INDIAN INSTITUTE OF MATERIALS MANAGEMENT Post Graduate Diploma in Materials Management Graduate Diploma in Materials Management

JUNE-2010

PAPER 12 Packaging & Distribution Management

Date: 14.06.2010 Time: 10.00 AM to 1.00 PM Max Marks: 100 Duration: 3 hrs

Total Marks:32

Total Marks:48

Total Marks :20

Instructions:

1. PART A: Answer all questions. Each sub-question carry 1 mark.

2. PART B: Answer any 3 questions out 5 questions of 16 marks each

- 3. PART C: Case Study (Compulsory)
- 4. Please read the instructions on the answer sheet carefully.

<u>PART A</u>

Q.1 State whether the following statements are 'TRUE' or 'FALSE'.

- 1. Roll on and Roll Off ships are used for transportation of vehicles.
- 2. Dispatch by sea involves additional inventory costs charges.
- 3. Zero packaging is used for heavy equipment.
- 4. For inert packaging air is replaced by Nitrogen.
- 5. For Surgical goods sterile and throwaway packs are used.
- 6. Minimum freight charges by sea is for one cubic meter by volume.
- 7. Vibration is experienced during the transit only.
- 8. Fork lift trucks is used for moving palletized loads and for stacking.

Q. 2. Write full form of the following terms .

- 1. I. T. C
- 2. D.W.T
- 3. T.E.U
- 4. V.C.I
- 5. P. V. C
- 6. E. T. D
- 7. FAO of UN
- 8. SCM

Q.3 Match the following: (1 mark each)

1	I.S.P.M 15	А	Determining cargo rate
2	C.I.F	В	With cooling facility
3	Bar Coding	С	Enhancing ripening
4	Dessiccant	D	Determining sea freight
5	Class Rates	Е	Treatment of wood
6	Volume freight ratio	F	Necessity for a super market
7	Ethylene vapours	G	Railways
8	Reefer containers	Н	Moisture Absorption

Q. 4. Fill in the blanks:

- 1. I.C.D assist and
- 2. TREM card is compulsory for transport of goods.
- 3. In super market billing is achieved by scanning the
- 4. New generation container ships can carry around T.E.U
- 5. Packaging is a Salesman.
- 6. TRAMP ships operate on and charter.
- 7. C & F agent offers service of and
- 8. Surcharges are levied by shipping lines.

PART B

- **Q.5** Discuss merits and demerits of packing products for Domestic Markets, Export Markets for the following
 - a) Consumer products and consumer durables
 - b) Industrial products

Q.6 Write short notes on any four of the following

- a) Types of cargo ships
- b) Active packaging
- c) Air cargo consolidation
- d) Palletization
- e) Packaging of flowers
- f) U.N certification of hazardous goods

- Q.7 In designing "Packaging", for distribution, discuss the type of hazards to be taken into consideration.
- Q.8 What factors can affect freight rates by sea as compared to air freight.
- Q.9 Elaborate various methods adopted in retailing for sales promotion.

Part C – (Compulsory)

Note: The rates per unit indicated are for guidance only and not for quantification.

Q.10 A customer from Europe is interested in importing 50000 units of a automobile component weighing 1 kg. the estimated price, is around 6000 Rs. / unit. He desires a JIT door delivery through a third party logistics provider.

The quantity per delivery could vary from a minimum of 500 units or above. The requirement per month varies from 3500 to 4500 units per month, thus necessitating a warehouse storage at 3pl.

For deciding shipments by either Air or Sea, or combination the exporter has to take into consideration the following.

- (a) During manufacturing "capacity 500 units per day, economic run 10000 units".
- (b) Packaging charges per unit by Sea Rs 15, by Air Rs 10.
- (c) Voyage by Sea roughly 30 days and two sailings are available per month.
- (d) Air shipment maximum 3 days, two flights are available per week.
- (e) Freight charges for full container load of 16000 units by sea is Rs 10, and for less than container loads for minimum of 1000 units is Rs 12 per unit.
- (f) Freight charges by Air minimum of 1000 units, could vary from 100 to 120 Rs per unit, depending upon availability of Air cargo consolidation or size of consignment.
- (g) Borrowing rate from bank 12%

How will the supplier plan dispatches at minimum cost, taking into consideration the cost of inventory holding at various stages.

- a) Manufacturing
- b) Finish goods storage
- c) Inventory during Transit
- d) Warehousing at 3PL