

- (iii) Bundling 4  
(iv) Stitching. 3

**(Compulsory Question)**

9. Attempt all sub-parts : 10×1.5=15
- (i) Define the term Entrepreneur.  
(ii) Define linear density.  
(iii) What do you mean by oligomer ?  
(iv) What do you mean by T.M. ?  
(v) What is doubling ?  
(vi) What is the importance of sizing ?  
(vii) What do you mean by plain weave ?  
(viii) What do you mean by continuous and batch process ?  
(ix) What do you mean by printing ?  
(x) What is marker efficiency ?

Roll No. ....

Total Pages : 04

**Sep-21-00028**

**B. Tech. EXAMINATION, 2021**

Semester III (CBCS)

TEXTILE MACHINES AND PROCESSES

TE-301

Time : 2 Hours

Maximum Marks : 60

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*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.*

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**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 do you mean by fibre ? What are the basic requirement of fibre and fibre forming polymer ? What do you mean by Crystalline and amorphous region of a fibre ? 15

2. What do you mean by yarn number ? Discuss the following types of yarn numbering system :

- (a) Tex
- (b) Denier
- (c) Metic count

Obtain a relation between Tex and Denier. **15**

### Section B

3. What do you mean by Spinning ? Classify various types of spinning system and their scope of application. What is the difference between staple and filament yarn ? Give at least *one* example of each. **15**

4. Discuss the importance of the following in yarn manufacturing :

- (i) Opening
- (ii) Cleaning
- (iii) Drafting
- (iv) Twisting
- (v) Winding.

**5×3=15**

### Section C

5. What do you mean by weaving ? Classify various types of weaving machines. Discuss the basic motions of weaving with neat sketches and their utility in weaving ? **15**

6. Discuss objectives of the following processes :

- (i) Singeing
- (ii) Desizing
- (iii) Scouring
- (iv) Bleaching
- (v) Mercerization.

**5×3=15**

### Section D

7. Explain the need of finishing of fabric. Discuss importance of the following types of finishes :

- (i) Calendering **4**
- (ii) Sanforizing **4**
- (iii) Decatizing **4**
- (iv) Anti crease finish. **3**

8. Discuss the following process :

- (i) Spreading **4**
- (ii) Cutting **4**