NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

SUPPLEMENTARY OCTOBER 2009

ACCOUNTING INFORMATION SYSTEMS CAC 4104

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

THE PAPER IS DIVIDED INTO TWO SECTIONS:

- <u>SECTION A</u> ALL THREE QUESTIONS ARE COMPULSORY AND AND MUST BE ATTEMPTED.
- <u>SECTION B</u> TWO QUESTINS ONLY TO BE ATTEMPTED.

SECTION A - **ALL THREE** QUESTIONS ARE COMPULSORY AND **MUST BE** ATTEMPTED.

QUESTION I

- **A.** You are an outside consultant specialising in computer security brought in by an Organisation to advice on the security aspects to a new computer centre.
 - (i) What potential physical threats would you make your client aware of, what precautionary measures would you suggest, and what techniques would you propose be implemented to control access to the computer centre?
 [6 Marks]
 - (ii) You also feel that a contingency plan is an essential aspect of the new computing facility.

Explain to the client the purpose of such a plan, how it might be developed, and the standby options which are available. **[8 Marks]**

B. Desribe six possible ways of validating data, both before it is entered into a computer system, and by use of data validation program. [6 Marks]

QUESTION 2

You have recently been appointed as financial manager at Crock [Pvt] Ltd. The business provides cables and other electrical ware to the construction industry and was established by the current owner, an electrical engineer in 1995. Since then, the annual turnover of the company has grown significantly.

One of the challenges of your new job is to manage the computerization of the existing inventory, sales and purchases systems. Management's strategic objectives in the past have included increasing revenue and controlling costs. The construction industry and was established by the current owner, an electrical engineer in 1995. Since then, the annual turnover of the company has grown significantly.

One of the challenges of your new job is to manage the computerization of the existing inventory, sales and purchases systems. Management's strategic objectives in the past have included increasing revenue and controlling costs. The owner's wife has played a major role in establishing and running the current manual accounting processes, but transaction volumes have grown too large for her and her small staff complement to handle.

Consequently, the management of Crock [Pvt] Ltd plans to implement software on a microcomputer network with the following features:

- Three microcomputers will be located in the sales department, one in the purchases department and one in the inventory store. These computers will be linked to file server which will make the data and programmes available to users. The file server will be under your control.
- There will be on-line updating of the inventory, accounts receivable and accounts payable master files from the transactions entered in the sales and purchases systems. Transactions will be entered in batches.

REQUIRED

A) Discuss in broad terms, the control considerations inherent in this type of data processing environment; and

[20 Marks]

B) Describe briefly the procedures that should be followed for computerizing the Continuous inventory record system.

[10 Marks]

QUESTION 3

A small chain of four department stores is located in and around the city of Bulawayo. It is about to implement, in all stores, a point of sale system with linkages to a central computer. The stores all currently use conventional cash registers. You have been asked to assist in the conversion to a new system.

REQUIRED

PRODUCE:

a. An evaluation of the various approaches to the system changeover.

[8 Marks] b. Suggestions as to how the new system might be evaluated after three months of operational running.

[7 marks]

SECTION B

ONE QUESTION ONLY TO BE ATTEMPTED

QUESTION 4

A. You have been appointed as head of newly created internal audit section within the computer department of a large food wholesaler. The department has a number of operational systems, some on line and some batch processing and a central corporate database. A significant effort is currently being devoted to new systems developments.

Your first task is to review the various types of controls which exist in the department and its computer systems.

REQUIRED

Describe what you are looking for in your review.

[12 Marks]

B. In order to effectively perform an audit of a computer department as decribed Above, you may well have to make use of computer assisted auditing techniques.

REQUIRED

What computer assisted techniques are available, and where might you use them? [8 Marks]

QUESTION 5

A small but expanding mail order company specializing in the sale of silk garments is contemplating the purchase of micro-computers and software to help with supplier and customer accounting. The company is based in a small isolated town and staff have little or no computer knowledge.

You are the consultant brought in to advise them of the best ways forward.

REQUIRED

Produce a report covering the following;

- A. A list of factors that the company should take into account for the selection of hardware and software. [7marks]
- B. An analysis of the financial techniques the company might adopt to asses the potential profitability of the proposed system. [4 Marks]
- C. Analysis of the main alternatives available for financing of the acquisition of hardware. [4 Marks]