First Semester M.B.A Degree Examinations
December 2015/ January 2016
(Directorate of Distance Education)

(Old Scheme/New Scheme)

PAPER–MBA DP 107: PRODUCTION AND OPERATION MANAGEMENT

Time: 3hrs.]   [Max. Marks: 75/80

SECTION – A

Answer the following, each question carries TWO marks: 5 x 2 = 10 Marks

1. a) What do you mean by Product Layout?

    b) Define the term Operation Management.

    c) What is Bill of Material?

    d) State the meaning of ABC Analysis.

    e) What is Aggregate Planning?

SECTION – B

Answer any FIVE of the following, each question carries SIX marks: 5 x 6 = 30 Marks

2. Discuss the characteristics of modern production and operation function.

3. Location A would result in fixed costs of Rs.5,00,000 variable cost of Rs.83 per unit and Revenue of Rs.88 per unit. Annual fixed costs at location B are Rs.10,00,000 with variable costs of Rs.52 per unit and revenue of Rs.88 per unit. Sales volume is estimated to be 25,000/year. Which location is most attractive?

4. Explain the functions of store –keeping manufacturing unit.

5. Discuss the purchasing cycle in detail.

6. Describe the benefits of implementing JIT system.

7. Calculate the standard production per shift of 8 hours duration, with the following data. Observed time per unit = 5 minutes, Rating Factor = 120%, Total Allowances = 331 3% of normal time.

SECTION – C

(10 + 10 + 15 = 35)

Answer the following question. Question No.8 and 9 carries TEN marks each.
Question No.10 carries FIFTEEN marks:

8. a) A factory uses annually 24,000 units of a raw material which costs ₹ 1.25 per unit. Placing each order costs ₹25 and carrying cost is 65 per year of the average inventory.

    i)   Find the EOQ and the total inventory cost including the cost of material.

    ii) The factory works for 320 days a year. If the procurement time is 10 days and safety stock is 450 units, find the re-order point, the minimum, maximum and average inventories.

OR

   b) Discuss the various functions carried out under production planning and control and state their purpose in brief.

9. a) For the following data, construct a fraction of defective chart.

Group No.	Sample Size	No. of Defectives
1	32	2
2	32	3
3	50	3
4	50	2
5	32	1
6	80	4
7	50	2
8	50	0
9	32	2
10	32	1

OR

   b) Briefly describe the various steps involved in method study procedure.

10. Explain the different types of Layout with suitable illustration.

SECTION – D
(Compulsory for New Scheme Students)

Answer the following question, which carries FIVE marks: 1 x 5 = 05 Marks

11. a) Write a note on ISO 9000 Requirement.

OR

   b) Explain the Six Sigma implementation steps.

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