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RF-4315-16

M. B. A. (Sem. II) (FT) & (Eve) (ATKT) Examination

April / May – 2010

Production & Operations Management

(Old Course)

Time : **3** Hours] [Total Marks : **100**

RF-4315

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ M. B. A. (SEM. 2) (FT) & (EVE) (ATKT)

Name of the Subject :

☛ PRODUCTION & OPERATIONS MANAGEMENT (OLD)

☛ Subject Code No. : 4 3 1 5 ☛ Section No. (1, 2,.....) : 1

Seat No. :

Student's Signature

(2) Answers to the two sections to be written in two separate answer books.

(3) Question 1 and Question 5 are compulsory. Attempt any two full questions from question 2-4 and two full questions from 6-8.

(4) Figures to the right indicate full marks.

1 (a) Define Operations and Production Management. Discuss the importance of production function in an organization. **10**

(b) Location A would result in fixed costs of Rs. 3,00,000, variable cost of Rs. 63 per unit and revenues of Rs. 68 per unit. Annual fixed costs at location B are Rs. 8,00,000 with variable cost of Rs. 32 per unit and revenue of Rs. 68 per unit. Sales volume is estimated to be 25,000 units/year. Which location is more attractive? **8**

2 What do you mean by Demand Forecasting? List the Forecasting Methods and explain any two methods of demand forecasting along with their advantages and disadvantages. **16**

3 (a) Find the sequence that minimizes total elapsed time required to complete the following tasks on two machines. Also determine idle time on each machine and total elapsed time. **10**

Task	A	B	C	D
Machine - 1	2	5	3	9
Machine - 2	6	8	7	4

(b) Write a short note on Materials handling systems. **10**

4 Write short notes (any two) **16**

(i) Process layout

(ii) New Product Development

(iii) Factors affecting the selection of a new facility

(iv) Productivity

(v) Value engineering/Value Analysis

(vi) Assembly Line Balancing.

RF-4316

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Name of the Examination :

☛ **M. B. A. (SEM. 2) (FT) & (EVE) (ATKT)**

Name of the Subject :

☛ **PRODUCTION & OPERATIONS MANAGEMENT (OLD)**

☛ Subject Code No. : **4 3 1 6** ☛ Section No. (1, 2,.....) : **2**

Seat No. :

Student's Signature

(2) Answers to the two sections to be written in two separate answer books.

(3) Question 1 and Question 5 are compulsory. Attempt any two full questions from question 2-4 and two full questions from 6-8.

(4) Figures to the right indicate full marks.

5 (a) A company uses annually 48000 units of raw material which costs Rs. 1.20 per unit. Ordering costs is Rs. 45 and carrying cost is 15% of purchase price. Find out economic order quantity. **8**

(b) What is inventory and why do we need to have inventory control? Explain ABC analysis technique of inventory control. **10**

6 (a) One unit of A is composed of 2 units of B and 3 units of C. Each B is composed of one unit of F. C is made of one unit of D, One unit of E and two units of F. Prepare a product structure tree. Suppose 100 units of A is required, How many units of B,C,D,E and F are required? **6**

(b) Write a short note on Material Requirement Planning (MRP). **10**

7 Using the following data relating to 10 samples of 5 item each, calculate the control limits for the x bar and R chart and check whether the process is in control or not. (Take A2 = 0.577, D3 = 0 and D4 = 2.116) **16**

Sample	Dimensions in Cms.				
1	1.04	0.98	0.99	1.00	1.01
2	0.98	0.98	0.98	1.03	1.01
3	1.01	1.02	1.02	1.04	0.98
4	0.97	0.99	1.01	0.95	0.97
5	1.04	1.02	1.01	1.00	1.00
6	1.03	1.01	0.97	0.98	0.99
7	1.00	1.02	0.98	1.01	1.01
8	1.00	1.01	0.99	0.99	0.95
9	0.99	1.02	1.03	1.01	0.97
10	0.96	0.95	1.02	1.03	1.01

8 Write short note (any two) **16**

(i) Total Quality Management

(ii) Time Study

(iii) Maintenance Management

(iv) Just In Time Manufacturing (JIT)

(v) Purchasing Management

(vi) Aggregate Production Planning.
