



INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management - 3 years
Graduate Diploma in Materials Management
PAPER No. 11

July 2019

LOGISTICS MANAGEMENT

Date : 26.07.2019
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.

PART A

(32x1 = 32 marks)

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

Q1. State TRUE or FALSE :-

8 Marks

- a) Inbound Logistics + Material Management + Physical Distribution = Logistics.
- b) The product / material flow in a supply chain is concerned with the procurement, but does not include movement and storage of materials and finished products.
- c) In break bulk warehouse operations storage is involved.
- d) There are three common methods of physical stock verification.
- e) Right deliveries ratio = $\frac{\text{No of deliveries on time / year}}{\text{Total No of deliveries / year}}$
- f) Zero Level Channels has multiple intermediaries.
- g) Freight Elevator is a device used for lifting or lowering a load by means of a drum or lift-wheel around which rope or chain wraps.
- h) Water Transport is the oldest mode of transport.

Q 2. Write full form of following abbreviations :-

8 Marks

- | | | | |
|--------|---------|-----------|-----------|
| i) LTL | ii) SWC | iii) ASRS | iv) EDI |
| v) UPC | vi) WMS | vii) FDI | viii) BTO |

Q 3. Fill in the blanks :-

8 Marks

- a) _____ means receiving goods at one door and shipping out through the other door almost immediately without putting them in storage.
- b) The primary objectives of any supply chain management are _____.
- c) _____ is the designing and managing of a system in order to control the flow of material throughout a corporation.

- d) _____ cross docking is receiving multiple vendors and sorting onto outbound trucks for different stores.
- e) _____ warehouses are designed to handle bulk material including non-food and also liquid products.
- f) To transport material from one fixed point to another fixed point _____ are used.
- g) The _____ type of transport has the highest fixed cost but lowest variable cost among transport modes.
- h) Logistics Information Systems Flow has _____ modules.

Q 4. Match Column A with correct responses from Column B :-

8 Marks

Column A		Column B	
1.	Multimodal Transportation Act	A	2007
2.	New Product Development, Material Management & Manufacturing & Distribution	B	1925
3.	Warehousing (Regulation and Development) Act	C	1986
4.	Carriage by Air Act	D	1988
5.	Carriage of Goods By Sea Act	E	1993
6.	Consumer Protection Act	F	1972
7.	Indian Customs Act	G	1962
8.	Motor Vehicles Act	H	Forward Logistics

PART - B

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

(48 Marks)

- Q. 5** Explain in detail the different types of material handling equipments.
- Q. 6** Explain in detail about Transport Infrastructure.
- Q. 7** “Physical distribution system should function efficiently. Efficiency is the ratio of output to input”. In the light of this statement, indicate the various parameters of efficiency. Indicate atleast two measuring productivity ratios in physical distribution management.
- Q. 8** Explain Fourth Party Logistics – (4PL).

Q. 9 Write Short Notes (Any Four) – (4 x 4 = 16 Marks)

- (a) Transport Functionality and Transport Principles.
- (b) Scope of Reverse Logistics.
- (c) Product Recall.
- (d) Channel Flows with flow process.
- (e) Logistical Organisational Structure.
- (f) Functionality aspects of Technology for Logistics.

PART – C

(20 Marks)

Q. 10. CASE STUDY (compulsory)

M/s XYZ Ltd., is a liquor company which has about 150 stores in France and is the country's largest privately owned retailer of wine, liquor, gourmet food and cigars. XYZ features over 4,000 wines and a complete selection of both rare and popular spirits. All the 150 locations are supported by their 180000 Sq. ft distribution centre in Paris.

Situation - XYZ Ltd., documented wants and needs for their operation to be more efficient. XYZ wanted to reduce breakage on the conveyor system, increase bottle picking efficiency, eliminate hand-scanning of products and develop a safer way to clear jams on the conveyor.

Assessment – Value Cargo Logistics collaborated with XYZ Ltd., to develop a feasible plan of action to achieve the set goals as pointed above. With the current distribution centre already in place, the solution had to utilize the space available.

In view of the above, you are requested to respond to the below mentioned queries:

Questions : (4 x 5 = 20 Marks)

- (a) What probable solution could be arrived at to reduce the breakage and increase bottle picking efficiency?
- (b) How do you think the hand-scanning of products can be eliminated and what is the solution available?
- (c) How can the jams on the conveyor belts be cleared in a safest possible manner ?
- (d) What results do you expect to achieve in the long run ?

-X-X-X-X-