

312306

24225

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 answer 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) Define staple yarn and filament yarn.
 - b) State objectives of pre-ginning and ginning process.
 - c) State various function and operations of blow-room.
 - d) List down the factors influencing opening and cleaning in blow room process.
 - e) List down various zones in blow-room.
 - f) State the function of vision shield.
 - g) List down various auxiliary equipments used in a modern blow-room line.
 - h) List down method of transportation used in blow-room and compare them.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain various essential and desirable properties any fiber should possess to be useful for textile application.
 - b) List down different ginning machines you are aware of. Draw neat labelled sketch of any one ginning machine.
 - c) Describe with the help of diagram the working of one feeding and opening device used in blow-room.
 - d) Draw diagram of wooper bale breaker and label the parts.
- 3. Attempt any THREE of the following:** **12**
- a) Describe how cotton is cultivated in India.
 - b) State importance of baling and pressing. State standard dimension of bale.
 - c) Elaborate opening function of blow room with respect to –
 - i) Principle of opening
 - ii) Types of opening
 - iii) Degree of opening
 - iv) Intensity of opening.
 - d) Compare conventional bale opener with automatic bale opener.
- 4. Attempt any THREE of the following:** **12**
- a) List down various types of cotton harvesting. Compare various types of cotton harvesting methods.
 - b) Explain manufacturing of carded yarn with the help of a flow-chart. Explain objectives of each process in brief and output and input of each process.
 - c) Explain manufacturing of combed yarn with the help of a flow-chart. State output and input of each process.
 - d) Explain with the help of diagrams, principles of fiber cleaning.
 - e) Elaborate various accessories and auxiliary equipments used in modern blowroom department.

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

- a) Elaborate on various methods of cleaning and cleaning in blow room.
- b) State function of coarse cleaning machines. List down various coarse cleaning machines used in this category. Explain any one of them with the help of a neat diagram.
- c) State function of mixing/blending machine. Explain working of any machine in this category with help of a neat diagram.

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

- a) Describe with the help of a neat diagram the working of ERM cleaner.
 - b) With the help of a neat diagram, explain working of scutcher.
 - c) Calculate the production of a scutcher in a shift of 8 hours, if the speed of a 9 inch diameter lap roller is 12 rpm. Hank of lap delivered is 0.00146. Time lost in doffing and other operations is 9%.
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