

Paper / Subject Code: 46001 / Logistics & Supply Chain Management

(Duration: 2 ½ Hours)

(Maximum Marks: 75)

- N.B. 1. Answer **all** the questions.
 2. The Marks are assigned on the R.H.S.
 3. Draw Illustrations, **diagrams** and **Schedules** wherever necessary.
 4. Use of **simple calculator** is allowed.

Q.1 A) Choose Correct Alternative. (Attempt Any 8 questions)

(8)

1., Production Control and physical distribution are the three major operations of logistics.

- a. Supply Chain Management b. Materials Management
 c. Logistics Management d. All of these

2. Which of the following is not an area of responsibility for a logistics manager?

- a. Inventory b. marketing
 c. Warehousing d. purchasing

3. Which of the following is not a part of Supply chain Management system?

- a. Funds Flow b. Manufacturer c. Information Flow d. Competitor

4. _____ is concerned with a firm's ability to satisfy customer's requirement in timely manner.

- a. Minimum Inventory b. Rapid Response c. Price stabilization d. Quality

5. Following is not type of Piggy – Back

- a. LASH b. TTFC c. COFC d. TOFC

6. Special purpose material handling equipments are used in _____.

- a. line layout b. process layout
 c. both 'a' and 'b' d. None of the above

7. RO-RO concept means:

- a. Roll On-Ride Off b. Ride On-Ride Off c. Roll Off-Roll On d. Roll On - Roll Off

8. _____ refers to supply chain practices that strive to reduce energy and environmental footprints in terms of freight distribution.

- a. Inbound Logistics b. Green Logistics c. Outbound Logistics d. SCM

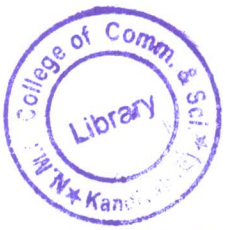
9. Which of the following is not a component of 4PL?

- a. Control Room (Intelligence)
 b. Resource Providers
 c. Information
 d. Recycling

10. _____ Involves streamlining the distribution process in terms of physical and information efficiency.

- a. Technical Integration b. channel Integration c. channel hierarchy d. vertical marketing System





Q.1 B) Match the right and closely related answer from Column Y with the terms given in Column X. (Attempt Any 7 questions) (7)

Column X	Column Y
1) Piggyback	a) Downstream logistics
2) Measurement of Logistical Customer Service with reference to Operational Performance	b) Selective criteria criticality of the part to operations
3) Measurement of Logistical Customer Service with reference to Availability	c) Selective criteria Seasonality
4) Inbound Logistics	d) Truck
5) Fixed Path Variable Destination Material Handling Equipment	e) Productivity
6) SOS	f) use of Road and Rail mode of transport
7) Internal Performance Measure	g) Supply Chain Integrator
8) VED	h) Logistics Park
9) 4 PL	i) Speed, Consistency, Flexibility
10) Warehousing facilities with efficient Transportation connectivity	j) Upstream Logistics
	k) Stock out Frequency and Fill rates
	l) Auto Guided Vehicle

Q.2) A) What is Performance Management System? Explain the importance and objectives of developing and implementing Performance Systems in Logistics? (8)

B) What is Bullwhip Effect? Explain causes and impacts of Bullwhip Effects? (7)

OR

C) From the following data, calculate a 3 period weighted moving averages from 4 th Month to 8 th Month, with weights as 3, 2 and 1. The largest weight is being assigned to most recent period and current Demand Value. (10)

Period (Month)	1	2	3	4	5	6	7	8
Demand in Units	100	120	130	145	160	170	200	?

D) Explain Primary, secondary, Tertiary Packaging and unit load? (5)

Q.3) A) What is Logistical Outsourcing? Differentiate between 3PL and 4PL Logistics. (8)

B) Explain the concept of DRP. What are its Logistics and Marketing Benefits? (7)

OR

C) What is Transportation? Explain the various factors that have to be taken into consideration before selecting a carrier? (8)

D) Discuss in detail Global Logistics trends. (7)

Q.4) A) The annual demand for a particular item is 9000 units, unit cost is Rs. 10/- Carrying cost on an average inventory is 20% and the ordering cost per order Rs. 150/-.

Find 1) EOQ (3)

2) Total Inventory Cost. (3)

3) If purchase manager has decided to place purchase order with minimum order quantity of 3000 units to get unit cost discount of 10 % per unit. State Purchase Manager is justified in his decision? (4)

B) Discuss Role of Information Technology in Today's Modern Logistics. (5)



OR

- C) Explain Guidelines or Principles of Material handling (8)
D) Explain what Logistical competency is and how it can be achieved? (7)

Q.5) A) Read the Case and answer the following:

Starbucks is pretty much a household name. But like many of the most successful worldwide brands, the coffee shop giant has been through its periods of supply chain pain. In fact, during 2007 and 2008, Starbucks leadership began to have serious doubts about the company's ability to supply its 16,700 outlets. As in most commercial sectors at that time, sales were falling. At the same time though, supply chain costs rose by more than \$75 million.

Supply Chain Cost Reduction Challenges: When the supply chain executive team began investigating the rising costs and supply chain performance issues, they found that service was indeed falling short of expectations. Findings included the following problems

- Fewer than 50% of outlet deliveries were arriving on time
- A number of poor outsourcing decisions had led to excessive 3PL expenses
- The supply chain had, (like those of many global organisations) evolved, rather than grown by design, and had hence become unnecessarily complex

The Path to Cost Reduction: Starbucks' leadership had three main objectives in mind to achieve improved performance and supply chain cost reduction. These were to:

- Reorganize the supply chain
- Reduce cost to serve
- Lay the groundwork for future capability in the supply chain

In order to meet these objectives, Starbucks divided all its supply chain functions into three key groups, known as "plan" "make" and "deliver". It also opened a new production facility, bringing the total number of U.S. plants to four.

Next, the company set about terminating partnerships with all but its most ineffective 3PLs. The remaining partners were then managed via a weekly scorecard system, which was aligned with renewed service level agreements.

Supply Chain Cost Management Results: By the time Starbucks' supply chain transformation program was completed, the company had made savings of more than \$500 million over the course of 2009 and 2010, of which a large proportion came out of the supply chain, according to Peter Gibbons, then Executive Vice President of Global Supply Chain Operations.

- 1) State the facts & analyse the case. (8)
2) Explain how Effective Supply chain management helped starbucks to improve their performance? (7)

OR

- B) Write short notes on: (Any 3) (15)
1. Customer Service Strategy
 2. Contract Warehousing
 3. Perfect Order Principle
 4. Cold Chain Logistics
 5. Activity Based Costing.