Scheme - I

Sample Question Paper

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

22462

Semester : **Fourth**

Course Title : **Principles of Weaving**

Max. Marks : **70** **Times: 3 Hrs.**

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) List the requirements of pirn for automatic loom.
b) List the functions of pirn winding process
c) State various primary motions in plain power loom.
d) Calculate the weight of yarn over the pirn if net weight of yarn over pirn is 50gm and yarn count is 40 Ne.
e) State the functions of warp stop motion.
f) State the importance of bunch on pirn.
g) List various woven fabric defects generated due to Machine problem.

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

a) List the types of sheds and compare their merits and demerits.
b) Describe with sketch the importance of draft in fabric design.
c) List the types of drafts and describe the concept of peg plan with relevant example.
d) Describe with sketch the working of crank beat up mechanism on power loom.

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

a) Describe with sketch the passage of yarn through pirn winding machine.
b) State the functions of let off and take up mechanism on plain power loom.
c) Describe the "Stock-Port" System of reed count and calculate the no. of ends/inch if reed count is 80, No.of ends/dent are 2.
d) Describe with sketch the working of cone under pick mechanism.

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

a) Distinguish between positive let off and negative let off mechanism.
b) Describe with sketch passage of warp sheet over plain power loom.
c) Distinguish between positive shedding and negative shedding.
d) Draw schematic figure of side weft fork mechanism and explain its working.
e) Describe with sketch the working of plain tappet mechanism.

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

a) Suggest the causes and remedies for following warp wise defects,
   - Missing End
   - Warp Float
   - Double end

b) Suggest the remedies for following woven fabric defects,
   - Weft Bars
   - Lashing in
   - Short Pick

c) Determine the weight of warp by using following parameters,
   - Fabric length:-10000 meter
   - EPI – 102
   - Yarn Count-40 Ne
   - Fabric width – 60 inch

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

a) Describe the construction and working of seven wheel mechanism with sketch.
b) Describe the construction method of tappet profile for 1 up 1 down weave.
c) Calculate the loom production in meters/day if loom speed is 100 and PPI is 54, machine is running with 65% efficiency.

Scheme - I

Sample Test Paper - I

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

Semester : **Fourth**

22462

Course Title : **Principles of Weaving**

Max. Marks : **20** **Times: 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) Draw the schematic diagram of pirn.
b) State the functions of bunch on automatic loom.
c) List various defects of pirn build.
d) Sate the importance of drawing in process.
e) Define Stock port system of reed count.
f) State the objects of shedding mechanism.
g) Define “sley eccentricity”.

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

a) Explain the working of cone over picking mechanism with relevant sketch.
b) Describe with a labelled diagram, the passage of yarn through plain tappet shedding mechanism.
c) State the concept of design, draft and peg plan with example.
d) Describe the functions of primary motions and secondary motion on power loom.
e) Determine the number of heald wire per heald shaft from data given below:
    - No. of heald shafts required for design -6
    - Fabric width- 40 inch,
    - Ends per inch: 80
    - Weave-plain weave
    - Type of draft – straight draft

Scheme - I

Sample Test Paper - II

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

Semester : **Fourth**

22462

Course Title : **Principles of Weaving**

Max. Marks : **20** **Times: 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 concept of starting mark.
b) State the concept of positive let-off.
c) Calculate the total number of ends if reed count is 80/2.
d) State the function of oscillating backrest.
e) List various components of shuttle box.
f) State the functions of temple.
g) Describe the functions of warp protector motions.

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

a) Explain the importance let off mechanism.
b) Describe with neat sketches the working of 5 wheel take up mechanism.
c) Draw the schematic figure of warp stop motion and explain its working.
d) Suggest causes and remedies for starting mark and warp float.
e) Describe the working of centre weft fork mechanism with sketch.
f) Calculate the loom production in yards/day from following data
    - Loom Speed – 150
    - Effeicency-75 %
    - PPCm-20