Scheme - I

Sample Question Paper

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

22675

Semester : **Sixth**

Course Title : **Advances in Spinning Technology**

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

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

a. Define back doubling.

b. Give which type of raw material required for Air Jet spinning.

c. State the features of modern blow room line.

d. List the names of naval.

e. State the advantages of ring data.

f. State the function of opening roller in Rotor spinning.

g. State the object of SIRO spinning.

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

a. Explain the features of modern rotor spinning machine

b. Draw and label SIRO spinning.

c. Summaries the feature of modern comber.

d. Explain with neat sketch the principle of friction spinning.

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

a. Draw the structure of air-vortex spun yarn and also summaries the properties of same.

b. Discuss on following points for Rotor spinning.

(i) Raw material requirement and preparation.

(ii) Yarn withdrawing and winding unit.

c. Compare rotor spinning with ring spinning.

d. With neat sketch describe the passage of material through DREF-II.

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

a. Explain the operating principle of wrap spinning with neat sketch.
b. With neat sketch explain the principle of Air jet spinning.
c. Explain the effect of opening roller speed and rotor diameter on structure and quality of rotor spun yarn.
d. Explain the influence of process parameters on properties of air vortex spun yarn.
e. Explain the waste disposal system used in modern blow room and carding.

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

a. Summaries the limitations of ring spinning machine
b. Discuss the features of modern ring frame on following points
   i) Auto doffing.
   ii) Automatic cop transport to winding.
c. Draw and describe the passage of material through Murata Air-jet spinning.

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

a. With neat labeled sketch describe Self-twist spinning.
b. Discuss the following points on Friction spinning.
   i) Fibre transport and fibre collection.
   ii) Imparting twist.
c. Explain the influence of process parameters on properties of air jet spun yarns.

Scheme - I

Sample Test Paper - I

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

22675

Semester : **Sixth**

Course Title : **Advances in Spinning Technology**

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 objects waste disposable system used in blow room and carding.

b. Enlist the advantages of spider web used in spinning industry.

c. Define wrapper fibres.

d. Classify advanced spinning systems.

e. State the function of navel in rotor spinning.

f. List applications of DREF II yarns.

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

a. State the features of modern draw frame and explain their technical significance.

b. Draw and label rotor spinning machine.

c. Compare rotor spun yarn properties with ring spun yarns.

d. With neat diagram describe rotor also write their importance.

e. Explain the process parameters influencing properties of Dref yarn.

Scheme - I

Sample Test Paper – II

Program Name : **Diploma in Textile Manufacturers**

Program Code : **TX**

22675

Semester : **Sixth**

Course Title : **Advances in Spinning Technology**

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 functions of air-jet nozzle in Air-jet spinning.

b. Enlist the applications of air-jet spun yarn.

c. Draw Air-vortex and Wrap spun yarn structure.

d. Enlist influencing process parameters on properties of air vortex spun yarn.

e. State any four yarn characteristics of SIRO spun yarn.

f. State the operating principle of wrap spinning.

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

a. Explain SIRO spinning with neat sketch

b. Draw the structure and properties of air-jet spun yarn.

c. Draw and explain PLYfiL spinning process.

d. Explain the effect of short fibres and fineness on air jet process.

e. Explain the Influence of process parameters on properties of air vortex spun yarn.