

[Total No. of Questions - 5] [Total No. of Printed Pages - 2]  
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**B. Tech 5th Semester Examination**

**Fabric Manufacture-II (O.S.)**

**TE-5001**

**Time : 3 Hours**

**Max. Marks : 100**

*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 :** Answer all the questions in section E and one question each from the sections A, B, C and D.

**SECTION - A**

1. Explain a Shirley positive continuous type take up system and calculate it's PPI. Also calculate the contribution towards periodicity of each wheel (assuming change wheel = 60T)  
(10+10=20)

OR

What are the different types of tension variations in negative Let off? How are they overcome in the positive system?  
(10+10=20)

**SECTION - B**

2. Compare the mechanical and electrical warp stop motions giving their advantages and drawbacks. (10+10=20)

OR

Explain the side weft fork and centre weft fork motion with proper diagrams and highlight their merits and demerits. (10+10=20)

**SECTION - C**

3. How does a 4x1 Cowburn & peck box changing motion work? Explain with proper diagram. (20)

**1389/150**

**[P.T.O.]**

OR

Compare the various types of feelers used in the weft replenishment system in a loom with their advantages and disadvantages. (20)

**SECTION - D**

4. (a) Explain the working of a cam operated dobby with neat figures.  
(b) How does a Keighley dobby operate? (10+10=20)

OR

Draw and describe the working mechanism of a Double lift double cylinder jacquard with appropriate figures. (20)

**SECTION - E**

5. (a) What are the advantages of a paper dobby?  
(b) Taking 2/3, 1/2 twill show how the pegging of the lags for a dobby is done?  
(c) What is the objective of a warp protector motion?  
(d) The importance of stopping a loom immediately after weft break is probably greater than in case of warp break. Comment.  
(e) What is pick at will type of control motion?  
(f) Highlight the importance of warp tension control during weaving.  
(g) What are fine pitch jacquards? Give examples.  
(h) With a standard 7 wheel take up, 27T standard wheel is available instead of 36T. Calculate the teeth of change wheel to be used to give 64 picks per inch.  
(i) Classify jacquard harness ties.  
(j) What is the importance of having a reserve bunch of weft on the butt of a pirn? (2x10=20)