

17692

16117

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) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following:** **20**
- a) Compare Process and Product layout.
 - b) List down various material handling equipments used in a textile mill.
 - c) Give labour compliment details of winding department.
 - d) What is Energy audit?
 - e) State the concept and importance of energy conservation.
 - f) Give job description of a Ringframe tenter.
 - g) State the causes of air pollution in a textile mill.
 - h) Write a note of significance of workload.

P.T.O.

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

- a) Enlist various factors to be considered while selecting site for a textile mill.
- b) (i) Describe various tools used for making and improving layout.
(ii) List down various steps involved in planning a layout.
- c) State various principles of material handling in a textile mill. Also elaborate the factors to be considered while selecting equipments for material handling.

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

- a) Give details of following processing parameters you would like to select for 30^s carded yarn.
 - (i) speeds of all machines
 - (ii) drafts of all machines
 - (iii) Efficiency for all machines
 - (iv) waste % at each m/c. (No calculation required for this question)
- b) Calculate the machinery required for a spinning mill having 25000 spindles and producing 30^s carded yarn.
- c) Draw a layout for the spinning mill mentioned in the above Question No. b. (Only for Ring frame department)

- 4. Attempt any TWO of the following:** **16**
- a) Calculate the machinery required in various departments of a spinning mill with 50000 spindles producing 40^s combed yarn.
 - b) List down various factors to be considered while selecting machinery in wearing preparatory and loom shed.
 - c) Give the details of following parameters you would like to select for producing
 - (i) Voile fabric
 - (ii) Bed sheeting
 - 1) speeds of all machines
 - 2) efficiency of all machines
 - 3) waste percentage at each department.
- 5. Attempt any TWO of the following:** **16**
- a) Calculate the number of machines required in different departments of a weaving mill producing 1 lakh meters of denim fabric per day on air jet weaving machine.
 - b) Draw a layout for a looms mentioned in above question.
 - c) Give details of power requirement of various departments of a weaving mill. Also give norms of the same.
- 6. Attempt any TWO of the following:** **16**
- a) (i) Furnish the details of labour compliment in various departments of a spinning mill.
 - (ii) State the importance of temperature and relative humidity in various department of textile mill.
 - b) Describe various methods and equipments used for humidification in a textile mill.
 - c) (i) Write a brief note on causes and control measures of accidents in textile mills.
 - (ii) Health hazards in a textile unit.
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