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UNIVERSITY OF PETROLEUM & ENERGY STUDIES

DEHRADUN

End Term Examination – May, 2018

Program/course: MBA (LSCM) **Semester – II**
Subject: Retail Supply chain Management **Max. Marks : 100**
Code : DSCR **Duration : 3 Hrs**
No. of page/s: 04

Section-A

1. Answer the following. (10x1)

a) Cross Selling
b) Specialty Store
c) 7 O's Model
d) Trade Area
e) Category Management
f) Inventory Turnover Ratio
g) EDLP
h) Surge Pricing
i) Line Pricing
j) Omni Channel

Section-B

Attempt any four questions (Make assumptions, if necessary)**.** (4x5)

3. A retailer acquires and sells 500 pieces of Paker pens at buying price was Rs 200 per piece. At the end of the season he observed that he lost 25 pieces due to pilferage, sold 400 pieces at mark up price of Rs 300 and balance 100 were sold at 20% discount on maximum retail price. How much revenue the retailer lost on Mark up price.

4. Discuss various types of retail formats, what are the advantages of a franchisee?

5. Discuss the role of reverse logistics for returns for e-commerce companies such as Flipkart?

6. Discuss the significance of operations aspect of consumer behavior.

7. How FDI has affected the retail logistics in India?

Section-C

Answer any three questions. (3x10)

8. Define Vertical Integration, discuss the advantages of vertical integration from the retail sector.

9. Define GMROI. Calculate the GMROI and inventory turnover given the annual sales of Rs 2,00,000

and average inventory at cost of Rs 40,000 and a gross margin of 30%.

10. Define Retail Marketing strategy. Explain basic growth strategies in detail with practical examples.

11. Define Buying Decision Process for any new consumer durable product such as furniture etc. and how it will differ from any FMCG such as Ice cream/Biscuit.

Section-D

Attempt the following questions (Compulsory):

SUMAN CROP PROTECTION

The crop protection (CP) industry plays a vital role in Indian agriculture by preventing and reducing crop loss before and after harvesting. A broad and common categorization of CP products (pesticides) is insecticides, herbicides, fungicides, rodenticides and fumigants. Another useful categorization is technical pesticides and formulations. India is one of the largest manufacturers of technical pesticides and there is a significant capacity in the industry.

The CP industry is made up of large companies operating at the national level and a number of smaller companies operating at regional levels. This allows for products to be available all across the country; but has also resulted in a severe competition. Insecticide dominates the market, although the continuing trends in the recent years have been of faster growth in herbicides and fungicides. Cotton is the key crop for pesticides consumption with rice, wheat, plantation, fruits and vegetable being other major crops. The industry is dependent on good monsoon and is labor-intensive in nature. The Indian seed industry continued to operate in a fragmented manner, with a few large products operating at the national level and many small producers/traders operating at the regional level, particularly in field crops. The industry is likely to witness some consolidation in the near future. A major development in the industry was the approval granted by government of India for commercial sale of genetically modified (Bt) cotton seeds. In agribusiness, companies have to be strong in research and development in order to survive and grow. This is especially so with the ad-vent of biotechnology in the seed industry.

Successive years of low agricultural growth caused by inadequate rains/drought have affected the industry. However, the past few years saw a revival in agricultural growth, which also spurred Indian GDP growth in a major way. The global industry continued to see further consolidation in agribusiness with the consequent ripple effect also being seen in India. The new agricultural policy announced in 2000 has been followed up by support measures in the Union Budget of both subsequent years and this promise to infuse new vigour into agriculture in India.

The potential for the CP industry is tied to the potential of agricultural growth in India. The long-term potential for the CP industry is positive due to the policy initiatives taken by the government, the increase in high-yielding hybrid cultivation and the growth in irrigation. The opportunities in the food processing industry and increased cultivation of export-oriented crops augur well for the industry. In India, the use of developed seeds is still at a very low level for many crops. There is a gradual shift to high-value hybrid seeds, particularly in crops such as high-value vegetables and in-field crops like sorghum, pearl millet, corn, sunflower and cotton. Efforts are also being made to develop suitable hybrids in crops like rice, where the

use of hybrids is very low. This offers big opportunities to seed companies in India. Producers having modern research facilities will have lots of opportunities not only from sales of seeds, but also from licensing of technology. The Indian farmer's acceptance of modern agriculture practice is also a positive factor. For the protection of breeders' rights, the government has now enacted legislation and is in the process of formulating the necessary rules and regulations. This should help the country get access to more modern technology in the agricultural sector. The low level of capital formation and productivity in agriculture is a matter of concern as is the fluctuation in quality and price of agricultural products. Marketing of spurious pesticides and seeds in the names of big companies is yet another threat.

SUMAN CROP PROTECTION (SCP)

The company started its operation in 1970 as a trading house for the imported crop protection chemicals. Initially, they concentrated their marketing effort in the southern part of the country. They opened their first office in Chennai and subsequently as the business grew, they had offices in Hyderabad, Bangalore and Trivandrum. Looking at the business prospects and the gradual shift of the farmers to using hybrid seed, wherein these chemicals find the application as insecticide and pesticide, SCP decided to start manufacturing activities and they built up a facility in Maharashtra, with the vision to succeed in both the up- and down-country markets. The plant went into operations in 1994 with an installed capacity of 5000 tonnes of agrochemicals, which was subsequently increased to 8000 tonnes. The second plant was put into operation in 1999 in Gujarat with an in-stalled capacity of 5000 tonnes. SCP has achieved rapid growth and commands a market share of 12 per cent, which is next to their rival Tata Rallis, which has a 15 per cent market share.

Table 1 SCP Performance

	1995	1996	1997	1998	1999	2000	2001
Income (INR mn)	2580	2843	3150	3414	3755	4027	4256
PAT (INR mn)	51.7	99.49	135.51	178.96	187.53	183.46	276.46
Finished Goods inventory (INR mn)	610.53	672.84	745.5	805.43	849.91	817.65	822.82
Inventory in no. of days	71	71	72	71	68	61	58

PRODUCTS

SCP manufactures a wide range of agrochemicals for crop protection, some pesticides for domestic application and seed for crops. The product range covers:

Herbicides—For prevention or elimination of weeds, erosion of soil and water loss.

Fungicides—To prevent and cure crop diseases that have severe adverse effects on crop yield and quantity.

Insecticides—Insects like caterpillars and aphids can significantly reduce crop yield through their feeding. Insecticides help in minimizing this damage by controlling the growth of insects.

Professional Products— The pest control chemicals for material protection, vegetation man-agement, gardens and public health.

Seeds—For field crops, vegetables and flowers.

The marketing of the above product categories is organized under two broad business segments, viz. crop protection (CP) division and seeds division. The contribution of the CP division was 86 per cent in the company's 2001 sales turnover and the balance 14 per cent contribution was from the seeds division. SCP exported products worth INR 121 million in 2001; contributing 2.8 per cent to its sales turnover, which is mostly in the CP division.

RAW MATERIALS

The raw material of SCP is divided into three main categories, namely active ingredients, intermediaries and packing material. The percentage contribution of each of the above categories in the total inventory is 30, 62 and 8 respectively. The material is procured from 78 suppliers, which includes suppliers from outside the country. Thirty-five per cent of raw material is imported, which has a 3-month lead time including the time for transportation and customs clearance. All the packaging materials are indigenously procured, which constitutes 10-12 per cent of the product cost. SCP maintains a 45-50 days' raw material inventory. As the finished products have seasonal demand, most of the raw materials are procured in advance before the season.

PRODUCTION

The agricultural season starts first in northern India followed by west, east and south regions. Suman follows the batch production methods and processes the material according to the region-wise requirement for dispatch—first to the north and the to the other regions in the above sequence. The production planning is done based on the requirement forecast by the regional offices. The production schedules are reviewed every month. The forecast is mainly based on the climatic conditions in the country and the degree of rainfall in the region. As the lead time for imported material is long, the company does not accept any order for shorter delivery periods. The material is quality-tested before packaging, which is available in pack sizes of 50 g, 100 g, 250 g, 500 g, 1 kg, 5 kg, and 10 kg.

DISTRIBUTION

After it stared business in India, SCP had entered into contract with the State Warehousing Corporations in various states for warehousing agrochemicals at the various consumption centres. These are government/public warehousing corporations, which mostly deal in warehousing and distribution of agro-products such as food grains, pulses, sugar and seeds. These corporations are actively associated with the Food Corporation of India (FCI) for procurement and distribution of food grains in the regions. These corporations also stock material (related to agricultural industry) from private manufacturers. Till 1998, SCP was distributing the materials through 350 public warehouses. The management noticed that they were maintaining finished goods inventory stocks of 70-71 days, which was very high, compared to their competitor (43-45 days). The company's regional offices were divided into seven zones and they were coordinating the warehouses for dispatches to the co-operatives and the farmers in their respective regions. Each office was staffed with one regional head, three sales representatives, and three lower grade staff.

Zones

1. Western (Maharashtra, Gujarat and Goa)

2. Central (MP and Rajasthan)

3. Northern (UP and Bihar)

4. North Western (Punjab, Haryana, HP and J&K)

5. Eastern (WB, Assam and North Eastern States)

6. South 1 (TN, Karnataka and Kerala)

7. South II (AP and Orissa)

Current System Drawbacks

- High distribution cost—Average INR 12,000-15,000 per year per warehouse
- The primary transportation cost was INR 48-50 lakhs per year
- Less control on the warehousing operations
- Stocks accounting and reporting very poor
- Product damages, pilferage and expiry 1-1.5 per cent

Looking at the problems, SCP in the year 1999 changed its distribution system and restructured the marketing network. The new system consisted of the following:

New Distribution System

- The practice of stocking the materials at public warehouses was abolished
- SCP appointed 200 big distributors to maintain the minimum inventory level as per the norms of the company, which is fixed on the basis of the demand pattern in the region
- The sales target was assigned to each of the dealers. The target was to be monitored by the respective regional office head
- The dealer organizes the storage space for stocking the material
- For the services rendered by the dealer, the compensation was fixed at 7.5 per cent of the purchase he makes. For exceeding the sales target, the dealer will be paid extra, based on the sales slabs he covers
- The dealer would report to the regional office every evening on the sales affected and inventory in stocks
- The dealer will pay to SCP for the sales effected within 30 days of the date of invoice, a copy of which he has to send to the regional and the head office on the same day
- SPC reworked the MRP for all its products. The charges for primary and secondary transportation and other distribution costs (warehousing and handling) were included in the MRP of the product, which is recovered by the company from the customer

New Marketing Set-up

- SCP reduced its zonal offices from eight to four regional offices as profit centres

- They were empowered to monitor and control the sales and marketing in their respective regions The dealers' requirements were met directly from the central warehouses of both the factories on the instruction of regional offices
- All regional offices were connected online with HO (Mumbai) and the factories (Maharashtra and Gujarat)

As a result of the above changes, the inventory stocks started reducing, but currently it is 45 days. (see Table 1). The non-value-added distribution activities were eliminated. Product damages, pilferages and losses were reduced to the bare minimum. The management is still unable to do anything on the demand front, as the requirement of agrochemicals depends on the crops, which in turn is dependent on the monsoon. The SCP has appointed a consultant to increase the market share and retain the existing customers.

QUESTIONS

1. **Compare and contrast the old and new logistics systems of SCP. How to reduce the inventory, which is more than 45 days even now?**
2. **Do you feel the revamping of the system is adequate, or would you suggest further changes in the marketing structure to cope with the market requirements in the competitive environment?**
3. **What CRM practices SCP should practice for customer retention? 3x10=30**