



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in logistics and Supply Chain Management

Paper No 24(enrollment code CPS)

June 2024

PAPER No. 19 (enrollment code PSM, CSM)[OFFLINE EXAM]

Emerging Trends in Logistics & Supply Chain Management

Date : 20.06.2024
Time : 2.00 pm to 5.00 pm

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. Each question carries 10 marks. **Total : 30 Marks**
3. Part C is a case study (compulsory). Read the case study carefully and answer the questions **Total: 20 Marks**

PART – A

[20 marks]

Attempt all questions. Each sub question carries 1 mark

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

[5 marks]

- i) _____ refers to the discernible pattern used to evaluate consistency.
- ii) Cross-sectional analysis facilitates comparisons between specific _____ of various organizations.
- iii) The major feature of Industry 4.0 is the _____ of industries through human-machine interaction.
- iv) IoS is an _____ perspective that covers the services.
- v) There are _____ design principles on the basis of which industry 4.0 works.

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

[5 marks]

- i) Socio-cultural factors define the scope of government's involvement in business.
- ii) KPOs are people-intensive in nature.
- iii) Business trading through electronic link is E-Commerce.
- iv) Supply chain productivity is measured with the help of dwell time.
- v) The letter 'C' in FMECA stands for cost.

Q.3. Expand the following

[5 marks]

- i) RPA
- ii) IVR
- iii) CLV
- iv) CPS
- v) WAP

Q.4.Match A and B

[5 marks]

	Column A		Column B
1.	E tailing	A	SDLC
2.	Aggregator	B	Use of sensors for data collection
3.	Business expansion model	C	Sale of goods online
4.	IoT	D	Franchising
5.	Information system design	E	Swiggy

PART B

[30 marks]

Answer any 3 questions out of 5. Each question carries 10 marks

- Q. 5.**
- a) Explain the emerging trends in business. **[5 marks]**
 - b) Enumerate the disadvantages of BPO. **[5marks]**

- Q.6.** a) Explain various digital marketing channels. **[5marks]**
b) Explain various E commerce business models. **[5 marks]**
- Q.7.** a) Explain the importance of Industry 4.0. **[5 marks]**
b) Explain disruptive technologies. **[5 marks]**
- Q.8.** a) Explain the drivers of supply chain. **[5 marks]**
b) Describe bullwhip effect. **[5 marks]**
- Q.9.** Write short notes any two: **(2 x 5 = 10 marks)**
a) M commerce
b) Network marketing
c) Smart factory
d) Supply chain trends

PART C **(compulsory)**

[20 marks]

Q.10 Case Study

DVD4LESS.com is one of the many new firms that have a presence on the World Wide Web. It specializes in manufacturing and selling one type of high-end DVD player. By purchasing large volumes from a small number of suppliers, it receives a significant discount. This reduced cost is passed on to its customers. DVD4LESS.com manages to sell its DVD player for \$200 less than all its high-end competitors, thereby creating its competitive advantage.

DVD4LESS.com receives 112000 orders for DVD annually. Each DVD player sells for \$500, of which \$200 is retained as gross profit. Last year, it filled 97 percent of all orders correctly. Of orders filled incorrectly, DVD4LESS.com estimates that 20% of the customers cancel the order and the remainder will accept a second shipment, which results in a re-handling cost of \$20 per order. To maintain customer goodwill, the firm gives a \$35 invoice reduction for all units re-handled.

DVD4LESS.com pays \$1,950,000 annually for the transportation of its materials and delivery of its products. Its warehousing costs average \$1,460,000 annually for the storage of its materials. DVD4LESS.com has \$30 million of debt outstanding at an annual interest rate of 10%. The total cost for all selling and general administrative expenses (other operating costs) comes to \$750,000, and \$50,000 is held in cash at all times.

DVD4LESS.com has an average inventory of \$5 million. This large inventory is partially attributed to its purchasing policy, and also to its inventory management system. The inventory carrying cost rate is estimated at 25% of the average inventory value per year. Its accounts receivables average \$250,000 throughout the year primarily due to sales to medium-sized retailers. DVD4LESS.com has a large fixed asset base. It is comprised of land, the manufacturing facility; machinery and various administrative offices that are valued at \$64 million.

DVD4LESS.com has explored a variety of options to improve its correct order fill rate. It is also interested in lowering its average inventory as a means to improve its overall profitability. After weeks of presentations and heated debates, the decision is made to outsource its warehousing operations and inventory management. Many third-party logistics providers bid for the contract; in the end, it is awarded to Basileo Logistics for an annual cost of \$500,000 (this is classified as other operating cost). By outsourcing, DVD4LESS.com manages to save \$760,000 in warehousing expenses, reduces its average inventory by 30%, and now meets its 99 percent correct order fill rate. All other costs remain the same.

Questions:

- 1) Explain the corporate strategy adopted by DVD4LESS.com? (5 marks)
- 2) What are the financial and non financial advantages of outsourcing? (5 marks)
- 3) How will the scenario change if E commerce is introduced? (5 marks)
- 4) What are the various forms of supply chain analytics and where it can be used? (5 marks)