

## INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM- 2years

Paper 22 (Enrollment code: CPS)

Paper 18 (EnrollmentCode: PSM, CSM)[ OFFLINE EXAM]

# Advanced SCM &Logistics

Date: 19.06.2024 Max. Marks 70 Time: 2.00 pm to 5.00 pm **Duration 3 hours** 

Instructions

1. Part A is compulsory. Each sub question carries one mark. Total marks-20 In Part B answer any 3 questions. Each question carries 10 marks Total marks-30

Part C is a case study with sub questions and it is compulsory. Total marks-20 **PART A** (20 marks) Q. 1. Select the appropriate option. [5 marks] a) Supply chain mapping means the study of -----(i) Logistics network (ii) Activities sequence (iii) Value and non-value added activities (iv) Cost reduction areas In physical distribution decisions, total logistics cost includes all of the following EXCEPT: (i) Order processing (ii) Material handling and warehousing (iii) Transportation (iv) Marketing costs. c) Receiving and inspection costs fall under ----- classification. (i) Ordering cost (ii) Inventory carrying cost (iii) Over-stocking cost (iv) Under-stocking cost. d) 3PL involves using a supplier to provide ----- services (i) Marketing (ii) Design (iii) Logistics (iv) Contract manufacturing e) Cycle inventory helps in -----

- (i) Taking advantage of economies of scale and reducing cost within the supply chain
- (ii) Providing flexibility to each decision-making point to manage its operations independently
- (iii) Taking care of uncertainty in demand and supply of products.
- (iv) Taking care of any special event that does not occur on a regular basis,

#### Q. 2. State True or False

[5 marks]

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- a) A stable process requires a responsive supply chain.
- b) Market Survey is a qualitative method of forecasting.
- In a joint venture two or more organizations establish a legally independent organization.
- Transportation is the operational area of logistics that geographically positions inventory.
- Payment of Rent for inventory storage facility comes under ordering cost.

## Q. 3. Match the following:

[5 marks]

	Column A		Column B
Α	Sourcing	1	Package carrier
В	Tightly integrated supply chain	2	Buffer stock for meeting excess demand
С	FedEx	3	Ford motor company
D	Push system	4	Driver of supply chain
E	Anticipation inventory	5	Producer-centric

### Q.4. Expand the following:

[5 marks]

a) MPS

b) CXO

c) MAPE

d) DFL

e) VMI

#### (Answer any three. Each question carries 10 marks)

- Q.5. a)What is a facility in a supply chain? Explain about any two facility related supply chain metrics and show how will you measure these metrics.
  [5 marks]
  - b)Small and medium enterprises (SMEs) find difficulties in implementing SCM practices. Discuss how their problems can be overcome. [5 marks]
- Q.6. a) What do you understand by "Forecast Error"? Explain various methods of measuring forecast error.

[5 marks]

b) Explain with a neat diagram the design option for Shipment via central distribution center.

[5 marks]

- Q.7.a) What is "Strategic Alliance"? why do organizations enter into strategic alliances? Illustrate your answer with an example.
  [5 marks]
  - b)What do you understand by "Cross-docking"? Explain with a neat diagram. names the different types of cross-docking strategies. [5 marks]
- Q.8. a)What is mass customization? Explain the characteristics needed to successfully implement mass customization.

[5 marks]

b) What do you understand by "Decoupling Stocks"? Explain with an example.

Q.9. Write Short Notes any two.

 $[2 \times 5 = 10 \text{ marks}]$ 

A) 3PL industry in India B) Role of transportation in supply chain

C) Inventory carrying costs D) Greening of supply chain

PART C (20 marks)

#### Q.10 Case Study (compulsory)

Read the case given below carefully and answer the questions given at the end.

ABC Ltd is a car manufacturing company. Their distribution system for marketing of finished goods is as follows:

- Finished cars are sent to central warehouse near the factory.
- From here, the finished goods are distributed to 7 regional warehouses in the country.
- Further, there are 27 depots from where the cars are sent to different stockists for sale.

The organization appointed an expert committee to streamline the distribution system. The findings of the committee are:

- Central warehouse, 7 regional warehouses, and 27 depots together have finished stock equal to 105 days all India sales.
- The marketing manager has no time to check the finished goods stock as he is busy with marketing functions.
- Several cars are lying for more than 2 years due to availability of new and better models.
- There are no norms for monitoring the stock positions and Indents for new cars were sent without checking the stocks.

The committee advised to put the finished goods warehousing under a separate Distribution Manager and advised to maintain the finished goods stock at 48 days all India sales in all the warehouses and depots together.

### Questions

- a. Whether there is need to reduce existing numbers of warehouses and depots?
- b. What methodology will you suggest to identify and dispose of slow and non-moving stock of cars?
- c. Suggest a method to avoid accumulation of unsold stock in future.
- d. Is the central warehouse required? Why?
- e. Suggest a system for maintaining the stock level to 48 days all India sales at all warehouses and depots together.

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