

22365

21819

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) Give the cylinder and Doffer wire point density
 - b) State the function of trumpet
 - c) Define burnishing
 - d) State the tasks of draw frame.
 - e) Define autolevelling
 - f) State the object of comber.
 - g) Define forward feed.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Draw and label passage of material through carding machine.
 - b) Give the classification of card clothing. Suggest the better card clothing with reasons.
 - c) List the factors affecting the draft in draw frame
 - d) Describe with neat sketch 5/4 drafting system.
- 3. Attempt any THREE of the following:** **12**
- a) Give the advantages of lap feed system with respect to quality of material.
 - b) Suggest the following setting for processing cotton fiber on carding machine also state the effect of setting on quality of material:
 - (i) Licker-in to cylinder
 - (ii) Cylinder to flat.
 - c) State the effect of pressure bar on quality of draw frame sliver
 - d) Describe with neat sketch passage of material ribbon lap machine
- 4. Attempt any THREE of the following:** **12**
- a) Draw and label India Roll Unit.
 - b) Calculate the production of a draw frame in kgs/shift of 7.5 hrs from the following particulars:
 - (i) Front roller speed - 320 yds/min
 - (ii) Hank of sliver - 0.12
 - (iii) Efficiency - 92%
 - c) Describe with neat sketch autolevellers used in draw frame
 - d) State any four differences between Unicom and half lap.
 - e) State the importance of Index wheel, also state the functions of comb machine at Index No-19.

5. Attempt any TWO of the following:**12**

- a) Draw and label Horse fall grinder also state the importance of grinding.
- b) State the draw frame defects. State causes and remedies for the same.
- c) Calculate the production of a comber from the following particular in kgs/shift of 8 hrs:
 - (i) Feed/ Nip 9.5mm
 - (ii) Nips/Min-270
 - (iii) Feed roller dia-1 inch
 - (iv) Weight of lap fed- 710 grains/yd
 - (v) Noil%- 15%
 - (vi) No of heads-06
 - (vii) Feed ratchet wheel – 10T
 - (viii) Through of pawl – 1T
 - (ix) Efficiency – 87%

6. Attempt any TWO of the following:**12**

- a) Suggest the effect of
 - (i) Distance gauge
 - (ii) Top comb setting on noil % removed at comber.
 - b) State the effect of forward and backward feed with respect to noil %.
 - c) State the working of each part of a comber at Index No-27, 36.
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