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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ME) (2011 Onwards E-II) (Sem.-7,8)

OPERATIONS MANAGEMENT

Subject Code : DE/ME-2.3

Paper ID : [A3077]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**Q1 Explain briefly :**

- a) Enlist all major inputs required for production (4Ms)
- b) Product architecture
- c) Productivity
- d) Market survey for forecasting
- e) Bill of material
- f) Routing
- g) Objectives of material management.
- h) Control Charts
- i) Role of data base management systems in MIS
- j) Predictive maintenance

SECTION-B

- Q2 State the differences between process and cellular type production systems.
- Q3 Explain in detail the exponential smoothening method of forecasting.
- Q4 Define SQC. Describe briefly the techniques of SQC used in inspection during process control.
- Q5 Define Scheduling. What are principles of scheduling? State the differences between forward and backward scheduling.
- Q6 Discuss the role of computers in MIS.

SECTION-C

- Q7 Write short notes on the following :

- a) Functions of production planning
- b) MRP

- Q8 a) For a given item there is a constant demand rate. Yearly demand is 6000 units.

The price of the item is Rs. 60 per unit. The ordering cost is Rs. 150 and inventory carrying cost is 20%. What is the optimal ordering policy?

- b) Derive an expression for economic order quantity (EOQ), stating the assumptions made.

- Q9 Describe the need of maintenance planning for a production system and identify the benefits of an effective maintenance planning system.