

(i) Printed Pages: 2 Roll No.

(ii) Questions : 14 Sub. Code :

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Exam. Code :

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Bachelor of Commerce 5th Semester

(1129)

PRODUCTION AND OPERATION MANAGEMENT

Paper—BCM-504

Time Allowed : Three Hours **[Maximum Marks : 80]**

Note :— (1) Attempt any *four* questions from Section-A.
(5×4=20)

(2) Attempt any *two* questions each from Section-B and
Section-C. (15×4=60)

SECTION—A (5×4=20)

1. Define the concept of Logistic Management.
2. Write down the steps in Production Process.
3. Explain ABC analysis of Material Management.
4. Write down key points/tips for Network Diagram (PERT/CPM).
5. Calculate the EOQ, Re-order period, No. of orders, P. Year and Total Variable Cost of Inventory.

Demand = 50,000 units p.a.

Ordering Cost = Rs. 3 p. order, Inspection Cost is
Rs. 12 p. order, Interest Cost Rs. .06 p.u. p.a.

Deterioration and Obsolescence Cost Rs. .004 p. unit p.a.

Storage Cost Rs. 1,000 p.a. for 50000 units.

6. Find optimal sequence as to minimize the total processing time on assembling — polishing machine :

Items	1	2	3	4	5	6
Assembling	8	10	6	7	9	14
Polishing	5	9	10	8	12	8

SECTION—B (15×2=30)

7. Activity	1-2	1-3	1-4	2-5	3-5	3-6	3-7	4-6	5-7	6-8	7-8
Duration (Days)	3	8	9	4	7	11	5	7	3	6	6

Find critical path and all floats/slacks.

8. Differentiate between PERT and CPM.
9. “Production and operation management is the management of an organisation’s production system, which converts inputs into the organisation’s products and services.” Discuss.
10. What is sequencing problem ? Give its essential characteristics.

SECTION—C (15×2=30)

11. A factory requires 1500 units of an item per month, each costing Rs. 27. The cost per order is Rs. 150 and the inventory carrying cost is 20% of the average inventory. Find out the EOQ and the no. of orders per year.

Would you accept a 2% price discount of a minimum supply quantity of 1200 units ?

Compare the total cost in both cases.

12. What are the various components of supply chain of a business unit ? Explain.
13. Explain :
- JIT
 - Time Study Vs. Motion Study
 - Logistics Management.
14. Define the terms set-up cost, holding cost and shortage or penalty cost as applied to an inventory problem.