

Roll No.

Total Pages : 07

BT-3/D-14

8356

YARN MANUFACTURING-I

TT-205-A

Time : Three Hours]

[Maximum Marks : 100

Note : Section A (Q. No. 1) is compulsory. Answer any *one* question from each of the remaining *four* Sections. All questions carry equal marks.

Section A

1. (a) FQI does not consider : 1×20
- (i) Length
 - (ii) Strength
 - (iii) Fineness
 - (iv) Trash
- (b) During blowroom processing, level of neps.:
- (i) Increases
 - (ii) Decreases
 - (iii) Remain same
 - (iv) Anything may happen

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P.T.O.

- (c) Minimum pressure on calender roller will be for :
- (i) Cotton
 - (ii) Viscose
 - (iii) Polyester
 - (iv) Acrylic
- (d) To avoid lap licking, rack pressure should be :
- (i) Increase
 - (ii) Decrease
 - (iii) Remain same
 - (iv) All are true
- (e) Which is not a cleaning machine :
- (i) Uniclean
 - (ii) Unimix
 - (iii) Uniflex
 - (iv) Axilflow
- (f) Maximum draft in a carding machine is in between :
- (i) Lickerin-cylinder
 - (ii) Lickerin-feed roller
 - (iii) Cylinder-doffer
 - (iv) Doffer-calender roller

- (g) Minimum rotational speed in a carding machine is of :
- (i) Cylinder
 - (ii) Doffer
 - (iii) Licker-in
 - (iv) Lap roller
- (h) Percentage plate in a carding machine is :
- (i) Front plate
 - (ii) Back plate
 - (iii) Mote knife
 - (iv) Feed plate
- (i) Card waste for polyester fibre processing is :
- (i) 1%
 - (ii) 2%
 - (iii) 4%
 - (iv) 6%
- (j) Stripping action occur when wire point act :
- (i) Point-to-point
 - (ii) Point-to-back
 - (iii) Back-to-back
 - (iv) None of these

- (k) Autoleveller is used on :
- (i) Blowroom
 - (ii) Carding
 - (iii) Mixing
 - (iv) Ring Frame
- (l) The majority hooks in a carded sliver are :
- (i) Trailing
 - (ii) Leading
 - (iii) Both sided
 - (iv) Straight
- (m) Flat waste is not affected by :
- (i) Flat speed
 - (ii) Front plate setting
 - (iii) Cylinder speed
 - (iv) Doffer speed
- (n) Break draft at drawframe will be higher at :
- (i) Breaker
 - (ii) Finisher
 - (iii) Equal at both
 - (iv) None of the above

- (o) The gauge on drawframe depends on fibre :
- (i) Length
 - (ii) Strength
 - (iii) Fineness
 - (iv) Short Fibre %
- (p) How to avoid lap licking ?
- (q) What is the function of piano feed regulation motion ?
- (r) Mention the function of mote knife.
- (s) Why pressure bar is used on drawframe ?
- (t) What is IGS System ?

Section B

2. (a) How is the mixing controlled with the help of scientific bale management system ? What are its advantages over conventional method ? 10
- (b) Discuss the role of tinting and spin finishes application in blowroom. Mention the important requirement in a tinting colour. 10

3. Mention the objective of blending. Discuss different methods of blending along with their advantages and disadvantages. 20

Section C

4. (a) Explain the working mechanism of Uniblend with suitable diagrams. 10
- (b) Explain the working of a modern scutcher. Mention development in scutcher along with their significance. 10
5. (a) Draw a Rieter blowroom line to process cotton having 6% trash. How can this line be used for cotton having 2% trash ? 12
- (b) Discuss different types of accessories used in blowroom along with their significance. 8

Section D

6. (a) Mention the objectives of a carding machine. Explain the working of a carding machine with a suitable flow diagram and mention name of parts. 12
- (b) Give a comparative assessment of lap feed and chute feed system. 8

7. (a) What is an Autoleveller ? Explain the principle of different types of autoleveller. 12
- (b) Calculate the production of a carding machine in kgs/shift if 27 inches doffer rotates at 30 rpm and producing a sliver of hank 0.012. Assume efficiency of machine is 90%. 8

Section E

8. (a) Discuss the objective of drawframe. How are these achieved ? 10
- (b) What is the function of Autoleveller ? Discuss different types of autoleveller on a drawframe. 10
9. (a) Discuss different types of drafting system along with their significance. 10
- (b) Discuss different types of drafting irregularities along with their reasons of occurrence. 10