

R17

Code No: 743AA

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 meant by production? Explain the systems concept of production? [5]
- b) What are the responsibilities of process planning engineer? [5]
- c) What are the factors influencing plant location? Explain? [5]
- d) Explain about Johnson's algorithm? [5]
- e) What is meant by inventory? Explain about material materials planning? [5]

PART - B**5 × 10 Marks = 50**

2. What is a 'strategy'? Explain about various types of strategies? [10]
- OR**
3. Explain about types of production systems? [10]
4. Explain about
 - a) Pilot plant development?
 - b) Capacity planning?[5+5]
- OR**
5. Explain
 - a) Steps in process planning?
 - b) Steps in product design?[5+5]
6. The following are the potential sites for setting up of ice factory. Using the following details, decide which site can be picked up for setting up of ice factory?
Annual demand is 3,000 units.
Selling price per unit is Rs. 3,00/-

Sites	Fixed cost/year (Rs.)	Variable cost (Rs.)
MUMBAI	50,000	135
AHEMADABAD	1,00,000	110
BANGALORE	1,20,000	120

[10]

OR

7. Write about advantages and disadvantages of group technology? [10]

8. What is scheduling? Explain about schedule generation? [10]
- OR**
9. What is meant by job shop scheduling? Explain various types of schedules? [10]
- 10.a) What are the objectives of Integrated Material Management?
- b) Discuss briefly the procedure to be followed for purchasing materials. [5+5]
- OR**
- 11.a) Calculate Economic Order Quantity (EOQ) from the following:
- | | |
|--------------------|-------------|
| Annual consumption | 6,000 units |
| Cost of ordering | Rs. 60 |
| Carrying costs | Rs. 2 |
- b) From the following particulars, calculate the Economic Order Quantity (EOQ):
- | | |
|---|-------------|
| Annual requirements | 1,600 units |
| Cost of materials per units | Rs. 40 |
| Cost of placing and receiving one order: | Rs. 50 |
| Annual carrying cost for inventory value 10%; carrying cost is estimated at cost price of material. | [5+5] |

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