



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM- 2 years

Dec 2022

PAPER No.18 (enrolment code –CPS)

PAPER No. 15 (enrolment code- PSM)

Packaging & Distribution Management

Date : 23.12.2022
Time : 10.00 a.m to 1.00 p.m.

Max. Marks : 70
Duration : 3 Hrs.

Instructions:

1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. **Total : 20 Marks**
2. From Part B – Answer any 3 questions out of 5 questions. Each question carries 10 marks. **Total :30 Marks**
3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions **Total: 20 Marks**

Part – A

[20 Marks]

Q.1 Fill in the blanks

[5 marks]

- 1.1 A ----- refers to tag, wrappers, a seal or an important message that contains product related information to be conveyed to custom
- 1.2 There are ----- essential drivers of packaging
- 1.3 -----agent is used to roughen thin plastic sheets so they do not stick together while processing.
- 1.4 ----- are used in transportation of bulk material like crude oil, iron ore
- 1.5 ----- is a receiving method in which products are directly delivered for storage without inspection

Q.2 State True or false

[5 marks]

- 2.1 Packaging provides an impression of the product or brand, quality etc. which helps develop buyer's trust
- 2.2 Biscuits can have packaging size of 200 or 250gms as well as 300gms
- 2.3 A lot of customers prefer large packaged goods and these are mainly targeted towards health-conscious younger generation
- 2.4 It is a complex task to generalise DC structure across industries
- 2.5 Tea should be packed inflexible packaging material such as laminates, LDPE or paper coated LDPE, to retain its freshness

Q 3 Expand the following

[5 marks]

- 3.1 FTC --Hint one of the act on labelling
- 3.2 PFA -- hint -to ensure purity of product
- 3.3 PLA --Hint for green packaging
- 3.4 SWMA
- 3.5 LASH

Q.4 Match the columns

[5 marks]

	Column A		Column B
4.1	Peelable coating	a.	Degree of freshness
4.2	Fresh check system	b.	Time and temperature indicator
4.3	Thermochromic ink	c.	Prevent corrosion
4.4	Plasticizer	d.	Prevent deterioration in storage
4.5	Antioxidants	e.	Increase flexibility

PART B

(30 Marks)

(Attempt any 3. Each question carries 10 marks)

Q.5.a. Define packaging? What are functions of packaging? Elaborate on packaging types with focus on auto parts exports **[5 marks]**

b. Write a note on role of additives in plastics .How PFA rule helps in safe use of plastics for food items?**[5marks]**

Q.6. a. Describe framework of packaging management, using rough, but neat sketch. What are the four kinds of packaging with emphasis on FMCG products? Underline the Importance of ancillary packaging?

[5 marks]

b. Describe essential drivers of packaging with examples. Elaborate more on 3rd (Design) and 5th (environment) drivers. Is there conflict between the two and if so, how do we contain the same (consider item like Domino Pizza)

[5 marks]

Q.7. Write short notes on any Two of the following. [2X 5=10 Marks]

- a. Push Pull strategies in distribution
- b. Contributions of distribution networks
- c. Transportation modes
- d. Note on Successful E commerce packaging
- e. Eco friendly Packaging

Q.8.a Write on distribution functions with special emphasis on value added resellers (VARs). [5 marks]

b Describe essentials of distribution systems and costs involved. How good planning helps in controlling costs? [5marks]

Q.9. Explain in brief the functions and structure of distribution Channel? Describe the factors that affect the choice or change of Distribution channels [10 marks]

PART –C

[20 marks]

Q. 10. Case study – Compulsory

Sachin kale, President of Omega Products, is reading the latest financial results of his company and he recalls the company's early days and the struggle to get retailers to stock his new line of bathroom fittings and light fixtures. Today, they are straining to match up with retailer demand.

Omega Products manufactures a variety of bathroom accessories, including vanities (medicine chest), mirrors, lighting fixtures. The products are made of rust-and chip-resistant moulded plastic and come in a variety of modern designs and colors. The plastic construction permits Omega to produce a high-quality bathroom accessory at an affordable price. In the beginning of 21st century, 2010, Sachin focused the company's marketing attention on the large home centre chain stores: Home Depot, Walmart, etc. Today, more than 80 percent of Omega sales are to these retail chains, and they account for 95 percent of its growth. Without these chain customers, Omega now would be a small, struggling manufacturer.

Sachin's pleasant memories quickly fade to the realities of dealing with these large-chain retailers. In the past two years, Omega has been required to install EDI /CRM software that permits the buyers to assess Omega's inventory data file to determine availability, to place orders and to verify shipment status. The latest demand from one of the chains, which is a precursor of what the others will want, is for Omega to reduce cycle time by shipping orders directly to the stores.

So far, Omega receives an order that is a consolidation of store orders to be served from a chain distribution warehouse. The order is sent in truckload quantity to the distribution warehouse, where the individual store quantity is broken out and sent to the store. Now, each store will be ordering separately, and Omega is to deliver the order within five working days and each store separately.

When Sachin approached Tom, Manager of logistics, with the latest demand, Tom was not very comforting. He indicated that freight costs would certainly increase because Omega would be shipping less than truckload quantities and hence involving at higher freight rates. This higher freight cost could be offset with freight consolidation software that combines stores shipments into truckload quantities for truck runs. Sachin liked the idea of keeping freight costs down, because Omega would have great difficulty increasing prices because of increasing competition.

However the freight consolidation strategy would increase the shipment holding time prior to dispatch, thereby making it difficult for Omega to meet the requirement that orders be delivered in five working days.

Since cycle time reduction is the primary objective of the chain store's demand, any process adding to the delivery time would not be acceptable.

Tom then is working on an idea to establish a series of distribution warehouses in the market areas where the chain stores are located. Tom's vision includes truckload shipments from the plants to the distribution centres and cross-docking of products from incoming trucks delivering orders to specific stores. In addition, each distribution warehouse would maintain a minimal level of inventory to meet emergency orders placed by local stores.

Sachin is skeptical of Tom's distribution warehouse idea because he feels it would increase capital costs, inventory levels and transportation costs. He is not even certain it would meet the delivery time requirements.

Questions:

1. From the case text above please write down the case summary identifying gaps and issues as per you .If necessary then please do SWOT analysis before answering questions below
2. Is Sachin's apprehension, right? Analyse.
3. Analyse the growth of Omega Products from the point of view of distribution.
4. Can decision to allocate 80% Omega production capacity to few large customers like Home Dept, be reviewed?
5. Can we explore the idea of dual distribution channel with chain of retailers mainly supplying to smaller customers, but Keeping some stocks which can be used for big players in case of delay in shipments of truck loads as earlier from Omega? Can Omega with this approach could save on Distribution centres investments and inventory costs?
6. In your opinion what Omega should do to reduce cycle time?
