



# INDIAN INSTITUTE OF MATERIALS MANAGEMENT

## Post Graduate Diploma in Logistics & SCM

PAPER No. 17 (enrollment code - PGSM)

Dec 2025

### PACKAGING AND DISTRIBUTION MANAGEMENT

Date : 21.12.2025  
Time : 2.00 p.m to 5.00 p.m

Max. Marks: 70  
Duration : 3 Hrs.

**Instructions:**

1. Part A, contains 4 main questions (with 5 sub-questions) each question carries 1 mark - Total 20 marks
2. 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. Read the case carefully and answer the questions - Total 20 marks

### PART – A

(20X1= 20 Marks)

(Compulsory - Attempt all questions each question carries 1 mark)

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

[5 marks]

- i) With ----- packaging products are protected against corrosion or electrochemical reactions
- ii) Fresh check system is introduced on packaging to indicate ----- of -----
- iii) -----agent is used to roughen thin plastic sheets so they do not stick together.
- iv) Poly mailers are good for -----
- v) ----- are used to transport crude oil, iron ore etc.

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

[5 marks]

- i) Consumers do not have full information so that they are unable to influence supply chain for delivery of their products
- ii) Ancillary packaging helps in improving product visibility
- iii) Organic fiber packaging can be recycled and reused
- iv) It is complex task to generalize, DC structure across industries
- v) Tea should be packed in flexible packaging, materials such as laminates or paper coated LDPE bags to retain its freshness

**Q.3. Expand the following**

[5 marks]

- i) LCL
- ii) SWMA
- iii) PLA
- iv) GSM
- v) LDPE

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

[5 marks]

	Column A		Column B
1.	One level channel	A	Time & Temperature Indicator
2.	Zero level	B	Ancillary packaging
3.	Physical distribution	C	Indirect
4.	Thermo chromic ink	D	Direct
5.	LABELS	E	time, place utility

### PART - B

[Total 30 marks]

(Answer any THREE out of the following five questions)

**Q. 5. a)** Define packaging? What are functions of packaging? Elaborate with focus on Ecommerce [5marks]

b) What is packaging management? What are activities involved in packaging management? Enumerate on 5 types or categories of packaging with emphasis on consumer type of packaging [5marks]

**Q.6. a)** Describe 5 drivers of packaging with examples. Elaborate with emphasis on 1<sup>st</sup> driver, marketing. [5marks]

b) write a note on packaging materials elaborating on packaging materials used by Domino pizza Vs local Chat outlet and its pros and cons [5 marks]

- Q.7.** a) What are new trends in E commerce packaging with few examples on sustainable packaging **{5marks}**  
 b) What are the draw backs of packaging itself? Elaborate on how circular economy and green packaging would work on limiting impact of those drawbacks **{ 5marks}**
- Q.8.** a) Discuss on contributions of distribution networks and what factors influence design and effectiveness of distribution network **[5 marks]**  
 b) Write on role of Technology in distribution like WMS, TMS, RFID, IOT etc.& its Benefits and challenges **{5 marks}**
- Q.9.** Write short notes any two: **(2 x 5 = 10 marks)**  
 a) Push Pull strategies in distribution      b) Note on difference between utility and branded packaging  
 c) Labelling    d) Note on choosing the right distribution channel partner

## **PART - C**

**[Total: 20 Marks]**

### **Q.10 CASE STUDY (Compulsory)**

The CEO of 'Neo locks' makers of residential & office door locks. from Faridabad, Akshay, was very worried after seeing market projections survey shared by his marketing manager, Raghu. For consecutive second year the share of business in residential sector in non-metropolitan areas had dropped vis a vis its new competitor from Ludhiana. From 90% just 3 years ago, they had dropped to less than 60%. Trend analysis showed that it could go down to under 50% over next 2/3 years. That was not good for 30 years old and established brand like Neo Locks, especially when it was also prices & quality competitive. Also, as per their branding agency, market perception of Neo lock products has continued to be strong amongst home owners or 'end' customers, for quality & reliability. Neo Locks had a central store in Faridabad and distributors in 5 major metros. Once every 10 days, trucks leave from each distributor to do milk run delivery to the sites.

Obviously, there were some issues with builders & developers who were direct customers of Neo Lock. To find out these issues, Akshay held a brainstorming meeting with his teams comprising of Marketing, Distribution, Purchase & IT cell.

But even after marathon discussions, they were clueless on possible issues.

Next day, Akshay called the distributors & transporters for probing further. As per transporters, about 30% of shipments were stranded for a day or two at construction site for delivery acknowledgement. Deeper questioning revealed that the transporters had on these occasions, reached sites, when house furnishing wood work was almost finished. It meant site was waiting for supplies from Neo Lock.

A problem resolution meeting was called very next day, for setting last mile delivery targets and work out its fulfilment plan, to be implemented in next one month

Targets – On time delivery (on same day). Optimized routes to curtail transport cost & sustainability. Use of mix of vehicles trucks/LCVs for last mile deliveries.

Some of the implementation ideas discussed were

1a Hub and spoke distribution with 5 distributors each supplying to 7/8 mini distributors in smaller towns around them in their respective region. And every 2<sup>nd</sup> day. a truck or tempo would leave from mini distributors deliveries to sites around.

OR

1b Instead of every 10 days trucks leave every week from distributor and wherever required using LCVs for delivery.

Use of TSM for planning optimum milk run routes for each trip

2 Install TSM soft ware at all distributors and transporters to optimize routes based on delivery locations relative to pick up points.

3 Use of RFID tags at distributors warehouses, which in turn communicate the stocks changes to Faridabad central stores through WMS system

4 To have service developer 3<sup>rd</sup> party logistics service provider

What could be the solutions according to you from above as well as the ones discussed by Neo Locks team, but are not spelt out above?

Akshay has decided to go ahead with solution 1a,2 and 4 to be put inn place by end of Dec25.

### **Answer following Questions ( 4 marks to each question)**

1. Read the case properly, and write down the case background and issues at hand in your own words
2. What are your opinion about addition of hub and spoke type design from distributors to mini distributors and to actual sites
3. What would be your additional suggestions to achieve last mile delivery targets?
4. Can you justify Akshay's choice? Explain. Can you name the distribution strategy used here?
5. Which solutions could offer optimum transportation?