

22365

11920

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

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

Marks

- 1. Attempt any FIVE of the following: 10**
- State the objectives of carding.
 - State the importance of stripping.
 - State the function of flats in the carding.
 - State the objectives of drawframe.
 - State the importance of auto levelers in drawframe.
 - State the purpose of combing.
 - State the function of top comb in comber.
- 2. Attempt any THREE of the following: 12**
- Describe with neat sketch Licker - in zone in the carding machine.
 - Explain the function of Auto leveler at card.
 - Describe the Shirley drafting system.
 - Draw neat labelled sketch of passage of material through drawframe.

P.T.O.

- 3. Attempt any THREE of the following: 12**
- a) Differentiate between chute feed and lap feed system. (any four)
 - b) Calculate the productions of carding machine in pounds / shift of 8 hours from the following particulars.
 - (i) Weight of sliver delivered = 4 gms/mt
 - (ii) Doffer speed - 36 rpm
 - (iii) Doffer diameter = 27 inch
 - (iv) Efficiency = 80%
 - c) Explain various roller weighing systems used in drawframe.
 - d) Explain the effect of pre comb draft on comber.
- 4. Attempt any THREE of the following: 12**
- a) Classify the fibre hooks at card. Explain fibre hook.
 - b) State various modern features of drawframe.
 - c) Calculate the production of drawframe in kgs/shift from following data:
 - (i) Hank of sliver - 0.13
 - (ii) Front roller speed = 300 m/min
 - (iii) Efficiency = 85%
 - d) State the modern features of comber machine.
 - e) Explain types of feed in comber.

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

- a) Suggest important card settings and its effect on sliver quality.
- b) Enlist various drawframe defects. Also write the causes and remedies for the defects.
- c) Calculate the production of comber in pounds / shift from following data :
 - (i) nips / min = 230
 - (ii) Weight of lap fed - 600 grains / yd
 - (iii) Efficiency = 90%
 - (iv) Noil% = 16%
 - (v) No. of feed = 6
 - (vi) Feed ratchet wheel = 10 T
 - (vii) Through of panel = 1 teeth
 - (viii) Feed roller diameter = 1 inch

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

- a) Suggest index wheel timings for forward feed detaching and combing. Justify it.
 - b) Draw neat labelled sketch of comber. Recite the sequence of operation in comber.
 - c) Enlist various lap preparatory machines. Draw the neat labelled sketch of unilap.
-