

Sem-VI / Production & operation
Management

PROD
14-12-15

Q.P. Code : 6429

(3 Hours)

[Total Marks : 80

N.B

1. Question No. 1 is Compulsory
2. Answer any three from remaining five Questions.
3. Draw figure, charts, block diagram wherever required.
4. Numbers to right side indicates the marks.



Q.1. Attempt any four questions from the followings. 20

- A Compare Job Production and Mass Production System.
- B Compare P order and Q order inventory system.
- C List down functions of Production Planning and Control.
- D List down characteristics of Good Product Design.
- E Derive the expression for Economic Order Quantity.

Q.2. A List the various factors considered while selection of Plant Location. 10

B List the various factors considered for Ergonomic Design. 10

Q.3. A What is Lean Manufacturing? List and elaborate various types of waste in connection with Lean Manufacturing. 10

B A Manufacturer has to Supply his customers 3600 Units of his Product per year. Shortages are not permitted. Inventory Carrying Cost Amounts Rs. 12/- Unit Per Annum. The Set-Up Cost per run is Rs. 80. Find
(i) Economic Order Quantity. (ii) Optimum Number of Orders per Annum.
(iii) List the assumptions of EOQ model.

Q.4. A The demand for a product in each of the last five months is given. 10

Month	1	2	3	4	5
Demand	13	17	19	23	24

- a. Use a two month moving average to generate a forecast for demand in month 6
- b. Apply exponential smoothing with a smoothing constant of 0.9 to generate a forecast for demand in month 6.

B Complete the MRP table with Lot size=5, Lead Time=2 and 1 level

10

Periods	0	1	2	3
Gross requirements		6	11	9
Scheduled receipts		2	3	0
Projected on hand	10			
Net requirements				
Planned order receipts				
Planned order releases				

- Q.5. A Write detail note on Green Manufacturing and Sustainable Development. 10
 B What is Selective Inventory Control and on what criteria it is grouped? 10
- Q.6. Write short notes on any four of the followings 20
 A Supply Chain Management.
 B Enterprise Resource Planning.
 C Maynard Operations Sequence Technique.
 D Group Technology.
 E Product Design and Product Development.