

B. Tech 3rd Semester Examination

Fabric Manufacture-I (CBS)

TE-304

Time : 3 Hours

Max. 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 : The question paper consists of five sections A, B, C, D and E. The candidates are required to attempt five questions in all selecting one question from each of section A, B, C, D, and all the subparts of the questions in Section E.

SECTION - A

1. Explain and compare the different types of rotary motion and traverse motion used in winding machine with the help of required diagram and expression. (10)
2. (a) Discuss the functioning of a photoelectric type yarn clearer and compare it with a capacitive type clearer. (5)
(b) Write a short note on Pirn winding. (5)

SECTION - B

3. Compare between Slasher sizing machine and Multi-cylinder sizing machine. Discuss the working principle of Multicylinder sizing machine with neat sketch. (10)
4. (a) What is the objective of warping? (2)
(b) What are the different types of creel available for warping? Discuss in detail. (8)

SECTION - C

5. With the help of graphical presentation, show the various types of draft applicable in drawing-in the warp threads. (10)

6. Discuss the different types of shed along with their advantages and disadvantages. (10)

SECTION - D

7. Derive the expression for power requirement for picking in shuttle loom. (10)
8. (a) What is sley eccentricity? Discuss the factors affecting it. (6)
(b) What are the difficulties in incorporating sley dwell in shuttle loom? (4)

SECTION - E

(All question are compulsory)

9. (a) What is the function of TFO?
(b) Which type of shed is formed on double lift single cylinder Jacquard?
(c) What is beam gaiting?
(d) Why is there swell in the shuttle box? Explain.
(e) What is the relation between input tension to output tension for a disc type tensioner?
(f) Define the auxiliary motion of a loom.
(g) What is the advantage of splicing over knotting?
(h) How speed of sizing machine is related to squeezing?
(i) A cotton yarn of 30 Ne has a fault area of length 6 cm and count 20 Ne. Under which grade of Uster Classimat system will you place it ?
(j) State the function of adhesive that may be used in size mixture. (10×2=20)