



# 17577

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) *Assume suitable data, if necessary.*
  - (5) *Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.*

**Marks**

1. Solve any 5 :

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- 1) Explain in brief any 2 types of production techniques.
- 2) State the objectives of method study.
- 3) What is meant by critical path method ? Give example.
- 4) State any 4 points that should be considered while planning under uncertainty.
- 5) What are the various types of maintenance in garment industry ?
- 6) Explain the need and importance of quality control.
- 7) State the objectives of cost accounting.

2. Solve any 4 :

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- 1) Explain any 2 strategies used in production planning.
- 2) State the advantages and importance of flow charts in industrial engineering.
- 3) What is meant by Activity On Arrow (AOA) ?
- 4) Explain the structure and working of network diagrams.
- 5) What are the requirements of good maintenance ?
- 6) State any 2 definitions of quality.

3. Solve any 4 :

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- 1) Explain the terms 'range' and 'median'.
- 2) Explain any 2 methods of cost control with suitable examples.
- 3) Describe the process of dispatching in detail.
- 4) Write the meaning and importance of ergonomics.
- 5) Explain the Fulkerson's rule with relevant example.
- 6) What are 3-time estimates ? State its significance.

**P.T.O.**

**4. Write notes on any 4 :**

- 1) Break-even analysis.
- 2) Production control.
- 3) SIMO charts.
- 4) Activity On Node (AON) Network.
- 5) Probability of completion of project.
- 6) Cost control.

**5. Solve any 2 :**

- 1) Explain the meaning, working and importance of 'capacity planning calculations' and give suitable example.
- 2) Explain in detail 'Time Study' and state its importance.
- 3) Write about the forward and backward pass computations in detail.

**6. Solve any 2 :**

- 1) a) Differentiate between CPM and PERT.  
b) Differentiate between breakdown and preventive maintenance.
  - 2) Describe the various statistical tools for quality control in detail.
  - 3) Explain the advantages and economics of using maintenance.
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