

Roll No.

Total Pages : 03

Sep-21-00030

B. Tech. EXAMINATION, 2021

Semester III (CBCS)

YARN MANUFACTURE-I

TE-303

Time : 2 Hours

Maximum Marks : 60

The candidates shall limit their answers precisely within 20 pages only (A4 size sheets/assignment sheets), no extra sheet allowed. The candidates should write only on one side of the page and the back side of the page should remain blank. Only blue ball pen is admissible.

Note : Attempt *Four* questions in all, selecting *one* question from any of the Sections A, B, C and D.
Q. No. 9 is compulsory.

Section A

1. What is the importance of blending ? Discuss commonly used methods of blending along with their advantages and diadvantages. **15**

2. Discuss different types of ingredients used in spin finish in mixing department, mentioning their functions. Also discuss the factors which influence to decide the percentage of spin finish to be sprayed.

15

Section B

3. Explain the working of a modern scutcher with a neat and clean diagram. Also compare it with conventional scutcher. 15
4. Define Rieter Blowroom line to process cotton having 6% trash. How this line can be used for low trash cotton ? 15

Section C

5. "Well card is half spun". Comment upon the statement. Explain the principle of carding, stripping and brushing action in a card. 15
6. What is an autoleveller ? Describe short, medium, long term autolevellers at carding machine. 15

Section D

7. Discuss, how irregularities of drafted materials can be measured. What is the effect of roller slip, roller vibration and amount of draft on the irregularities ? 15

8. What is breaker and finisher drawframe ? Explain different types of drafting systems with a neat sketch.

15

(Compulsory Question)

9. (a) What is Tinting ?
(b) Suggest the range of mechanical draft employed in carding machine.
(c) How blend percentage can be determined in a sliver ?
(d) What is the purpose of using antistatic agent for man-made fibre during mixing ?
(e) What is the function of calender roll in blowroom ?
(f) What is tandem card ?
(g) Mention the changes carried out in a blowroom line intended to process man-made fibres.
(h) Which types of hooks are formed in majority in a card ?
(i) What are different types of lap defects ?
(j) What is drafting wave ? 10×1.5=15