

22461

22223

3 Hours / 70 Marks

Seat No.

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- 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 FIVE of the following: **10****
- a) State the object of roving frame.
 - b) State the object of litter motion used in roving frame.
 - c) State the importance of silver stop motion used in roving frame.
 - d) State the function of baloon control used in ring frame.
 - e) State the importance of direct drive in ringframe.
 - f) List the names of travellers used in ringframe.
 - g) List the types of cop build in ringframe.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Elaborate selection of different hanks of drawframe silvers to be used in roving frame with justification.
 - b) Explain the effect of top roller pressure on rove material produced.
 - c) Describe in detail automation in roving frame machine.
 - d) Give the names of different change places in roving frame with their formulas.
- 3. Attempt any THREE of the following:** **12**
- a) Draw and label the parts of building mechanism of roving frame.
 - b) Calculate the production of roving frame from following particulars in kgs/shift of 8hrs/frame of 120 spindles.
 - i) Spindle speed - 800 rpm.
 - ii) T.M.-1.1
 - iii) Weight of rove - 7 grains/yd.
 - iv) efficiency - 85%
 - c) Draw sketch of top arm drafting system of roving frame giving details of roller diameters, load on top rollers and roller setting.
 - d) Describe with neat sketch. Passage of material through ring frame.
- 4. Attempt any THREE of the following:** **12**
- a) Describe with neat sketch working of building mechanism on ring frame.
 - b) Explain spinning triangle with neat sketch and its importance.
 - c) List the names of rings and draw a sketch of each of them.
 - d) List the names of travellers and draw a sketch of each of them.
 - e) Describe with neat sketch traveller clearer and give setting and state its importance.

- 5. Attempt any TWO of the following:** **12**
- a) State the object of building mechanism and its effect on quality of ring yarn.
 - b) State the causes and remedies of end breakages in ring frame.
 - c) State the modern features of high production ring frame.
- 6. Attempt any TWO of the following:** **12**
- a) List the names of spindle drive and explain each drive.
 - b) Calculate the production of ring frame from the following particulars:-
 - i) Spindle speed - 19000
 - ii) T.M. - 4.2
 - iii) Efficiency - 90%
 - iv) No spindle/frame - 1008
 - v) Count spun - 32 NeCalculate the production/frame/shift of 7.5 hrs.
 - c) Calculate time in hours to exhaust-2.0 kg roving bobbin at ring frame working with following particulars
 - i) Spindle Speed = 20,000 rpm.
 - ii) Count Spun = 32^s Ne
 - iii) Twist Multiplier = 3.9
 - iv) Efficiency = 92%
 - v) hank of roving = 1.
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