

**B.Tech. MECHANICAL ENGINEERING
(COMPUTER INTEGRATED
MANUFACTURING)**

Term-End Examination

00063

December, 2018

BME-013 : PRODUCTION MANAGEMENT

Time : 3 hours

Maximum Marks : 70

Note : Attempt any *five* questions. All questions carry equal marks. Use of scientific calculator is allowed.

1. (a) What are the different types of facility layout ? List the advantages and disadvantages of product layout. 7
- (b) Name various factors affecting the site location decision for a service facility. Describe the centre of gravity method for evaluating the alternatives of locations. 7
2. (a) What do you understand by Program Evaluation and Review Technique (PERT) ? Differentiate between CPM and PERT. 7
- (b) What do you understand by demand forecasting ? Explain the regression and correlation methods of forecasting. 7

3. (a) Discuss the various aggregate production planning strategies. 7
- (b) What are the main objectives of material requirement planning? 7
4. (a) What are the factors involved in the successful implementation of Enterprise Resource Planning (ERP)? 7
- (b) Discuss the economies of scale with the help of a suitable example. 7
5. (a) What is bullwhip effect? What problems does it create in a supply chain? Discuss. 7
- (b) Discuss the importance of inbound and outbound logistics in a supply chain. 7
6. (a) In a company, the annual requirement of a product is 800 units, ordering cost per order is ₹ 125, 20% per year is the inventory carrying cost and the cost per unit is ₹ 100. Calculate the Economic Order Quantity (EOQ). 7
- (b) List the different types of job-sequencing rules. Explain the steps of any one of them. 7

7. Write short notes on any *two* of the following topics :

$2 \times 7 = 14$

- (a) ABC Analysis
 - (b) Just-In-Time (JIT)
 - (c) Sampling Plans
 - (d) Logistic Management
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