STRATHMORE BUSINESS SCHOOL

BACHELOR OF COMMERCE

SPECIAL EXAMINATION

BCA 4201: ACCOUNTING AND FINANCIAL INFORMATION SYSTEMS

DATE: Tuesday, 5th May2026 **TIME:** 10:00 – 12:00

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 **ANY TWO QUESTIONS** from **Section B.**

SECTION A: (COMPULSORY)

QUESTION ONE

(a) Explain the following as discussed in Accounting & Financial Information systems.

i) Enterprise Resource Planning (ERP) software. **(2 marks)**

ii) Bill of lading. **(2 marks)**

iii) Chart of Accounts. **(2 marks)**

(b) Explain **FIVE** ways Quickmatt supermarket can benefit from using Artificial Intelligence (AI) technology. **(10 marks)**

(c) The following Ledger balances were extracted from the Trial Balance of Quickmatt Supermarket Ltd for the year ended 31/12/2025.

	Debit Balances	Credit Balances
1. Accounts Payables/Creditors		19,500,400
2.Sales		1,900,000,000
3.Equity Bank	700,000,000.00	
4.Motor Vehicles	250,000,000	

Additional Information;

Quickmatt supermarket board of directors has also requested the auditor to check the effectiveness of the access controls within the payroll system

Required;

i) Explain how you would conduct substantive tests for each of the above five balances as an external auditor looking to confirm the accuracy of the balances**.** **(10 marks)**

ii) Explain how you test the effectiveness of the access controls that the supermarket has implemented within the payroll system**.** **(2 marks)**

iii) Explain the difference between qualified and unqualified auditors' opinion. **(2 marks)**

(TOTAL:30 MARKS)

SECTION B:

Answer **ANY TWO QUESTIONS** from **Section B**

QUESTION TWO

(a) The development of any new system in accounting information system is crucial for the success of any business. More businesses are focusing on having a comprehensive development program for new systems. The System Development Life Cycle (SDLC) model provides a detailed framework that should be followed in the development of new systems with 8 distinct Phases. Quickmatt supermarkets is one of the upcoming supermarkets in Kenya and the company want to upgrade their current purchasing system with the goal being to develop a more efficient purchasing system in June 2026.

Required;

Explain the 8 System Development Life Cycle (SDLC) Phases that will be involved in the development of the new purchasing system for Quickmatt Supermarket. **(8 marks)**

(b) The following data tables have been provided in relation to the fixed assets purchasing system for Quickmatt supermarkets. The information will be used for the design of a database of the fixed assets purchase system using the Relational database structure technique.

1. Fixed Asset register Table:

Asset Name	Fixed Asset Identification Number (FIDN)	Fixed Asset type
Lenovo Desktop Computers	F-CO-005	Computers
Delivery Vans	F-VE-004	Vehicles
Cashier Desk & Chairs	F-FU-009	Furniture
Apple Macbooks	F-CO-007	Computers

2. Purchase order Table:

Purchase Order Number (PO)	Supplier Name	Fixed Asset Identification Number (FIDN)	Amount
PO-005	Lenovo Kenya Ltd	F-CO-005	1,800,000.00
PO-008	Toyota Kenya Ltd	F-VE-004	19,500,000.00
PO-011	Furniture Palace Kenya	F-FU-009	1,200,000.00
PO-012	Apple Kenya Ltd	F-CO-007	5,500,000.00

3. Purchase Invoice Table:

Purchase Invoice Number (PIN)	Supplier Name	Purchase Order Number (PO)	Amount
PIN-108	Lenovo Kenya Ltd	PO-005	1,800,000.00
PIN-119	Toyota Kenya Ltd	PO-008	19,500,000.00
PIN-128	Furniture Palace Kenya	PO-011	1,200,000.00
PIN-135	Apple Kenya Ltd	PO-012	5,500,000.00

4.Cash Payment Table:

Purchase Invoice Number (PIN)	Supplier Name	Payment Voucher Number (PVN)	Amount
PIN-108	Lenovo Kenya Ltd	PV-255	1,800,000.00
PIN-119	Toyota Kenya Ltd	PV-259	19,500,000.00
PIN-128	Furniture Palace Kenya	PV-260	1,200,000.00
PIN-135	Apple Kenya Ltd	PV-261	5,500,000.00

Required;

Explain how you would design the fixed assets purchase system database using the Relational database structure technique and make sure to explain the primary keys and secondary/foreign keys being used for each table. **(12 Marks)**

(TOTAL 20 MARKS)

QUESTION THREE

(a) Rubis Energy Kenya is one largest company that sells petroleum products in Kenya.The management of the company has just initiated the revision of their internal control framework their accounting and financial information systems. The company plans to rely on the COSO framework model of internal control. The COSO model has five components; Control environment, risk assessment, information and communication, monitoring, and control procedures.

Required;

Explain how the company would conduct **risk assessment** under the COSO framework model of internal control and identify the risk that the company may face. **(5 Marks)**

(b) Kilimall Kenya ltd is one of the largest online retail businesses in Kenya. The following ledger account balances have been extracted from the trial balance of Kilimall Kenya ltd at the end of the year 2024.

Kilimall Kenya Ltd		
Adjusted Trial Balance		
For the Year Ending December 31, 2024		
Accounts	**Debit**	**Credit**
	Kshs	Kshs
Sales		314,180,000
Purchases	184,800,000	
Prepaid Rent	1,200,000	
Inventory	20,500,000	
Building and equipment	80,000,000	

Accounts Receivables	580,000	
Accounts payables		900,000
Ordinary Share Capital		50,000,000
Retained earnings, as at 1/01/ 2024		13,500,000
Salaries and Wages Expense	85,200,000	
Insurance expense	500,000	
Depreciation Expense-(Buildings & Equipment)	1,000,000	
Advertising Expense	2,800,000	
Dividends	2,000,000	
	378,580,000	**378,580,000**

Required;

From the above adjusted trial balance provided by Kilimall Kenya Ltd at the end of the year 2024 explain the closing of the year procedures and provide the relevant journal entries to accompany the explanation. **(8 marks)**

(c) Explain the following terms in accounting & Financial information systems.

i) Point-of-Sale (POS) Systems. **(2 marks)**

ii) Extensible Business Reporting Language (XBRL). **(2 marks)**

(d) PwC audit firm was hired as the external auditor by Safaricom Ltd earlier this year. After conducting a detailed audit, the following two types of fraud were noted in the audit report presented to the board of directors.

- ✓ **Overtime hours fraud:** The auditor noted that there were some employees working in certain Safaricom shops in Nairobi that were claiming more overtime hours for payment that could not be verified against the time sheet documents. For overtime the employees would write their name and sign on a register book that is maintained by the security guards at the entry point. The auditor suspects collusion between these employees and the security guards who allow the employees to record inaccurate time in and time out.
- ✓ **Data theft fraud:** The auditor in the audit report noted that there have been a few cases of employee data theft over the last one year. The auditor suspects that certain compromised Safaricom employees would steal customer data and sell it to outsiders who would then use this data to send Safaricom customers with malicious SMS.When the customer opened the SMS the hackers would gain unrestricted access to their mobile phones draining their bank accounts and MPESA.

Required;

Explain the control procedures/measures that can be adopted to prevent the occurrence of each of the above types of fraud. **(3 marks)**

(TOTAL 20 MARKS)

QUESTION FOUR

(a) The general ledger and reporting transaction system is one of the subsystems within the Accounting & Financial Information System.

Required;

i) Explain any **two** processes within the general ledger and reporting system. **(4 marks)**

ii) Explain **two** management reports apart from the income statement and the balance sheet that are generated by the general ledger and reporting system. **(2 marks)**

(b) E-bay is one of the largest online retail business in the world.Ebay plans to launch its operations in Kenya to serve the wider east African Market.Ebay plans to launch a dedicated e-commerce platform to serve the Kenya and wider east African market (Ebay-Kenya.co.ke/).The business sells new products and also sells used products through a competitive bidding process

The revenue system will have the following 4 major processes.

The first major process is the **Sales order Process**:

The customers will place their orders through (Ebay-Kenya.co.ke/) website and also through eBay mobile application. The customers will first log-in to their account for returning customers with the new customers being required to register and create a new account. After the customer logs into their account on the website or mobile app they will select their country. Next they will select whether they are buying new or used products.

The customer will then select the product which they want to buy.The website and mobile app will be designed so that the system can automatically check for availability of inventory in real time with the products that are out of stock not being displayed until more stock is purchased.

The customers buying new products will then confirm their order by selecting confirm order on the order page.

Those buying used products will make a bid for the products that they have selected and the system will automatically run a competitive bidding process versus other customers that want to buy.The order for used products can only be confirmed is the customer places a winning bid which is accepted by the system.All the sales will be on credit with the customer paying once the goods are delivered.

The second major process is the **Billing Process**:

After confirming the sales order, a sales invoice is created for the customer and then the accounts receivables records for the customer are updated. The customer will receive a copy of the sales invoice ,packing slip and sales order during the shipping process.All the documents will be updated on the website and the mobile app where the customer can view the sales order,invoice and packing slip.The customer will receive an advance shipping notice once their package leaves the warehouse.

The third major process is the **shipping process/delivery process**:

The third major process will be the shipping process. The goods sold to the customer will be packed and packing slip created and the customer will be required to confirm the delivery against packing slip.The customer will then select their preferred shipping company out of either DHL Kenya Logistics and G4S Kenya Logistics the two authorized delivery companies

The fourth major process is the **Cash Collection process**:

The fourth major process begins with the customer making the payment using the following modes of payment (Bank Transfer,M-PESA,Airtel Money, Credit Card or Debit Card). After making the payment and after confirmation a receipt will be issued to the customer. The ledgers will then be updated accordingly. The bank reconciliation is also carried out monthly.

Required;

Prepare a Data Flow Diagram (DFD) representing the revenue system for eBay Kenya Ltd. Make sure to include all processes in the DFD. **(14 Marks)**

(TOTAL 20 MARKS)

QUESTION FIVE

a) The production system is one of the subsystems within accounting information systems. This system has 4 major processes.

Required;

i) Explain any two major processes within the production system. **(4 marks)**

ii) Explain the bill of materials document prepared within the production system. **(2 marks)**

b) Equity Bank Ltd is one of the largest banks in Kenya. Equity bank hires both full-time employees and part-time employees in various branches. The full-time employees are paid a fixed gross determined by the allowances plus other allowances for the employee. The part-time employees will be paid based on time both regular and overtime.

The payroll system has the following 4 major processes as explained below.

- ✓ The first process is the update of the master data process. When a new employee reports the human resource department updates the payroll related data for the employee including; Name of the employee, Job group, Department. The terms of employment data such as basic pay and allowances are also updated for the full-time employees. The pay rate per hour data is also updated for the part-time employees. The deductions related data like PAYE tax rates, NSSF, SHIF are also updated.

  For current employees any changes affecting their net pay will also be updated when the employee is promoted or leaves the organization
- ✓ The second major process is the verification of time and attendance data. Here the payroll accountant will verify the accuracy of the time data for part-time employees and then verify the attendance for the full-time employees.The bank uses a biometrics system that captures fingerprint data for all employees when they report to work.The

payroll accountant will compare the payroll attendance and time data against the raw data extracted from the biometrics system

- ✓ The third process within the payroll system is the calculation of the Net pay. Under this process the payroll accountants will calculate the gross pay for each employee based on their contract first. The statutory deductions like PAYE, NSSF,SHIF and Housing Levy will be calculated.The optional deductions like bank loan and sacco deductions will then be calculated to determine the total deductions. The net pay is then calculated and the ledgers updated accordingly by debiting the salary expense a/c and crediting respective payroll liability accounts.
- ✓ The third process is the cash payment of the net salaries. Under this process the payroll payment voucher for the net salaries is prepared and approved then the money is transferred to the employee's bank accounts.The finance manager,Head of internal audit and the CEO will approve the payment voucher.The bank uses an accounting software which allows for digital signature approvals which allows the preparation and approval of payroll payment vouchers even in remote locations. Relevant ledgers will also be updated.
- ✓ The Last process is the cash payment of the deductions. Under this process the payroll payment voucher for each deduction is prepared and approved then the money is transferred. Relevant ledgers will also be updated.

Required;

Explain the flow of information within the payroll system and provide a level-0 Data Flow Diagram (DFD) for the payroll system. **(14 marks)**

(TOTAL 20 MARKS)