



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

**June 2017**

**Date** : 17.06.2017

**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)**

**[ 8 marks ]**

- i) Causes of product damage result from transportation and \_\_\_\_\_.
- ii) \_\_\_\_\_ packaging materials are secondary packaging materials.
- iii) ESD stands for \_\_\_\_\_
- iv) The coefficient of \_\_\_\_\_ is related to the slip properties of plastic.
- v) Impulsive purchase of retail products heavily depends on \_\_\_\_\_
- vi) If a food item is sold by a name which belongs to another article of food it is said to be \_\_\_\_\_
- vii) The path through which goods and services travel from the manufacturer to the consumer is known as \_\_\_\_\_
- viii) 'Yaw' is the \_\_\_\_\_ a ship takes from its intended course.

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

**[ 8 marks ]**

- i) Packaging affects the purchase decision of the buyer.
- ii) Blister packaging is used for product that are not heavy and that needs moisture protection.
- iii) Pallet rack is a catalogue items.

- iv) Packaging of several related products in one package is known as unitization.
- v) Packaged mineral water is considered to be food.
- vi) Agent intermediaries take title while merchant intermediaries do not.
- vii) Contract carriers provide services for select customers.
- viii) Trip lease is a long term leasing of containers.

**Q.3. Choose correct answer from the multiple choices :**

**[ 8 marks ]**

- i) Palletized goods is an examples of which function of packaging
  - a) Unitization
  - b) Protection
  - c) Containment
  - d) Apportionment
- ii) Selection of packaging materials depends on all of the following factors except
  - a) Transportation & storage methods
  - b) Product specifications
  - c) Climate & culture
  - d) Market position
- iii) Material handling is concerned with all of the following except
  - a) Motion
  - b) Time
  - c) Quality
  - d) Space
- iv) Which of the following is not a type of polyethylene?
  - a) LDPE
  - b) HDPE
  - c) LLDPE
  - d) EHDPE
- v) Which of the following is not a marketing function of packaging?
  - a) Preservation
  - b) Attraction
  - c) Promotion
  - d) Differentiation
- vi) Who among the following does not influence transport decision
  - a) Shipper
  - b) Bank
  - b) Carrier
  - d) Consignee

- vii) A vessel that operates on fixed route between two ports is called
- |                  |                     |
|------------------|---------------------|
| a) Tramp vessels | b) Conference line  |
| c) Liner vessels | d) Independent line |
- viii) Who among the following is not a party to bill of exchange?
- |              |             |
|--------------|-------------|
| a) Exporter  | b) Importer |
| c) The payee | d) Customs  |

**Q.4.Match A and B**

**[ 8 marks ]**

- | A                    | B                       |
|----------------------|-------------------------|
| 1) Apportionment     | a) Shelf life           |
| 2) Fragile items     | b) Direct distribution  |
| 3) WVTR              | c) Consumer size        |
| 4) Industrial market | d) Cushioning           |
| 5) Stowability       | e) Intermodal transport |
| 6) Unit load         | f) Imported goods       |
| 7) Containerization  | g) Space utilization    |
| 8) Bill of entry     | h) Single entity        |

**PART B**

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

- Q.5. a) Explain the functions of packaging.  
b) What is package cushioning? Explain the characteristics of cushioning materials.
- Q.6. a) Explain the elements of packaging cost and packaging economics.  
b) Explain the label declarations requirement as per SWMA rules.
- Q. 7. a) What are the steps required to identify distribution costs?  
b) Explain the transportation economics.
- Q.8. a) Explain in your own words palletization and containerization.  
b) Compare air cargo and ocean cargo.
- Q.9. Write short notes on any four
- |                       |
|-----------------------|
| a) Bar codes          |
| b) Tramp vessels      |
| c) Distribution audit |

- d) Apportionment
- e) Bundling

## **PART C**

**20 marks**

### **Q. 10) Case Study- compulsory**

Before 1992, Goodyear took a hard-line approach to negotiating with transportation providers, focusing only on rates. The negotiation process was really an “annual rate battle” that consumed a great deal of time in terms of preparation and the actual negotiation process. Then Richard Adante, vice president of materials management for Goodyear realized how unproductive this approach was. “We realized there could be strength in sharing information, “ he says, “and developing a relationship where each party knew more about the other’s operation..... we realized that how we worked impacted their business and cost structure.”

Goodyear thus developed the following negotiating strategy:

1. Establish three-year, firm price LTL contacts.
2. Consolidate domestic LTL carriers, giving preferred carriers greater volume.
3. Pursue open-book negotiations with each party, studying the processes of each for ways to reduce total system costs.

While this innovative approach was initially not well received by carriers, Yellow Freight System responded. The two firms established a joint steering committee to reduce costs, agreeing that it would be dissolved after one year if either side was dissatisfied. They worked together to establish key indicators of the success of the relationship. The chosen indicators included:

- Yellow Freight’s operating ratio.
- Percent of on-time delivery compared with Yellow Freight’s average.
- Average days in transit
- Transfer data: cost per bill, per cwt.
- Pickup and delivery cost data: per bill, per cwt.

The relationship has progressed very positively. The two-way information sharing and joint management of continuous improvement efforts have created a commitment to the project and relationship.

#### **Questions:**

- 1) Elaborate what was the learning from this case study.
- 2) What was the need for Goodyear to develop a relationship with transport providers?

- 3) Evaluate Goodyear's negotiating strategy for LTL carrier and how it is going to benefit Goodyear.
- 4) Comment on the indicators identified for evaluating the relationship.

\*\*\*\*\*