

14115

3 Hours/100 Marks Seat No.

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:

20

- a) Explain in brief how fineness of fibre influences various quality parameters of yarn.
- b) Draw diagram of cross sections of mature, half mature and immature (dead) fibre of cotton. Explain in brief how maturity of fibre influence properties of yarn.
- c) Write a short note on cultivation of cotton in India.
- d) Compare mechanical picking with hand picking.
- e) Explain stack mixing.
- f) Describe various objectives of blow-room.
- g) List down the factors influencing opening and cleaning.
- h) State the importance of metal extractor. State its limitation.

2. Attempt any two:

16

- a) State in brief how fibre strength and fibre length influence yarn quality.
- b) Describe in detail how fibre slenderness ratio and fibre cleanness affect yarn quality.
- c) Describe with the help of a diagram working of a double roller gin.

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- a) Write a detailed note on baling and pressing of cotton.
- b) Classify feed apparatus into different categories. Explain working of any two of them with the help of a neat diagram.
- c) Describe construction of grid. State its function. Draw diagrams of various elements of grid. How grid is adjusted to control waste % extraction?

4. Attempt any two:

16

- a) List down 5 different zones (types) of a modern blow room machinery. Give an example of each type.
- b) Describe the working of automatic bale opening machine with the help of a diagram.
- c) Describe working of step cleaner with the help of a neat diagram.

5. Attempt any two:

16

- a) Describe working of unimix with the help of a neat diagram.
- b) Draw diagram of cleanomat cleaner and explain its working.
- c) Explain working of ERM cleaner with the help of a neat diagram.

6. Attempt any two:

16

- a) Draw diagram of scutcher and lable the parts. State function of each part.
- b) Give detailed account of control of material flow in a modern blow-room line.
- c) Describe the working of electronic extractor used in blow room line. State its importance.