

Scheme - I

Sample Question Paper

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Sixth
Course Title : Process Control in Weaving
Max. Marks : 70

22677

Time: 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. State the objects of process control in weaving.
- b. List the factors to be considered in deciding key parameters for establishment of standards and norms for process control in weaving.
- c. Describe various ways to collect the data for process control in weaving.
- d. State the importance of controlling hard waste in weaving.
- e. Illustrate assignment of penalty points in 4 point fabric inspection system.
- f. List the factors which limit the maximum speed of weaving machine.
- g. Describe Snap study technique to estimate efficiency of loom shed.

Q.2 Attempt any Three of the following.

(12 Marks)

- a. Describe the Machine Audit technique used for process control in weaving.
- b. Draw the schematic diagram illustrating working of electronic yarn clearing device on winding machine.
- c. Explain the term retained splice strength (RSS), splice breaking ratio (SBR) and splice appearance grade (SAG)
- d. Explain various types of winding package defects their causes and remedies.

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

- a. Illustrate with schematic graph, the unwinding tension variation in ring bobbin and explain its effect on build quality of cone winding package.
- b. Explain the key parameters in process control in warping.
- c. Explain the causes of low productivity in warping and their remedies.
- d. Explain the method to calculate efficiency of warping machine.

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

- a. Describe the parameters of good beam in warping.
- b. Explain the factors affecting size pick up and methods to control it.
- c. Describe key parameters in process control in Sizing.
- d. Select the sizing ingredients to size 40^s, cotton yarn for medium density fabric.
- e. Explain the importance of stretch control in Sizing and methods to control stretch.

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

- a. Explain the importance of dead loss in Sizing and method to calculate it.
- b. Explain the key parameters for process control in loom shed.
- c. Illustrate with example the how to achieve optimum loom allocation per operator in loom shed.

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

- a. Describe online process control and quality control methods used in weaving.
- b. Describe various factors affecting warp stoppages, weft stoppages and mechanical failures in weaving shed.
- c. State main considerations in 4 point grey fabric inspection system along with its advantages.

Scheme - I

Sample Test Paper - I

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Sixth
Course Title : Process Control in Weaving
Max. Marks : 20

22677

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. Explain the use of control chart in process control in weaving.
- b. State advantages of direct control method for process control in weaving.
- c. Classify different types of yarn clearer in winding.
- d. List key parameters for process control in Warping.
- e. List the various parameters good pirn.
- f. Explain knot factor in winding.

Q.2 Attempt any THREE.

(12 Marks)

- a. Explain different types of tensioners on winding with sketch.
- b. List various package faults in Winding with their causes.
- c. State the factors to improve productivity of winding machine.
- d. Explain various ways to collect data for process control in weaving.
- e. State the factors to improve productivity of warping machine.

Scheme - I
Sample Test Paper – II

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Sixth
Course Title : Process Control in Weaving
Max. Marks : 20

22677

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 importance of sizing.
- b. State advantage of dry steaming of warp sheet in sizing
- c. Describe importance process control in drawing in.
- d. State importance of energy conservation in Weaving.
- e. Explain importance of fabric realization.

Q.2 Attempt any THREE.

(12 Marks)

- a. Explain important stretch zone in sizing with justification.
- b. Describe method to control crossed ends in Sizing.
- c. State importance of foam pads and after waxing in Sizing.
- d. State various parameters to control loom shed efficiency.
- e. Explain 10 point fabric inspection system.