EMERGING TRENDS IN SUPPLY CHAIN MANAGEMENT & LOGISTICS

Date: 22.12.2022
Time: 2.00 pm to 5.00 pm
Duration 3 hours

Instructions
1. Part A is compulsory. Each sub question carries one mark. Total marks - 20
2. Part B answer any 3 questions. Each question carries 10 marks Total marks - 30
3. Part C is a case study with sub questions and it is compulsory. Total marks - 20

Part – A (20 Marks)
(Assert all questions. Each sub question carries 1 mark.)

Q.1 Fill in the Blanks (5 Marks)
   a) Artificial Intelligence (AI) was developed by -----------.
   b) E-Catalogue is a ------ of products with prices.
   c) Converting raw data into useful data for business purpose is --------.
   d) ERP was used by for the first time by Gartner group in the year -------.
   e) Performing business activities through mobile is --------.

Q.2 State TRUE or FALSE (5 Marks)
   a) IFA is In Flight Alignment.
   b) The software which provides real time operation is ERP.
   c) Trend in a business is to evaluate the consistency of occurrence in transactions.
   d) Selling products and services of another business under own brand is known as Aggregator.
   e) In Robotics, application of ML (Machine Learning) is done.

Q.3 Match the Following: (5 Marks)

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Starbucks.</td>
<td>1 Performance Measurement.</td>
</tr>
<tr>
<td>b Amazon.</td>
<td>2 Network.</td>
</tr>
<tr>
<td>c KPI.</td>
<td>3 Coffee Growers.</td>
</tr>
<tr>
<td>d Amway.</td>
<td>4 BPO company.</td>
</tr>
<tr>
<td>e Accenture.</td>
<td>5 E-Commerce.</td>
</tr>
</tbody>
</table>

Q.4 Expand the Following Abbreviations: (5 Marks)
   a) CPS   b) SCV   c) QCM   d) BPO   e) EBB

PART B (30 Marks)
(Attempt any 3. Each question carries 10 marks)

Q. 5 a) Explain the concept of Franchising and its features? [5 marks]
    b) Discuss different types of E-Commerce models? [5 marks]

Q. 6 a) Explain in brief three important types of ERP systems? [5 marks]
    b) What is Digital Economy? What are its characteristics? [5 marks]

Q. 7 a) Explain value Buying in a supply chain? [5 marks]
    b) Discuss the advantages of Network Marketing for business organisations? [5 marks]
Q. 8 a) Explain in detail the role of Supply Chain Drivers? [5 marks]
    b) What are the uses of Alternate Source of Energy in Logistics, Warehousing and Distribution? [5 marks]

Q. 9 Write Short Notes on any 2 from the Following: [2 x 5 = 10 marks]
   a) Digital Purchase Order Software.    b) Logistics System Engineering.
   c) Industry 4.0.    d) Cash Spin.

PART C 20 marks

Q. 10. Case study – Compulsory

LULU Hyper Market, one of the fastest growing brands began as a small supermarket in Abu Dhabi in 1995 and is one of the largest retail chains in Asia at present. With the parent company EMKE Group headquartered in Abu Dhabi, it has over 120 outlets worldwide, of which 50 are in the UAE. They have opened 5 malls in India and planning to expand to 12 within 3 years. In spite of the volume of goods handled and the number of outlets in the distribution chain, the group has been able to run its supply chain management like a well-oiled machine and most of it is due to an efficient distribution channel and warehouse management system. For ease of operations, Lulu group has divided the UAE region into four parts: Dubai, Northern Emirates, Abu Dhabi and Al Ain. Lulu has four warehouses, the one in Abu Dhabi being the largest followed by the warehouse in Dubai Investments Park. Ordering stage to warehouse is completely automated. Digital Purchase Ordering of products is done daily based on Safety Stock levels. Inventory data integrity is maintained through cycle-counting. The benefits of auto ordering include Lower out-of-stocks, Higher sales, Lower inventory costs, Higher margins, and Lower Labour costs (by cycle-counting). WMS also alerts about goods which are going to expire two months in advance, so that necessary steps are taken to sell off stocks. Early 2016, the first transit warehouse in Jebel Ali Free Zone began operations, enhancing the group’s import and export operations. The warehouse covers an area of 200,000 sq. ft and currently handles around 700 shipping containers per month and frequency of shipments has increased. The warehouse at Jebel Ali, which mainly houses items such as textiles, home furnishing and electronics, employs around 100 staff, while those at Abu Dhabi and Dubai employ 700 and 500 respectively. With such a large number of SKUs and a wide network of stores, distribution was a bigger challenge. They resorted to minimum vehicle, maximum output policy. Lulu operates a fleet of 168 vehicles. Routing and Scheduling are done in advance, and the movement of all vehicles are monitored through GPS. They have arranged the schedule in such a manner that during prohibited hours (when trucks are not allowed on UAE roads), vehicles are either being loaded or offloaded, both of which takes around three hours. The trucks at the retail warehouse in Dubai itself carry out a hundred trips daily and around 10,000 SKUs are issued to various outlets daily. Lulu has its own logistics management system and no part of their supply chain process is outsourced. All Lulu outlets have back stores, with limited space as the majority of the stock is held at the warehouse. Lulu warehouses always hold stock for 15 to 20 days. When an item gets out of stock int an outlet, replenishment is done within three hours. Lulu currently sources items from about 400 local suppliers and sources 75% of its fruits and vegetables through direct imports from more than 25 countries. They import around 275 containers of fruits and vegetables per month. The group has also signed contracts with local farms as part of a CSR (Corporate Social Responsibility) initiative to support local organic farmers. Products with a short shelf-life, such as fresh juice, chicken, fish, milk, yoghurt and other beverages are directly sent to the stores by the suppliers, twice a day. During the first quarter of 2016, Lulu started online shopping. Lulu’s e-commerce division (www.luluwebstore.com) currently sells groceries and department products. Their logistics team places utmost importance on the quality of the delivery process to ensure that Lulu meets the expectations of customers.

Questions
   { Answers should not be made one-word type. Questions are based on the Textbook provided. Read the Case carefully and answer.}

1) What is the supply chain process done by Lulu? Explain the sourcing of various commodities?
2) How Lulu manages their logistics activities without outsourcing?
3) What is the Value Buying activity done by Lulu. What are the advantages?
4) Explain how Lulu has implemented Logistics System Engineering in their organisation?
5) What CSR initiative is done by Lulu?

************************

Q. 2 From the Following:

a) Explain the sourcing of various commodities by Lulu.
   b) What are the uses of Digital Purchase Order Software in Logistics?
   c) What is the role of Supply Chain in Lulu?
   d) Write Short Notes on Industry 4.0.
   e) What is the importance of cycle-counting in Lulu’s inventory management?

Q. 3 From the Following:

a) How does Lulu ensure efficient distribution channel?
   b) What are the benefits of auto ordering in Lulu’s operations?
   c) How does Lulu manage their supply chain process?
   d) Explain the role of Logistics System Engineering in Lulu’s organisation?
   e) What is the significance of minimum vehicle, maximum output policy in Lulu’s operations?

Q. 4 From the Following:

a) How does Lulu manage their inventory levels?
   b) What is the importance of cycle-counting in Lulu’s inventory management?
   c) How does Lulu’s e-commerce division contribute to their supply chain?
   d) Explain the role of CSR initiative in Lulu’s operations?
   e) How does Lulu ensure the quality of delivery process?