



QUALIFICATION : BCOM HONOURS
MODULE : BUSINESS RESOURCE PLANNING SYSTEMS
CODE : LBE04X7 / LMA8X04
DATE : NOVEMBER 2014
DURATION : 3 Hours
TIME : 180 Minutes
TOTAL MARKS : 180

EXAMINER : Ms A.A. D'Amato
MODERATOR : Prof J Cronjé
NUMBER OF PAGES : 5 PAGES

INSTRUCTIONS TO CANDIDATES:

- Question papers must be handed in.
- This is a closed book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly
- Structure your answers by using appropriate headings and sub-headings.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.
- Answer each section on a different answer sheet.

QUESTION 1**(15 marks: 15 min)**

Information critical to various business units must be available for effective and timely decision-making. Product Lifecycle Management (PLM) allows for collaboration and sharing of valuable information. Critically analyse and evaluate five objectives of Collaborative Product Lifecycle Management (PLM).

QUESTION 2**(30 marks: 30 min)**

- 2.1) Organisations are required to continuously improve in meeting the needs of the marketplace. Synthesis Supply Chain Information Solutions (SCIS) for Vanity Products (attached case study) for their ongoing business improvement (15).
- 2.2) The Supply Chain Council has identified numerous benefits to integrating the supply chain. Discuss these benefits in relation to the SCIS suggested for Vanity Products (15).

QUESTION 3**(30 marks: 30 min)**

Customer Relationship Management (CRM) software is well-known for its ability to enhance customer service levels. Many of the documented success stories however, link the level of success of CRM to the level of integration of SCIS within the business.

- 3.1) What are the typical business challenges that would drive organisations to look at the implementation of a CRM solution? In other words, what are the company's requirements? (8)
- 3.2) What CRM capabilities / modules would you suggest for implementation in Vanity Products? Fully motivate your answer by describing how it may impact on the business (22).

QUESTION 4**(50 marks: 50 min)**

- 4.1) Strategic Sourcing can be deemed a comprehensive concept. Elaborate on the unique aspects of Strategic Sourcing faced by a Logistics Manager (20).
- 4.2) SRM consists of five phases – describe three functionalities and elaborate as to how it can assist to achieve “best-in-industry” procurement benefits (30).

QUESTION 5**(20 marks: 20 min)**

John Vance, the president of Vanity Products is concerned that the new decentralised warehousing and distribution model suggested by Tom White will increase inventory levels and jeopardise profit margins.

- 5.1) Explain how using a pull approach to inventory management will aim to address this concern within Vanity Products? (10)
- 5.2) Explain the impact of system-wide versus single facility solution approaches to inventory management, and how Vanity Products may need to adapt their approach? (10)

QUESTION 6

(15 marks: 15 min)

The word 'mobility' in the context of supply chain management refers to the ability to connect wirelessly to a supply chain information system (SCIS) from a specific interface. Several types of man-machine interfaces exist.

- 6.1) Name three such man-machine interfaces and explain the benefits each could yield when used in conjunction with a form of SCIS? (6)
- 6.2) Explain Global Positioning Systems (GPS) as a potential application for Vanity Products (from case study 1). You can discuss GPS in the context of a specific SCIS if preferred (9).

QUESTION 7

(20 marks: 20 min)

Use Case Study 1 (Vanity Products) to assist you in answering the following questions:

John Vance, the president of Vanity Products is concerned that the new decentralized warehousing and distribution model suggested by Tom White will increase inventory levels. Further, the additional warehouses and distribution centers that will be added will increase transportation costs according to Vance.

Explain how Transportation Management Solutions (TMS) in combination with integrated SCIS can assist to.....

- 7.1) Consolidate shipments from a central distribution center (CDC) to decentralized distribution centers, in an effort to keep less inventory in decentralized locations? (5)
- 7.2) Assist to create a loading sequence from the CDC to the decentralized location that will speed up the cross-docking process? (5)
- 7.3) Assist to reduce transportation costs through carrier management functionality? (5)
- 7.4) Result in effective operations with the implementation of centralized planning. Please state your argument FOR or AGAINST central planning once the implementation of a TMS has been completed. Discuss and motivate your answer fully (5).

CASE STUDY 1: VANITY PRODUCTS

Vanity Products

John Vance, president of Vanity Products, is reading the latest financial results reported in the company newsletter. Every time he reads this year's financials, he recalls the company's early days and the struggle to get retailers to stock his new line of bathroom vanities, mirrors, and light fixtures. Today, the company is straining to produce enough product to meet retailer demand.

Vanity Products (VP) manufactures a variety of bathroom accessories, including vanities (medicine chests), mirrors, lighting fixtures, and shelving. The products are made of rust- and chip-resistant molded plastic and come in a variety of modern designs and colors. The plastic construction permits VP to produce a high-quality bathroom accessory at an affordable price.

In the middle 1990s, John focused the company's marketing attention on the large home center chain stores: Home Depot, Walmart, Sears, and so on. Today, more than 80 percent of VP's sales are to these retail chains, and they account for 95 percent of its growth. Without these chain store customers, VP would still be a small, struggling manufacturer.

John's pleasant memories quickly fade to the realities of dealing with these large chain retailers. In the past two years, VP has been required to install EDI software that permits the buyers to assess VP's inventory data file to determine availability, to place orders, and to verify shipment status. The latest demand from one of the chains, which is a precursor of what the others will want, is for VP to reduce cycle time by shipping orders directly to the stores.

Currently, VP receives an order that is a consolidation of store orders to be served from a chain distribution warehouse. The order is sent in truckload quantity to the distribution warehouse, where the individual store order is broken out and sent to the store. Now, each store will be ordering separately, and VP is to deliver the order within five working days.

When John approached Tom White, manager of logistics, with the latest demand, Tom was not very comforting. He indicated that freight costs would certainly increase because VP would be shipping less-than-truckload quantities at higher freight rates. This higher freight cost could be offset with freight consolidation software that combines store shipments into truckload quantities for peddle runs. John liked the idea of keeping freight costs down, because VP would have great difficulty increasing prices because of competition.

However, the freight consolidation strategy would increase the shipment holding time prior to dispatch, thereby making it difficult for VP to meet the requirement that orders be delivered in five working days. Since cycle time reduction is the primary objective of the chain store's demand, any process adding to the delivery time would not be acceptable.

Tom is working on an idea to establish a series of distribution warehouses in the market areas where the chain stores are located. Tom's vision includes truckload shipments from the plants to the distribution centers, and cross-docking of products from incoming trucks to trucks delivering orders to specific stores. In addition, each distri-

bution warehouse would maintain a minimal level of inventory to meet emergency orders placed by local stores.

John is skeptical of Tom's distribution warehouse idea because he feels it would increase capital costs, inventory levels, and transportation costs. He is not even certain it would meet the delivery time requirements.

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