



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM

Post Graduate Diploma in Materials Management - 2 years

PAPER No 8 (enrolment code –PGMM, PGSM)

Supply Chain Management

Dec 2024

Date : 17.12.2024

Time : 2.00 pm to 5.00 pm

Max. Marks: 70

Duration : 3 Hrs.

Instructions:

1. From Part A, contains 4 main questions (with 5 sub-questions) each question carries 1 mark Total of 20 marks
2. From part B answer any 5 questions out of 5 questions. Each question carries 10 marks – A total of 50 marks
4. Graph Sheet will be provided if required.
5. Use of standard calculator is permitted.

PART – A (compulsory)

[20 marks]

(Compulsory- each sub-question carries one mark)

Q. 1. Select the best option

[5 marks]

- a) E-Procurement, which is done for the _____ products helps in reducing time and the cost of transaction.
(i) customized (ii) standard (iii) significant (iv) critical
- b) Which of the following is **NOT** one of the primary flows of the supply chain?
(i) Material (ii) Information (iii) Cash (iv) Work-in-process
- c) Strategic supply chain decisions include all of the following **EXCEPT**
(i) Decision on location of facility (ii) Decisions on inventory
(iii) Decisions related to production process (iv) Decisions related to sourcing
- d) Which sourcing strategy of the segmentation focuses on keeping low risk, low-cost purchase, as best deal and not worry about source?
(i) Leverage (ii) Commodity (iii) Critical (iv) Strategic
- e) Which aggregate planning strategy aims at matching demand on a period-by-period basis without maintaining safety inventory?
(i) Chase strategy (ii) Level strategy (iii) Capacity strategy (iv) Combined strategy

Q. 2. State True or False

[5 marks]

- a) Information flow in supply chain is in one direction only.
- b) Achieving cost optimization in a supply chain may result in loss of flexibility.
- c) There is no need to align the supply chain strategy with the overall business strategy.
- d) Agile supply chain is basically focused on efficient stream-lined operation.
- e) Effective reverse logistics can result in cost savings.

Q. 3. Match the following:

[5 marks]

	Column A		Column B
A	Dell Supply Chain	1	Pull production
B	Cycle inventory	2	Recycling at the end of used product
C	Kanban	3	Normal demand
D	Sourcing	4	Third revolution
E	Closed-loop supply chain	5	Strategic process

Q.4. Expand the following:**[5 marks]**

- a) EDI b) LSP c) TCO d) SCOR e) VSM

PART B**(Total 30 marks)****(Answer any three. Each question carries 10 marks)**

- Q.5.** a) The advent of internet has tremendously impacted the scope of supply chain. In this context explain the various supply chain platforms that have emerged and their roles in the supply chain management. **[5 marks]**
- b) It is necessary for an organization to align its supply chain with its business strategy to achieve best results. In this context, explain the steps you would take to achieve this alignment. **[5 marks]**
- Q.6.** a) Supply chain drivers help in providing a framework for developing supply chain capabilities. Explain the key supply chain drivers, with a neat diagram. **[5 marks]**
- b) Lean supply chain concept and agile supply chain concept are opposite of each other. Explain this statement and bring out the differences between the two concepts and give examples of their areas of applications. **[5 marks]**
- Q.7.** a) Managers make purchase decisions by segmenting the inputs and analyzing the spend category of each input. Explain this with a neat diagram showing the classification of inputs Give examples of each category. **[5 marks]**
- b) What do you understand by “Reverse Supply Chain”? discuss the key components of reverse supply chain. **[5 marks]**
- Q.8.** a) Aggregate planning has an important role in supply chain’s success. In this context, explain the different strategies which organizations adopt to perform efficient aggregate planning. **[5 marks]**
- b) Information technology (IT) plays an important role in the success of supply chains with the application of computers in data processing for decision-making. Explain the ways in which IT helps in supply chain. **[5 marks]**
- Q.9. Write Short Notes (any two).** **[2 x 5 =10 marks]**
- a) Use of Radio Frequency Identification in SCM b) Importance of sustainability in supply chain
- c) Application of six sigma in supply chain d) Advantages of 3-PL service providers

PART C**[20 marks]****Q.10 Case Study (compulsory)**

In the second half of 2008, large consumer goods manufacturing company was confronted with common inventory management problems. The consumer market for the company’s products is mainly concentrated in urban cities. The market research data suggests that company has to focus on expanding the consumer base to rural areas in order to remain competitive and for future growth. The company has got good reputation in the market and the products enjoy better brand value as compared to competitor’s products. The company is receptive to change, and amenable to adopting modern technology.

The information management system of the company was not responsive to the changed market situation. All five manufacturing units with different standalone systems located in four states of northern India needed proper management of safety stocks/optimum inventory levels for improving customer service and operational efficiency. The management of the company has decided for implementing internet based effective decision support system covering entire value chain for optimum inventory holding, dealing with conflicting inter-departmental and inter-unit objectives, and sorting out capacity constraints for men, money, and material.

Questions:

- (a) What are the problems being faced by the company? **[5 marks]**
- (b) What information technology infrastructure would you suggest for the company? **[5 marks]**
- (c) Outline the various stages for implementation of the system. **[5 marks]**
- (d) How will you evaluate the performance of the entire supply chain? **[5 marks]**