# INDIAN INSTITUTE OF MATERIALS MANAGEMENT <br> Post Graduate Diploma in Materials Management Graduate Diploma in Materials Management 

JUNE-2010
PAPER 12
Packaging \& Distribution Management
Date: 14.06.2010
Max Marks: 100
Time: $\mathbf{1 0 . 0 0}$ AM to $\mathbf{1 . 0 0} \mathbf{~ P M}$
Duration: 3 hrs

## Instructions:

1. PART A: Answer all questions. Each sub-question carry 1 mark. Total Marks:32
2. PART B: Answer any 3 questions out 5 questions of 16 marks each Total Marks:48
3. PART C: Case Study (Compulsory) Total Marks :20
4. Please read the instructions on the answer sheet carefully.

## PART A

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 | A | Determining cargo rate |
| :--- | :--- | :---: | :--- |
| 2 | C.I.F | B | With cooling facility |
| 3 | Bar Coding | C | Enhancing ripening |
| 4 | Dessiccant | D | Determining sea freight |
| 5 | Class Rates | E | Treatment of wood |
| 6 | Volume freight ratio | F | Necessity for a super market |
| 7 | Ethylene vapours | G | Railways |
| 8 | Reefer containers | H | Moisture Absorption |

## Q. 4. Fill in the blanks:

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

