# TE-703 (Mill Management and Maintenance) B.Tech. 7th (CI3CS)

Time: 3 Hours Max. Marks: 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

**Note**: Attempt five questions in all, selecting one question from each section A, B, C and D. Section E is compulsory.

#### SECTION - 4

- 1. What is a plant location? How to select an ideal location for spinning industry? What is criterion for selecting suitable location and its significance for the spinning industry? (10)
- 2. What are the objectives of plant layout? Explain different types of layouts and also discuss layout plan for weaving industry.

  (10)

#### SECTION - B

- Why air conditioning and humidification is required in textile industry? Explain different types of humidification system used in textile mills. (10)
- 4. What do you understand by machine balancing in weaving industry. For the monthly production of 10,000 meter of shirting fabric, how many air-jet looms are required? (Take other data as per your suitability). (10)

#### SECTION - C

5. What is costing? Discuss elements of costing and how to develop grey fabric cost sheet in weaving industry. (10)

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6. What is the importance of energy consumption in textile industry? Explain the energy consumption in spinning machines.

(10)

### SECTION - D

- How to measure a good working environment in weaving industry? Discuss different types of noise and remedial measures to minimize noise of different department in textile mill. (10)
- Why machine maintenance is important in textile industry?
   Discuss about maintenance cost and maintenance schedules.
   (10)

## **SECTION - E**

- 9. Attempt all questions:
  - (a) What is combined layout? Explain with suitable example.
  - (b) Define the plant layout.
  - (c) What is the importance of location in textile business?
  - (d) What is heat load?
  - (e) Discuss the importance of machine balancing in spinning industry.
  - (f) What do you understand by the overhead cost?
  - (g) Enlist any two-material handling equipment's name which is used in weaving industry.
  - (h) Importance of lighting in textile industry.
  - (i) Distinguish between product layout and process layout.
  - (j) What is TPM?  $(10\times2=20)$