## MANAGEMENT PROGRAMME (MP)

## Term-End Examination December, 2023

## MS-05 : MANAGEMENT OF MACHINES AND MATERIALS

Time: 3 Hours Maximum Marks: 100

Weightage: 70%

Note: (i) Attempt any four questions

- (ii) All questions carry equal marks.
- 1. (a) Discuss the different forms of transformation processes that may be adopted in a production system commenting on their production rate, flexibility and cost of installation and operation.
  - (b) What are the steps in the design of a process layout? On what criteria would you evaluate alternative layout designs?

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2. (a) Why is it more difficult to increase productivity of a service system as compared to a production system?

- (b) Operations Management is essentially a function concerning planning, organizing and controlling of production/operations system for customer satisfaction at the lowest cost. Elucidate with examples.
- 3. (a) It may generally be said that Value Analysis leads to cost reduction. Can you give some specific benefits which may be expected when VA is effectively used within a manufacturing organisation?
  - (b) What do you understand by capacity and capacity planning? Differentiate between licenced capacity and rated capacity.
- 4. (a) Discuss the following factors for an effective job design:
  - (i) Technological factors
  - (ii) Environmental factors
  - (b) What is the fundamental difference between the use of acceptance sampling plans and process control charts?

- 5. (a) Differentiate between wastivity and productivity. Explain whether reducing wastivity and increasing productivity imply one and the same thing.
  - (b) What do you understand by automated storage and retrieval? For what kind of goods do you think such systems should be appropriate?
- 6. Write short notes on any *four* of the following:
  - (a) Value addition in production
  - (b) Learning curve
  - (c) Matrix organisation
  - (d) Control charts
  - (e) Signature analysis
  - (f) Taxonomy of waste