BT-3/D13: 8357

TT-207-A Fabric Manufacture-I (New)

Time: 3 Hrs.] **[Max. Marks: 100**

Note: Section-A contains one compulsory question. Attempt one question from each of the remaining four sections (B, C, D, and E). All Questions carry equal marks.

1 **Section-A** **20x1**

Choose the most appropriate answer from the given options:-

(a) Autoconer 338 is a-
- i) Precision winding machine
- ii) Random winding machine
- iii) Combination of i) and ii)
- iv) None of i) and ii).

(b) In Autoconer 238 -
- i) Friction drum is used
- ii) Knotter is used
- iii) Both of i) and ii) used
- iv) None of i) and ii) used

(c) Function of a slub catcher is to
- i) Introduce slub in yarn to produce special effect.
- ii) Remove weak place in yarn
- iii) Introduce neps in yarn to produce special effect.
- iv) None of the above

(d) Increase the speed of a sizing machine lead to-
- i) increase impregnation time
- ii) decrease squeezing pressure
- iii) decrease in squeezing time
- iv) increase in squeezing time

(e) Multi-cylinder sizing machine is preferred over slasher sizing machine due to
- i) more productivity
- ii) good quality of sized yarn
- iii) easy maintenance
- iv) All the above.

(f) Pirn winding
- i) Rotary traverse machine
- ii) Separate traverse machine
- iii) Both Rotary traverse and Separate traverse is possible
- iv) None of the above

(g) Sizing is done on
- i) Single yarn to be use for knitting
- ii) Double yarn to be use in warp
- iii) Single yarn to be use for weft
- iv) None of the above

(h) Pirn winding machine may have a
- i) Drop wire to detect yarn break
- ii) Bunch winding mechanism
- iii) Random winding Drum
- iv) None of the above.

P.T.O.

(i) Photo electric sensor type of yarn clear sensor is
   i) Diameter of yarn
   ii) Mass of yarn
   iii) Tension of yarn
   iv) Both of the option i) and ii)

(j) Knotting is preferred to splicing for
   i) Knitted yarn
   ii) Warp double yarn
   iii) Warp single yarn
   iv) Weft yarn

(k) The objective of pre clearer in Autoconer is to
   i) Remove slub
   ii) Remove crimp
   iii) Remove twist variation
   iv) None of the above

(l) Pirn winging is required for
   i) Projectile weaving
   ii) Rapier weaving
   iii) Airjet weaving
   iv) None of the above

(m) TFO means
   i) Two for one twister
   ii) Turn fast operation
   iii) Three full operation
   iv) Ten-for-One machine

(n) Final product of warping machine is
   i) Warper's beam
   ii) Warper's drum
   iii) Weaver's beam
   iv) Weaver's drum

(o) TFO is a
   i) Winding machine
   ii) Doubling machine
   iii) Pirn winding machine

Write your answers in one or two sentences.

(p) What the function of a cheese winding?
(q) What is the function of a knotter?
(r) What are the disadvantages of direct warping?
(s) What is relation of input tension to output tension for a disc type tensioner?
(t) What is function of a spicer?

Section-B

2 What are the modern automatic machines uses now a day in Textile industry? Draw the flow of material through one of that machine and explain the different parts and their functions of that machine with the help of neat and clean diagram of different parts. **20**

3 Discuss the function of yarn tensioner, yarn clearer and unwinding accelerator. How the patterning in Drum winding machine can be avoided? Explain with the help of a suitable example. **20**

Section-C

4(a) Why direct warping is not preferred for complex colour design? What are the differences between direct and sectional warping? Draw the flow of material on these machines along with their advantages and disadvantages. **12**

(b) What are the different types of creel available for warping discuss in details. **8**

5 Calculates the running efficiency and production in kg/hours for a Beam warping machine. Assume necessary data yourself. **20**

Section-D

6 What are the objectives of sizing? With the help of a suitable diagram explain the different parts and their functions of a conventional slasher sizing machine **20**

7 Draw a suitable diagram of modern size box and explain different parts and their functions. **10**

What is the function of a sizing adhesive? Discuss about the different types of sizing adhesives in brief **10**

Section-E

8 What are the different types of drafting used in drawing-in department? With the help of graphical representation, show the various types of drafts applicable in drawing in the warp threads. **20**

9 With the help of suitable diagram discuss about different types of drop wires and heald wires with their advantage and disadvantage and use. **20**

8357