



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management-3 years
Graduate Diploma in Materials Management

Dec 2019

PAPER No. 12
Packaging & Distribution

Date : 29.12.2019
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). Read the case study carefully and answer the questions

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. (Please do not reproduce the statement) [8 marks]

- i) Packaging plays a very important role in the marketing of a product as it is a part of the _____ product.
- ii) The _____ function of packaging simplifies the use of products by the customer.
- iii) Polyethylene films are _____ friendly as they are easy to recycle.
- iv) _____ packaging materials improve package performance.
- v) When several related products are packed in one package it is called _____.
- vi) Fundamental principles of transportation are economy of _____ and economy of _____.
- vii) _____ carriers provide transport to select customers.
- viii) _____ refers to the vehicle space utilization.

Q.2. State True or false (Please do not reproduce the statement) [8 marks]

- i) Packaging affects the image of a product and in turn would affect the purchase decision of the customer.
- ii) The technical aspect of packaging is concerned with the promotion of the product.
- iii) The containment function of packaging is primarily responsible for safeguarding the contents of a package.
- iv) Expensive and heat sensitive products are skin packaged.
- v) Cushioning is used to protect fragile items during shipment.
- vi) ESDS stands for Electro Static Discharge Stabilized.
- vii) Rack jobbers are wholesalers that manage inventory and merchandising for retailers.
- viii) Liner vessels operate on a fixed sailing schedule.

Q.3. Expand the following

[8 marks]

- i) PSA
- ii) WVTR
- iii) EMI
- iv) EMAA
- v) TLC
- vi) PIMS
- vii) ERAP
- viii) LLDPE

Q.4.Match A and B**[8 marks]**

A		B	
i)	Re-closability	a)	Coefficient of friction
ii)	Reinforcement	b)	Final mile
iii)	Slip properties	c)	Convenience
iv)	Green dot	d)	Transport & storage unit
v)	Distribution	e)	Enhance strength
vi)	Transportation	f)	Method of payment
vii)	Freight container	g)	Vegetarian food
viii)	Bill of exchange	h)	Time and place utility

PART B**48 marks****Answer any 3 questions out of 5. Each question carries 16 marks**

- Q. 5.** Explain the functions of packaging in detail with suitable examples. **[16 marks]**
- Q.6.** List various ancillary packaging materials along with its functions and characteristics. **16 marks]**
- Q.7.** a) Explain the seven elements of packaging costs. **[8 marks]**
b) Briefly explain the concept of transportation economics. **[8 marks]**
- Q.8.** a) Explain containerization list down its benefits. **[8 marks]**
b) Explain in detail RFID and its advantages. **[8 marks]**
- Q.9.** Write short notes any four (**4 x 4 = 16 marks**)
- Material handling
 - Bundling
 - Shelf life and its determination
 - Network design
 - Palletization
 - Bill of entry

PART C (compulsory)**20 marks****Q.10 Case Study**

Let's face it- the internet is still a relatively new phenomenon. When it comes to conducting E commerce, many organizations are stumbling around trying to determine how to handle day to day business generated by the internet. Unfortunately, however, it is their supply chain that are often required to pick up the slack- and take the flack if something goes awry.

Grainger realizes these challenges and actually welcomes them. In fact the company has uncovered myriad opportunities on the internet and has invested approximately \$6 million in the process. Most importantly it has built a sound distribution network that has been able to support these opportunities and demands.

Grainger first stepped into the web in 1995 with Grainger.com, when the customer have instant, 24 hour access to the companies 220000 products, including real time prices as well as local availability and shipping information. Although there is no minimum order requirement, the average order size on greinger.com is almost twice the average order size of those in Grainger's physical stores. Why? Simply stated, customers can shop 24 hours a day, 7 days a week; and, perhaps most importantly, they can spend as much time as they want shopping on the web site.

Early in 2000, grainger.com reached a milestone- a million dollar sales day. The company expects to do \$300 million in sales on the internet in 2000.

Questions:

- What are the advantages of on line sales over physical stores sales?
- What benefits are available to customers for on line shopping?
- What type of distribution channel is required for on line business?
- How returns and rejections are handled in E commerce?
