II MBA - II Semester – Regular/Supplementary Examinations
MAY 2017

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Duration: 3 hours   Max. Marks: 70 M

SECTION-A

1. Answer any FIVE of the following: 5 x 2 = 10 M

    a) What is Competitive advantage?

    b) Explain Supply Chain Management.

    c) Service capability.

    d) Bullwhip effect.

    e) Transport documentation.

    f) Global strategy.

    g) Logistic service alliances.

    h) Global logistics.

SECTION – B

Answer the following: 5 x 10 = 50 M

2. a) How to achieve competitive advantage through logistics? Explain.

<div align="center">OR</div>

    b) Differentiate between Logistic Management and Supply chain Management.

3. a) Explain service driven logistics systems.

OR

b) Write the customer profitability analysis.

4. a) Explain the process of benchmarking the SCM operations.

OR

b) Write in detail the channel structure and relationships.

5. a) Write the sourcing decisions in supply chain management.

OR

b) Explain the factors affecting the coordination among supply chain activities.

6. a) Explain the global supply chain strategy.

OR

b) Write the role of IT in the supply chain.

SECTION-C
7. Case Study   **1x10=10**

Read the following case and answer the questions given at the end.
ROCHE DIAGNOSTICS
Roche Diagnostics, based in Basel, Switzerland, is one of two divisions of the 100-year-old healthcare company. For Roche Diagnostics, business success comes primarily from manufacturing and selling many of the world's best-known in-vitro diagnostic products. In-vitro products typically consist of chemicals that, when mixed with other substances, cause chemical reactions. These types of tests are highly effective for diagnosing a wide range of medical disorders. However, Roche Diagnostics realized that to maintain its business success it had to address the challenges presented

by a non-integrated infrastructure of computer systems, used for monitoring and managing the processes of Roche's analytical laboratories. The company turned to information systems to help it manage these processes — which, in fact are quite complex.

Stringent Quality Tests

For instance, every batch of chemicals (or "reagents," as they are called) must undergo a series of stringent quality tests before being released to production. With the old IT infrastructure, which was made up of a dozen, separate quality management systems, Roche technicians and scientists were required to communicate with one another, and with production, manually —usually by sending faxes to one another. "Eventually, we were able to send our data into our main ERP system," says Kai Rothermel, information manager QM at Roche Diagnostics." But it was a slow process, since we had a dozen different interfaces between the quality management systems and our central ERP system." As a result, redundant and sometimes conflicting data populated the different systems, so laboratory personnel frequently had to check their data, and communicate their results manually.

Growing Complexity

At the same time, quality testing itself was becoming increasingly complex. Roche was growing, capturing about twice the in-vitro diagnostics market share as its competitors, and was introducing a variety of new products, each of which required its own testing regimen. "This industry has always been closely regulated for quality compliance," says Rothermel. "But as the processes become more complex, the regulations get more complicated. For instance, for the last three years, the regular government inspections have covered our IT systems as well as our actual test and production processes." Because of these pressures, Roche integrated information systems to enhance its quality management (QM) capabilities in its diagnostics processing plants.

Numerous Benefits

"Quality management benefits us in two ways," says Rothermel. "First, it performs a full range of laboratory management processes, and produces accurate, consistent documentation that can satisfy the government audits. Second, because it is seamlessly integrated with our ERP and production

system, it has let us turn what was an IT bottleneck into a highly automated laboratory-to-production system." In the laboratory, the solution acts as an enterprise laboratory information management system (LIM S) to cover wide-ranging analyses, including audit-trail and problem management. And thanks to the integration of Roche's IT system, all appropriate QM information now flows directly — and immediately — into the company's material and batch management and production-planning modules. "For instance, once a new batch of reagent passes the QM testing, the status of that batch is automatically posted as 'free stock' in the materials management system," says Rothermel. "And if it doesn't pass, then it's automatically blocked from production." As a result, Roche now gets products to market more quickly than before, because staffers do not have to take the time to manually check and double-check one another's test data.

Room for Growth, Product Safety

The solution for quality management has helped Roche Diagnostics streamline its IT infrastructure, too, by eliminating the dozen IT interfaces that connected the laboratory and production systems. This has cleared the way for Roche to continue growing and introducing new products well into the future. The QM solution has also brought new level of safety both 'to its customers and to Roche, according to Rothermel. "We now know we can rely on our QM data and its documentation," he says. "This means our customers and our employees are assured of continuing, top-level product quality — a fact that is extremely important in this business." "And it means we can be confident about complying with regulatory audits. This is important, because if you don't comply, the FDA or another agency can actually shut down your entire plant."

Questions :

a) How has Roche improved its quality management processes
   without increasing IT complexity?

b) Highlight the importance of quality in manufacturing.