Scheme - I

Sample Question Paper

Program Name : **Diploma in Textile Manufacturers**
Program Code : **TX**
Semester : **Sixth**
Course Title : **Shuttle less Weaving**
Max. Marks : **70** **Time: 3 Hrs.**

22678

Instructions:
(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any FIVE of the following. **(10 Marks)**

a. State the merits of shuttle less looms.
b. State the limitations of shuttle looms.
c. List various types of projectiles used on projectile loom.
d. Distinguish between impulsive beatup and crank beatup mechanism.
e. State the functions of leno device on rapier weaving machine.
f. Classify the different rapier weaving machine.
g. List the quality requirement of air for air jet weaving machines.

Q.2 Attempt any Three of the following. **(12 Marks)**

a. Describe with neat sketch working of torsion bar picking mechanism.
b. Distinguish between loop transfer and tip transfer technic of rapier weaving machine.
c. State the principle of air jet weaving machine.
d. State the working principle of needle loom with neat sketch.

Q.3) Attempt any Three of the following. **(12 Marks)**

a. Draw the schematic diagram of cam beatup mechanism and label its parts
b. Classify the shuttle less weaving machines with respect to its picking mechanism
c. Explain the working of accumulators and write their functions.
d. Describe the working principle of circular loom with sketch.

Q.4) Attempt any Three of the following. (12 Marks)

a. Describe with sketch the various driving mechanism of rapier weaving machine.
b. State the limitations of plain power looms.
c. Compare between leno selvedges and tuck selvedge with schematic diagrams
d. State the various developments of air jet loom reed with its merits.
e. Draw the schematic diagram of multiphase weaving mechanism and state it's working.

Q.5) Attempt any Two of the following. (12 Marks)

a. Describe with sketch the picking mechanism of water jet loom and state the concept of lead angle
b. Draw the schematic diagram of picking cycle of projectile picking mechanism.
c. State the yarn quality requirements for shuttle less looms.

Q.6) Attempt any Two of the following. (12 Marks)

a. Describe the pick insertion cycle of multiphase weaving machine.
b. Describe the picking cycle of rapier weaving machine with sketch.
c. Describe the various types of selvedges used in weaving and List their merits and demerits.

Scheme - I

Sample Test Paper - I

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

22678

Semester : **Sixth**

Course Title : **Shuttle less Weaving**

Max. Marks : **20** **Time: 1 Hour**

Instructions:
(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR. **(08 Marks)**

a. State the salient features of plain power looms.

b. State the merits of shuttle less looms

c. Differentiate between crank beat up and cam beat up mechanism.

d. Enlist various types of rapier driving mechanisms.

e. State the principle of projectile weaving mechanism.

f. State salient features of projectile weaving machine.

Q.2 Attempt any THREE. **(12 Marks)**

a. Distinguish between Devas and Gabbler rapier weaving system.

b. Explain the working of loop transfer technic in rapier weaving machine.

c. State the merits and demerits of telescopic rapier driving system.

d. List the different types of projectile and classify them into different categories as per applications.

Scheme - I

Sample Test Paper – II

Program Name : **Diploma in Textile Manufacturers**
Program Code : **TX**
Semester : **Sixth**
Course Title : **Shuttle less Weaving**
Max. Marks : **20**

22678

Time: 1 Hour

Instructions:
(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR. **(08 Marks)**

a. State the functions of profile reed in air jet weaving machine.

b. State the functions of tandom nozzle.

c. State the importance of relay nozzle in air jet weaving machine.

d. State the importance leno binding in shuttle less loom.

e. State application of water jet looms.

f. Classify the jet weaving machines.

Q.2 Attempt any THREE. **(12 Marks)**

a. Describe the working mechanism of needle looms.

b. Describe the working of tuck in selvedge mechanism on shuttle less looms.

c. State the yarn requirements for shuttle less looms.

d. Describe the working mechanism of circular looms with relevant sketches.