B. TECH.

(SEM. IV) EXAMINATION, 2006-07

FABRIC MANUFACTURE - II

Time : 3 Hours] [Total Marks : 100

Note : Attempt all questions. All questions carry equal marks.

1 Attempt any four parts of the following :

(a) Justify the superiority of automatic loom over non-automatic loom.

(b) Classify automatic looms and discuss the merits of automatic pirm changing loom.

(c) Classify dobbby and compare single lift dobbby and double lift dobbby.

(d) Describe the selection mechanism of any paper dobbby.

(e) What are crank driven and cam driven dobbies? When cam driven dobbies are used?

(f) What do you mean by 'pegging of lags' in dobbby shedding? What types of faults are associated with pegs and lags?
2 Answer any **four** parts of the following:

(a) What is jacquard? Name the end uses of the fabrics woven with the help of jacquard.

(b) What is double lift jacquard? In a 200 capacity (size) double lift jacquard, number of hooks is generally 408 or 416 - why the number of hooks is not 400?

(c) Describe the driving of knives in any jacquard.

(d) Explain in brief the selection principle of any mechanical type of jacquard.

(e) What is verdol jacquard? In which respect it is different to conventional English jacquard?

(f) Write down the advantages of electronic jacquard. Why such jacquards are not widely found in Indian textile industry?

3 Answer any **two** parts of the followings:

(a) What is weft patterning? Describe one mechanism for obtaining four (4) colour weft pattern in fabric.

(b) What is ‘pick at will’ and when it is practised? What are the requirements in loom for getting pick at will facility?

(c) Why warp protector motion is used in loom? Describe one warp protector motion suitable for weaving heavy fabrics.

4 Answer any **two** parts of the following:

(a) Discuss the effect of warp stop motion on cloth quality and loom efficiency. Why warp stop motion is a pre-requisite in automatic loom?
(b) Compare mechanical and electrical type warp stop motions and describe one such motion of your choice.

(c) When and where we use side weft fork motion and centre weft fork motion? Describe the working principle of any centre weft fork motion.

5 Answer any two parts of the followings:

(a) Compare five wheel and seven wheel take up motions. Discuss the merits of shirley take up motion.

(b) What are negative, positive and semi-positive or controlled let off motions? What faults are associated with faulty let off motion?

(c) Discuss the utility and economics of bobbin loader and unifil loom winder in loom.