



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management
Graduate Diploma in Materials Management
PAPER No. 11 (New)

Dec 2015

LOGISTICS MANAGEMENT

Date : 18.12.2015
Time : 10.00 a.m. to 1.00 p.m.

Max. Marks :100
Duration : 3 Hrs.

Instructions:

1. **PART A** is compulsory. Answer all questions. Total marks = 32
 2. From **PART B**, answer any three questions. Each question carries 16 marks. Total marks = 48
 3. **PART C** is **Case Study** and is compulsory. Answer the questions reflecting through understanding of the case. Total marks = 20
 4. Please read instructions on the answer sheet carefully.
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PART A

32x1 = 32

marks

(compulsory- Attempt all Questions each question carries 1 mark)

Q1. State TRUE or FALSE - 1 Mark each

(8 Marks)

1. Material handling is a logistics activity.
2. Operating areas of logistical system are not affected by potential variance.
3. Inbound logistics means movement of materials received from suppliers.
4. Variance is unexpected event that disrupts performance of the system.
5. Supply buffer management does not manage variations in demand.
6. MTS and ATO strategies postpone production.
7. ISCM is processes that are internal to the firm.
8. Hub and Wheel concept describes warehousing functionality.

Q2. Fill in the Blanks - 1 Mark each

(8 Marks)

1. Direct mixed shipment reduces _____ cost.
2. _____ warehouse stocks product combination in anticipation of customer orders.
3. In break bulk warehouse operation no _____ is involved.
4. _____ warehouse charges client a basic fee for handling and storage.
5. Goods received are entered into _____ consignment register.
6. In-transit _____ brings economics when plants are geographically separated.
7. Stockpiling provides an inventory _____.
8. _____ cranes are used for overhead material handling.

Q3. Expand the following abbreviations (1 mark each)

(8 Marks)

- | | | | |
|--------|--------|--------|--------|
| 1. CTR | 2. JIT | 3. MTS | 4. TQM |
| 5. FTL | 6. SRM | 7. LTL | 8. 3PL |

Q4. Match the following in column A with those in column B - 1 Mark each

(8 Marks)

Column A		Column B	
P	Auto Identification System	A	Vehicle space utilization
Q	Retail stores	B	Water transport
R	Automatic identification method	C	Humanlike machine
S	Towline	D	Point of Sale
T	Robotics	E	RFID
U	Stowability	F	Continuous movement
V	Refilling	G	Bar Codes
W	Canoe	H	Metal cylinders

PART - B

Write any three (3) of the following questions – 16 marks each

(48 Marks)

- Q5.** What is logistics? Explain the concepts, activities and importance of logistics.
- Q6.** Explain the supply chain relationship, capacity buffer, inbound and outbound logistics.
- Q7.** Explain the concepts of warehousing, spot stock, pre and post distribution.
- Q8.** Explain physical distribution tasks and approaches in detail.
- Q9.** Describe the different levels of functionality of logistics information and explain satellite communication and intranet.

PART – C (Compulsory)

20 Marks

Q. 10. CASE STUDY

Whirlpool Corporation is the world's leading manufacturer and marketer of major home appliances, with annual sales over \$19 billion, more than 80,000 employees and more than 60 manufacturing and technology research centers globally. Consumers around the world enjoy Whirlpool's innovative products marketed under Whirlpool, Maytag, Kitchen Aid, Jenn-Air, Amana, Brastemp, Bauknecht and other major brand names. With this varied inventory, plus a large direct sales force in more than 170 countries and an unpredictable sales cycle, effective supply chain management is critical for continued growth. Whirlpool has not always considered logistics a competitive advantage. However, since naming Penske as lead logistics supplier, Whirlpool experienced cost savings, increased customer satisfaction and found a partner to help integrate the recent acquisition of Maytag.

Challenges

- To effectively leverage its supply chain to maximize cost savings, while also positively influencing the overall Whirlpool customer experience
- To swiftly and efficiently integrate Maytag operations

Solutions

- Through the Penske/Whirlpool lead logistics provider (LLP) relationship, Penske assumed responsibility for execution and management of third party logistics providers (3PLs), and provided an enhanced ability to view each supplier's key performance indicators integrated with financials
- Penske built a new routing tool specifically for Whirlpool that offered overall cost optimization and mode selection
- Penske helped to integrate Maytag operations through consolidating Local Distribution Center (LDC) networks, optimizing routing of Regional Distribution Center (RDC) shipments, determining optimal fleet size and operating network, combining co-located Maytag and Whirlpool RDC locations and integrating the Hi/Lo network to improve product availability and fill rates

Questions

Analyze the above case study and prepare a detailed note of your understanding about the case study and suggest the ways about further logistical operations improvements.
