Sixth Semester
Textile Technology
Scheme July 2008
SHUTTLELESS WEAVING

Time : Three Hours *Maximum Marks : 100*

Note : i) Attempt total *six* questions. Question No. **1** (Objective type) is compulsory. From the remaining questions attempt any *five*.

ii) Give sketch wherever necessary.

1. Choose the correct answer. 2 each

i) The selvedge formed in Air-jet multiphase weaving machine is

(a) Fused selvedge

(b) Tucked-in selvedge

(c) Standard leno selvedge

(d) Melt selvedge

ii) In water jet loom the timing of cramper opening and closing depends on

(a) Direction of flight (b) Measuring length of yarn

(c) Amount of water (d) Water jetting angle

iii) "Buckle pick" is the main problem in

(a) Projectile weaving (b) Jet weaving

(c) Rapier weaving (d) Multiphase weaving

iv) Tip to tip weft transfer system is used in

(a) Dewas rapier weaving

(b) Two phase rapier

(c) Gabler rapier weaving

(d) All of the above

v) Which type of energy required in torsion bar picking mechanism for high speed weft insertion

(a) Store kinetic energy (b) Store potential energy

(c) Both (a) and (b) (d) None of the above

2. a) Give classification of shuttleless loom. 6

b) Sketch and explain with working principle of staubli positive dobby? 12

3. a) Explain and sketch with the working principle of Beat-up mechanism in projectile weaving. 12

b) Write down the main features of projectile weaving. 6

4. What are the different Rapier driving mechanism. Explain one of them with neat sketch. 18

5. a) Describe passage of warp on Maxbo murata loom with neat sketch. 12

b) Write down different traverse aids used in air-jet. Explain one of them. 6

6. Explain different type of selvedges used in shuttleless weaving. 18

7. Write short note on any three: 6 each

a) Central Rapier clamp control system

b) Types of Rapier weaving

c) Water jet loom timing

d) Air-jet main nozzle

e) Difference between shuttleless and shuttle looms

f) Weft accumulator with measuring unit