Institute of Management Technology
Centre for Distance Learning, Ghaziabad
Recognised by University Grants Commission

IMT- 69

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Notes:

a. Write answers in your own words as far as possible and refrain from copying from the text books/handouts.
b. Answers of Ist Set (Part-A), IInd Set (Part-B), IIIrd Set (Part – C) and Set-IVth (Case Study) must be sent together.
c. Submit the assignments in IMT CDL H.O. along with the assignments Question Papers for evaluation .
d. Only hand written assignments shall be accepted.

A. First Set of Assignments	5 Questions, each question carries 1.5 marks.
B. Second Set of Assignments	5 Questions, each question carries 1.5 marks.
C. Third Set of Assignments	5 Questions, each question carries 1.5 marks. Confine your answers to 150 to 200 Words.
D. Forth Set of Assignments	Two Case Studies : 7.5 Marks. Each case study carries 3.75 marks.

SECTION - A

1.What do you understand by Logistics Management?What are the sources of Competitive Advantage in Logistics Management?

2.What are the major elements of Logistics Cost?How can we leverage them for competitive advantage?

3.Explain the concept of Gap Analysis for customer service measurements.

4.What do you understand by logistical competency?Explain with an example.

5.What are the various factors which are important while determining transportation costs?How are they related to each other?

SECTION - B

1.Compare and contrast different parameters relevant for locational strategies for service and industrial units.What are the factors to be kept in mind while Locating a Steel Plant in India?

2.What is the concept of market presence , and how does it relate to the warehousing strategy of the firm.

3.Explain various functions of a warehouse.What are the economic benefits of Warehousing?

4.What are the various systems of packaging?Provide an illustration that highlights the difference between primary , secondary and tertiary packaging.

5.Explain the concept of intermodal transportation. How is it more effective in International Logistics.

SECTION - C

1.What do you understand by Demand Flow Strategy?

2.Explain the concept of Bull Whip Effect. How can we minimise it?

3.What are the bottlenecks in decreasing Cycle Times?Describe the remedies for each bottleneck.

4.Explain Balanced Score Card and SCOR as applied to Supply Chain Management.

5.What is RFID?List various applications and benefits of RFID.

CASE STUDY - 1

Coals to Newcastle

The blizzard Steamship Company, headquartered in Hampton Roads, Virginia, had been asked to bid on a contract of affreightment for the carriage of several million tons of coal from Hampton Roads to an English port, where the coal would be unloaded and then move by rail to Newcastle. (Contracts of affreightment are used when a shipper has vast quantities of materials to move, often over a period of several years and requiring several vessels provided on a charter basis. The owners of the charter vessels, such as Blizzard, assign various vessels in their fleet to participate in the haulage.)

One of the vessels in Blizzard's fleet, the Jennifer Young, was ideally suited for this assignment, and Blizzard decided to determine first how much coal she could carry over a 12-month period, at which point he could decide which other vessel(s) to assign. There were no backhauls available so the vessel would sail light from England back to Hampton Roads.

The anticipated costs of operating the Jennifer Young follow. Days in port cost

Case Table One

Duration of round trip in days	Fuel carried (and consumed) In tons	Tons of coal carried
14	600	60,000
15	500	60,100
16	420	60,180
17	350	60,250
18	300	60,300
19	240	60,360
20	200	60,400

$1,000 each and days at sea cost $ 2,000 each. At sea there is also the cost of bunkers (fuel oil), which is expected to be $50 per ton. Fuel consumption per nautical mile of travel increases exponentially with the vessel's speed. All assumptions include a day in port at Hampton Roads for loading and two days at the English port for unloading. While the vessel is returning to the United States light, it is traveling against prevailing weather, so it6 takes the same number of days to cross in each direction.

The vessel, when loaded, is loaded as heavily as allowed by the insurer. If it carries less fuel it can carry more cargo. Hence, calculations for travel at slower speeds will show a slightly higher tonnage of coal
Carried per voyage. Case Table One shows the duration of a round trip (including three days in ports) and the load of coal and fuel carried.

Questions for coals to Newcastle

1. How many round trips should the vessel make if the objective is to haul the most coal within one year? (the number of voyages can include a fraction since this would mean that a portion of the last voyage would be completed in the first days of the following year.)

2. How many round trips should the vessel make if the objective is to haul the coal at the lowest cost per ton within one year? (The number of voyages can include a fraction, since this would mean that a portion of the last voyage would be completed in the first days of the following year.)

3. Does it make a difference where the vessel is located before it is assigned to begin work on this haul?

CASE STUDY - 2

Betty's Brownies

Growing up in Chicago, Betty Budris always enjoyed baking: cookies, cakes, sweets of all kinds. As Betty's children grew up, all their friends knew that Betty was the neighborhood source for homemade treats. But once Betty's children had gone off to college, she was left with lots of time-tested recipes but few "consumers." Her son Kenny was working on his MBA in marketing at Northwestern University when he suggested to his mom that they go into business together and bring Betty's treats to the sweet tooths of the world.

They started small. With a walk-in bakery shop in Evanston, Illinois, not far from the Northwestern campus. Wildly successful with the college crowd, they expanded by building a baking plant in Gurnee, Illinois, where they could concentrate on making packaged cookies and brownies with modifications to Betty's old recipes.

One of Betty's first corporate customers was ABC Sky Kitchen, an airport-based caterer whor specialized in assembling meals for in-flight food service. One of their customers was Japan Airlines, and soon Betty's Double Fudge Brownies were being served warm to business- and first-class passengers on JAL. It wasn't long after ABC Sky Kitchen began to serve the tasty brownies that Kenny received an email message from Ryuji Fujikami in Tokyo.Mr. Fujikami had enjoyed a Betty's Brownie on his return flight to Tokyo, and was interested in the possibility that Betty's might want to export their brownies to Japan Mr. Fujikami was a food buyer for a major Japanese department store chain, and thus presented an immediate overseas expansion opportunity to Betty's Brownies.

Kenny was excited at the prospects for the company's first step into a distant market. He called Mr. Fujikami to discuss developing a business relationship, and Fujikami responded with an offer to purchase an initial order of 40,000 individually wrapped Double Fudge Brownies. Each packaged brownie would weigh 100 grams (about 3.5 ounces). He asked that the products be labeled in both English and Japanese (for the promotional appeal of the American product), but that Japanese manufacturing standards for food would have to be used to insure that the brownies would pass customs and agricultural inspection.

The initial order of 40,000 brownies would be shipped to the department store chain's distribution center near Osaka, Japan. But Fujikami asked that future shipments be presorted and packaged for direct delivery to the individual retail store locations throughout Japan. Kenny immediately grasped the complexity of this new customer's requirements, and sat down with Betty to consider what kinds of assistance they would need to expand their business into the Japanese market.

Questions for Betty's Brownies

1. With just one customer in Japan, should Kenny and Betty be handling all aspects of this relationship? What logistics functions might make sense to outsource? Which should they consider keeping in house?
2. If they decided to outsource the entire relationship, would an export management company or an export trading company make more sense? Why?
3. What transportation modes should be considered for this product? What kinds of transportation intermediaries might be useful?