

Total number of printed pages – 4

B. Tech
CPTX 8206

Fourth Semester Examination – 2008

FABRIC MANUFACTURE – II

Full Marks – 70

Time : 3 Hours

*Answer Question No. 1 which is compulsory
and any **five** from the rest.*

*The figures in the right-hand margin
indicate marks.*



1. Answer all the questions in brief : 2×10
 - (a) What is the role of temple in looms ?
 - (b) Why heald reversing motion is essential in ordinary shuttle loom ?
 - (c) What is parallel pick motion ?
 - (d) Why the tension on warp is to be regulated (varied) after regular interval in the case of negative let-off motion ?

- (e) Why center weft fork motion is preferred over side weft fork motion ?
 - (f) Why floating back rest is generally used in positive let-off motion ?
 - (g) Why automatic looms produce better quality cloth than non-automatic loom ?
 - (h) What is the necessity of shuttle eye cutter and selvedge weft cutter in automatic pirn changing loom ?
 - (i) Why the motion of the sley is made eccentric ?
 - (j) What is card saving device in multiple box loom ?
2. (a) Discuss the factors to be considered in the construction of negative shedding tappet. 4
 - (b) Show the typical loom timing diagram for a shuttle loom. 3
 - (c) Compare closed shed and open shed in loom. 3
3. (a) Compare over pick and under pick motions. 4

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Contd.

- (b) Describe one improved type picking motion found in shuttle loom. 6
4. (a) Show the arrangement of wheels in a seven wheel take-up motion and derive the expression of loom constant from the same. 6
- (b) Discuss the causes of pick spacing variation in cloth. 4
5. (a) What are the basic requirements / conditions of positive let-off motion. 3
- (b) Describe one positive let-off motion and explain how uniform warp tension is maintained. 7
6. (a) What are the scopes of dobby and jacquards in weaving ? 3
- (b) How an electronic jacquard is superior to mechanical one ? 2
- (c) Describe in brief the working principle of any jacquard of your choice. 5
7. (a) Compare automatic loom and non-automatic loom. 4

- (b) Describe the working principle of any electrical type weft feeler motion. 6
8. (a) Discuss in general the advantages of shuttleless looms over shuttle looms. 6
- (b) Calculate the cover factor and GSM of the fabric having the following parameters – ends / inch = 64, picks / inch = 56, count of warp and weft are 40^s & 36^s Ne respectively. Assume any other particulars, if needed. 4