



R18 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VIII Semester Regular Examinations, June 2022

Subject code: 2P8CA

PRODUCTION PLANNING AND CONTROL
(MECHANICAL ENGINEERING)

Maximum Marks: 70

Date: 17.06.2022 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Draw the internal organization of PPC.
- 2 Explain Delphi procedure of forecasting.
- 3 How are the 'A' class items controlled?
- 4 Do JIT enhances return on investment (ROI)? Explain.
- 5 Define line balance efficiency.
- 6 Explain routing procedure.
- 7 What are the assumptions in flow shop scheduling?
- 8 State the standard scheduling policies.
- 9 State the steps involved in dispatching.
- 10 What are the methods to take corrective action in follow-up?

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 A. Briefly explain the pre-processing of PPC. [5M]
B. State the principles of good production planning and control. [5M]
OR
- 12 What is forecasting? State and explain principles of forecasting. [10M]
- 13 A. Derive the expression for EOQ when the demand of the item is uniform, the production rate is infinite and no stocks out are allowed. [5M]
B. Explain the various elements of JIT. [5M]
OR
- 14 A. What is MRP? What are the principles of MRP explain briefly? [5M]
B. Alpha industry estimates that it will sell 12000 units of its product for the forthcoming year. The ordering cost is Rs. 100 per order and the carrying cost per unit per year is 20% of the purchase price per unit. The purchase price per unit is Rs.50. Find i) Economic Order quantity, ii) No. of orders per year and iii) Time between successive orders. [5M]

- 15 A. What are the various methods of line balancing? Explain RPW method. [5M]
B. Define routing and its significance. Explain about the important components of routing sheets? [5M]
- OR
- 16 A. Explain various steps involved in routing procedure. [5M]
B. Explain various functions of Routing. [5M]
- 17 A. Bring out any four differences between scheduling and loading. [5M]
B. What are different types of scheduling. Explain. [5M]
- OR
- 18 Explain the use of Line of Balance (LOB) in Production control. Explain in detail the steps involved in LOB. [10M]
- 19 A. What are different types of follow-ups. Explain. [5M]
B. The PPC function dispatching “ is often misunderstood.” Explain the correct meaning and duties of the dispatching function. [5M]
- OR
- 20 A. State and explain activities of dispatcher. [5M]
B. Explain the need of existence of follow up procedure. [5M]