



STRATHMORE BUSINESS SCHOOL
BACHELOR OF COMMERCE
END OF SEMESTER EXAMINATION

BCA 4201 ACCOUNTING AND FINANCIAL INFORMATION SYSTEMS-EC

DATE: Tuesday, 15th August 2023

Time: 2 Hours

Instructions

1. This examination consists of **FIVE** questions.
2. Answer **Question ONE (COMPULSORY)** in section A.
3. Answer any **TWO** Questions from **Section B**.

SECTION A:(COMPULSORY)

QUESTION ONE (Compulsory) (30 Marks)

- (a) Answer the following questions by selecting the correct answer from the provided options (A, B, C & D). Each question is awarded 1 mark.
- i) The source document that initiates the recording of the sales return and the adjustment to the customer's credit status is the? **(1 mark)**
 - A. pick slip
 - B. sales journal
 - C. credit note
 - D. sales invoice
 - ii) Which of the following is not a document that is part of the cash collection process within the revenue cycle? **(1 mark)**
 - A. Received Cheques list
 - B. Cash receipts journal
 - C. Bank deposit slip
 - D. Packing slip
 - iii) Within the purchasing processes, which of the following is the first document prepared and thereby the one that triggers the remaining purchasing processes? **(1 mark)**
 - A. The invoice
 - B. The receiving report
 - C. The purchase order
 - D. The purchase requisition
 - iv) Which of the given departments will immediately adjust the suppliers account for each purchase transaction so that the company will know the correct amount owed to the supplier? **(1 mark)**
 - A. Purchasing department
 - B. Receiving department
 - C. Accounts payable department

- D. Shipping department
- v) Which of the following is not one of the rules that describe how the three types of entities should relate to one another in an REA data model? **(1 mark)**
- Each event is linked to at least one resource that it affects.
 - Each event is linked to at least one other event.
 - Each event is linked to at least two participating agents.
 - All of the above are Important rules.
- vi) Which fraud scheme involves stealing customer cash receipts and applying subsequent customer cash receipts from other customers to cover the theft? **(1 mark)**
- kiting
 - laundering
 - lapping
 - bogus expense
- (b) Explain the following terms as discussed in accounting & financial information systems.
- Electronic Data Interchange (EDI). **(4 marks)**
 - Substantive testing. **(3 marks)**
 - Relational database structure. **(3 marks)**
- (c) Explain four benefits that a company such as Naivas supermarket would enjoy from adoption of computerized Accounting and financial information systems. **(4 marks)**
- (d) Identify and explain two pressures that would increase the likelihood of a cashier in a company engaging in fraud. **(4 marks)**
- (e) Bamburi is a company that manufactures cement for the Kenyan market. The company manufactures various brands of cement that include the; Nguvu Cement, Bamburi Tembo Cement, Bamburi PowerMax Cement and Bamburi Fundi Cement. One of the main Accounting & Financial Information systems subsystems is the production transaction cycle. **Required.**
Identify the 4 main processes in Bamburi production transaction cycle and prepare a detailed Data Flow Diagram (DFD) showing how the processes are linked together. **(6 marks)**

SECTION B Answer any TWO Questions from Section B

QUESTION TWO (20 Marks)

- (a) Explain how the following technologies can be applied within the revenue cycle of Quickmatt supermarkets:
- Cloud Computing. **(3 marks)**
 - Customer relationship management systems (CRM). **(2 marks)**
- (b) The following data tables have been provided in relation to the purchase's transaction cycle of Dynamic technologies ltd that sells various computer electronic products in Kenya. The information was to be used for the design of a database of the purchase's transaction cycle using the Relational database structure technique.

1.Suppliers Table:

Supplier Identification Number (SIDN)	Supplier Name
SIDN-155	Samsung Kenya ltd
SIDN-156	Apple Kenya ltd
SIDN-157	HP Kenya ltd
SIDN-158	Dell Kenya ltd

2.Purchase order Table:

Purchase Order Number (PO)	Supplier Identification Number (SIDN)	Supplier Name	Amount
PO-285	SIDN-155	Samsung Kenya ltd	250,000
PO-286	SIDN-156	Apple Kenya ltd	855,000
PO-287	SIDN-157	HP Kenya ltd	1,250,000
PO-288	SIDN-158	Dell Kenya ltd	1,800,000

3.Purchase Invoice Table:

Purchase Order Number (PO)	Supplier Identification Number (SIDN)	Purchase Invoice Number (PIN)	Amount
PO-285	SIDN-155	PIN-30185	250,000
PO-286	SIDN-156	PIN-40277	855,000
PO-287	SIDN-157	PIN-20555	1,250,000
PO-288	SIDN-158	PIN-889998	1,800,000

Required;

- i) Explain how you would design the purchase's transaction cycle database for of Dynamic technologies ltd using the Relational database structure technique that uses primary keys and secondary keys. **(5 marks)**
- ii) Another database design model that can be used when designing the database in accounting information systems is the REA (Resources-Events-Agents) database structure technique. Explain what the REA (Resources -Events-Agents) database model entails and how it can be used in the design of a database for the revenue transaction cycle for the Dynamic technologies ltd. **(5 marks)**
- (c) Liquid Telkom Kenya ltd has recently paid for the telecommunications Licence to operate within Kenya. The company will be offering various telecommunication services within the Kenyan market ranging from voice, SMS, data, cable tv and home fiber internet. The management of the company has just hired you as an expert in accounting information systems to help with the design of a purchasing transaction cycle system for fixed asset. The company will be using this system to manage the purchasing transaction cycle for fixed assets for the company.

Required;

Explain five steps found within the systems development life cycle (SDLC) that would be followed in the design of the new purchasing transaction cycle system for the fixed assets Liquid Telkom Kenya ltd **(5 marks)**

QUESTION THREE (20 Marks)

- (a) One of the processes within the general ledger and reporting transaction cycle is the post adjusting process which include various end of year adjustments.

Required;

Explain three end year post adjusting transactions that would be carried out at the end of the year before the financial statements are prepared. **(3 marks)**

- (b) The accounting cycle has various key steps with the last step being Closing the Books which is usually done at the end of the financial year. The books have to be closed before starting to record the transactions for the next year.

Required;

Explain the procedures that are involved when Closing the Books at the end of the year before the transactions for the next can be recorded. Provide the relevant ledger entries that required when closing the books. **(4 marks)**

- (c) Explain two other management reports other than the two financial statements of Income statement and Balance sheet that can be provided by the general ledger transaction cycle for Equity bank ltd. **(2 marks)**
- (d) Rossi Sports ltd is a company that produces various sports equipment's for the African market. The company payroll transaction cycle is as provided below.

When a new employee is hired, the human resources department completes a personnel action form and forwards it to the payroll department. The form contains information such as pay rate, number of exemptions for tax purposes, and the type and amount of payroll deductions. When an employee is terminated or voluntarily separates from Rossi, the human resources department completes a personnel action form to indicate separation and forwards it to the payroll department.

Each employee in the production department maintains his own time card weekly. Employees fill out their time cards in ink each day, and at the end of the week, the time cards are forwarded to the payroll department. Employees in the payroll department use the time cards and employee records to prepare a weekly paycheck for each employee who has turned in a time card. A copy of the payroll checks is forwarded to the accounts payable department, and the original payroll checks are forwarded to the cash disbursements department to be signed. The payroll department updates the payroll subsidiary ledger.

After the paychecks are signed, they are given to department supervisors to distribute. Any unclaimed checks are returned to the payroll department.

The payroll accountant then prepares a payment voucher for all the deductions and transfers the money through bank transfer.

Finally, the payroll accountant updates all the ledger accounts from the payroll process

Required;

- i) Identify two weaknesses from Rossi Sports ltd payroll transaction cycle described above. **(2 marks)**
- ii) Explain two control procedures that that you would recommend adopted to deal with the identified weaknesses from Rossi Sports ltd payroll transaction cycle described above. **(2 marks)**
- iii) Identify all the major processes from the details provided above for Rossi Sports ltd payroll transaction cycle and prepare a data flow diagram (DFD) to document the entire payroll transaction cycle. **(7 marks)**

QUESTION FOUR (20 Marks)

- (a) The audit of accounting information systems involves various stages/phases with the first being audit planning stage. Explain four activities/tasks that you would carry out within the Audit planning phase/stage of Strathmore University. **(4 marks)**
- (b) Explain the three major processes found within the financing cycle. **(3 marks)**
- (c) At Kingston Industries ltd, the revenue transaction cycle processes are conducted by five employees. The five employees are the salesclerk, warehouse clerk, accountant 1, accountant 2, and the collection clerk. A description of their duties is as follows:
 - ✓ The salesclerk receives customer orders by phone. She prepares a four-copy sales order form. She files one copy, one copy goes to the warehouse clerk, one copy goes to accountant 1, and one copy is mailed to the customer.

- ✓ After receiving a sales order, the warehouse clerk prepares a packing slip, takes the proper items from the warehouse, and ships them with the packing slip enclosed. The sales order is stamped with the ship date, and the shipping log is updated. The sales order is filed by customer number.
- ✓ After receiving the sales order from the salesclerk, accountant 1 reviews the customer records and either approves or disapproves customer credit. If he approves the customer's credit, he stamps the sales order "approved" and forwards it to accountant 2. Accountant 1 prepares a three- copy invoice. One copy is mailed to the customer, one copy is forwarded to accountant 2, and one copy goes to the collection clerk.
- ✓ Accountant 2 matches the approved sales order to the invoice and files these by customer number.
- ✓ After receiving a copy of the invoice, the collection clerk updates each individual accounts receivables accounts for each credit customer.
- ✓ The customers make payments through bank cheques. When the customers pay cash a mail clerk forwards customer checks to the collection clerk. The collection clerk stamps the check "For Deposit Only" and updates the accounts receivables for each customer and the relevant bank ledger accounts. The collection clerk deposits check in the bank account weekly. A weekly summary of cash receipts is forwarded to accountant 2, and she records these summaries in the general ledger.

Required;

- i) Identify any two weaknesses in the revenue transaction cycle for Kingston Industries ltd based on the above information. **(2 marks)**
- ii) Identify any two solutions that you would recommend to address the two weaknesses identified above in the revenue transaction cycle for Kingston Industries ltd based on the above information. **(2 marks)**
- iii) Identify all the major processes from the details provided above for Kingston Industries ltd revenue transaction cycle and prepare a data flow diagram (DFD) to document the entire revenue transaction cycle. **(7 marks)**
- iv) Explain two technologies that you would recommend for adoption by Kingston Industries ltd to improve efficiency within its revenue transaction cycle. **(2 marks)**

QUESTION FIVE (20 Marks)

- (a) The external auditor of Four Seasons Resort ltd has identified a fraud that has been going on in relation to sales commission claimed by travel agents. The resort uses a computerized system to make room reservations and bill customers. Following standard policy for the industry, the resort also offers authorized travel agents a 10% commission on room bookings. Each week, the resort prints an exception report of bookings made by unrecognized travel agents. However, the managers usually pay the commissions anyway, partly because they don't want to anger the travel agencies and partly because the computer file that maintains the list of authorized agents is not kept up-to-date.

Although management has not discovered it, several employees are exploiting these circumstances. As often as possible, they call the resort from outside phones, pose as travel agents, book rooms for friends and relatives, and collect the commissions. The employees then create fake customer accounts in the system and also create fake invoices which are finally paid out to the fraudulent employee's bank accounts.

Required;

- i) Explain two preventive controls that can be used adopted to deal with the above type of fraud. **(2 marks)**
 - ii) Explain two detective controls that can be used adopted to deal with the above type of fraud. **(2 marks)**
 - iii) Explain two corrective controls that can be used adopted to deal with the above type of fraud. **(2 marks)**
- (b) The design of the internal control framework for the accounting & financial information system is an important task. Various internal control models can be used in the design of internal control framework in accounting & financial information system. Explain how the COSO Internal Control Model can be used in the design of internal control security framework within accounting & financial information systems. **(5 Marks)**
- (c) Explain the application of the following technologies in accounting information systems.
- i) Extensible Business Reporting Language (XBRL). **(3 marks)**
 - ii) Integrated test facility (ITF) programs. **(3 marks)**
- (d) Identify and explain three pressures that would increase the likelihood of a cashier in a company engaging in fraud. **(3 marks)**