

Scheme - I
Sample Question Paper

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Fourth
Course Title : Roving and Ring Spinning
Max. Marks : 70

22461

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) Define the term false twisting.
- b) State the objects of Roving frame.
- c) State the importance of stop motions in roving frame.
- d) State the importance of binding coil, and its ratio with winding coil.
- e) State the importance anti- wedge rings.
- f) State the necessity of elliptical traveller.
- g) State the tasks of Ring frame building mechanism.

Q.2 Attempt any Three of the following.

12 Marks

- a) Suggest the remedies for following roving package faults:-i) soft bobbins ii) slough –off.
- b) Calculate the production of a roving frame from following particulars in kgs per shift of 7.5 hrs :- i) spindle speed -950 rpm. ii) TM-1.2 iii) Weight of rove -7 Grains /yard IV) Efficiency -87% v) Spindles/frame -120.
- c) Give any eight modern features of a roving frame.
- d) Describe with neat sketch passage of material through ring frame.

Q.3) Attempt any Three of the following.

12 Marks

- a) Describe with neat sketch passage of material through roving frame.
- b) Describe with neat sketch electronic building mechanism used in roving frame.
- c) Suggest the importance of stop motions used in roving frame.
- d) Draw neat labeled sketch of a different rings used in ring frame.

Q.4) Attempt any Three of the following.

12 Marks

- a) Differentiate any four points between bobbin lead and flyer lead system in roving frame based on ease of rove stretch, end breakage, and evenness.
- b) Calculate the production of ring frame in kgs/shift of 8 hours from the following particulars:- i) spindle speed-18000 ii) count -24Ne iii) Efficiency-90% iv) T.M.-4.1 v) spindles/frame -1008.
- c) With neat sketch state the functions of different travellers.
- d) State the functions of traveller clearer and suitable settings between traveller and traveller clearer.
- e) Describe with neat sketch ant wedge rings and elliptical traveller.

Q.5) Attempt any Two of the following.

12 Marks

- a) Describe with neat sketch ring frame building mechanism.
- b) State the advantages and disadvantages of ring frame auto-doffing based on ease of time, labour, maintenance.
- c) Give modern features of ring frame.

Q.6) Attempt any Two of the following.

12 Marks

- a) State the difficulties for automation in ring frame department.
- b) With neat sketch describe plug type spindle.
- c) State the importance of spinning triangle, describe with neat sketch spinning triangle.

Scheme - I
Sample Test Paper - I

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Fourth
Course Title : Roving and Ring Spinning
Max. Marks : 20

22461

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 flyer.
- b) State the functions of hollow leg and solid leg of a flyer.
- c) List various defects of roving bobbin.
- d) State the importance of binding coil ring frame.
- e) State the importance of monitoring in roving frame.
- f) State the objects of ring frame.
- g) Enlist various defects of ring bobbin.

Q.2 Attempt any THREE.

12 Marks

- a) Explain the working of roving frame building mechanism with relevant sketch.
- b) Describe with a labelled diagram, the passage of yarn through roving frame.
- c) State the causes of end breakages in ring frame.
- d) Give the modern features of ring frame.
- e) Calculate the production of ring frame in kgs/shift of 8 hrs from following particulars :-
 - Spindle speed -17500 rpm.
 - Twist multiplier -4.0.
 - Count -24 Ne.
 - Efficiency -92%.
 - Spindles/frame -1008.

Scheme - I
Sample Test Paper - II

Program Name : Diploma in Textile Manufacturers
Program Code : TX
Semester : Fourth
Course Title : Roving and Ring Spinning
Max. Marks : 20

22461

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 tasks of auto leveller used in ring frame.
- b) State the objects of building mechanism used in ring frame.
- c) State the importance of elliptical traveller.
- d) State the function of traveller clearer.
- e) State the objects of ring frame auto doffing.
- f) State the importance of ring frame automation.
- g) State the causes of ring bobbin slough-off.

Q.2 Attempt any THREE.

12 Marks

- a) State causes and remedies of ring cut bobbin.
- b) Draw and label any four rings.
- c) Give modern features of ring frame.
- d) Suggest causes and remedies for end breakages in ring.
- e) Draw and give traveller numbers of any four travellers.