INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management - 2years
Post Graduate Diploma in Supply Chain Management &L

March 2020

Paper 15

SUPPLY CHAIN MANAGEMENT

Date: 04.03.2020 **Max. Marks 100**
Time: 10.00 a.m to 1.00 p,m **Duration 3 hours**

Instructions

1. Part A is compulsory. Each sub question carries one mark. **Total marks-20**
2. In Part B answer any 3 questions . Each question carries 20 marks **Total marks-60**
3. Part C is a case study with sub questions and it is compulsory. **Total marks-20**

PART A **(4 x5 = 20 marks)**

Q. 1. Fill in the blanks. **[5 marks]**

a) The ____ ______ is a dynamic process where various parties are involved.

b) An external party that collects finished products from suppliers is a ________.

c) Finance oriented supply chains are also called as _________ ______.

d) Process to determine an amount the organization would charge for a product is ______.

e) The decisions related to day to day operational freight transactions are ____ ______

Q. 2. State True or False **[5 marks]**

a) Just in time manufacturers often use multi sourcing strategy of procurement.

b) Honesty is important for healthy supplier relationship.

c) Process of planning from point of consumption to point of origin is reverse logistics.

d) A good sourcing strategy does not depend on organization's strategy.

e) Negotiations control the payment to be made to the suppliers. .

Q. 3. Match the following: **[5 marks]**

	Column A		Column B
A	Strategic Planning	1	Forecasting demand
B	Tactile Level	2	Creating a base of network
C	Operational Level	3	Warehousing solutions
D	Reorder Level	4	Shipment of order
E	Delivery Time	5	Order point

Q.4. Expand the following: **[5 marks]**

a) OEM b) LSP c) SCM d) SKU e)APS

PART B **(Total 60 marks)**

(Answer any three. Each question carries 20 marks)

Q4. a)Explain the role of CRM in SCM. b)Discuss CRM confusion in SCM. **[2 x10= 20 marks]**

Q5. a)Define electronic data interchange and discuss its benefits. b)Explain different ERP tolls used in the SCM. **[2 x10= 20 marks]**

Q6. a)What is digitalization? Explain the Role of Digitization in Supply Chain? **[10 marks]**
b)What is product digitalization ? How it has affected different sectors? **[10 marks]**

Q7. a)Discuss the type of approaches used for balancing the supply chain. **[10 marks]**
b)Define aggregate planning and its role in supply chain **[10 marks]**

Q.8. Write Short Notes **any four**. **[4 x 5 = 20 marks]**

A)Pricing and revenue management B)Closed loop supply chains
C)Sourcing strategies D)Virtual integration E) Supply chain drivers

PART C 20 marks

Q.10 Case Study (compulsory)

McDonald's is a fast food chain with restaurants all over the world. It serves burgers and other fast food customized to local tastes. It's philosophy has been 'one world, one burger;' which meant that the burger must be consistent in terms of cost and quality. To meet such high standards, it was essential to have an excellent supply chain management system. In India as in other parts of the world, McDonald's had a very well-orchestrated supply chain, called the 'Cold Chain'.

It was early evening and one of the 25 McDonald's outlets in India was bustling with activity with hungry souls trooping in all the time. No matter what one ordered - a hot Maharaja Mac or an apple pie - the very best was served every time.

But did anyone ever wonder as to how this US giant managed the show so perfectly? The answer seemed to lie in a brilliantly articulated food chain, which extended from these outlets right up to farms all across India.

US-based fast food giant, McDonald's success in India had been built on four pillars: limited menu, fresh food, fast service and affordable price. Intense competition and demands for a wider menu drive-through and sit-down meals - encouraged the fast food giant to customize product variety without hampering the efficacy of its supply chain.

Around the world (including India), approximately 85% of McDonald's restaurants were owned and operated by independent franchisees. Yet, McDonald's was able to run the show seamlessly by outsourcing nine different ingredients used in making a burger from over 35 suppliers spread all over India through a massive value chain.

Between 1992 and 1996, when McDonald's opened its first outlet in India, it worked frenetically to put the perfect supply chain in place. It trained the local farmers to produce lettuces or potatoes to specifications and worked with a vendor to get the perfect cold chain in place. And explained to the suppliers precisely why only one particular size of peas was acceptable (if they were too large, they would pop out of the patty and get burnt).

These efforts paid off in the form of joint ventures between McDonald's India (a 100% wholly-owned subsidiary of McDonald's USA) and Hard castle Restaurants Pvt. Ltd, (Mumbai) and Connaught Plaza Restaurant (New Delhi). Few companies appreciate the value of supply chain management and logistics as much as McDonald's does.

From its experience in other countries, McDonald's was aware that supply chain management was undoubtedly the most important factor for running its restaurants successfully. Amit Jatia , Managing Director, Hard castle Restaurants Private Limited said, "A McDonald's restaurant is just the window of a much larger system comprising an extensive food-chain, running right up to the farms".

McDonald's worked on the supply chain management well ahead of its formal entry to India. "We spent seven years to develop the supply chain. The first McDonald's team came to India way back in 1989," said S. D. Saravanan (Saravanan), Product Manager, National Supply Chain, McDonald's India.

McDonald's was started as a drive-in restaurant by two brothers, Richard and Maurice McDonald in California, US in the year 1937. The business, which was generating $200,000 per annum in the 1940s, got a further boost with the emergence of a revolutionary concept called 'self-service.'

The brothers used assembly line procedures in their kitchen for mass production. Prices were kept low. Speed, service and cleanliness became the critical success factors of the business. By mid-1950s, the restaurant's revenues had reached $350,000.

As word of their success spread, franchisees started showing interest. However, the franchising system failed because the McDonald brothers observed very transparent business practices. As a consequence, imitators copied their business practices and emerged as competitors. The franchisees also did not maintain the same standards of cleanliness, customer service and product uniformity.

At this point, Ray Kroc (Kroc), distributor for milkshake machines expressed interest in the business, and he finalized a deal with the McDonald brothers in 1954. He established a franchising company, the McDonald System Inc. and appointed franchisees. In 1961, he bought out the McDonald brothers' share for $2.7 million and changed the name of the company to McDonald's Corporation. In 1965, McDonald's went public.

In 1996, when McDonald's entered India, it was looking for a distribution agent who would act as a hub for all its vendors. Mumbai-based Radhakrishna Foodland Private Limited (RFPL) was chosen for the job as it was already a distributor for its sister concern, Radhakrishna Hospitality Services, a catering unit supplying to offshore institutions. The iceberg lettuce from Ooty, mutton patties from Hyderabad and sesame seed buns from Punjab were all delivered to RFPL's distribution centre (cold storage) in its refrigerated vans. RFPL stored the products in controlled conditions in Mumbai and New Delhi and supplied them to McDonald's outlets on a daily basis.

By transporting the semi-finished products at a particular temperature, the cold chain ensured freshness and adequate moisture content of the food. The specially designed trucks maintained the temperature in the storage chamber throughout the journey. Drivers were instructed specifically not to switch off the chilling system to save electricity, even in the event of traffic jam.

McDonald's sourced ingredients from all parts of India. The iceberg lettuce was specially developed for India using a new culture farming technique. This variety of lettuce was similar to the lettuce McDonald's used elsewhere in the world. To meet the demand consistently, McDonald's helped Trikaya Agriculture grow the lettuce throughout the year and even in rain-shadow areas. The crop was harvested between 45 days, depending on the climate. The crop was harvested early in the morning and immediately stored in vacuum pre-coolers installed at the farm. The pre-cooler brought down the temperature of the lettuce from 26º to 3º.

Questions:

1. Discuss the major causes of the success with the supply chain of the company.
2. What are the strategies that you would suggest to the company to become proactive in ensuring supply chain efficiency?

****