

Register Number:

M.B.A. DEGREE EXAMINATIONS: NOV/DEC 2010

Fourth Trimester

MASTER OF BUSINESS ADMINISTRATION

MBA518: Production Management

Time: Three hours

Maximum Marks: 100

Answer All the Questions:-

PART A (1 x 20 = 20 Marks)

1. Identify the various Input and Output elements in the following production system

- (i) University
- (ii) Restaurant
- (iii) Automobile workshop
- (iv) Departmental store
- (v) Hospital

PART B (10 x 2 = 20 Marks)

- 2. List the functions of operations management
- 3. List the types of production systems
- 4. List the different costs involved in inventory management
- 5. What is the significance of “price discount “in EOQ
- 6. List any three factors for measuring the performance of forecasting techniques
- 7. List any three MRP output reports
- 8. List the activities of Scheduling
- 9. Define critical path
- 10. What is meant by work sampling?
- 11. What is meant by Resource leveling in project management?

PART C (4 x 15 = 60 Marks)

12. a) Bring out the significance of material handling .What are the common material handling technologies practice.

(OR)

- b) A dealer supplies you the following information with regard to a product dealt by him

Annual demand	10000 units
Ordering cost	Rs 10 / order
Inventory carrying cost	20% of value of inventory per year
Price	Rs 20/unit

The dealer is considering the possibility of allowing some back order (shortage) to occur. He has estimated that the annual cost of back ordering will be 25% of the value of inventory.

- (i) What should be the optimum number of units of the product he should buy in one lot?
- (ii) What quantity of the product should be allowed to be shortage if any?
- (iii) Would you recommend to allow back ordering? If so what would be the annual cost saving by adopting the policy of back ordering?

13. a) Explain the methods of quantitative and qualitative forecasting

(OR)

b) Write short on

- (i) Capacity planning
- (ii) Standardization
- (iii) Expert system

14. a) There are seven jobs each of which has to go through the m/c's A and B in the order AB.

Processing times in hrs are given as

Job	1	2	3	4	5	6	7
M/C A(hrs)	3	12	15	6	10	11	9
M/C B(hrs)	8	10	10	6	12	1	3

Determine the optimal sequence of these jobs that will minimize the total elapsed time. Also find the idle time for M/C'S A and B

(OR)

b) Consider the following table

Activity	Optimistic time	Most likely time	Pessimistic time
1-2	5	8	10
1-3	18	20	22
1-4	26	33	40
2-5	16	18	20
2-6	15	20	25
3-6	6	9	12
4-7	7	10	12
5-7	7	8	9
6-7	3	4	5

- (i) Draw the Net work
- (ii) Find the critical path
- (iii) What is the probability that the project will be completed in a scheduled time of 41.5 weeks?

15. a) A Project schedule has the following characteristics

Activity	Time in weeks
0-1	2
1-2	8
1-3	10
2-4	6
2-5	3
3-4	3
3-6	7
4-7	5
5-7	2
6-7	8

- (i) Construct the net work
- (ii) Identify the critical path
- (iii) Determine the Total, free and independent float

(OR)

b) Write short notes on

- (i) work measurement techniques
- (ii) Types of facility layout design
