[This question paper contains 6 printed pages.]

Sr. No. of Question Paper : 154 **Roll No.....**

Unique Paper Code : 101404

Name of the Course : **Bachelor of Financial Studies**

Name of the Paper : Computer Application in Finance

Semester : IV (2014)

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **all** questions.
3. **All** questions are compulsory.

1. (a) Differentiate between system software and application software. How do their different roles affect you as a business end user ? (4)

(b) **Differentiate between :**

(i) Hub and Routers

(ii) Connection oriented **and connectionless protocols**

(iii) Bus Topology and Mesh Topology (6)

(c) Witu Ltd., a motor vehicle spare parts dealer, has its head office in Nairobi. The company has eight branches in Kenya, two in Uganda and one in Rwanda. To enable the branches share data and other resources, the company has a large database that is replicated in the computers located in the branches. These computers are interconnected through data communication networks. The database is centrally administered from Nairobi but the branches have flexibility and may customize the database to meet their needs.

P.T.O.

(i) State the type of database used by Witu Ltd. (2)

(ii) Explain the business reasons that may have encouraged Witu Ltd. to use this database. (2)

(iii) State and briefly explain advantages and disadvantages of the database used by Witu Ltd. (2)

(d) Explain the component of CPU with the block Diagram and differentiates between the types of Memory ? (4)

2. (a) Information technology can't really give a company a strategic advantage because most competitive advantages don't last more than a few years and soon become strategic necessities that just raise the stakes of the game. Discuss with example (industry specific) taking in to consideration competitive forces and strategies as defined by porter. (6)

(b) How could business use internet technologies to form a virtual company or become an agile competitor ? (4)

(c) Explain the types of problems and decisions in the organisation hierarchy. How can Information system help individual managers make better decisions when the problems are non-routine and constantly changing ? (5)

3. In a systems development life cycle, the systems analyst is interested in finding out the organization's objectives and exploring the nature and scope of the problems under study during the feasibility stage.

(a) Explain in detail the stages of system development life cycle. (4)

(b) Explain three objectives of a feasibility study. (3)

(c) Explain the methods used by the systems analyst in defining the objectives of an organization. (3)

4. Diagrammatically discuss the following aspects of Expert Systems as part of MIS.

(a) Structure of an expert system (2)

(b) Forward and backward chaining (2)

(c) Explanation system (2)

5. **Case Study**

Invacare headquarters in Elyria, Ohio, is the world's leading manufacturer and distributor of non-acute health care products, including wheel chairs, motorized scooters, home care beds, portable compressed oxygen systems, bath safety products, and skin and wound care products. It conducts business in over eighty countries, maintaining manufacturing plants in the United Stated and eleven other nations. Invacare sells its products primarily to over 25,000 home health care and medical equipment provider locations in the United States, Europe, Australia, New Zealand and Canada, with the remainder of its sales primarily to government agencies and distributors. The company also distributes medical equipment and related supplies manufactured by other companies.

Invacare does not maintain much inventory. It manufactures most of its products to meet near term demands, and it builds some of its products to order. It is constantly revising and expanding its numerous product lines.

In 2004, Invacare began working on replacing a collection of homemade legacy systems for purchase to payable processes with modules from Oracle's 11i E-Business Suite. Invacare had been using Oracle database software and had implemented the financial modules from Oracle E-Business Suite four years earlier. The company experienced no problems implementing and using the Oracle E-Business financial modules.

However, Inacare ran into problem when it went live with new order-to-cash modules, which let a company receive an order, allocate supplies to build it, and provide customer access to order status. Invacare's information systems specialists had tested the software under the real-world business conditions and everyone felt the software was ready to be used in actual business operations.

When the new system went live in October 2005, the software would not perform properly. "Our systems were locking up, "Observed Greg Thompson, Invacare's Chief financial officer. Invacare call center representatives were unable to answer customer telephone calls in a timely manner. When they did talk with customers, they could not find complete information in the system about stock availability and shipment dates for products. The company was unable to ship products to customers within required lead times. Invacare's management never expected the implementation to be trouble-free, but it clearly did not foresee the magnitude of the problems it experienced with the new systems.

As a result of the malfunctioning software Invacare lost sales and had higher than usual levels of returned goods. It also incurred extra expenses for expediting product orders and for paying for employee overtime in its manufacturing distribution, and customer service department. Two months of sales disruptions caused Invacare to cut its fourth quarter 2005 revenue estimate to between $370 million and $380 million, lower than the previous year and well below the 2 percent sales increase the company had previously projected. Losses totaled $30 million for the quarter and extended into the first quarter of 2006.

The new system also changed some of the company's internal controls did not function as intended. During the final quarter of 2005, Invacare had to perform a physical year-end inventory count for its North American operations, and take special steps to validate the figures used in financial statements.

According to Thompson, Invacare's problems were not caused by the Oracle software but by the way the Invacare configured the software and integrated its business processes with the new system. He and other Invacare management also believes that the company should have done more testing work.

Oracle worked closely with Invacare to resolve the problems and Thompson was pleased by Oracle's response. "Oracle has been very helpful in working with our teams to resolve the issues we've identified," he said. Thompson anticipated all ordering and invoicing problems to be cleared up by early 2006.

Thomson also expressed hope that the new ERP system will provide enough value to the offset the company's losses from the system. Invacare spent $20 million on its ERP implementation. It's still too early to tell whether Invacare ERP system will justify its costs.

Case Study Questions :

(a) How did problems implementing the Oracle enterprise software affect Invacare's business performance ? (3)

(b) What management, organization, and technology factors affected Invacare's ERP implementation ? (3)

(c) If you were Invacare's management, what steps would you have taken to prevent these problems ? (3)

6. Write short notes on : **(any three)**

(a) Domain name and URL

(b) Executive Information System

(c) Centralized and Distributed System

(d) Artificial Intelligence (3×3=9)

P.T.O.

7. (a) Is e-commerce the same as e-business ? Comment with example. (2)

(b) **E-commerce serves as an "equalizer".** It enables start-up and small- and medium- sized enterprises to reach the global market. Discuss this in the light of advantages of e-commerce apart from reducing the cost of doing business. (4)