

**THE INSTITUTE OF CHARTERED  
ACCOUNTANTS (GHANA)**



**NOVEMBER 2005 EXAMINATIONS  
(PROFESSIONAL)**

**PART 2**

**MIS AND BUSINESS SYSTEMS  
(Paper 2.5)**

**TIME ALLOWED: 3 HOURS**

## SECTION A

Read the Case carefully and answer Any Two of the questions that follow:

The National Association of Security Brokerage (NASB) is a self-regulatory organization of the brokerage industry and the operator of the stock exchange market in Ghana. It was established in 1995.

In recent years the NASB has sought to improve client service by building information systems and networks based on ICT. The rationale is to facilitate public-disclosure system that will allow investors to access information on all NASB brokers and firms through the internet or NASB's toll-free hotline. Investors will be able to log onto the internet, punch up the name of a broker or firm, and immediately see if there are any pending customer complaints, arbitration claims, arbitration awards, court awards paid to customers, or settlement of account disputes in excess of ₵100,000,000.

The system so designed was also intended to provide information on brokers' work histories and where they are registered to do business.

The system is based on regulatory records of over 500 stock brokers maintained in a central registration depository (CRD) system. An earlier system allowed investors to obtain some of this information from a 333-number hot line, but the information that could be obtained this way was much more limited. For example, investors could not learn whether there was a backlog of complaints against their broker. To obtain more complete data, including pending complaints, investors had to check with other sources. Moreover, some data that were supposed to be included in the NASB central registration depository system were missing. In 1998 NASB disclosed that as many as 10,000 copies of regulatory data on stockbrokers could have been inadvertently purged from this system.

To resolve these issues concerning data security a revised leading-edge technology based on ICT was installed by NASB.

Despite the leading-edge technology available to the NASB, the CRD works much like a library card catalogue. Materials about brokers and firms must be entered into computers manually by NASB clerks. It was realised that these clerks were following faulty guidelines that had been inadvertently issued by the NASB in an internal memorandum. This memo informed staffers that "revised" guidelines allowed them to delete a broad range of disciplinary data from the CRD system including instances in which a customer, court or arbitration panel had withdrawn or dismissed a broker as a named party in a lawsuit or arbitration filing before judgement was entered. Most of the purged data dealt with this information.

In 1999, a group of NASB executives and regulators developed a "restoration protocol" for correcting the purged files. Determining what data are missing can be difficult. Avoiding all inadvertent purging has become the prerogative of NASB.

### QUESTION 1

Identity any five (5) factors that make the CRD system important from the point of view of investors and brokers of NASB.

**(Total:20 marks)**

### QUESTION 2

(a) Identity two (2) control weaknesses in the CRD system.

(8 marks)

(b) Explain any three (3) Management or Organizational factors that were possibly responsible for these weaknesses.

(12 marks)

**(Total: 20 marks)**

### QUESTION 3

(a) What three (3) methods of security control would you recommend for NASB?

(15 marks)

(b) Mention and explain two (2) methods of administrative control to be Used by NASB.

(5 marks)

**(Total: 20 marks)**

## **SECTION B**

### **ANSWER ANY THREE (3) QUESTIONS**

### QUESTION 4

In order to reap the benefits that Information Technology (IT) offers the business environment, organisations must craft and implement information systems (IS)/IT strategy.

(a) Explain the difference between a business strategy and an IS strategy.

(8 marks)

(b) An information systems unit will usually have policies for dealing with risk, disaster and recovery.

- (i) Explain the need for risk management on a project. (3 marks)
- (ii) State any four (4) steps involved in a risk management process. (4 marks)
- (i) Describe the meaning and contents of a disaster recovery plan. (5 marks)

**(Total: 20 marks)**

### QUESTION 5

Two ways of breaking down a software package design are external design and internal design.

- (a) Explain the distinction between external and internal design. (6 marks)
- (b) Explain each of the following characteristics, indicating how each assists in making an external design 'user-friendly'.
  - (i) Consistency (3 marks)
  - (ii) Ease of data entry (3 marks)
  - (iii) Context sensitive HELP (3 marks)
- (c) One way of defining the external design is to build and review prototypes in conjunction with users.

Explain why prototyping is an effective way of defining an external design. (5 marks)

**(Total: 20 marks)**

### QUESTION 6

It is generally asserted that external environmental factors as well as internal environmental factors influence the types of information systems that organizations select, develop, and use.

- (a) Mention and explain four (4) factors for the establishment of Information Systems by organizations. (8 marks)
- (b) Mention and explain three (3) internal factors that influence the adoption and design of Information Systems. (6 marks)

- (c) Mention and explain three (3) opportunities that influence the adoption and design of Information Systems.

(6 marks)

**(Total: 20 marks)**

### **QUESTION 7**

As a hardware specialist, you are required to give a brief lecture to a group of business executives who are about to invest in a major networking project. One of their greatest mysteries lies with the distinction between the concepts, “Network Computers” (NCs), Net PCs or legacy-free PCs”, designed for the Internet and a limited range of applications.

Your role is to clearly bring out the differences in the application of these concepts to clear the confusion in their minds.

Prepare your notes for this presentation. (Identify three (3) points under each concept).

**(Total: 20 marks)**