Indian Institute of Materials Management

Post Graduate Diploma in Logistics Management

Paper –3

Strategies and Organization in Logistics

Date: 14.12.2009

Time: 10.00 am to 1.00 pm

Max. Marks: 100

Duration: 03 Hrs.

Instructions:

1. From Part - A, answer all questions, each sub question carries 1 mark
2. From Part – B, answer any three questions out of five questions. Each question carries sixteen marks.
3. Part –C is a case study of 20 marks.

Part –A

Q.1) Fill in the blanks. Marks (8)

i. The two types of marine insurance are i) ______ ii) ___________

ii. Freight is charged on ______ weight of the consignment

iii. The most common popular size of the containers in use for international trade is ____ feet and ______ feet.

iv. There are two types of intermediaries. They are i) ______ and ii) ___________

v. Certificate of origin is prepared by __________ to declare the origin of the country.

Q. 2) State true or false Marks (8)

i. Traditional supply chain strategies are push and pull strategies

ii. A number of companies have a hybrid supply chain strategy that is called advance strategy.

iii. TQM is Total Qualitative Maintenance.

iv. The most direct reflection of logistic performance is actual cost incurred to accomplish objectives.

v. The important customer satisfaction indicator is delivery to original committed date.

vi. Customer inquiry response in not a criterion to measure customer satisfaction.

vii. ISO 9000 is followed only in India.

viii. ISO is a tool of TQM
Q. 3) Name any eight units given in the figure of a supply chain.  
Marks(8)

Fig. 1 A supply chain Management

Q. 4) Match the following  
Marks (8)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Sr. No.</th>
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<tbody>
<tr>
<td>A</td>
<td>Order cycle time</td>
<td>I</td>
</tr>
<tr>
<td>B</td>
<td>Stock availability</td>
<td>II</td>
</tr>
<tr>
<td>C</td>
<td>Order size constraints</td>
<td>III</td>
</tr>
<tr>
<td>D</td>
<td>Ordering convenience</td>
<td>IV</td>
</tr>
<tr>
<td>E</td>
<td>Frequency of delivery</td>
<td>V</td>
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<tr>
<td>F</td>
<td>Delivery reliability</td>
<td>VI</td>
</tr>
<tr>
<td>G</td>
<td>Documentation Quality</td>
<td>VII</td>
</tr>
<tr>
<td>H</td>
<td>Claim Procedure</td>
<td>VIII</td>
</tr>
</tbody>
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Part B

(Answer any three Questions.)

Q. 5) What are the global logistic challenges?
Q. 6) Discuss in brief the stages of functional Aggregation
Q. 7) Explain seven key elements of the horizontal corporation.
Q. 8) Which are the five critical configuration components of the logistics?
Q. 9) What are the five processes of end to end Supply chain management?

Part C

(Compulsory Question)

Q. 10 Read the following case study and answer the questions.

According to the organized sector, the snack food market in India is growing at 25 to 30 percent per year. The unorganized sector dominates 50 percent of this market. Local player sell both branded and unbranded products which are at 20 to 25 percent cheaper than national and international brands. Unbranded products are supplied to small and medium sized restaurants bars clubs and pubs in bulk. However branded products are popular amongst the educated elite and the young generation in urban areas. Due to changing trends in life and adoption of western culture, there is greater inclination towards fun and enjoyment in life, which is reflected in the food habits and lifestyle of the younger Indian population, both in urban and semi-urban areas.

Company background

Based on market survey conducted in 1987 by ABC Company, a subsidiary of a multi-national company, snack food plants were set up at Patiala and Delhi to manufacture potato chips and baked fried cheese and snacks. The mission is “To be peoples’ favorite snacks and be always available when required”. In a competitive market scenario, where staying ahead of the competition is a key challenge, the pace with which one respond is of strategic importance. To day with volatile demand, the emphasis is on making to sell rather than making to stock. With high consumer expectation and need for rapid response in the marketing, distribution assumes greater significance and provides the required competitive edge. Availability of the product at the right time and place has become a prerequisite for creating long term loyalty.

The company’s market survey conducted on consumer perception indicates more than 95 per cent customer satisfaction. The three product variety introduced so far have been well receive and have created a favorable image for the company. But competition from the unorganized sector, on the price front is causing concern to GM marketing. He is worried about the distribution cost as a percentage of the product cost, which has been growing over the years and reducing the profit margin. On the other hand, due to killing competition, ABC is under tremendous pressure to keep prices at levels acceptable to customers.
**Problem Analysis**

To analyse the distribution cost problem the GM has assigned the job to Mr. X an engineer with an MBA and four years of experience in the distribution of ABC products, who joined as Logistic Manager in ABC. He has been with the company for the last one month. Mr.X took the opportunity as a challenge to prove his worth. He studied the current distribution system of the company, which is reflected in the distribution chain shown below.

![ABC Distribution Chain Diagram](image)

**Figure 2. ABC Distribution Chain**

ABC’s first phase of distribution from its factories to C&F agents is more critical as it includes long distance freight paid dispatches involving primary freight charges, which are included in the maximum retail price (MRP) of the product. The distribution of the products, from C & F agent down to the retailers are taken care by channel members. The freight charges from secondary charges from C & F down the line are taken care of by channel members who are compensated through commission and quantity discounts. As the products are sent through open trucks, ABC encounters following problems:
**Trans-shipments**: The trucks are sometimes not loaded to full volume due to varying product mix requirements. Also due to low weight requirements, the transporter sometimes clubs other heavy goods with ABC products, resulting in transit damages.

**Freight**: ABC products occupy more space and hence a 9 ton truck is underutilized as far as loading is concerned, resulting in higher freight charges per unit weight.

**Damages**: Transit damage in open truck is to the extent of 8 to 10 per cent, due to improper handling, trans shipments, protrusions and mixing with other cargo.

**Pilferages**: ABC sometimes receives complain from C&F an agent regarding short supplies, which normally occurs due to pilferage of their products. The percentage is alarming but ABC wants to eliminate this.

ABC packs its products in transparent plastic bag of 200 grams each. These bags are packed in cartons of an average size of 2 feet by 1 feet by 1 feet. The average dispatches of three stock keeping units (SKU) during the last twelve months are as given below:
- SKU A – 68%
- SKU B – 25%
- SKU C – 7%

Answer the following questions.
Que 10 A. Assume you are Mr. X and Propose a solution to the company’s problem.
Que. 10 B Which is the most appropriate basis (tonnage, volume, cases or Km) to assess freight charges for snack food products? Compare them for rupee value per unit.