MBA – INFORMATION TECHNOLOGY MANAGEMENT (MBAITM)

Term-End Examination

00394

December, 2014

MBMI-010 : SUPPLY CHAIN MANAGEMENT

Time : 3 hours   *Maximum Marks : 100*

Note :

(i) In Section I, it is **compulsory** to answer all the questions.

(ii) In Section II, answer any **five** questions.

(iii) Assume suitable data and / or draw suitable sketches wherever required.

(iv) Graph sheets would be provided by the invigilator on request.

(v) Italicized figures to the right indicate maximum marks.

SECTION I

1. A company uses 50,000 units of an item annually. The item costs ₹ 1.20. The company operates 250 days in a year and procurement time is 10 days. Each order costs ₹ 45.00 and the inventory carrying cost is 15% of the annual

average inventory value. If the safety stock is 500 units, find Economic Order Quantity (EOQ), the Reorder level, minimum, maximum and the average inventory.   *5+2+1+1+1=10*

2. A marketing manager of a firm has to decide the price of a new product as per the cost involved in production and the margin of profit. Based on the customer base, the market competition and the policy of the firm, etc., the sales volumes at four different price levels are furnished in the following table for four different regions, A, B, C, and D :

I (₹ 999)	II (₹1,099)	III (₹ 1,009)	IV (₹ 909)
A 12	C 19	B 10	D 8
C 18	B 12	D 6	A 7
B 22	D 10	A 5	C 21
D 12	A 7	C 27	B 17

Further, the marketing manager has to establish a significant influence of price levels over sales volumes. Carry out the analysis and suggest to him suitably.   *10*

3. A manufacturer has two products P and Q, both of which are produced in two steps by machines M and N. The process times/hundred for the products on the machines are :

PRODUCT	MACHINE		CONTRIBUTION PER 100 UNITS
	M	N	
P	4	5	10
Q	5	2	5
Available hours	100	80	—

The manufacturer is in a market up-swing and can sell as much he can produce of both products. Determine an optimum product by Simplex Method.   *10*

SECTION II

4. (a) Write a short note on the three major challenges for the business managers of the 21st century to ensure the efficiency of Supply Chain Management. *8*

   (b) Provide an outline of the Supply Chain Integration journey. *6*

5. (a) How is the customer service a key interface between marketing functions and logistic functions ? *6*

   (b) Discuss the important and desirable outputs of the value-chain that can be used for a better understanding of the cost/price relationship. *8*

6. (a) Describe the need of Business Process Re-engineering in Supply Chain Management. *6*

   (b) Discuss in detail various Supply Chain Strategies. *8*

7. (a) What is the concept of Captive Vendor Management (CVM) ? Mention the relative advantages and disadvantages of Single and Multiple Sourcing. *4+5=9*

   (b) How can quality assurance be attained in different stages of procurement in the Supply Chain ? *5*

8. (a) What are the important issues concerning the distribution network of a Supply Chain ? Explain how distribution network influences the customer loyalty and performance of the Supply Chain. *4+5=9*

(b) "Demand Management is an important function of obtaining, interpreting and controlling the customer orders for Supply Planning" – Explain. *5*

9. (a) Discuss in brief the dynamics of Inventory Management. *5*

(b) Write a short note on Competitive Purchasing, Just-in-Time (JIT) Purchasing and International Purchasing. *3+3+3=9*

10. (a) Describe the need for coordination and integration of various activities related to supply chain and mention the role of various major IT-tools and their interrelated utilization in the IT-enabled systems. *4+5=9*

(b) Write the features of Enterprise Resource Planning (ERP) package in relevance to the systems of Supply Chain Management. *5*

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