



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

June 2018

Date : 17.06.2018

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) _____ affects supply chain effectiveness as it represents an interface between the supply chain and its main customers.
- ii) The _____ function of packaging is primarily responsible for safeguarding the contents of a package.
- iii) _____ results in low density package.
- iv) Ancillary packaging materials are _____ packaging materials.
- v) Packaging _____ one brand from another brand.
- vi) _____ is the path through which goods and services forwarded from the vendor to consumer.
- vii) The lowest continuous line on the bottom of a ship is called the _____.
- viii) _____ vessel is a chartered ship prepared to carry anything anywhere.

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

- i) The augmented product takes the form of packaging, delivery arrangements, warehousing, customer advice, etc.
- ii) Increased package information decreases shipment delays and tracking of shipment.
- iii) Famous four P's are product, price, packaging, and promotion.
- iv) The technical aspect of packaging is concerned with creating sales appeal.
- v) Secondary and tertiary packages are unitized packages in logistical parlance.
- vi) The more expensive or exclusive the product the more expensive the package is.
- vii) Reinforcements enhance strength of packaging.
- viii) Bundling reduces unit cost of a product.

Q.3. Expand the following

- i) UPC
- ii) PVA
- iii) PSA
- iv) MVB
- v) EAA
- vi) EDP
- vii) LCM
- Viii) CTD

Q.4. Match A and B

A

- 1) Apportionment
- 2) Packaging
- 3) Perfect cube
- 4) Hedonic
- 5) Segmentation
- 6) Common carriers
- 7) Bar code
- 8) Coefficient of friction

B

- a) to do with pleasure
- b) Ideal package
- c) Purchase decisions
- d) Size for the end user
- e) UPC
- f) Slip properties
- g) Dividing the market
- h) Nondiscriminatory prices

PART B

48 marks

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

- Q.5. a) Describe how will you proceed with the design of a package for a liquid product.
b) What is package cushioning? Enumerate normally used cushioning materials with its properties.
- Q.6. a) What is the role and importance of labeling in food and pharmaceutical products?
b) Explain how will you reduce packaging cost?
- Q. 7. a) What do you understand by network design?
b) Briefly explain the transportation functions and principles.
- Q.8. Differentiate between
a) Apportionment and unitization
b) Straps and tapes
c) Common carrier and contract carrier
d) Bill of exchange and bill of entry.
- Q.9. Write short notes on any four
a) Caps and closures
b) Functions of packaging
c) Bundling
d) Palletization
e) RFID

PART C (compulsory)

20 marks

Q.10 Case Study

In addition to traditional economic and service benefits, warehouse operators must offer other value added services to remain competitive today.

The most common value-added services relate to packaging. Product is shipped to the warehouse in bulk or unlabeled form, so inventory is undifferentiated. Once a customer order is received, the warehouse operator customizes and releases the product. An example of this service is an automotive battery manufacturer that ships unmarked product to the warehouse. The warehouse is supplied with decals for the brand names the batteries are sold under. Once an order for a specific private label is received, the warehouse operator places the decals on the batteries and packages the product in a customized box. The customer receives customized product and packaging. The battery manufacturer reduces its inventory because less safety stock is required to support individual customer demand. A corresponding reduction in forecasting and production planning complexity is also achieved.

Warehousing can increase the value added by refining product packaging to better meet the needs of customers down the channel. For example, the warehouse may add value by stretch wrapping or changing pallets. This allows the manufacturer to deal with only one type of unitization while postponing commitment to specialized packaging requirements. Another example of warehousing value-added is the removal of protective packaging prior to product delivery to customers. This is a valuable service offering in the case with large appliances, since it is sometimes difficult for customers to dispose of large amounts of packaging.

Warehouse operators can also add value by changing packaging characteristics such as for and antifreeze supplier that ships in bulk quantities to the warehouse. The warehouse operator bottles the product to meet brand and package size requirements. This type of postponement minimizes inventory risk, reduces transportation cost, and can reduce damage especially for product packaged in glass.

Warehousing can also complete production activities to postpone product specialization and refine product characteristics. At times, reassembly at a warehouse may be done to correct a production problem. For example, automobile engines might be shipped to the warehouse. If a quality problem arises with the carburetors, they might be changed at the warehouse without returning each unit to the engine plant. In this case, the warehouse is operating as the last stage of production.

Another value-added service is climatizing products such as fruits and vegetables. Warehouse operators can promote or delay the ripening process of bananas depending on storage temperature. The product can be ripened as required by market conditions.

Value-added warehousing service can also provide market confidentiality. One importer re-labels a product for private brand customers. The relabeling is done after the product has entered the United States to prevent the supplier from identifying the ultimate customers of the importer.

Providing value-added warehousing services places a special responsibility on the warehouse operator or the distribution centre manager overseeing the contract operations. While outsourcing activities and operations may increase inventory effectiveness and operating efficiency it also takes key responsibilities outside the control of the firm.

Questions:

- 1) What are the value added services that a warehouse can offer?

- 2) What are the benefits of shipping unlabeled materials to a warehouse?
- 3) What is meant by postponement as discussed in this case study? What are its benefits?
- 4) What are the packaging functions carried out in a warehouse?
