CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐ **18ME56**

Fifth Semester B.E. Degree Examination, July/August 2022
Operations Management

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. Define Operations Management and explain briefly how the production systems are classified. **(10 Marks)**
    b. Explain briefly with a schematic model the functions within Business Organisation and Operations Management. **(10 Marks)**

OR

2   a. What is Decision Making? Briefly explain the characteristics of Operation decisions **(10 Marks)**
    b. Explain Break Even Analysis with necessary equations, graphs and assumptions. **(10 Marks)**

Module-2

3   a. Define Forecasting and explain briefly the steps involved in Forecasting process. **(10 Marks)**
    b. Briefly explain the components of Time Series method with sketches. **(10 Marks)**

OR

4   a. Explain the following methods :
        i) Exponential Smoothing   ii) Linear Regression. **(10 Marks)**
    b. A Company adopts method of least squares to develop a linear trend equation for the data as shown in the table below :

Year (X)	1	2	3	4	5	6	7	8	9	10	11
Shipment in (Tons) (Y)	2	3	6	10	8	7	12	14	14	18	19

Calculate the trend for the year 12 and 20. **(10 Marks)**

Module-3

5   a. Define the following : i) Design capacity   ii) System capacity
        iii) Capacity planning   iv) Facility layout. **(10 Marks)**
    b. Sketch and explain any two types of layouts. **(10 Marks)**

OR

6   a. List and explain the various factors influencing plant location. **(10 Marks)**
    b. Sketch and explain the different types of layouts. **(10 Marks)**

Module-4

7   a. Define Aggregate and Master Scheduling. Explain the Pure strategies used for aggregate planning in brief. **(10 Marks)**
    b. Discuss the techniques of aggregate planning process with flow chart. **(10 Marks)**

OR

8   a. What are the objectives and importance of Aggregate Planning?   (10 Marks)
    b. Explain Master Scheduling Methods.   (10 Marks)

Module-5

9   a. What is Material Requirement Planning? What are the various steps involved in the
        implementation of MRP.   (08 Marks)
    b. What are the benefits and limitations of MRP?.   (06 Marks)
    c. Define CRP and BOM.   (06 Marks)

OR

10 a. What is Supply Chain Management? What are its functions?   (08 Marks)
    b. Briefly explain Make (or) Buy decisions.   (06 Marks)
    c. Explain the different approaches to SCM.   (06 Marks)

* * * * *