salient features of Precision winding machine.

(g) Explain the term : Gain

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

(a) Draw process flow chart for conversion of yarn to fabric.

(b) Define the yarn numbering systems :

(i) English count

(ii) Metric count

(iii) Woollen count and

(iv) Tex

(c) Define : Objectionable faults. Explain its significance.

(d) Compare parallel wound package with cross wound package.

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

(a) Describe the different methods used for yarn traversing on a winding machine.

(b) Explain the following terms :

(i) Traverse ratio and

(ii) Angle of wind

(c) Describe the salient features of drum winding machine.

(d) Explain with a labelled sketch the disc type tensioner.

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

(a) State the causes and remedies for following package defects :

(i) Soft nose and

(ii) Stitch (Jali)

(b) Explain the method to measure the yarn size.

(c) Draw the different yarn feed packages used on winding machine.

(d) Explain the importance of knot factor in winding.

(e) Distinguish between direct and indirect yarn numbering system with example.

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

(a) Enlist the different types of Knots. State their merits and demerits.

(b) Draw and state the properties of different delivery packages on winding machines.

(c) Calculate the equivalent yarn number in Tex for following counts :

(i) 20 Ne

(ii) 150 D

(iii) 18 Nm

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

(a) Explain with a diagram, the passage of yarn through a winding machine.

(b) Compare classimat II and classimat V chart for different size of yarn defects.

(c) Calculate the production in kgs/shift of a winding machine working with following particulars :

(i) Yarn count = 50s Ne

(ii) Diameter of drum = 3"

(iii) RPM of drum = 2400

(iv) No. of spindles = 50

(v) Efficiency of machine = 85%
