



CII Institute of Logistics

PGDSCM & Certificate Programs

Semester-end Examination – December 2008

TRANSPORTATION & DISTRIBUTION MANAGEMENT

Time : Three Hours

Marks : 100

Part A

Answer all questions (20 x 1 = 20 Marks)

- 1) *Cross Docking* decreases the following:
 - a) Inventory cost
 - b) Warehousing cost
 - c) Manufacturing cost
 - d) Trip related cost
- 2) *LCL* stands for:
 - a) Levelled Cargo Load
 - b) Low level Cargo Load
 - c) Less than Container Load
 - d) None of the above
- 3) A *Distribution Centre* (DC) hold inventories to the:
 - a) Maximum level
 - b) Minimum level
 - c) Safety level
 - d) None of the above
- 4) Mobile Data Terminals (MDT) display:
 - a) Transportation planning
 - b) Demographic analysis
 - c) Automatic vehicle location
 - d) Despatch messages
- 5) Which of the following is NOT related to *Carrier's decision* in transportation management:
 - a) Trip related cost
 - b) Quantity related cost
 - c) Vehicle related cost
 - d) Service level cost
- 6) *TOFC* stands for :
 - a) Trailer On First Car
 - b) Transshipment Of Foreign Consignment
 - c) Trailer On Flat Car
 - d) None of the above
- 7) A *Distribution channel* involves ;
 - a) Middleman
 - b) Retailer
 - c) Distributor
 - d) One or more of the above
- 8) Generally *Freight* is determined by:
 - a) Weight
 - b) Volume
 - c) Value
 - d) All these
- 9) Effectiveness of *utilization of space* in a warehouse is measured by:
 - a) Floor space utilization
 - b) Cubic space utilization
 - c) Bay width vs. Aisle width
 - d) Bay length vs. Building length
- 10) In the case of freight by railways, PWB stands for:
 - a) Paid Way Bill
 - b) Parcel Way Bill
 - c) Passenger train Way Bill
 - d) Permanent Way Bill
- 11) *Cross docking* bypasses Transport activity by transferring items directly from the receiving dock to shipping dock (True / False)
- 12) *Milk run* is a route in which a truck delivers a product from a single supplier to multiple retailers (True / False)
- 13) *Land bridge* is a service in which foreign cargo crosses a country en route to another country (True / False)
- 14) *Freight consolidation* is an activity carried out in Warehousing management (True / False)

- 15) *Perishable* items to be issued from warehouse on FIFO method
(True / False)
- 16) *Stowability* refers to how the product dimensions can be positioned in Warehouse performance. (True / False)
- 17) *Channel mapping* is used in Transportation network planning
(True / False)
- 18) *Transit warehouse* function is permanent in nature (True / False)
- 19) *Air transportation* offers faster delivery lead time at a lower cost
(True / False)
- 20) *Distribution channel* structure is influenced by the target market and the product
(True / False)

Part B

Answer any four (4 x 10 = 40 marks)

- 1) Warehouses and Distribution centers are not the same – Substantiate this statement?
- 2) One of the FMCG manufacturing companies in India wants to achieve a wider market penetration through one or more of the following various distribution channels. Discuss merits and demerits of the following conventional types of the distribution channels:-
 - a) General distributors
 - b) Exclusive distributor
 - c) Bulk indenters [Malls, Clubs, Factories etc.]
 - d) Direct delivery to Retailers
 - e) C&F agent
- 3) Describe the criteria which determine the design of a Warehouse? What are the principles to be kept in mind while estimating the storage space in the design of a warehouse?
- 4) What are the key features, advantages and disadvantages of a multi-channel distribution model?
- 5) What are the different modes of Transportation and explain briefly the mode selection?

- 6) Briefly explain Advanced Fleet Management System (AFMS), its functions and benefits to User and Fleet owner?

Part C

Case Study (40 marks)

M/s Eastern Electric (EE) is a major appliance manufacturer with a large plant in Chicago area. EE purchases all the motors for its appliances from West view motors, located near Dallas. EE currently purchases 120,000 motors each year from West view at a price of \$120 per motor. Demand has been relatively constant for several years and is expected to stay that way. Each motor averages about 10 pounds in weight, and EE has traditionally purchased lots of 3,000 motors. West view ships each order within a day of receiving it. At its assembly plant, EE carries a safety inventory equal to 50% of the average demand for motors during the delivery lead time. EE's annual cost of holding inventory is 25%. Shipments by truck have a transit time of 3 days whereas by train it is 5 days.

The Plant Manager at EE has received 3 proposals for transportation as follows:-

| <i>Carrier</i> | <i>Range of Qty shipped(cwt)</i> | <i>Shipping cost(\$/cwt)</i> |
|--------------------|----------------------------------|------------------------------|
| AM Railroad | 200+ | 6.50 |
| Northeast Trucking | 100+ | 7.50 |
| Golden Freightways | 50 - 150 | 8.00 |

1cwt = 100 pounds

Which Transporter will the Plant Manager choose? Support your answer with (1) annual holding cost (2) annual transportation cost and (3) annual total cost for the three organizations.
