Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 08

M.Tech. (Mechanical Engineering) (Manufacturing Engineering & Automation) (Sem.–1)

OPERATIONS MANAGEMENT

Subject Code : MTME-104

M.Code : 91565

Date of Examination : 21-01-23

Time : 3 Hrs. **Max. Marks: 100**

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carry TWENTY marks.**

l. a) Define operation management. Give the classification of production systems.

b) Explain in brief the function of operation management.

c) Define productivity. List the factors affecting productivity.

2. a) What is forecasting? List the steps involved in forecasting process.

b) List the elements of good forecasting techniques.

c) Explain the moving average and simple exponential smoothing method of forecasting.

3. a) Explain :

i) Design capacity

ii) System capacity.

b) List the various factor influencing plant location.

4. a) What is aggregate planning ? What are the objectives of aggregate planning?

b) ''*Product layout is better than the process layout.*'' Do you agree with the statement? Support your answer.

5. a) What are the functions of operation scheduling?

   b) List the common strategies used in aggregate planning. Explain **any two.**

6. a) Define Material Resource Planning (MRP) with the help of block diagram and explain the various inputs to an MRP system.

   b) What is ERP? Write the benefits and limitations of ERP.

7. a) Differentiate between the qualitative and quantitative techniques of demand forecasting.

   b) Differentiate between the micro and macro process design.

8. a) Write the type of manufacturing systems and their characteristics.

   b) Explain Manufacturing Resource Planning.

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