Roll No. .....

9437

Printed Pages : 4

BT–4 / M–17

YARN MANUFACTURING–II

Paper–TT-202 N

Time allowed : 3 hours] *[Maximum marks : 75*

Note : **Section–A (Question no. 1)** ***is compulsory.*** *Answer any* ***one*** *question from each of the remaining four sections. All questions carry equal marks.*

Section–A

1. (i) Which machine is used at first stage during combing lap preparation – 1×15

(a) Lapformer (b) Unilap

(c) Super lap former (d) Ribbon lapper

(ii) Which setting of top comb is not important –

(a) Depth

(b) Speed

(c) Distance w.r.t. detaching roller

(d) Angle

(iii) Combing remove which hooks –

(a) Trailing (b) Leading

(c) Both equally (d) Does not remove hooks

(iv) Combing speed (Nips/min) in latest comber is –

(a) 100 (b) 300

(c) 600 (d) 1000

(v) Which is a drafting elements at simplex _

(a) False twister (b) Spindle

(c) Flyer (d) Apron

(vi) Level of TM at ring frame for viscose yarn is –

(a) 2.8 (b) 3.3

(c) 3.8 (d) 4.3

(vii) Hollowing is a fault related to –

(a) Flyer (b) Setting of roller

(c) Cots (d) Bobbin

(viii) Speed of bobbin at simplex during winding is –

(a) Constant

(b) Increase

(c) Decreases

(d) First increase then decrease

(ix) If yarn count changes at ring frame, which drafting elements need to be changed –

(a) Spacer (b) Cradle

(c) Saddle (d) Cot

(x) Which is not a compact spinning system –

(a) COM 4 (b) MVS

(c) ELITE (d) ROCOS

(xi) Speed of which part remain constant at simplex with increase in package diameter –

(a) Flyer (b) Bobbin rail

(c) Bobbin (d) Winding on rpm

(xii) Which is latest ring –
(a) ORBIT (b) SU
(c) Double sided ring (d) Normal T-ring

(xiii) If 60 Ne yarn is doubled at doubling, the resultant count of yarn will be
(a) 30 Tex (b) 20 Tex
(c) 5 Ne (d) 120 Ne

(xiv) Difference in ring frame and ring doubler machine is –
(a) Twisting (b) Winding
(c) Drafting (d) All are same

(xv) Size of balloon in ring spinning is affected by –
(a) ABC ring (b) Moving lappet
(c) Traveller weight (d) All of these

Section–B

2. (a) Give the objective of combing. Explain the combing cycle with suitable diagrams. 10

(b) Mention the level of draft and doubling in different sequence of lap preparation for combing. 10

3. (a) Define forward and backward feeding. Discuss the influence of feed rate on noil extraction in forward and backward feeding. 10

(b) Discuss different setting use to alter the level of noil in combing. 10

Section–C

4. (a) Explain the principle of twisting and winding on speed frame. 8

(b) What changes are required on speed frame for polyester fibre processing ? 7

5. (a) What and how different objective of a building mechanism is achieved in speed frame ? Discuss with diagrams. 10

(b) Calculate the production of a 60 spindles speed frame in kgs/shift if spindle rotates at 1200 rpm and producing a roving of hank 1.2 Ne with 0.9TM. Assume efficiency of machine is 92%. 5

Section–D

6. (a) Discuss different type of ring/traveller combination along with their suitability. 8

(b) Discuss modern development in ring spinning along with their advantages. 7

7. (a) Briefly discuss the function of following : 4×2
(i) Spacer (ii) Ballon control ring
(iii) Traveller (iv) Seperator

(b) Mention different reasons of end breakage along with their causes and remedies. 7

Section–E

8. (a) Mention the objective of Doubling. Explain the principle of TFO with suitable diagrams. 1(

(b) Mention different requirement of feed package suitable on TFO. 5

9. (a) Discuss different system of dry and wet doubling. 10

(b) Calculate the production of a 32 spindles TFO in kgs/shift if spindle rotates at 8000 rpm and 40^s single yarn is doubled with a TM of 3.2. Assume efficiency of machine is 94%. 5