

**TERM END EXAMINATION - JUNE, 2019**  
**P.G Diploma in Management (PGDIM)**  
**Advance Diploma in Management (ADIM)**  
**Diploma in Management (DIM)**

Course Code MP-06 DIM-06
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**Operations Management**

**Time - 3 Hours**

**Full Marks - 100**

*(Answer All the questions from Group-A , any four questions from Group - 'B', any four questions from Group - 'C' and any two questions from Group - 'D')*

**Group 'A'**

**Q. No. 1** *Answer all the questions, each within one or two sentences*

**Marks: 1 × 10= 10**

- a) What is conversion process?
- b) What is a new product?
- c) What is job shop?
- d) What is product rating?
- e) What is re-ordering point?
- f) What is fixed-position layout?
- g) What is stock-out cost?
- h) What is customer's risk?
- i) What is AQL?
- j) What is np-chart?

**Group 'B'**

**Q. No. 2** *(Answer any four questions each within 100 words)*

**Marks: 5 × 4= 20**

- a) Write on the world's operations management by 2020.
- b) Model of operations management
- c) Break-even Analysis in the contest of location selection.
- d) Discuss various factors affecting plant layout.
- e) Discuss the importance of holding cost in the contest of inventory management.
- f) Explain how to measure supply chain performance.

**Group 'C'**

**Q. No. 3** *(Answer any four questions, each within 200 words)*

**Marks: 10 × 4= 40**

- a) Discuss the recent trends in operations management.
- b) Explain various continuous production systems.
- c) Distinguish between process layout and product layout
- d) Sumac industry purchases spark plugs at the rate of Rs. 25 per piece. The annual consumption of spark plug is 18,000 nos. The ordering cost is Rs. 250 per order, carrying cost is 25% per annum and lead time is 7 days.

Decide:

- i. The Economic Order Quantity
- ii. The Re-order Point
- e) Briefly explain the acceptance sampling method.
- f) Construct Mean chart and Range chart of the following  
Sum of mean of all sample is = 585  
Sum of the ranges of all samples = 410  
Number of sample sub-groups = 20  
Sample size = 5 each  
 $A_2 = 0.58, D_4 = 2.28, D_3 = 0$

**Group 'D'**

**Q. No. 4 (Answer any two questions, each within 300 words)**

**Marks: 15 × 2= 30**

- a) Describe Median models for plant location selection with suitable example.
- b) Samples of 4 each were taken for study the manufacturing process of a company, the measurement of which were noted as follows:

Sample no	Measurements in mm			
1	20	22	25	24
2	18	23	20	26
3	24	25	22	20
4	23	21	26	24
5	24	25	24	21

Construct a control chart for process mean.

- c) What is supply chain management? Discuss on supply chain design strategy.