

R15
Code No: 723AA
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA III Semester Examinations, December - 2019
PRODUCTION AND OPERATIONS MANAGEMENT
Time: 3 hours
Max.Marks:75
Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A
5 × 5 Marks = 25

- 1.a) What is Operations Management? What are organizational sub-systems? [5]
- b) What are the various stages in New Product Development process? [5]
- c) What are the objectives of good Plant Layout? [5]
- d) Explain about Johnson's rule for scheduling. [5]
- e) What is Inventory? What are the different types of inventory control methods? [5]

PART - B
5 × 10 Marks = 50

2. What is Production? Explain about types of Production systems. [10]
- OR**
- 3.a) What is Productivity? Explain the difference between production and productivity. [5]
 - b) Write a note on world class manufacturing? [5]
- 4.a) What is the purpose of Product Analysis? [10]
 - b) What is Product process and design?
 - c) What is Process Planning? What are the responsibilities of process planning engineer?
- OR**
- 5.a) What are the advantages and applications of Standardization? [5]
 - b) What is Optimization? What are the advantages of value analysis? [5]
6. What are the factors affecting Plant Location and Plant Layout? [10]
- OR**
- 7.a) Calculate weighted score for Location-1 and Location-2 and decide which location has to be selected for the plant based on the weighted score?

Factor	Factor weight	Factor score	
		Location-1	Location-2
Cost of living	10	5	2
Proximity to family	20	4	2
Climate	30	2	5
Transportation system	10	5	3
Quality of life	30	3	5

- b) Furniture company is considering two possible sites for its new plant. The annual fixed and variable costs for each site are:

Location	Fixed costs/year (Rs.)	Variable costs (Rs.)
VIJAYAWADA	5,50,000	50/unit
BOMBAY	10,50,000	65/unit

If annual demand for is expected to be 50,000 units, which is the best location? [5+5]

8. What is Scheduling? What are the different types of Schedules? Explain. [10]

OR

9. Describe about Job Shop Scheduling? [10]

10. Explain about

a) Economic Order Quantity

b) ABC Analysis

[5+5]

OR

11. Carry out ABC analysis on the following sample of 8 items from an inventory and ascertain the status:

Items	1	2	3	4	5	6	7	8
Annual Usage (Units)	300	700	30	800	50	220	160	800
Unit Cost (Rs.)	15	25	10	25	14	50	35	15

[10]

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