(i) Printed Pages: 3 Roll No.

(ii) Questions :9 Sub. Code: 0 8 3 2 Exam. Code: 0 0 1 5

Exam. Code: Lot

Bachelor of Commerce 5th Semester

(2123)

PRODUCTION AND OPERATION MANAGEMENT

Paper: BCM-504

Time Allowed: Three Hours] [Maximum Marks: 80

Note:—Attempt any **four** short answer types questions from Section-A. Attempt **two** questions each from Sections-B and C respectively.

SECTION-A

I. (a) Determine the sequence for the 5 jobs that will minimise the elapsed time :

Job	1	2	3	4	5 11	
Machine 1	6	2	10	4		
Machine 2	3	7	8	9	5	

- (b) What is the purpose of capacity planning?
- (c) Write principles of a good facility layout.
- (d) What is work study?
- (e) Explain EOQ under Inventory Control.
- (f) Differentiate between logistic management & supply chain management.
 4×5=20

SECTION—B

II. From the following data find out all floats along with determining critical path in the network diagram:

Activity	1-2	2-3	3-4	2-4	4-5	5-7	4-6	5-6	6-7
Time	8	9	7	15	4	1	4	5	4

- III. Briefly explain the objectives of production & operations management.
- IV. What is demand forecasting? Explain the various methods of demand forecasting.
- V. Define PERT & CPM. What are similarities & differences between them?
 2×15=30

SECTION-C

- VI. A company manufactures a special product which requires a component 'Alpha'. The following particulars are collected for the year 2008:
 - (i) Annual demand of Alpha : 8000 units
 - (ii) Cost of placing on order : Rs. 200 per order
 - (iii) Cost per unit of Alpha : Rs. 400
 - (iv) Carrying Cost % p.a. : 20%

The company has been offered a quantity discount of 4% on the purchase of 'Alpha' provided the order size is 4000 components at a time.

Your are required to:

- (i) Compute the economic order quantity offer
- (ii) Advise whether the quantity discount offer can be accepted.

VII. Explain:

- (a) JIT
- (b) VED analysis
- (c) Lead time & Re-order level.
- VIII. What is logistic management? What are the various issues & challenges for logistics management in India?
- IX. What is purchase management? Explain in detail the concept of centralized vs decentralised purchasing. 2×15=30