No. of Printed Pages : 4 **MMPC–009**

MANAGEMENT PROGRAMME

(MP)

Term-End Examination

December, 2025

MMPC-009 : MANAGEMENT OF MACHINES AND MATERIALS

Time : 3 Hours *Maximum Marks : 100*

Note : *(i) Attempt any* ***five*** *questions.*

(ii) All questions carry equal marks.

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1. Illustrate and explain the framework of planning, organizing and control within a production system using an appropriate diagram.

2. Define plant layout and explain why it is considered a strategic decision. Discuss the key objectives and advantages of an effective plant layout, along with the common factors that lead to layout problems.

3. What is aggregate production planning and why is it important in meeting customer demand ? Explain how production strategies such as constant workplace level affect inventory and shortage costs. You may use examples.

4. Explain the role of economic and risk analysis in evaluating alternate capacity plans. How does the certainty or uncertainty of demand growth influence capacity planning strategies ?

5. What are the factors that cause organizations to redesign their products or services ? Describe some of the ways a product designer can use CAD.

6. What is an exchange curve (or optimal policy curve) in inventory management ? Explain how it helps in determining an optimal trade-off between total inventory investment (TI) and total number of orders (TO) in a year. Why is this trade-off important for effective inventory policy ?

7. Write short notes on any *three* of the following :

   (a) Locational Break-even Analysis

(b) Function Analysis System Technique (FAST)

(c) Brisch System in Codification

(d) Identification of Waste

(e) Programme Evaluation and Review Technique (PERT)

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