



**Fourth Semester M.B.A. Degree Examination, Sept./Oct. 2022
(CBCS – 2014-15 Scheme)**

MANAGEMENT

Paper – LSCM 4 : Warehousing and Inventory Management

Time : 3 Hours

Max. Marks : 70

SECTION – A

Answer **any five** questions. **Each** carries **5** marks :

(5×5=25)

1. Write short notes on any five types of inventory.
2. What is Warehouse Management System (WMS) ? Explain briefly on the role of WMS in warehousing operations.
3. Explain economic order quantity.
4. Write short notes on Work-in-Process Inventories.
5. What are the criteria and methodology of evaluation ?
6. Why is inventory control important in any organization ?
7. What are the various types of goods ? Explain.

SECTION – B

Answer **any three** questions. **Each** carries **10** marks :

(3×10=30)

8. What are the various types of warehousing ? Explain in detail.
9. Explain the role of warehousing in distribution system.
10. Explain in detail about material requirement planning.
11. Explain the use of computers in inventory management evaluation of performance of materials function.

P.T.O.



SECTION – C

Compulsory question :

(1×15=15)

12. Case study.

Wal-Mart Stores, Inc. is the largest retailer in the world, the world's second-largest company and the nation's largest non-governmental employer. Wal-Mart Stores, Inc. operates retail stores in various retailing formats in all 50 states in the United States. Wal-Mart had developed an ability to cater to the individual needs of its stores. Stores could choose from a number of delivery plans. For instance, there was an accelerated delivery system by which stores located within a certain distance of a geographical center could receive replenishment within a day. Wal-Mart invested heavily in IT and communications systems to effectively track sales and merchandise inventories in stores across the country. With the rapid expansion of Wal-Mart stores in the US, it was essential to have a good communication system. Hence, Wal-Mart set up its own satellite communication system in 1983.

Wal-Mart was able to reduce unproductive inventory by allowing stores to manage their own stocks, reducing pack sizes across many product categories, and timely price markdowns. Instead of cutting inventory across the board, Wal-Mart made full use of its IT capabilities to make more inventories available in the case of items that customers wanted most, while reducing the overall inventory levels. Wal-Mart also networked its suppliers through computers. The company entered into collaboration with P and G for maintaining the inventory in its stores and built an automated reordering system, which linked all computers between P and G and its stores and other distribution centers. The computer system at Wal-Mart stores identified an item which was low in stock and sent a signal to P and G. The system then sent a re-supply order to the nearest P and G factory through a satellite communication system. Thus the entire warehousing process will be carried out by the system.

Employees at the stores had the 'Magic Wand', a hand-held computer which was linked to in-store terminals through a radio frequency network. These helped them to keep track of the inventory in stores, deliveries and backup merchandise in stock at the distribution centers. Wal-Mart also made use of bar coding and radio frequency technology to manage its inventories. Using bar



codes and fixed optical readers, the goods could be directed to the appropriate dock, from where they were loaded on to the trucks for shipment. Bar coding devices enabled efficient picking, receiving and proper inventory control of the appropriate goods. It also enabled easy order packing and physical counting of the inventories. In 1991, Wal-Mart had invested approximately \$4 billion to build a retail link system. More than 10,000 Wal-Mart retail suppliers used the retail link system to monitor the sales of their goods at stores and replenish inventories. The details of daily transactions, which approximately amounted to more than 10 million per day, were processed through this integrated system and were furnished to every Wal-Mart store by 4 a.m., the next day. In October 2001, Wal-Mart tied-up with Atlas Commerce for upgrading the system through the Internet enabled technologies. Wal-Mart owned the largest and most sophisticated computer system in the private sector. The company used Massively Parallel Processor (MPP) computer system to track the movement of goods and stock levels. All information related to sales and inventories was passed on through an advanced satellite communication system. To provide back-up in case of a major breakdown or service interruption, the company had an extensive contingency plan. By making effective use of computers in all its company's operations, Wal-Mart was successful in providing uninterrupted service to its customers, suppliers, stockholders and trading partners.

Questions :

- a) How the warehousing system of Wal-Mart differ from various other warehouses ? Explain.
 - b) Chart the Supply Chain process carried out in Wal-Mart and explain why warehousing is mandate in the Distribution system.
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