



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Logistics & SCM– 2years
Paper 22 (Enrollment code: CPS)
Paper 18 (Enrollment Code: PSM, CSM)
Advanced SCM & Logistics

Dec 2024

Date: 24.12.2024
Time: 2.00 pm to 5.00 p.m

Max. Marks 70
Duration 3 hours

Instructions

1. Part A is compulsory. Each sub question carries one mark.
2. In Part B answer any 3 questions. Each question carries 10 marks
3. Part C is a case study with sub questions and it is compulsory.

Total marks-20
Total marks-30
Total marks-20

PART A

(20 marks)

Q. 1. Fill in the blanks.

[5 marks]

- a) Average replenishment ____ size metric of inventory is used to estimate the average amount of batch size in each replenishment order.
- b) ____ is the process of making predictions.
- c) ____ is the difference between the actual value and the forecast value for a certain period.
- d) The one who provides raw material to the manufacturer is called as the ____.
- e) The level of modularity or integrality in a product is given by product ____.

Q. 2. State True or False

[5 marks]

- a) Functional products have stable demand patterns.
- b) The idea behind standardization is to exploit economies of scale.
- c) Craft production is the manufacturing process of making hand-made products.
- d) Outdated stock is seasonal stock.
- e) Time for replenishment is chosen in fixed time system.

Q. 3. Match the following:

[5 marks]

Column I		Column II	
i.	Facilities	a.	raw materials, work in process and finished goods.
ii.	Inventory	b.	determines the price charged by the organisation
iii.	Transportation	c.	are the actual physical locations
iv.	Sourcing	d.	Details of suppliers and subcontractors
v.	Pricing	e.	deals with the movement of material or goods

Q.4. Expand the following:

[5 marks]

- c) SKU b) MRP c) COR d) BTS e). VMI

PART B

(30 marks)

(Answer any three out of the following 5 questions, each question carry 10 marks)

- Q.5. a)What are the metrics and drivers of supply chain? [5 marks]
b)Explain: Supply Chain Management is a philosophy. [5 marks]
- Q.6. a) Discuss with an example decision phases of supply chain. [5 marks]
b) What is the role of IT in forecasting? [5 marks]
- Q.7. a) Explain the role of transportation in a supply chain. [5 marks]
b)What is strategic alliance and what are its types? [5 marks]
- Q.8. a)What is a distribution system? What is cross docking? [5 marks]
b)Explain briefly the problems encountered in the network design. [5 marks]
- Q.9. Write Short Notes **any two**. [2 x 5 =10 marks]
A) Macroeconomic Factors. B)Promotional demand.
C) Mass customization D)Design Chain Reliability

PART C

(20 marks)

Q.10 Case Study (compulsory)

L'Oréal is a global leader and the largest cosmetics organisation in the world. It leads in operational innovation and digitalization and serves the fashion customers all around the world. L'Oréal maintained its position as a winner on the annual Gartner's top 25 supply chains ranking. L'Oréal performs business operations in different countries and has more than 150 distribution centres. The top acquisitions of L'Oréal are:

- Maybelline New York
- Garnier
- NYX Professional Makeup
- CeraVe.

The organisation refreshes or innovates up to half of its products yearly and is purely committed to widen the diversity of distribution. L'Oréal has also made huge investments in supply chain automation and in cutting-edge technology solutions. In the year 2014, the lead of L'Oréal's supply chain, Emmanuel Plazol, told the press that "our current approach of segmenting by distribution channel needed to evolve".

The supply chain capabilities of L'Oréal were re-designed and a world-class integrated information system was established. This helped the organisation to give collaborative volume forecasts across the teams of different departments such as sales, marketing, supply chain, and finance. These forecasts were also given to its factories and distribution centres, present worldwide.

Redesigning and integrated information systems improved L'Oréal's sales forecast accuracy rate of 60 per cent to 71 per cent. The cost of logistics also decreased, and there was more than 40 per cent increase in the delivery from 2009 to 2014. The customers of the organisation noticed an improvement in the customer service levels in 2016.

L'Oréal noticed that there was a change in the order profiles, increase in the sheer volume of order but decrease in the lines per order. There was a demand from the retail customers that L'Oréal must decrease their lead times and improve delivery time. L'Oréal introduced robotics and slotting software for mechanising its distribution centres. These solutions helped L'Oréal in the following ways:

- Helped in remaining competitive and in maintaining the speed of order fulfilment
- Helped in decreasing the costs related to labour and quality improvement and in meeting demand peaks.

Questions:

- Q. 1.What is the business model of L'Oréal?
Q. 2.In which area L'Oréal made a huge investment?****