

- (viii) Objective and types of doubling.
- (ix) Calculate efficiency of loom when production of loom is 100 m and 60 picks quality to be woven.
- (x) Discuss modern sizing box. **10×2=20**

Roll No.

Total Pages : 04

July-22-00235

B.Tech. EXAMINATION, 2022

Semester III

FABRIC MANUFACTURING-I

TE-304

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. Discuss the types of winding machines. Explain the working of hacooba pirn winding machine. **10**

2. Explain the machine parameters of auto-winders. Also describe the yarn path with different traverse ratio. 10

Section B

3. Differentiate between beam warping and sectional warping machine. Also calculate number of threads in a beam to be taken is 60's reed of 72" width of fabrics to be prepared. 4+6
4. Explain the twin and multi cylinder sizing machine with diagram. 10

Section C

5. Explain the process of manual drawing-in. What is its importance ? How modern drawing-in process is different from manual one ? 10
6. Write the features of tappet. How is plain tappet constructed ? What are its limitations ? Calculate the lift of tappet by taking own data. 10

Section D

7. Write the derivation for kinematic movement of sley. What are the factors influencing sley eccentricity ? 10
8. What is the effect of distance, velocity and acceleration with respect to sley eccentricity on beat up force and timing available for shuttle passage ?

10

(Compulsory Question)

9. (i) What is sley dwell ?
(ii) Define need count and heald count.
(iii) What is the reason for shuttle trap in the shed ?
(iv) "Early shedding is preferable for weaving closure construction fabrics." Explain.
(v) What is the leasing system in warping ?
(vi) Define early picking.
(vii) Discuss latest methods of sizing.