

**First Semester M.B.A. (Distance Mode) Degree Examination,
June/ July 2009
(New Scheme)**

M.B.A. DP : 107 : Production and Operation Management

Time : 3 Hours

Max. Marks : 80

Section - A

Answer the following questions. Each one carries 2 marks.

(2x5=10)

1. a. What is 'production management'?
- b. What are 'quality circles'?
- c. What is 'ROL'?
- d. Define 'Scheduling'.
- e. What is 'acceptance sampling'?

Section - B

Answer any FIVE of the following. Each one carries SEVEN marks

(5x7=35)

2. Examine Japanese contribution to production and operations management.
3. Differentiate between forward scheduling and backward scheduling with suitable examples.
4. What are the different dimensions of a quality product.
5. Examine the steps involved in implementation of six sigma.
6. Explain the concept of product structure.
7. Explain the various types of charts used in work study.

Section - C

Answer the following questions. Q.No. 8 and 9 carry 10 marks each and Q.no. 10 carries 15 marks.

(10+10+15=35)

8. a) A small coffee shop serves coffee to an average 224 customers each day. The coffee shop is open from 6.00 am to 2.00 pm and three employees make-up the total staff.
 1. What is the productivity?
 2. On Wednesday 232 customers were served. Only two employees worked full day and one worked for only two hours. What is the productivity?

OR

- b) The following details are available for two locations A and B.

	Location A	Location B
Fixed cost	3 lakhs	8 lakhs
Variable cost	Rs. 36/ unit	Rs. 32/unit
Revenue	Rs. 68/unit	Rs. 68/unit

Sales volume is expected to be 25,000 units / year which location is better.

9. a) A local seller for a national tyres company expects to sell approximately 9600 radial tyres. Annual carrying cost is Rs 16/ year and ordering cost in Rs 75. The seller works for 288 day a year.

1. What is EOQ ?
2. No. of orders per year
3. Inventory cost
4. What is the minimum inventory ?

OR

- b) Five jobs A,B, C, D, E are to be processed. The data is as below :

Jobs	Processing time (Days)	Due date (in days from now)
A	4	6
B	17	20
C	14	18
D	9	12
E	11	12

Use SPT (SOT) and least slack priority rule and calculate

1. Total completion time
2. Avg. flow time
3. Avg. job lateness.

10. Rolls of coiled wires were monitored 18 rolls have been examined and the number of defects per roll has been recorded. Use a suitable chart to determine whether the process is under control

Sample	No. of defects	Sample	No. of Defects
1	3	11	3
2	2	12	4
3	4	13	2
4	5	14	4
5	1	15	2
6	2		
7	4		
8	1		
9	2		
10	1		