

VPM's
DR VN BRIMS, Thane
Programme: MMS (2016-18) (Operations)
Third Semester Examination October 2017

Subject	SUPPLY CHAIN MANAGEMENT		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	2	Date	26.10.2017

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q1) 20 Marks (Compulsory)

(A) A confectionary manufacturer orders spare parts with the vendor generally at Rs.5/- per unit. The annual requirement of an item is 30,000, having ordering cost of Rs.500 per order and inventory carrying cost at 20%. The revised schedule given by vendor is as follow:

Order Quantity	Price/Unit Rs.
0-3,000	5
3001-6000	4
6001-9000	3
Over 10,000	2

What is the optimum quantity to be purchased and at what price? Give the reasons.

(B) 'X' and 'Y' coordinates of seven retail locations of a retail chain is given below along with the volume to be shipped. Using the center of gravity method, identify the coordinates of the optimal location of the warehouse.

Retail Outlet	X	Y	VOLUME
L	4	10	80
M	3.5	15	100
N	4	6	120
O	10	2	130
P	16	6	100
Q	8	5	150
R	14	13	90

(C) Electronic company needs 60,000 pieces of aluminum bars per year. Each bar costing Rs.100/-. Cost of ordering is Rs.1200 per order per annum. Inventory carrying cost is 12% per annum. If vendor gives 5% discount for ordering 5,000 bars at a time or more, what is incremental benefit or loss to the company? Give reasons.

(D) Classify the following items into ABC class with 70:20:10 % approximately based on value.

Item Code	Annual consumption units	Price/Unit Rs.
C001	600	500
C002	600	4000
C003	600	2000
C004	600	3000
C005	600	4000
C006	1200	500
C007	600	500
C008	1200	1000
C009	600	1500
C010	600	500

Attempt Any FOUR from the Remaining SIX Questions

Q2) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (A) Define Logistics and draw schematic diagram of logistical inputs, outputs and process.
- (B) Discuss in brief the various logistical activities.
- (C) What are various policy guidelines for controlling A-B-C items from selective inventory control?

Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (A) What are the similarities and differences in Global and Domestic supply chain?
- (B) What are 'Industry Globalization Drivers'?
- (C) What is 'Mass Customization'?

Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (A) What are transport modes available? Discuss advantages of each mode.
- (B) Discuss various transport networks and their advantages.
- (C) What is inventory turnover and its implications on firm's profitability?

Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (A) What is e-business? How and why it is important in today's context?
- (B) Explain 'Reverse Auction' and e-commerce in detail.
- (C) Discuss Bull-whip effect and the remedies to control them.

Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

Write SHORT NOTES (ANY 2)

- (a) Postponement
- (b) Cross Docking
- (c) Value added customer service
- (d) Perfect Order

Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (A) What is 'Physical Distribution'? How many Channels choices one has? Explain.
- (B) Explain different parameters available for measuring performance of 'Supply Chain'.
- (C) What is the difference between 3PL and 4PL?