



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management
Graduate Diploma in Materials Management
PAPER No. 12
PACKAGING & DISTRIBUTION

Dec 2016

Date : 18.12.2016

Time : 10.00 a.m to 1.00 pm

Max. Marks :100

Duration : 3 Hrs.

Instructions:

1. From Part A – Answer all questions (compulsory). Each sub questions carries 1 mark.

2. From Part B – Answer any 3 questions out of 5. Each question carries 16 marks.

3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions

4. Please read the instructions given in the answer sheet

Total : 32 Marks

Total : 48 Marks

Total: 20 Marks

PART – A

32 marks

Attempt all questions. Each sub questions carries 1 mark

Q. 1. Fill in the blanks (Do not reproduce the statement)

- i) Packaging refers to a _____ in which the product reaches the end user.
- ii) The four most common causes of product damage are vibration, impact, puncture, and _____.
- iii) Plastic being _____ material can be tailored to cater to specific needs.
- iv) _____ refers to offering several related product in one package.
- v) Backbone of supply chain is _____.
- vi) _____ is a reusable transport and storage unit for moving products.
- vii) The main body of a vessel is called _____.
- viii) Bill of entry is document prepared by _____.

Q. 2. State True or False (Do not reproduce the statement).

- i) Packaging augments a product.
- ii) Unitization of packaging increases package density for efficient movement & handling.

- iii) Material handling creates form utility within the manufacturing environment.
- iv) Seam strength test is conducted to determine tear strength of materials.
- v) The tertiary level distribution plan lists the name of beneficiaries.
- vi) Two guiding principles of transportation are selection of mode and economy of distance.
- vii) IATA is a voluntary, non-exclusive, non-political, democratic organization open to any air traffic operating company for membership.
- viii) EAN 8 is a symbology used in RFID.

Q.3. Expand the following

- a) HDPE
- b) ESD
- c) IML
- d) COF
- e) LFA
- f) ULCC
- g) FPO
- h) RFID

Q.4. Match A & B

- | A | B |
|------------------------------|----------------------------------|
| 1) Protection of the product | a) Consumer |
| 2) Perfect Cube | b) Last mile |
| 3) Blister packaging | c) Select customer |
| 4) PFA | d) Intermodal transport |
| 5) Personal use | e) Technical aspect of packaging |
| 6) Distribution | f) Ideal package |
| 7) Contract carrier | g) Pre-formed |
| 8) CTD | h) Adulteration |

PART B

48 marks

Answer any 3 questions out of 5. Each question carries 16 marks

- Q.5. a) Explain different types of protective packaging.
b) Explain principles of material handling.
- Q.6. a) Explain how you select plastic material for food products.
b) Explain elements of packaging cost.
- Q. 7. Differentiate between
a) Apportionment and unitization
b) Straps and tapes
c) Palletization and containerization
d) Common carrier and contract carrier
- Q.8. a) Briefly explain what you understand by IATA.
b) Explain how bar codes and RFID help in optimizing profits.
- Q.9. Write short notes on any four
a) Package reinforcements
b) Packaging characteristics
c) Food degradation factors
d) Transport economics
e) Bill of exchange
f) Conveyor System benefits

PART C

20 marks

Q. 10 Case Study- compulsory

Q. 10. The Philips India is continuously in the process of cutting down its distribution costs. A major component of cost-cutting is being contributed by the redistributors, which the company appointed in 1997. They are helping Philips pare down its outlet servicing costs. For instance, of the 400 outlets that the company caters to in Mumbai, 300 are serviced by redistributors. Such a practice is particularly beneficial when low-cost products- like Rs 300/- transistor radio- need to be reached to far-flung rural outlets. Moreover, since Philips manufacturing units are spread across 4 locations in different parts of the country, using redistributors offers a major cost-benefit. After all, products no longer have to travel from the factories to distributors at the other end of the country – they only have to be delivered to the redistributors nearest to the plant.

As a result, Philips has halved its own inventory-carrying levels. Besides, with its redistributors taking care of the task of servicing the retail outlets, Philips' manpower needs are lower too. Explains Ravi Pisharody, General Manager (marketing, Audio), Philips, "we could never have served our 15,000 outlets profitably with a direct sales force.'

Philips is also lowering the fixed component of its distribution costs. It has 39 depots, but only 4 are company owned, and even these will be soon be franchised out. It has already franchised 8 exclusive showrooms, which it used to own and manage earlier. Additionally, it has embarked on a new infotech initiative which will help it get online information on the sales off-take at each of its dealers, and the stock position at its depots. This is helping Philips align its distribution to the actual requirements of its channels, and to fine-tune its cost further.

Questions:

- 1) Analyze the current distribution method used by Philips.
- 2) What are the benefits accrued to Philips by using redistributors in place of direct sales.
- 3) What are the advantages of using IT in distribution?
