



JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M) / PGDM (SM)
SECOND TRIMESTER (Batch 2018-20)
END TERM EXAMINATIONS, DECEMBER 2018

Course Name	Operations Management	Course Code	OM-202
Max. Time	2 hours	Max. Marks	40 MM

Part - A

1. How is 'Quality' defined? Explain the customer's and manufacturer's view regarding quality. (1 + 5)
2. What are Product and Process Layouts? How should organization decide on which layout to choose? (2 + 5)
3. Explain the importance of accuracy in forecasts. Also explain various errors in forecast. (2 + 5)

Or

A carpet discount store in Jaipur stocks carpet in its warehouse and sells it through an adjoining showroom. The showroom keeps several brands and styles of carpets in stock. However, its biggest seller is the super shag carpet. The showroom wants to determine the optimal order size and the total inventory cost of this brand of carpet, given an estimated annual demand of 10,000 yards of carpet, an annual inventory cost of Rs 0.75 per yard, and ordering cost of Rs. 150.

Find

- a) The optimal order size and the total inventory cost. (2 + 2)
 - b) The number of orders that will be made annually given that the showroom is opened every day except Sunday. (2)
 - c) What is the difference between ordering cost and carrying cost? (1)
4. Short notes (2.5 X 4)
- a) Statistical Quality Control
 - b) Inventory Classifications
 - c) Line Balancing
 - d) Location Decision Strategy

Part - B

Case study

Inside Dell: The secrets of its supply chain success

What does it take for a US\$60 billion high-tech giant like Dell Inc. to compete in today's margin-hungry personal computer market? "We are always looking for ways to take out waste, to take out time and take out costs, and then passing those savings along to our customer," says Dave Schneider, continuous improvement engineering manager for Dell Americas operations.

To meet these goals, Dell relies on a unique supply chain strategy that gathers large volumes of customer information through its direct-sales model and shares it with internal procurement and sales departments, as well as external suppliers.

"These close relationships with customers and suppliers allow us to know what we must be able to supply in real time, and then very quickly and precisely meet that demand while maintaining low inventory," Schneider says. "We are not manufacturing finished goods that we hope people will buy. However, the relationships we have with the majority of our customers enable us to forecast accurately without filling a pipeline of finished goods."

It's All About the Information

To successfully forecast demand, Dell maintains a constant flow of data in two information loops: one between customers and the Dell sales team, and the other among sales, procurement, and suppliers. Key metrics Dell shares with suppliers include forecasted sales dollars, sales quantities and parts requirements. In return, it receives data about how well suppliers can support these forecasts.

"We need to understand the supportability of our demand in the short term for every single product that we're going to sell — down to every hard disk, video card and optical drive," Schneider explains. "What we are really measuring is our suppliers' ability to be flexible and adjust to our changing demands."

The information Dell receives from suppliers tells its sales team what products it can effectively promote. "That really goes to a demand-shaping concept."

Information Evolution

Dell's communication system evolved from the early days of spreadsheets to today's sophisticated online and collaborative tools, which provide a rich mix of current and historical information about supplier performance.

Dell's other key information technology infrastructure components include Oracle Database 10g (on which it has standardized) and Oracle E-Business Suite 11i, including Oracle Financials, Oracle Purchasing, Oracle Order Management, Oracle Collaboration Suite, Oracle Field Sales and Oracle Telesales. Dell also uses the Oracle Customer Data Hub.

"We have certainly moved the needle on the use of technology in this supply chain process," Schneider says.

Questions

1. Explain the supply chain of Dell. (5)
2. Technology is an enabler in lean supply chain management. Give your views. (5)