

**UNIVERSITY OF SWAZILAND**  
**FACULTY OF COMMERCE**  
**DEPARTMENT OF BUSINESS ADMINISTRATION**  
**SUPPLEMENTARY EXAMINATION 2012**

**TITLE OF PAPER:** MANAGEMENT INFORMATION SYSTEMS II

**PROGRAM:** BCOM 2 (FULL TIME)  
DIP COM 3 (FULL TIME)

**COURSE CODE:** BA216/ BA318

**TIME ALLOWED:** THREE (3) HOURS

**INSTRUCTIONS:**

1. THIS PAPER CONSISTS OF SECTIONS (A) AND (B)
2. THE CASE STUDY SECTION (A) IS COMPULSORY
3. ANSWER ANY THREE QUESTIONS FROM SECTION B

**NOTE:**

**MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION OF WORK.**

**THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR**

## SECTION A

### *This section is compulsory*

Swazi Network Solutions (SNS) has recently installed a new on-line database computer network system. Computers are located throughout the firm, with at least one computer located in each department. Siphso Simelane, vice president of finance, has overall responsibility for the firm's management information system, but he relies heavily on Mandla Sibeko, director of MIS, for technical assistance and direction.

Simelane was one of the primary supporters of the new information system because he knew it would provide labour savings. However, he is concerned about the security of the new computer network. Simelane was walking through the purchasing department one day when he observed a SNS buyer using a microcomputer to inquire about the current price of a specific part used by SNS. The new system enabled the buyer to have the data regarding the part brought up on the screen as well as each SNS product that used the part and the total manufacturing cost of the products using the part. The buyer told Simelane that, in addition to inquiring about the part, he could also change the cost of parts.

Simelane scheduled a meeting with Sibeko to review his concerns regarding the new system. Simelane stated, "Mandla, I am concerned about the type and amount of data that can be accessed through the linked computers. How can we protect ourselves against unauthorized access to data in our system file? Also, what happens if we have a natural disaster such as a fire, a passive threat such as a power outage, or some active threat resulting in malicious damage- could we continue to operate? We need to show management that we are on top of these things. Would you please outline the procedures we now have, or need to have, to protect ourselves?"

Sibeko responded by saying, "Siphso, there are areas of vulnerability in the design and implementation of any automated system. Some of these are more prevalent in on-line systems such as ours- especially with respect to privacy, integrity and confidentiality of data. The four major points of vulnerability with which we should be concerned are the hardware, the software, the people and the network."

## Required

- a. For each of the four major points of vulnerability identified by Mandla Sibeko,
  - a. Provide and explain one potential threat or risk to the system (10)
  - b. Identify the actions to be taken to protect the system from that threat or risk (10)
- b. Mandla Sibeko knows that he must develop a contingency plan for SNS' new system in order to be prepared for a natural disaster, passive threat, or active threat to the system.
  - a. Discuss why SNS should have a contingency plan. (10)
  - b. Briefly describe the major components of a contingency plan that could be implemented in the case of a natural disaster, passive threat, or active threat to the system. (10)

## **SECTION B**

Answer any *three* questions from this section.

### **Question 1**

Representatives of computer vendors can provide detailed knowledge concerning how their computer systems can solve problems that a firm is experiencing. Discuss the limitations of such advice as well as the appropriate initial steps that a firm considering the installation of a computer system might take to obtain help and advice. (20)

### **Question 2**

Discuss five matters that should be examined during a post-implementation review and evaluation of a recently implemented Web-based system. (20)

### **Question 3**

Although dataflow diagrams are used to understand what data are processed by the system, they also provide some understanding of what processes (procedures) are involved to manipulate such data. Discuss using an example. (20)

### **Question 4**

When managers leave a firm and are replaced by other managers, the information needs often change even though the decisions to be made remain unchanged. What difficulties does this situation pose for a systems analyst or team during the analysis phase? How can they solve this? (20)