

Code: ME7T2

**IV B.Tech - I Semester – Regular/Supplementary Examinations
MARCH - 2021**

**PRODUCTION PLANNING AND CONTROL
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1.

- a) List out the elements of production control.
- b) Briefly explain the types of forecasting methods?
- c) What are the activities of dispatcher?
- d) Give a short note of VED analysis.
- e) What is BOM and ERP?
- f) List out the limitations of Routing.
- g) List the objectives of Line balancing.
- h) Describe master scheduling
- i) Give a short note on chase strategy.
- j) What is meant by Dispatching?
- k) A XYZ refrigerator supplier has experienced the following demand for refrigerator during past five months. Find out the demand forecast for the month of July using five-period moving average.

Month	February	March	April	May	June
Demand	20	30	40	60	45

PART – B

Answer any **THREE** questions. All questions carry equal marks.

$$3 \times 16 = 48 \text{ M}$$

2. a) What are the objectives and functions of PPC? Explain in detail. 8 M
- b) Discuss the factors which affect the choice of forecasting method. 8 M
3. a) The demand for an item is 7000 units/year. The cost of unit is 10. The holding cost is given as 20% of unit cost. The ordering cost is 150 per order. Determine i) EOQ
ii) Number of orders per annum iii) Time interval between 2 consecutive cycles and iv) Minimum total Annual inventory cost. 8 M
- b) Explain the various elements of JIT and KANBAN system. 8 M
4. a) Explain in detail the Routing procedure. 8 M
- b) Distinguish between loading and scheduling. 8 M
5. a) What is aggregate planning? Explain the pure strategies of aggregate planning. 8 M

b) What is line balancing? Explain different types of line balancing. 8 M

6. a) Differentiate between centralized and decentralized dispatching procedures. 8 M

b) Discuss about the applications of computers in production planning and control. 8 M