22245

11819 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.
- (8) Use of steam tables, logarithmic, Mollier's chart is permitted.

1. Attempt any FIVE of the following :

(a) Define Textile fibre.

- (b) Enlist any four cotton varieties which you know.
- (c) State the object of combing.
- (d) State the object of carding.
- (e) Define "Opening".
- (f) Give sequence of machines for modern blow-room.
- (g) State the advantages of optical sensors.

2. Attempt any THREE of the following :

- (a) State the importance of conditioning of cotton raw material.
- (b) Describe cotton cultivation and list the names of areas of cotton cultivation.

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- (c) Draw and label conventional bale opener.
- (d) List the types of opening devices and define degree of opening.

Marks

 $2 \times 5 = 10$

 $4 \times 3 = 12$

3. Attempt any THREE of the following :

- (a) Give classification of Textile fibre.
- (b) Draw and label saw gin.
- (c) List the types of transport of material in blow-room, state the merits and demerits of each.
- (d) State the factors affecting on cleaning and opening of cotton.

4. Attempt any THREE of the following :

- (a) Give flow process chart for combed yarn.
- (b) Differentiate any eight points between carded yarn and combed yarn.
- (c) With neat sketch describe any one automixer.
- (d) State the importance of intensive cleaner, also draw and label any one intensive cleaner.
- (e) State the object of dedusting machine, also draw and label any one dedusting machine.

5. Attempt any TWO of the following :

- (a) With neat sketch describe blendomat opener.
- (b) State the advantages and disadvantages of manual mixing.
- (c) With neat sketch describe axiflow cleaner.

6. Attempt any TWO of the following :

- (a) Define cleaning. List the different types of cleaning devices, describe with neat sketch any one cleaning device.
- (b) Differentiate (any six) points between conveyor belt and pneumatic transport of material.
- (c) Calculate the production of a scutcher in pounds/shift of 7.5 hours from the following particulars :
 - (i) Lap roller dia. = 12'' inch
 - (ii) Lap roller speed = 13 rpm
 - (iii) Efficiency = 85%
 - (iv) Lap weight = 6941 grains / yd.

 $4 \times 3 = 12$

 $6 \times 2 = 12$

$6 \times 2 = 12$