

**FACULTY OF MANAGEMENT****M.B.A. III – Semester (CBCS) Examination, December 2018****Subject: Operations Management****Paper Code – MB – 301****Time: 3 Hours****Max.Marks: 80****PART – A (5x4 = 20 Marks)****[Short Answer Type]****Note: Answer all the questions in not more than one page each.**

- 1 Operations strategy
- 2 Service facility layout
- 3 Service management
- 4 Bin Card, Double Bin and Stores Ledger.
- 5 Classification, codification, simplification and standardization of materials.

**PART – B (5x12 = 60 Marks)****[Essay Answer Type]****Note: Answer all the questions by using internal choice in not exceeding four pages each.**

- 6 a) What is process design? Explain factors effecting process design.  
**OR**  
b) Define product life cycle and process life cycle. Discuss its process.
- 7 a) What is Plant Layout? Discuss the various types of Plant Layout highlighting their merits and demerits.  
**OR**  
b) From the following data, find the sequence that minimizes the total elapsed time. Also calculate the machine idle time and Job Waiting time.

Jobs	A	B	C	D	E	F	G
M-1	7	12	11	8	13	12	11
M-2	8	7	6	9	5	8	7
M-3	10	11	9	15	9	10	16

- 8 a) What is service management? Explain various types of service operations.  
**OR**  
b) What is work measurement? Discuss various techniques and methods.
- 9 a) What is materials management? Explain its importance and advantages.  
**OR**  
b) Explain the concept of materials requirements planning. Its advantages and disadvantages.

- 10 a) The annual requirement of an item in a firm is 1,44,900 units. The cost of placing an order is Rs. 450 and the carrying cost per unit per annum is 10% of the cost of the item. The cost per unit of the item is Rs. 36. You are required to find the EOQs the number of orders to be placed in a year with the above data and when (i) the cost of the item decreases by 12% and (ii) the cost per order increases by Rs.75.

**OR**

- b) A manufacturing firm uses 12 items in its process. The annual requirement of the items and their cost is given below:

Item	Annual Requirement (units)	Cost per unit (Rs.)
A	9000	140
B	3600	600
C	240	2300
D	4300	340
E	656	945
F	656	945
G	18,000	50
H	11,500	80
I	3,500	540
J	600	1800
K	175	3200
L	480	2150

You are required to classify the materials into ABC categories and give a graphical presentation of the same.

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