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
Machine 1	6	2	10	4	11
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. $4 \times 5 = 20$

0832/PB-10838   1   [Turn over

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 ? $2 \times 15 = 30$

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