22461

Instructions –   (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Use of Non-programmable Electronic Pocket Calculator is permissible.

(7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.   **Attempt any <u>FIVE</u> of the following.**   **10**

   a) State the necessity of condensers

   b) State the function of solid leg used in flyer.

   c) State the necessity of breakdraft in roving frame.

   d) State the object of balloon control ring.

   e) State the object of compact spinning

   f) State the effect of worn out rings on quality of yarn.

   g) Define:

   i)   Slub

   ii)   Cork screw yarn.

Marks

2. Attempt any THREE of the following.   **12**

a) Describe with neat sketch the function of flyer at roving frame.

b) State the object of litter motion of roving frame and its effect on rove quality.

c) List the difficulties of automation in roving frame.

d) Describe with neat sketch, passage of material through compact spinning.

3. Attempt any THREE of the following.   **12**

a) State the necessity of creel and its effect on quality of rove.

b) Explain the importance of sliver and rove stop motion used in roving frame.

c) Calculate the time required to exhaust 10 kg sliver can of 0.12 hank of sliver from the following particulars:

    i) F. R. diameter - 1.5 inch

    ii) B. R. diameter - 1 inch

    iii) B. R. roller speed - 100 rpm.

    iv) Draft - 12

d) Describe with neat sketch bolster of ring frame.

4. Attempt any THREE of the following.   **12**

a) Describe with neat sketch conventional and modern cone drums used in roving frame.

b) Describe with neat sketch lappet gauging.

c) Describe with neat sketch antiwedge ring also state its application.

d) Give the table of traveller nos and traveller weight.

e) State any four difference between single side and double side rings.

Marks

5. **Attempt any <u>TWO</u> of the following.** **12**

   a) Describe with neat sketch types of builds.

   b) Give the table of classimatt-II yarn faults.

   c) Calculate the production of ring frame in kgs/shift of 7.5 hrs from the following particulars:

      i) Spindle speed - 18000

      ii) T.M. - 4.1

      iii) Count - 24

      iv) Efficiency - 86%

      v) Number of spindles/frame -1008.

6. **Attempt any <u>TWO</u> of the following.** **12**

   a) State the effect of drafting arrangement on quality of ring yarn.

   b) State any twelve modern features of ring frame.

   c) Explain monitoring system in ring frame.

————