THE UNIVERSITY OF THE WEST INDIES
CAVE HILL

EXAMINATIONS OF April/May 2013

CODE AND NAME OF COURSE: ACCT3015 - Accounting Information Systems
DATE AND TIME: DURATION: 2 Hours

INSTRUCTIONS TO CANDIDATES: This paper has 6 pages, 20 MC ITEMS and 5 questions. Section A has 20 MC items, you are required to answer all the MC items in your answer booklet on the page provided. Section B has two (2) questions you are required to answer one (1) question from this section. Section C has three (3) questions you are required to answer one (1) question from this section.

SECTION A
Answer all the MC items on the MC answer sheet provided in your booklet

1. Matching customer account numbers and inventory item numbers to the numbers in the customer and inventory master files is an example of a

   A) completeness test.  
   B) reasonableness test.  
   C) field check.  
   D) validity check.

2. The benefits of a lockbox arrangement with a bank are maximized when

   a) the bank is located nearby to the company, so remittance advices can be delivered to the company every day.
   b) several banks around the country are used, in order to minimize the time payments spend in the mail.
   c) an arrangement is made with only one bank, so all remittance advices can be batched for processing.
   d) the bank deposits the payments and accesses the customer’s information system to record the payments.

3. A serious exposure in the revenue cycle is loss of assets. What is the related threat and applicable control procedure that address this exposure?

   a) shipping errors; reconciliation of sales order with picking ticket and packing slip
   b) theft of cash; segregation of duties and minimization of cash handling
   c) making sales that turn out to be uncollectible; force sales people to make collection calls on customers with past due balances
   d) poor performance; preparation and review of performance reports
4. Requiring all packing slips be reconciled to purchase orders before accepting a delivery of inventory would be *most* likely to prevent which of the following situations?

   a) A supplier delivers more inventory than ordered at the end of the year and sends an invoice for the total quantity delivered.
   b) An employee mails a fake invoice to the company, which is then paid.
   c) The inventory records are incorrectly updated when a receiving department employee enters the wrong product number on the receiving report.
   d) Receiving department employees steal inventory and then claim the inventory was received and delivered to the warehouse.

5. Comparing quantities on a vendor invoice to quantities on the receiving report would *not* prevent or detect which of the following situations?

   a) Receiving and accepting inventory not ordered
   b) Theft of inventory by receiving department employees
   c) Update of wrong inventory items due to data entry error
   d) Order for an excessive quantity of inventory

6. Which of the following would probably be the *least* effective control to mitigate the risk of paying an invoice payable to a phony vendor for inventory purchases, mailed to the company by an employee attempting to commit fraud?

   a) Only pay from original invoices.
   b) Cancel all invoices and supporting documentation when paid.
   c) Strict access and authorization controls for the approved vendor master file.
   d) Require three-way match for all inventory purchase invoices.

7. The general ledger system of an organization should be designed to serve the information requirements of both internal and external users. This means that the system should support

   a) producing expansive regular periodic reports to cover all information needs.
   b) the real-time inquiry needs of all users.
   c) producing regular periodic reports and respond to real-time inquiry needs.
   d) access by investors and creditors of the organization to general ledger balances.

8. How is general ledger updating accomplished by the various accounting subsystems?

   a) Individual journal entries for each accounting subsystem transaction update the general ledger every 24 hours.
   b) Summary journal entries that represent the results of all transactions for a certain time period are used to update the general ledger.
   c) The controller or treasurer must approve accounting subsystem journal entries before any updating may occur.
   d) Nonroutine transactions are entered into the system by the treasurer's office.
9. Communications technology and the Internet can be used to reduce the time and costs involved in disseminating financial statement information. Users of such financial information still struggle in that many recipients have different information delivery requirements and may have to manually reenter the information into their own decision analysis tools. The ideal solution to solve these problems and efficiently transmit financial information via the Internet is to use

A) HTML code.  B) XML.  C) pdf file.  D) XBRL.

10. All of the following are guidelines for preparing data flow diagrams except:

a) show the most detail in the highest-level DFD.
b) include all storage files, even if they are only temporary.
c) uniquely name all data flows.
d) sequentially number process bubbles.

11. A data flow diagram is a graphical description of the

a) source and destination of data that shows how data flow within an organization.
b) flow of documents and information between departments or areas of responsibility.
c) relationship among the input, processing, and output in an information system.
d) sequence of logical operations that a computer performs as it executes a program.

12. A flowchart that depicts the relationships among the input, processing, and output of an AIS is

A) an internal control flowchart.  B) a document flowchart.
C) a system flowchart.  D) a program flowchart.

13. Chas Mulligan has been hired by Yardley Security as an assistant to the internal auditor. He has been asked to thoroughly document the existing accounting information system in preparation for making recommendations for improvements to internal controls. He decides to begin with a description of the information stored in paper records, their sources, and their destinations. The documentation tool that he should employ for this purpose is a

A) data flow diagram.  B) document flowchart.
C) system flowchart.  D) program flowchart.

14. The schema that provides an organization-wide view of the entire database is known as the

A) external-level schema.  B) internal-level schema.
C) conceptual-level schema.  D) logical view of the database.

15. A relational database in which customer data is not maintained independently of sales invoice data will most likely result in

A) an update anomaly.  B) an insert anomaly.
C) a delete anomaly.  D) an integrity anomaly.
16. What is one potential drawback in the design and implementation of database systems for accounting?

a) Double-entry accounting relies on redundancy as part of the accounting process but well-designed database systems reduce and attempt to eliminate redundancy.
b) Relational DBMS query languages will allow financial reports to be prepared to cover whatever time periods managers want to examine.
c) Relational DBMS provide the capability of integrating financial and operational data.
d) Relational DBMS can accommodate multiple views of the same underlying data; therefore, tables storing information about assets can include data about both historical and replacement costs.

17. Tapping into a communications line and then entering the system by accompanying a legitimate user without their knowledge is called

A) superzapping.  B) data leakage.  C) hacking.  D) piggybacking.

18. The unauthorized use of special system programs to bypass regular system controls and perform illegal act is called

A) a Trojan horse.  B) a trap door.  C) the salami technique.  D) superzapping.

19. Wally Hewitt is an accountant with a large accounting firm. The firm has a very strict policy of requiring all users to change their passwords every sixty days. In early March, Wally received an email from the firm that explained that there had been an error updating his password and that provided a link to a Web site with instructions for re-entering his password. Something about the email made Wally suspicious, so he called the firm’s information technology department and found that the email was fictitious. The email was an example of

A) social engineering.  B) phishing.  C) piggybacking.  D) spamming.

20. Of the following examples of fraud, which will be the most difficult to prevent and detect? Assume the company enforces adequate segregation of duties.

a) Jim issues credit cards to him and Marie, and when the credit card balances are just under $1,000, Marie writes off the accounts as bad debt. Jim then issues new cards.
b) An employee puts inventory behind the accounts as bad debt. Jim then issues new cards.
c) A mail room employee steals a check received from a customer and destroys the documentation.
d) The accounts receivable clerk does not record sales invoices for friends or family, so they can receive free goods.
SECTION B
ANSWER ONE [1] QUESTION FROM THIS SECTION

QUESTION 1 [20 MARKS]
Stan's Southern Barbecue Supply Store orders mass-produced barbecue products from various suppliers. Stan's maintains information about a contact person at each supplier along with all required address information. Each purchase order has the order number, date, tax, and total. Purchase orders also contain the following information for each product ordered: stock number, description, and price. The manager of Stan's places orders by fax several times a day, whenever he notices that an item is running low. Some suppliers fill each individual order separately. Others, however, consolidate orders and fill all of them in one weekly delivery. Some suppliers require payment at the time of delivery, but others send Stan's a monthly statement detailing all purchases during the current period. Two suppliers allow Stan's to make installment payments for any individual purchase orders that exceed $20,000.00.

Required
a) Draw an REA diagram with cardinalities for the expenditure cycle of Stan's Southern Barbecue Supply Store.
b) Develop a set of tables to implement the REA diagram you developed for Stan's Southern Barbecue Supply Store. Identify the primary and foreign keys for each table, and don't forget to address any M:N relationships.

QUESTION 2 [20 MARKS]
As the internal auditor for No-Wear Products of Hibbing, Minnesota, you have been asked by your supervisor to document the company's current payroll processing system. Based on your documentation, No-Wear hopes to develop a plan for revising the current information system to eliminate unnecessary delays in paycheck processing. Your best explanation of the system came from an interview with the head payroll clerk:

The payroll processing system at No-Wear Products is fairly simple. Time data are recorded in each department using time cards and clocks. It is annoying, however, when people forget to punch out at night and we have to record their time information by hand. At the end of the period, our payroll clerks enter the time card data into a payroll file for processing. Our clerks are pretty good - though I've had to make my share of corrections when they mess up the data entry.

Before the payroll file is processed for the current period, human resources send us data on personnel changes, such as increases in pay rates and new employees. Our clerks enter this information into the payroll file so it is available for processing. Usually, when mistakes get back to us, it's because human resources is recording the wrong pay rate or an employee has left and the department forget to remove the record. The Data are then processed and individual employee paychecks are generated. Several important reports are also generated for management – though I don't know exactly what they do with them. In addition, the government requires regular federal and state withholding reports for tax purposes. Currently, the system generates these reports automatically, which is nice.

Required
a. Prepare a context diagram to document the payroll processing system at No-Wear Products
b. Prepare a level 0 DFD to document the payroll processing system at No-Wear Products.

TURN OVER
SECTION B

ANSWER ONE [1] QUESTION FROM THIS SECTION

QUESTION 3 [20 MARKS]

a) Describe four threats in the general ledger and reporting system and identify corresponding controls for each threat. [8 marks]

b) Critically assess the use XBRL in businesses today [6 marks].

c) Discuss how a company can use information technology to improve the efficiency and effectiveness of its expenditure cycle processes. [6 marks]

QUESTION 4 [20 MARKS]

a) Describe four threats in the revenue cycle and identify appropriate controls for each threat. [10 marks]

b) Most experts maintain that the computer frauds that are publicly revealed represent only the tip of the iceberg. Although the major threat to computer security is perceived by many to be external, the more dangerous threats come from insiders. Management must recognize these problems and develop and enforce security programmes to deal with the many types of computer fraud. Certain measures can significantly decrease the potential for fraud and any resulting losses. Briefly discuss four methods that can be used to reduce the fraud in organizations. [10 marks]

QUESTION 5 [20 MARKS]

a) Briefly discuss the following terms that are used in Accounting Information Systems
   i. Digital signatures [3 marks]
   ii. EDI – electronic data interchange [3 marks]
   iii. Auditing around the computer [3 marks]
   iv. Data encryption [3 marks]

b) Give three specific examples of nonroutine transactions that may occur in processing cash receipts and updating accounts receivables. Also specify the control procedures that should be in place to ensure the accuracy, completeness and validity of those transactions. [8 marks]

END OF EXAM