TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Business & Social Studies

DEPARTMENT OF BUSINESS STUDIES

UNIVERSITY EXAMINATIONS FOR
MASTERS IN BUSINESS ADMINISTRATION

EIT 5101: MANAGEMENT INFORMATION SYSTEMS

SPECIAL/SUPPLEMENTARY EXAMINATIONS
SERIES: FEBRUARY 2015
TIME: 3 HOURS

INSTRUCTIONS:

- Answer question ONE and any other **THREE** questions.

This paper consists of Three printed pages

QUESTION 1

Read the Walmarts Retail link and answer the questions that follow:

Walmart is a well-known leader in the application of network technology to coordinate its supply chain. Walmart's supply chain is the secret sauce behind its claim of offering the lowest prices everyday. It's able to make this promise because it has possibly the most efficient B2B supply chain in the world. It does not hurt to also be the largest purchaser of consumer goods in the world. With sales of more than 4443 billion for the fiscal year ending January 31, 2012, Walmart has been able to use information technology to achieve a decisive cost advantage over competitors. As you might imagine, the world's largest retailer also has the world's largest supply chain, with more than 60,000 suppliers worldwide. In the next five years, the company plans to expand from around 5,000 retail stores in the United States (Including Sam's Clubs) to over 5,500 and increase its selection of goods. Internationally, Walmart has over 5,200 additional stores in 26 countries outside the United States, giving it a total of over 10,000 retail units. The rapid expansion in Walmart's international operations will require an even more capable private industrial network than what is now in place.

In the late 1980's, Walmart developed the beginnings of collaborative commerce using an Electronic Data Interchange (EDI)- based supply chain management system that required its large suppliers to use Walmart's proprietary EDI network to respond to orders from Walmart purchasing managers. In 1991, Walmart expanded the capabilities of its EDI-based network by introducing Retail Link. This system connected Walmart's largest suppliers to Walmart's own inventory management system, and it required large suppliers to track actual sales by stores and to replenish supplies as dictated by demand and following rules imposed by Walmart. Walmart also introduced financial payment systems that ensure that Walmart does not own the goods until they arrive and are shelved.

In 1997, Walmart moved Retail Link to an extranet that allowed suppliers to directly link over the Internet into Walmart's inventory management system. In 2000, Walmart hired an outside firm to upgrade Retail Link from being a supply chain management tool toward a more collaborative forecasting, planning and replenishment system. Using demand aggregation software provided by Atlas Metaprise Software, Walmart purchasing agents can now aggregate demand from Walmart's 5,000 separate stores in the United States into a single RFQ from suppliers. This gives Walmart tremendous clout with even the largest suppliers.

In addition, suppliers can now immediately access information on inventories, purchase orders, invoice status, and sales forecast, based on 104 weeks of online, real-time, item-level data. The system does not require smaller supplier firms to adopt expensive EDI software solutions. Instead, they can use standard browsers and PCs loaded with free software from Walmart. There are now over 20,000 suppliers-small and large participating in Walmart's Retail Link network.

By 2012, Walmart's B2B supply chain management system had mastered on a global scale the following capabilities: cross docking, demand planning, forecasting, inventory management, strategic sourcing, and distribution management. The future of Walmart's SCM lies in business analytics-working smarter-rather than simply making the movement and tracking of goods more efficient. For instance, in 2012 Walmart managers to optimize the loading of its trucks and to reduce the time required to supply its retail stores.

Despite the economic slowdown in 2011-2012, Walmart's sales grew. In 2011, Walmart's revenues of $443 billion were up 6.4 percent from 2010, and its net income was $15.77 billion up, up from $15.36 billion. In the first half of 2012 of 2012, sales continued to growth by over 4 percent.

Required:

a) Where does Walmart's supply chain start? What triggers Walmart's Retail Link system to ship goods to local Walmart stores.

b) Why is a detailed knowledge of computer purchases at each store important to Walmart's success?

c) Why cant other large retailers easily duplicate Walmart's Retail Link?

d) Why does Walmart encourage its vendors to learn to use Retail Link. **(25 marks)**

QUESTION 2

a) How can a transaction processing system help on organization's MIS and DSS?

b) Which of the **FOUR** major types of information systems do you think is the most valuable to an organization.

c) Discuss the benefits and challenges of enterprise systems and explain why a firm would want to build one. **(25 marks)**

QUESTION 3

a) Describe the **FIVE** technology drives of the infrastructure evolution. Which do you think has been the most influential in helping us achieve the level of technology we enjoy today?

b) Discuss how could computing provide value to a business.

c) Discuss the business value of open-source software.

(25 marks)

QUESTION 4

a) Discuss why wireless networks are more susceptible to security problems and how business can protect them.
b) Discuss the security issues associated with cloud computing and what cloud users should do about them.
c) Discuss the threat employees pose to information system security. **(25 marks)**

QUESTION 5

a) Describe how the internet changes information asymmetry in favour of consumers versus sellers.

b) Describe in commerce service and applications that either you have already used or would like to have available.

c) Discuss the challenges managers face when building a successful e-commerce website. **(25 marks)**