

Roll No.

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Total No. of Questions : 08

M.Tech (ME) (Sem.-1)

OPERATIONS MANAGEMENT

Subject Code : MTME-104

M.Code : 74718

Date of Examination : 20-01-2023

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

- 1. Attempt any FIVE questions out of EIGHT questions.**
- 2. Each question carries TWENTY marks.**
1. (a) What do you mean by Operations Management? Define characteristics of Production/Operations Management.
- (b) Discuss in brief, the different production systems giving their salient characteristics.
2. (a) Explain the technological considerations in product and process design.
- (b) Discuss in brief Macro and Micro process design.
3. (a) What are various types of forecasting techniques? Discuss their relative advantages and disadvantages in logistics and supply chain prospective.
- (b) Explain qualitative techniques of forecasting & give their advantages and limitations.
4. (a) How do planning and scheduling help in optimizing production?
- (b) Define aggregate planning. Explain different approaches and strategies used in aggregate planning.
5. (a) Define material requirement planning. Discuss in detail, the steps involved and benefits of MRP.
- (b) What do you mean by MRP II? What is difference between the MRP and MRP II? What are the benefits of MRP II System application?
6. (a) Explain the steps involved in job shop control.
- (b) Explain in detail ERP and various elements of ERP giving an example.

7. (a) *“Location and layout of production facility are important decisions from the point of view of finance and accounting, human resources, MIS, operation and marketing.”*
Discuss.
- (b) What are the objectives of good layout? Distinguish between product layout and process layout giving their advantages and applications.
8. **Write short note on any two of the following :**
- (a) JIT & JIT-II
- (b) Softwares used in demand forecasting
- (c) Principles and types of material flow
- (d) Scheduling and management of multi-stage manufacturing systems.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.