

# 17224

**15162**

**3 Hours / 100 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 TEN of the following: **20****
- Define slenderness ratio.
  - List the names of essential fibre properties.
  - State advantages of land picking.
  - Why pre ginning is necessary?
  - Why baling and pressing of cotton is necessary?
  - Define fibre maturity.
  - What do you mean by blending?
  - What is the function of grids.
  - What is optical regulating system.
  - Why metal extractors are necessary?

P.T.O.

- k) Define cleaning efficiency with formulae.
- l) Write the function of dustex DX.
- m) What do you mean by fly waste?
- n) Why recycling of raw material is necessary?

**2. Attempt any FOUR of the following: 16**

- a) Explain the desirable fibre properties.
- b) Define : Nep, write any two causes of neps
- c) Define : elongation. Write the importance of elongation.
- d) Explain the effect of dust on human health.
- e) Explain the effect of fibre fineness on spinning.
- f) Differentiate between mechanical and hand picking of cotton.

**3. Attempt any FOUR of the following: 16**

- a) Draw and label double roller gin.
- b) Explain the effect of ginning on fibre properties.
- c) Explain stack mixing.
- d) Define : homogenous mixing, write difference between mixing and blending.
- e) Write short notes on cotton cultivation in India.
- f) Explain objectives of blow room.

**4. Attempt any FOUR of the following: 16**

- a) Draw and label bale opener.
- b) State the advantages of blendomat.
- c) Draw and label Maxiflow cleaner.
- d) Draw and label Multimixer.
- e) What are the objects of unimixer?
- f) Differentiate between mechanical and pneumatic transport of material.

**5. Attempt any FOUR of the following:****16**

- a) Explain the function of mechanical regulating devices.
- b) Write short note on magnetic metal extractors.
- c) Explain scutcher with neat labelled diagram.
- d) Draw and label cleanomet cleaner.
- e) State the advantages of card feeder.
- f) Explain five zone machine installation.

**6. Attempt any FOUR of the following:****16**

- a) Explain about fire eliminators.
  - b) Write short note on disposal of dirty waste.
  - c) Draw and label uniflock.
  - d) Draw and label rollers with
    - (i) spikes
    - (ii) toothed discs
    - (iii) fine saw tooth
    - (iv) blades
  - e) Describe working of step cleaner with neat sketch.
  - f) Define :
    - (i) cleaning degree
    - (ii) fibre stressing index
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