

Roll No.

Total Pages : 03

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B.Tech. EXAMINATION, 2022

Semester III (CBCS)

YARN MANUFACTURE-I

TE-303

Time : 3 Hours

Maximum Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

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

Section A

1. Explain the latest developments pertaining to ginning processes. Write a short note on pre and post ginning process. **10**

2. What are the factors that affect blending performance during blowroom operation ? Explain the modern automations incorporated in blending machine systems for their enhanced performance. **10**

Section B

3. Briefly explain the mechanism of modern openers and cleaners employed in blow room operation. How opening of fibres is affected by fibre length ? **10**
4. How is the feed rate controlled through piano feed regulating motion ? Suppose the answer with a neat diagram. **10**

Section C

5. Explain the principles of roller and clearer card. What is the function of flats in carding machine ? **10**
6. Write a note on nep formation ? In which region of carding machine maximum proportion of neps are generated ? **10**

Section D

7. Write a note on roller slip and roller eccentricity. How drafting waves are formed between drafting rollers and what are the their consequences ? **10**

8. Which type of drafting system is generally preferred for drawframe system and why ? Why bottom rollers are of knurled shaped in drafting system ? What is the hardness range top and bottom rollers in draw frame ? **10**

(Compulsory Question)

9. (a) Mention the objectives of ginning process.
(b) Explain the mechanism of lap former.
(c) What is the basic difference between stripping and carding process ?
(d) What are stationary flats ? Explain their role in carding.
(e) Explain degree of opening and cleaning in blowroom. **5×4=20**