PVP 14

Code: ME7T2

IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2019

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) Write the objectives of PPC.

   b) What is forecasting? Explain with an example.

   c) Write short notes on types of production.

   d) Write short notes on inventory control systems.

   e) What is VED analysis? Explain with an example.

   f) What is bill of materials?

   g) Write short notes on scheduling.

   h) What are the important objectives of line balancing.

   i) List the inputs of aggregate planning.

   j) Write short notes on dispatching.

   k) Write important applications of computers in PPC.

PART – B

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

3 x 16 = 48 M

2. a) What are the important functions of PPC? Explain in detail. 8 M

b) What is forecasting and explain simple and moving averages methods with examples. 8 M

3. a) Explain EOQ model for inventory management in a production plant. 8 M

b) How did JIT revolutionized the production planning? Explain. 8 M

4. a) Explain 8 M

i) important factors affecting routing and

ii) steps of routing procedure.

b) Seven job tasks have to be assigned to two machines (Ml and M2) as per the order shown in Table 1. From the data, find the sequence that minimizes the total elapsed time and find the minimum time by using Johnsons rule. 8 M

Table 1: Job allotment to machines and respective time (Min) required to complete the tasks

Task	M1	M2
A	2	3
B	1	5
C	2	2
D	5	1
E	3	7
F	5	1
G	2	1

5. a) What is aggregate planning? Explain various objectives of aggregate planning. 8 M

b) Explain line and chase strategy. 8 M

6. a) Explain centralized and decentralized dispatching in connection with mass production industries. 8 M

b) Discuss important steps involved in dispatching procedure with example? 8 M