



STRATHMORE BUSINESS SCHOOL

BACHELOR OF COMMERCE

END OF SEMESTER EXAMINATION

BCA 4201 ACCOUNTING AND FINANCIAL INFORMATION SYSTEMS

DATE: Tuesday, 17th December 2024

TIME: 15:30 – 17:30

Instructions

1. This examination consists of **FIVE** questions.
2. The Total Marks for this exam is **70**.
3. Answer **Question ONE (COMPULSORY)** in section A.
4. Answer **ONE QUESTION** from **Section B**.
5. Answer **ONE QUESTION** from **Section C**.

SECTION A:(COMPULSORY)

QUESTION ONE

- (a) Kevian ltd is a company that produces fresh juice for the Kenyan market. The company has just released the strategic plan for the next five years 2025-2030. The company is looking to design a new revenue system with the Kevian proprietor and Managing Director Kimani Rugendo noting that the new system will enable the company to implement its business strategy. The business strategy for Kevian in the next 5 years will be to expand to sell its products to all other countries in Africa. The board of directors has already formed a steering committee led by the Managing Director Kimani.

Required;

- i) Explain **three** roles of the steering committee in the design of the new revenue system that will be adopted in January 2025. **(3 marks)**
 - ii) Explain how the business strategy of expansion to sell its products to all other countries in Africa will influence the design of the new revenue system. **(3 marks)**
- (b) Explain the following terms as discussed in accounting & Financial information systems;
- i) Chart of accounts. **(3 marks)**
 - ii) Electronic Data Interchange (EDI). **(4 marks)**
 - iii) Substantive testing. **(3 marks)**

- (c) Identify and explain **three** pressures that would increase the likelihood of a cashier in a company engaging in fraud. **(3 marks)**
- (d) The management board of Strathmore university has just passed a resolution to design a new purchasing system that will be adopted at the beginning of January 2025. The new purchasing system will be implemented to address some of the following weaknesses in the old purchasing system including (use of paper based documents, payment of wrong amounts to suppliers, delivery of the wrong materials and payment of invoices before preparation and approval of the payment voucher.
Having completed the accounting and financial information systems unit, the management board has engaged you as the lead IT expert to redesign the purchasing system. The VC has also emphasized on adoption of a computerized purchasing system.

Required;

- i) Based on your vast knowledge about the design of purchasing systems explain the **four** major processes within the purchasing system for Strathmore. **(8 marks)**
- ii) Explain **three** control procedures that would be adopted in the purchasing system to prevent shell company fraud. **(3 marks)**

(TOTAL 30 MARKS)

SECTION B

Answer **ONE QUESTION** from **Section B**

QUESTION TWO

- (a) Explain how the following technologies can be applied within the revenue cycle of Quickmatt supermarkets:
- i) Cloud Computing. **(3 marks)**
- ii) Customer relationship management systems (CRM). **(3 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 purchasing system 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;

Identify primary keys and foreign/secondary keys in each table and explain how you would design the purchases system database for Dynamic technologies ltd using the Relational database structure technique. **(6 Marks)**

(c) Liquid Telkom Kenya ltd has recently paid for the telecommunications License 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 fixed purchasing system. The company will be using this system to manage the fixed purchasing system the company.

Required;

Explain eight stages found within the systems development life cycle (SDLC) that would be followed in the design of the new fixed assets purchasing system form Liquid Telkom Kenya ltd. **(8 marks)**

(TOTAL 20 MARKS)

QUESTION THREE

(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 information system. Explain how the COSO Internal Control Model can be used in the design of internal control security framework within accounting & information systems. **(5 Marks)**
- (c) Explain the application of the following technologies in accounting & Financial information systems.
- i) Extensible Business Reporting Language (XBRL). **(3 marks)**
 - ii) Integrated test facility (ITF) programs. **(3 marks)**
 - iii) Bill of Lading. **(3 marks)**

(TOTAL 20 MARKS)

SECTION C

Answer **ONE QUESTION** from **Section C**

QUESTION FOUR

(a) One of the processes within the general ledger and reporting transaction system 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 year 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 system for Equity bank ltd. **(2 marks)**

- (d) Nike Africa Sports Ltd is a company that produces various sports equipment's for the African market. The company payroll transaction system 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 Nike, the human resources department completes a personnel action form to indicate separation and forwards it to the payroll department. The payroll accountant updates this data into the payroll database. The deductions related to KRA tax rates, NHIF deductions, NSSF, Pension and insurance related data is also updated by 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. The full time employees are required to sign a manual attendance register every day when they report and leave work.
- ✓ The payroll accountant goes through each employees file and calculates the net pay before another payroll account starts working on the cash payment of employees' salaries to the bank accounts.
- ✓ Using the payroll documents another accountant prepares the payroll payment voucher and once this is approved 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 Nike Sports ltd payroll system described above. **(2 marks)**
- ii) Prepare a detailed data flow diagram (DFD) to document the entire payroll system for Nike Africa Sports ltd based on the above information. **(9 marks)**

(TOTAL 20 MARKS)

QUESTION FIVE

- (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 system processes are conducted by five employees. The five employees are the sales clerk, warehouse clerk, accountant 1, accountant 2, and the collection clerk. A description of their duties is as follows:
 - ✓ The sales clerk 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 sales clerk, 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 system 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 system. **(2 marks)**

(TOTAL 20 MARKS)