CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 17 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.

2. This paper is divided into TWO (2) sections:

   Section A: Ten (10) compulsory multiple choice questions.
   Section B: There are FIVE (5) questions in this section. Attempt QUESTION TWO (2) and any other THREE (3) questions from the remaining FOUR (4) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

Attempt all ten (10) multiple choice questions

QUESTION ONE

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 Musa is preparing the general ledger journal entry to record depreciation expense. He knows that the debit entry should be made in the depreciation expense account.

Into which general ledger account will the credit entry be made?

A. Non-current asset cost account.

B. Accumulated depreciation account.

C. Non-current asset disposal account.

D. Profit and loss account.

(2 marks)

1.2 Which accounting concept is being used on the recording of non-current assets in the statement of financial position, at their depreciated cost?

A. Prudence.

B. Separate entity.

C. Accruals.

D. Going concern.

(2 marks)

1.3 Which of the following statements about the provisions of IAS 37 Provisions, Contingent Liabilities and Contingent Assets are correct?

(i) Contingent assets must be disclosed in a note when an inflow of economic benefits is virtually certain to arise.

(ii) Disclosure of contingent liability is required if the possibility of a transfer of economic benefits is possible.

(iii) A provision should not be recognized if an inflow of economic benefits is possible.

A. (i), (ii) and (iii)

B. (i), and (ii)

C. (ii) and (iii)

D. (ii) only

(2 marks)

1.4 Coco and Melon are in partnership. During the year ended 30 June 2023, the partnership made a profit of K750,000. The partnership agreement stated that profits were to be shared in the ratio 3:2 after Melon had received a salary of K50,000 per annum. However, on 1 January 2023, it was decided to increase Melon's salary to K60,000 per annum but that the profit-sharing ratio remained the same.

What total share of profits are Coco and Melon entitled to for the year ended 30 June 2023?

	Coco	**Melon**
A.	K417,000	K333,000
B.	K420,000	K330,000
C.	K414,000	K336,000
D.	K417,000	K328,000

(2 marks)

1.5 Which of the following best describes the role of the IFRS Advisory Council?

A. To prepare interpretations of International Accounting Standards.
B. To provide the IASB with the views of its' members on standard setting projects.
C. To promote the use of International Accounting Standards amongst its members.
D. To select the members of the IASB.

(2 marks)

1.6 On 1 April 2023, the balance on the receivables general ledger account was K20,050, by 31 March 2024, it was K81,000. Sales had been K710,000, sales returns K18,000 and cash receipts K505,500.

What was the amount settled by receivables and payables account contras?

A. K125,550

B. K81,000

C. K105,500

D. K110,550

(2 marks)

1.7 On 31 December 2023 the inventory of Vubwi Co was destroyed by fire.

The following information is available:

(1)	Inventory at 1 December 2023 at cost	K96,400
(2)	Purchases for December 2023	K140,600
(3)	Sales for December 2023	K280,000
(4)	Standard gross profit percentage on revenue	30%

Based on this information, which of the following is the cost of inventory destroyed?

A. K237,000

B. K196,000

C. K41,000

D. K55,400

(2 marks)

1.8 The net assets of Kizito, a sole trader, at 1 February 2023 amounted to K228,000. During the year to 31 January 2024 Kizito introduced a further capital of K85,000 and made drawings of K68,000. At 31 January 2024, Kizito's net assets totalled K284,000.

What is Kizito's total profit or loss for the year ended 31 January 2024?

A. K73,000 profit

B. K73,000 loss

C. K39,000 loss

D. K39,000 profit

(2 marks)

1.9 A club has 150 members; each should pay K250 for subscriptions per annum. At the start of the year, 20 members owed subscriptions, at the end of the year, 12 members had prepaid subscriptions. 5 members' subscriptions were unpaid and written off as uncollectable during the year.

Calculate the cash receipts for the year. (Assume the annual subscription remains at K250).

A. K44,250

B. K42,500

C. K37,500

D. K40,500

(2 marks)

1.10 A company has the following information about property, plant and equipment.

	2023	2024
	K'000	K'000
Cost	880	970
Accumulated depreciation	240	280
Net book value	640	690

Plant with the carrying amount of K120,000 (original cost K160,000) was sold for K85,000 during the year. What is the net cash flow from investing activities for the year?

A. K165,000 inflow

B. K250,000 inflow

C. K250,000 outflow

D. K165,000 outflow.

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO (2) in this section is compulsory and must be attempted. Then attempt any THREE (3) questions from the remaining FOUR (4) questions.

QUESTION TWO – (COMPULSORY)

Papa and Mama are in a partnership business based in Kawambwa. They share profits and losses in the ratio of 6:2 respectively. Mama receives a quarterly salary of K1,150. The following were the balances in the financial books as at 1 January 2024:

Advertising paid in advance		250
Capital Balances:	Papa	28,000
	Mama	14,000
Bank overdraft		5,900
Office rent and rates owing		350
Inventory		7,500
Trade payables		6,000
Plant and machinery at cost		15,000
Motor vehicles at cost		8,000
Freehold premises		20,000
Allowances for Depreciation:		
Plant and machinery		7,000
Motor vehicles		2,500
Cash Account		1,500

For the financial year ended 31 December 2024; the following information was made available:

1. Inventory at 31 December 2024 was K12,000.
2. Total drawings had been made as follows: -
   Papa K7,350
   Mama K5,250
3. Depreciation for the year had to be provided as follows:
   Plant and machinery at 20% on cost
   Motor vehicles at 20% on reducing balance basis.
4. Adjustments for expenses necessary at 31 December 2024 were:

In arrears –	Wages	K800
	Office salaries	K100
	Printing and stationery	K60
In advance –	Office rent and rates	K150

5. Payments made during the year

	K
Vehicles expenses	1,250
Advertising	100
Bank overdraft interest	520
Printing and stationery	120
Office rent and rates	2,000
Office salaries	2,500
Distribution expenses	6,000

6. Other balances of accounts at 31 December 2024 were:

	K
▪ Purchases during the year	132,900
▪ Trade receivables	5,000
▪ Trade payables	4,700
▪ Bank overdraft	7,600
▪ Cash	1,210
▪ Sales	150,000

Required:

(a) Prepare the partnership's income statement and the appropriation account for the year ended 31 December 2024. (12 marks)

(b) Prepare partnership statement of financial position as at 31 December 2024 for the partnership.
(8 marks)
[Total: 20 Marks]

QUESTION THREE

(a) The revised version of the IASB's Conceptual Framework for Financial Reporting provides guidance to preparers and users of financial statements.

Required:

(i) Compare the use of 'Historical cost' and the 'current cost' as measurement bases applied to transactions. (4 marks)

(ii) Explain the meaning of 'faithful representation' and 'relevance' as qualitative characteristics of financial information. (4 marks)

(b) A number of countries are adopting the accruals based International Public Sector Accounting Standard (IPSAS).

Required:

Provide two (2) reasons why the accruals basis of preparing accounts in Zambia should be adopted by public sector organizations compared to the cash basis. (4 marks)

(c) The assets of a business at start comprised cash from the owner of K20,000 and borrowings from a bank of K15,000. The following is the accounting equation as at 1 January 2023:

Assets	**=**	**Capital + Profit - Drawings**	**+**	**Liabilities**
K35,000	=	K20,000 + 0 - 0	+	K15,000

(i) Invested additional funds in the business of K15,000
(ii) Bought goods on credit for K45,000
(iii) Returned goods to a supplier valued at K15,000
(iv) Sold goods for cash worth K25,000
(v) Sold goods on credit for K55,000
(vi) Paid insurance in cash amounting to K12,000
(vii) Arranged another loan in the sum of K30,000
(viii) Bought a delivery van by cheque, for K40,000
(ix) Withdrew K800 cash for personal private use.

Required:

Update the accounting equation above with the listed transactions that occurred in the month of January 2023. (8 marks)

[Total:20 Marks]

QUESTION FOUR

(a) The bookkeeper at Mwaayi Ltd prepared a trial balance from the business's accounting records on 31 December 2023. The trial balance failed to balance by K19,507; a shortage being found on the credit side.

A suspense account was opened to record the difference. After careful examination of the accounting records of the company, the following errors were discovered:

1. Rent account had been under cast by K19,040.
2. Sales day book had been under cast by K25,897.
3. Wages account had been overcast by K12,650.
4. Sale of computers had been credited to the sales account with K21,350.
5. Sales of K45,450 to B. Mathew had been debited in P. Mathias' account.

Required:

(i) Prepare the journal to correct the errors. (Narratives are not required). (5 marks)

(ii) Prepare the suspense account after the errors above have been corrected. (2 marks)

(iii) Show the calculations of the corrected net profit, if the net profit had previously been calculated as K97,320 for the year ending 31 December 2023. (3 marks)

(b) Delia, a sole trader, buys and sells cosmetics. The following trial balance was extracted from her books on 31 December 2023:

	Dr	Cr
	K	K
Premises	50,000	
Motor vans	7,400	
Trade receivables	1,680	
Trade payables		2,385
Purchases	160,260	
Sales		200,490
Wages	12,000	
Drawings	1,600	
Capital		30,000
	232,940	232,875

A suspense account was opened to clear the above in balance in the trial balance. The following errors were discovered after an examination of the books and records:

(1) Purchase of a motor van had been entered in the motor van account as K3,860 instead of K3,680.

(2) The total of the purchases book K32,543 had been posted to the purchases account as K32,453.

(3) The owner withdrew goods amounting to K140 for private use during December 2023. This amount had been debited to the wages account.

(4) A cash discount of K25 allowed by Napaasa, a payable, had not been entered in Napaasa's account.

Required:

(i) Redraft the trial balance after considering the above errors. (7 marks)

(ii) Explain any three (3) errors that do not affect the trial balance. (3 marks)

Total: 20 Marks]

QUESTION FIVE

Manyando operates a market stall at Mukuni Village Curios market in Zambia's tourist capital Livingstone. Among the merchandise being sold are African-traditional wear, copper crafts, curios and Tonga artifacts.

Most of her sales are for cash although regular customers are allowed credit. Manyando does not keep any double entry accounting records, but has made the following information available to you:

SUMMARY OF NET ASSETS AT 31 MARCH 2023

Assets	K	K	K
Non-current assets			
Cost		3,000	
Depreciation		(2,500)	
			500
Current assets			
Inventory	500		
Receivables	170		
Cash at bank	2,800		
Cash in hand	55		
		3,525	
Less current liabilities			
Payables		(230)	3,295
			3,795

Additional information

(1) Manyando makes a markup of 2/3 on selling price. She is certain that no goods had been stolen but remembers that she appropriated a couple of copper crafts and some artifacts for her visiting former classmates. These items had a total selling price of K300.

(2) During the year to 31 March 2024, Manyando also paid cash for the following:

Sundry expenses	K24
Repairs to stall canopy	K201

(3) Trade receivables and payables at 31 March 2024 were K320 and K233 respectively, and cash in hand amounted to K39. No inventory count had been made and there were neither accrued nor prepaid expenses.

(4) Manyando bought a new motor van in January 2024 in exchange for her old van at an agreed trade-in-value of K1,800. A full year's depreciation is to be provided on the new van, calculated at 20% on cost.

(5) Manyando had taken K50 cash per week for her personal use. She also estimates that petrol for the van, paid in cash, averaged K10 per week.

A summary of Manyando’s bank statements for the twelve (12) months in question showed the following:

Credits	K
Cash banked (all cash sales)	7,521
Cheques banked (all credit sales)	1,500
Dividend income	210
	9,231

Debits	K
Purchase of motor van	3,200
Road fund license	80
Insurance on van	323
Payables for purchases	7,777
Rent	970
Sundry	31
Accountancy fees (current work)	75
Bank overdraft interest (six months to 1 October 2023)	20
Returned cheque (irrecoverable debt)	29
	12,505

The bank statement for 1 April 2024 shows an interest charge of K27.

Required:

Assuming a 52-week year, prepare

(a) Manyando's statement of profit or loss for the year ended 31 March 2024, and (15 marks)

(b) Manyando's a statement of financial position as at 31 March 2024. (5 marks)

[Total: 20 Marks]

QUESTION SIX

Bonilinda buys farm produce from various farmers in Mwense district and supplies this to various supermarkets mainly on short term credit terms. On 31 December 2024, the balance on payables control account of Bonilinda in the nominal ledger was K240,390 and the total of the list of payables from the payables ledger was K241,320.

Investigation of the reason for the difference indicated the following:

(1) Purchases amounting to K1,314 had been entered on the wrong side of the supplier's account in the payables ledger.

(2) Debit balances in the payables ledger amounting to K25,700 had been omitted from the list of payables.

(3) A payment to a supplier Mubanga of K30,500 for a cash purchase of vegetables had been correctly recorded in the cash book, but was not posted to his account in the payables ledger.

(4) An invoice for K 46,000 recorded in error in the Purchases Returns Day Book instead of the purchases day book. The invoice value was, however, correctly posted to personal account in the payables ledger.

(5) A payment of K9,000 was made to settle a balance of K10,000 but the discount was not recorded in the personal account of a supplier.

(6) A settlement by contra entry with the receivables ledger of K2,100 was recorded in the supplier's personal account but no entry was made in the control account.

(7) The purchases day book was under cast by K17,128

(8) A debit balance of K20,565 in the payables ledger had been listed as credit balance.

(9) A credit note received from a supplier of K450 was omitted from the accounting records.

(10) An invoice for K13,250 was correctly recorded in the purchases day book, but when posting to supplier's personal account, the amount was entered as K15,320.

(11) Cash paid to suppliers of K50,870 were omitted from the control account.

Required:

(a) Prepare the adjusted payables control account for Bonilinda that includes necessary adjusting entries and corrected balance. (5 marks)

(b) Prepare a reconciliation of the list of balances to the corrected control account balance. (8 marks)

(c) Explain two (2) purposes of control accounts. (2 marks)

(d) Prepare journal entries to show how the entries would be posted to the general ledger accounts for only the following errors listed above: (iv), (vi), (vii), (ix) and (xi). (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.1 FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

1.1	B
1.2	D
1.3	C
1.4	A
1.5	B
1.6	A
1.7	C
1.8	D
1.9	A
1.10	D

SOLUTION TWO

(i) **Depreciation** on plant and machinery 20% x 15 000 = K3 000
Depreciation on plant motor vehicles 20% x 5 500 = K1 100

(ii) **Office Rent and Rates Account**

Bank	2 000	Opening balance b/f	350
		Income statements (bal.figure)	1 500
		Balance c/d	150
	2 000		2 000

(iii) **Current Accounts**

	Papa	Mama		Papa	Mama
Drawings	7 350	5 250	Share of profit	375	125
			Partnership salary		4 600
			Balances c/d	6 975	525
	7 350	11 275		7 350	5 250

(a) Partnership statement of profit or loss appropriation account for the year ended 31st December 2024

	K	K
Sales		150 000
Opening inventory	7 500	
Purchases	132 900	
	140 400	
Closing inventory	(12 000)	
Cost of sales		(128 400)
:- Gross Profit		21 600
Less: Office rent and rated (2 000 – 350 – 150)	1 500	
Vehicles expenses	1 250	
Advertising (250 + 100)	350	
Interest on Bank overdraft	520	
Printing and stationery (120 + 60)	180	
Office salaries (2 500 + 100)	2 600	
Distribution expenses)	6 000	
Depn on motor vehicles plus plant & machinery)	4 100	(16 500)
		5 100
Less appropriation:		
Mama's salary (K1, 1150 x 4)		(4 600)
		500

Share of residual profit:	Papa	$^{6}/_{8}$ x 500 =	375	
	Mama	$^{2}/_{8}$ x 500 =	125	(500)
				-

(b) Partnership statement of financial position as at 31st December 2024

Non-Current Assets:		Cost	Accum'd Department	NBV
Freehold premises		20 000	-	20 000
Plant and machinery		15 000	(10 000)	5 000
Motor vehicles		8 000	(3 600)	4 400
		43 000	(13 600)	29 400
Current Assets:				
Trade receivables			5 000	
Inventories			12 000	
Cash			1 210	
Prepaid office rent and rates			150	18 360
				47 760
Financial by:				
Capitals Papa	(28 000 – 6 975)		21 025	
Mama	(14 000 + 525)		13 475	34 500
Current liabilities:				
Bank overdraft			7 600	
Trade payables			4 700	
Accrued manufacturing wages		800		
Accrued office salaries		100		
Accrued printing and stationery		60	960	13 260
				47 760

SOLUTION THREE

(a) (i) The use of **historical cost** in measuring transactions is common because it provides objective figures which are verifiable by referring to invoices and contracts entered into when the transactions took place. On the other hand, historical cost information tends to lag behind, especially in times of hyperinflationary economic circumstances. For this reason, historical cost information becomes irrelevant for decision making. **Current cost basis** of measuring transactions become handy when a decision has to be made. Current cost accounting considers circumstances that are obtaining, although they may be subjective, if there are no comparatives to refer to. Current cost measurement bases include fair values, value in use, replacement cost and fulfillment value.

(ii) **Faithful representation** is reflecting the economic substance of a transaction rather than its legal form. The information has to include all information necessary for understanding (completeness), without bias and supported by the exercise of prudence (neutral) and described reasonable correctly (free from error). **Relevance** refers to capability of information in making a difference in the decision making of users. Information has to have predictive and or confirmatory value if it is to be relevant.

(b) The accruals basis of preparing financial statements ensures that the effects of transactions and events are reported in the periods in which those effects occur, even if the resulting cash receipts and payments occur in a different period. This implies that transactions on credit are also captured and used in assessing whether a profit or loss was made in the period under review. Public sector organizations have for a long time relied on budgeting and actual expenditure. This is the cash basis of accounting. It is inadequate or deficient in that a lot of information is held off-record and is subject to manipulation and losing. The reports based on the cash basis are therefore likely to be misleading and incomplete.

(c)

Assets	=	**Capital**	+	**Profit**	-	**Drawings**	+	**Liabilities**
K		K		K		K		K
35,000		20,000	+	0	-	0		15,000
15,000		15,000						
								45,000
								(15,000)
25,000								
55,000								
(12,000)								
30,000								30,000
(40,000)								
40,000								
(800)								

147,200 = 35,000 + 38,000(W1) - 800 + 75,000

Calculation of Profit (W1)

Income and expenses isolated:

Purchases	45,000
Purchases Returns	(15,000)
	30,000
Sales Cash	(25,000)
Credit Sales	(55,000)
Insurance	12,000
	38,000

SOLUTION FOUR

(a)

(i) Mwaayi Ltd's Journal Entries

Details	Dr	Cr
Suspense	25,897	
Sales		25,897
B. Mathew	45,450	
P. Mathias		45,450
Rent	19,040	
Suspense		19,040
Suspense	12,650	
wages		12,650
Sales	21,350	
Computer disposal account		21,350

(ii) Mwaayi Ltd's Suspense account

	K		K
Wages	12,650	Balance b/d	19,507
Suspense	25,897	Rent	19,040
	38,547		38,547

(iii) Mwaayi Ltd's Corrected Net Profit

		K	K
Net profit			97,320
Add:	Sales under cast (1)	25,897	
	Wages overcast (4)	12,650	
			38,547
			135,867
Less:	Rent under cast (3)	19,040	
	Sales (5)	21,350	
			(40,390)
			95,477

(b)

(i) Delia's Redrafted Trial Balance as at 31 December 2023

	Dr	Cr
	K	K
Premises	50,000	
Motor vans (7,400-180)	7,220	
Trade receivables	1,680	
Trade payables		2,360
Purchases (160,260+90)	160,350	
Sales		200,490
Wages (12,000-140)	11,860	
Drawings (1,600+140)	1,740	
Capital		30,000
	232,875	232,875

(ii) The errors that do not affect the trial balance are:

Omission error:	This is where a transaction is completely omitted from the accounting books.
Error of principle:	This is where a transaction or item is entered in the wrong class account. An example is where the purchase of a computer debited in the computer expenses account instead of computer account.
Error of commission:	This is where the correct amount is entered in the wrong account.
Compensating errors:	This is where two (2) errors cancel each other out. If the sales account was added up to be K10,000 and the purchases account was also added up to be K10,000, then these two errors would cancel out in the trial balance
Original entry errors:	This is where the original amount or figure is not correct, yet double entry is correctly done using the incorrect amount or figure.
Complete reversal error:	This is where the correct amounts in the correct accounts are entered but each item is shown on the wrong side of the account.

SOLUTION FIVE

(a) **MANYANDO**
STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 MARCH 2024

	Working	***K***	***K***
Revenue: cash	1		10,850
credit	2		1,650
			12,500
Opening inventory		500	
Purchases	3	7,600	
		8,100	
Closing inventory	4	(600)	
Cost of sales			(7,500)
Gross profit			5,000
Administrative costs			
Rent		970	
Repairs to canopy		201	
Van running expenses (520 + 80 + 323)		923	
Depreciation	5	1,000	
Sundry expenses (24 + 31)		55	
Bank interest		47	
Accounting fees		75	
Irrecoverable debts		29	
			(3,300)
			1,700
Profit on disposal of van	6		1,300
Net profit for the period			3,000

(b) **MANYANDO**
STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 2024

	Working	K	K
Assets			
Non-current assets			
Motor van: - cost	5	5,000	
- depreciation	5	(1,000)	
- carrying amount			4,000
Current assets			
Inventory	4	600	
Receivables	2	320	
Cash in hand	1	39	
			959
Total assets			***4,959***
Proprietor's capital and Liabilities			
Proprietor's capital			
Balance at 31 March 2023		3,795	
Profit for the year		3,000	

Less withdrawals	7	(2,570)	
			4,225
Current liabilities			
Bank overdraft	1	474	
Bank interest (presumably not paid until 1 April)		27	
Payables	3	233	
			734
Total Proprietor's capital and Liabilities			**4,959**

Workings

1 **CASH BOOK**

	Cash	*Bank*		*Cash*	*Bank*
	K	*K*		*K*	*K*
Balance b/d	55	2,800	Withdrawals (52×K50)	2,600	
Cash takings banked			Petrol (52 × K10)	520	
(contra entry)		7,521	Sundry expenses	24	
Cheques banked		1,500	Repairs to canopy	201	
Dividend income		210	Takings banked (contra		
Cash takings (bal. figure)	10,850		entry)	7,521	
			Purchase of van		3,200
			Road fund license		80
			Insurance on van		323
			Payables		7,777
			Rent		970
			Sundry		31
			Accounting work		75
			Bank interest		20
			Returned cheque:		
			irrecoverable debt		29
Balance c/d (overdraft)		474	Balance c/d	39	
	10,905	12,505		10,905	12,505
Balance b/d	39		Balance b/d		474

2 **RECEIVABLES**

	K		K
Balance b/d	170	Cash	1,500
Credit sales - balancing figure	1,650	Balance c/d	320
	1,820		1,820

3 **PAYABLES**

	K		K
Bank	7,777	Balance b/d	230
Balance c/d	233	Purchases (balancing figure)	7,780
	8,010		8,010

Goods taken as withdrawals	**K**
Selling price (100%)	300
Gross profit (40%)*	120

Cost (60%)	180

Therefore, purchases taken to the trading account = K7,780 − K180 = K7,600.

* Manyando marks-up by 2÷3; hence margin equals 2÷5 or 40%; i.e. 40% x 300=**K120**, profit

4 Closing inventory

	K
Sales (10,850 + 1,650) (100%)	12,500
Gross profit (40%)	(5,000)
Cost of goods sold (60%)	7,500
Opening inventory	500
Purchases (W3)	7,600
	8,100
Cost of goods sold	(7,500)
Closing inventory (balancing figure)	600

5 New van

The bank statement shows that the cash paid for the new van was K3,200. Since there was a part exchange of K1,800 on the old van, the cost of the new van must be K5,000 with first year depreciation (20%) K1,000.

6 Disposal of van

	K		K
Van at cost	3,000	Provision for depreciation at date of sale	2,500
Profit on disposal	1,300	Asset account (trade in value for new van)	1,800
	4,300		4,300

7 Withdrawals

	K		K
Cash	2,600	Dividend income	210
Inventory	180	Capital account (bal.)	2,570
	2,780		2,780

Since there are no investments in the business's statement of financial position, the dividend income must be separate from the business. However, since it is paid into the business bank account, it should be accounted for, in effect, as a reduction in withdrawals.

SOLUTION SIX

(a) **Adjusted Payables Control account**

	'K'		'K'
Contra with receivables	2,100	Balance b/f	240,390
Credit note omitted	450	credit note reversal	46,000
Cash omitted	50,870	Invoice recording	46,000
Balance c/d	296,098	Purchases undercast	17,128
	349,518		349,518
		Balance c/d	296,098

(b) **Reconciliation of list of payables to Control account**

Balance per list of payables	241,320
Purchases mispost (2 x K1,314)	2,628
Debit balances omitted	(25,700)
Cash purchase wrongly posted	30,500
Discount received omitted	(1,000)
Credit note omitted	(450)
Invoice overstated (K15,320 – K13,250)	(2,070)
Credit note reversal + invoice recording (46,000 x 2)	92,000
Debit balance listed as credit (K20,565 x 2)	(41,130)
Balance per adjusted control account	296,098

Purposes of control accounts

- Used to locate/detect errors. This happens when control accounts do not agree with payables ledger accounts and this facilitates investigations.

- Used to provide receivables and payables balances for the preparation of final accounts.

- Provide a platform for fraud prevention as segregation of duties is a core feature of a system of control accounts that enhances checks and balances to be carried out by each individual on another's work.

(c) **Journal entries**

(i)	Dr Purchases returns	46,000	
	Dr Purchases	46,000	
	Cr Payables control		92,000
	Being purchases recorded as returns		
(ii)	Dr Purchases	17,128	
	Cr Payables ledger control		17,128
	Being understatement of purchases day book		
(iii)	Dr Payables ledger control account	2,100	
	Cr Receivables ledger control account		2,100
	Being set off with receivables ledger control account		
(iv)	Dr payables ledger control account	450	
	Cr Discounts Received account		450
	Being credit note omitted from accounting record		
(v)	Dr Payables account	50,870	
	Cr cash account		50,870
	Being cash paid omitted from control account		

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2 BUSINESS STATISTICS

WEDNESDAY 19 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.

2. This paper is divided into TWO (2) sections:

   Section A: Ten (10) compulsory multiple choice questions.
   Section B: There are FIVE (5) questions in this section. Attempt question TWO (2) and any other THREE (3) questions from the remaining four (4) questions

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. A mathematical standard formulae book must be provided to you. Request for one if not given by the Invigilator.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A – (COMPULSORY)

Attempt all ten (10) multiple choice questions

QUESTION ONE

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 A statistical data presentation diagram in which numerical data is presented as segments in degrees representing the respective data categories is called?

A. Histogram.

B. Cumulative frequency curve.

C. Bar chart.

D. Pie chart.

(2 marks)

1.2 Given the following regression model; $y = a + bx$, the variables y and x respectively are called.

A. Continuous variable, correlation coefficient.

B. Dependent variable, Independent variable.

C. Independent variable, dependent variable.

D. Intercept, slope.

(2 marks)

1.3 The Union of two (2) independent events A and B can be expressed as:

A. $P(A \cup B) = P(A)/P(B)$

B. $P(A \cup B) = P(A) - P(B)$

C. $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

D. $P(A \cup B) = P(A) + P(B)$

(2 marks)

1.4 The following are scores of a test for 7 students; 50%, 45%, 65%, 70%, 55%, 70%, 59%. The median of the test scores is:

A. 25

B. 65

C. 55

D. 59

(2 marks)

1.5 A normal random variable X has a mean of 50 and standard deviation of 10. What is the value of the probability $P(X < 30)$.

A. 0.5.

B. 0.0228.

C. 0.2.

D. 0.9772.

(2 marks)

1.6 The average weight of students is found to be 80Kg. Suppose the data had a coefficient of variation equal to 12.5%, what was the standard deviation of the Data.

A. 0.156.
B. 10.
C. 6.4.
D. 50.

(2 marks)

1.7 A regression model to assess the relationship between inflation (y) in percentage and exchange rate (x) is $y = 1.3 + 0.5x$. Calculate the prevailing exchange rate if the inflation 10%.

A. 10.
B. 6.3.
C. 22.6.
D. 17.4.

(2 marks)

1.8 Which of the following describes the meaning of the term mode?

A. The largest observation in the data set.
B. The most centrally located observation of the data.
C. The observation that appears most often in the data set.
D. The closest observation to the highest frequency of the data.

(2 marks)

1.9 A sample contains 351 observations ranked from highest to lowest. Which observation is the median?

A. 175th observation.

B. 176th observation.

C. 177th observation.

D. 179th observation.

(2 marks)

1.10 The table below shows the price classifications and number of goods in a store.

Price range of goods	**Number of goods**
0 and less 10	40
10 and less 20	60
20 and less 30	70

What is the mean of the data?

A. 16.76.

B. 2850.

C. 170.

D. 10.

(2 marks)

[Total: 20 Marks]

SECTION B

Question Two (2) in this question paper is compulsory and must be attempted. Then attempt any three (3) questions from the remaining four (4) questions.

QUESTION TWO - (COMPULSORY)

(a) A Manager of a large corporation has recommended that a K20,000 pay rise be given to keep a valued subordinate employee from moving to another company.

(i) List two (2) internal sources of data which might be used to decide whether such a salary increase is appropriate. (2 marks)

(ii) List two (2) external sources of data which might be used to decide whether such a salary increase is appropriate. (2 marks)

(b) The marketing group at your company has come up with a new diet soft drink that it claims will capture a large share of the young adult market.

(i) What data would you want to see before deciding to invest a substantial funds in introducing the new product into the market? (2 marks)

(ii) How would you expect the data mentioned in part (i) to be obtained? (2 marks)

(c) A company runs two manufacturing lines A and B which make rods 8cm in diameter. Random samples are taken from each of the lines A and B and the diameters measured. The results are summarized below.

	Mean diameter	**Standard deviation of diameter**
A	2	0.015
B	2	0.050

The company wishes to close one of the lines down. State which one you would recommend them to close. Give one reason for your answer. (3 marks)

(d) The following table shows the average monthly production of coal in millions of tonnes for the year 1987 and 1996.

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Average Production	50.0	36.5	43.0	44.5	38.9	38.1	32.6	41.7	41.1	33.8

Determine 4–yearly centered moving averages (9 marks)

[Total: 20 Marks]

QUESTION THREE

The following frequency distribution table gives the age distribution of drivers who were at fault in auto accidents that occurred during a 1-week period in Kitwe city.

Age (Years)	Frequency
20 - 30	7
30 - 40	12
40 - 50	17
50 - 60	14
60 - 70	15
70 – 80	35

Required:

(a) Calculate the mean number of accidents during a one week period (5 marks)

(b) Calculate the median of the data. (3 marks)

(c) Calculate the mode of the data. (3 marks)

(d) Calculate the standard deviation of the data. (6 marks)

(e) Calculate the skewness and Comment on the distribution of the data. (3 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The number of defective items produced per unit of time y, by a certain machine is thought to vary directly with the speed of the machine, x, measured 1000s of revolutions per minute. Observations for 12 time periods yielded results which are summarised below:

$\sum x = 60$ $\sum x^2 = 504$ $\sum xy = 1400$ $\sum y = 200$

$\sum y^2 = 4400$

Required:

(i) Calculate the correlation coefficient. (6 marks)

(ii) Find the equation of the regression line. (3 marks)

(iii) What practical use could be made of this equation? (2 marks)

(iv) Calculate the coefficient of determination and interpret its results. (2 marks)

(b) Police records show the following numbers of daily crime reports for sample of days during the winter months and a sample of days during the summer months.

Winter	18	20	15	16	21	20	12	16	19	20
Summer	28	18	24	32	18	29	23	38	28	18

Required:

(i) Compute the interquartile range for winter. (4 marks)

(ii) Compute the mean for summer. (2 marks)

(iii) Compute the mode for winter. (1 mark)

[Total: 20 Marks]

QUESTION FIVE

(a) XYZ Motors is a car dealer in a small town. Based on an analysis of its sales history, the Managers know that on any single day the number of Toyota cars sold can vary from 100 to 600. The table below shows the probability distribution of the number of cars sold and their associated probabilities.

Number of cars sold	100	200	300	400	500	600
Probability	0.15	0.30	0.20	0.20	0.10	0.05

(i) Find the expected number of cars sold. (3 marks)

(ii) Find the variance. (4 marks)

(b) The table below shows the quarterly records of percentages of whole sale prices for various goods in a store.

Year	**Quarter**			
	I	II	III	IV
2001	-	-	11.0	11.0
2002	12.5	13.5	15.5	14.5
2003	16.8	15.2	13.1	15.3
2004	11.2	11.0	12.4	13.2
2005	10.5	13.3	-	-

Calculate the seasonal indices for each quarter from the percentages of whole sale prices shown in the table above. (9 marks)

(c) The mean age of 21 students of a class is 16.5 years. One more student is added to these students and the mean age drops to 16.4 years. Determine the age of the student added to the original sample. (4 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Identify the following as discrete or continuous random variables:

(i) Increase in length of life attained by a cancer patient as a result of surgery. (1 mark)

(ii) Tensile breaking strength of 1-inch-diameter steel cable. (1 mark)

(iii) Number of deer killed per year in a state wildlife preserve. (1 mark)

(iv) Number of overdue accounts in a department store at a particular time. (1 mark)

(v) Your blood pressure. (1 mark)

(b) The following table lists the probability distribution of the number of breakdowns per week for a machine based on past data.

Breakdowns per week	0	1	2	3
Probability	0.15	0.20	0.35	0.30

Required:

(i) Present this probability distribution graphically. (3 marks)

(ii) Find the probability that the number of breakdowns for this machine during a given week is exactly 2, at least 2, at most 2. (5 marks)

(iii) Calculate the mean number of break downs. (3 marks)

(iv) Find the standard deviation of the data. (4 marks)

[Total: 20 Mark

END OF PAPER

CA 1.2 BUSINESS STATISTICS   SUGGESTED SLUTIONS

SOLUTION ONE

1.1	D
1.2	B
1.3	C
1.4	D
1.5	B
1.6	B
1.7	D
1.8	C
1.9	B
1.10	A

SOLUTION TWO

(a)

(i) Sales records
Marketing activity
Cost information
Employee records
Production records
Credit records

(ii) Government publications
Books
Magazines
Newspapers
Annual reports
Research reports in universities
Industry handbook
Publications of statistics department
Census data

(b)

(i) Product taste tests and test marketing
(ii) Specially designed statistical studies

(c) They should close down line B as the standard deviation is larger. In manufacturing you want the rods to all be the same so the smaller standard deviation is better.

ALTERNATIVE SOLUTION:

$$CV_A = \frac{0.015}{2} = 0.0075$$

$$CV_B = \frac{0.05}{2} = 0.025$$

They should close down line B as the $CV_A < CV_B$

(d)

Year	**Average Monthly Production of Coal (in million tonnes)**	**4 – yearly Moving Totals**	**4 – yearly Moving Averages** $=col(3)/4(4)$
1987	50.0	-	-
1988	36.5	-	-
1989	43.0	174.0	43.5
1990	44.5	162.9	40.7
1991	38.9	164.5	41.1
1992	38.1	154.1	38.5
1993	32.6	151.3	37.8
1994	41.7	153.5	38.4
1995	41.1	149.2	37.3
1996	33.8	-	

SOLUTION THREE

Summary statistics table:

Class Limits	Xi	f	fx	F	$fi(Xi-\bar{x})^2$
21 - 30	25.5	7	178.5	7	7303.03
31 - 40	35.5	12	426	19	5967.48
41 - 50	45.5	17	773.5	36	2571.93
51 - 60	55.5	14	777	50	74.06
61 - 70	65.5	15	982.5	65	889.35
71 - 80	75.5	35	2642.5	100	10965.15
Totals		100	5780		27771

(a) **Mean:**

$$\frac{1}{n}\sum fx = \frac{1}{100}(5780) = 57.8$$

(b) **MEDIAN**: To find the median, first locate the median class, which is the class that fall on the mid of the values of cumulative frequency, then find the lower limit of the median class and the class width, and calculate using the formula

$$median = L_k + \frac{w}{n_k}(\frac{n}{2} - cf_{k-1}). \quad k = 4$$

$$51 + \frac{9}{14}\left(\frac{100}{2} - 36\right) = 59$$

(c) **Mode:**

$$\mathrm{Mo} = \mathrm{L_k} + \mathrm{w}\left(\frac{\mathrm{d_1}}{\mathrm{d_1}+\mathrm{d_2}}\right) \quad , \quad \mathrm{k} = 6$$

$$\mathrm{Mo} = 71 + 9\left(\frac{20}{20+35}\right) = 74.27$$

Note:

$$\mathrm{d_1} = \mathrm{n_k} - \mathrm{n_{k-1}} = 35 - 15 = 20 \qquad \mathrm{d_2} = \mathrm{n_k} - \mathrm{n_{k+1}} = 35 - 0 = 35$$

(d) Standard deviation

$$\boldsymbol{s} = \sqrt{\frac{\sum \boldsymbol{f}(\boldsymbol{x}-\overline{\boldsymbol{x}})^2}{\boldsymbol{f}-\mathbf{1}}}$$

$$\boldsymbol{s} = \sqrt{\frac{27771}{\mathbf{100 - 1}}} = \mathbf{16.75}$$

(e)

$$S_k = \frac{3(M_d - \bar{X})}{S} = \frac{3(59 - 74.27)}{\sqrt{280.5151515}} = -2.73$$

The data is skewed to the left.

SOLUTION FOUR

(a)

(i) $\bar{x} = \frac{\sum x}{n} = \frac{60}{12} = 5, \quad \bar{y} = \frac{\sum y}{n} = \frac{200}{12} = 16.7$

$$SS_{xx} = \sum x^2 - \left(\frac{\sum x}{n}\right)^2 = 504 - \frac{60^2}{12} = 204$$

$$SS_{yy} = \sum y^2 - \left(\frac{\sum y}{n}\right)^2 = 4400 - \frac{200^2}{12} = 1066.7$$

$$SS_{xy} = \sum xy - \frac{\left(\sum x\right)\left(\sum y\right)}{n} = 1400 - \frac{(60)(200)}{12} = 400$$

$$r = \frac{SS_{xy}}{\sqrt{SS_{xx}SS_{yy}}} = \frac{400}{\sqrt{204 \times 1066.7}} = 0.86$$

(ii) $y = \beta_0 + \beta_1 x$

$$\beta_1 = \frac{SS_{xy}}{SS_{xx}} = \frac{400}{204} = 1.96$$

$$\beta_0 = \bar{y} - \beta_1 \bar{x}$$
$$= 16.7 - 1.96(5)$$
$$= 6.9$$

Therefore, the regression equation is
$y = 6.9 + 1.96x$

(iii) This is a prediction equation. The practical use of this equation in this problem is that it can be used to predict or estimate the number of defective items produced per unit of time, y, given any speed of the machine, x.

(iv) $r^2 = 0.86^2 = 0.7396$
$r^2 = 73.96\%$ reveals that 73.96% of the data fit the regression model.

(b)

(i) First, arrange the numbers in ascending order:
12, 15, 16, 16, 18, 19, 20, 20, 20, 21

$Q_1 = \frac{1}{4}(n+1)^{th}$ value

$= \frac{1}{4}(10+1)^{th}$ value

$= 2.75^{th}$ value

$\therefore Q_1 = 16$

$Q_3 = \frac{3}{4}(n+1)^{th}$ value

$= \frac{3}{4}(10+1)^{th}$ value

$= 8.25$

$\therefore Q_3 = 20$

Thus,

Interquartile Range $= Q_3 - Q_1$

$= 20 - 16$

$= 4$

(ii) $\overline{x} = \frac{\sum x}{n} = \frac{256}{10} = 25.6$

(iii) Mode $= 20$

SOLUTION FIVE

(a)

(i) $E(X) = \sum_x x \quad P(X = x)$

$= \sum_{x=100}^{600} P(X = x)$

$= 100(0.15) + 200(0.30) + 300(0.20) + 400(0.20) + 500(0.10) + 600(0.05)$

$= 15 + 60 + 60 + 80 + 50 + 30$

$= 295$

(ii) $Var(X) = E(X^2) - [E(X)]^2$

$E(X^2) = \sum_{x=100}^{600} x^2 P(X = x)$

$= 100^2(0.15) + 200^2(0.30) + 300^2(0.20) + 400^2(0.20) + 500^2(0.10) + 600^2(0.05)$

$= 1500 + 12,000 + 18,000 + 32,000 + 25,000 + 18,000$

$= 106,500$

$\therefore Var(X) = E(X^2) - [E(X)]^2$

$= 106,500 - 295^2$

$= 19,475$

(b)

Year	**Quarter**			
	I	II	III	IV
2001	-	-	11.0	11.0
2002	12.5	13.5	15.5	14.5
2003	16.8	15.2	13.1	15.3
2004	11.2	11.0	12.4	13.2
2005	10.5	13.3	-	-
Total	**51.0**	**53.0**	**52.0**	**54.0**
Average	**12.75**	**13.25**	**13.0**	**13.5**

Average of averages $= \frac{12.75 + 13.25 + 13.0 + 13.5}{4} = \frac{52.5}{4} = 13.125$

Seasonal indices

1st Quarter $= \dfrac{12.75}{13.125} \times 100 = 97.143$ **2nd Quarter** $= \dfrac{13.25}{13.125} \times 100 = 100.952$

3rd Quarter $= \dfrac{13.0}{13.125} \times 100 = 99.048$ **4th Quarter** $= \dfrac{13.5}{13.125} \times 100 = 102.852$

(c) $\sum x$ for 21 students $= n \times \bar{x} = 21 \times 16.5 = 346.5$

After addition of one more student

$\sum x$ for 22 students $= n \times \bar{x} = 22 \times 16.4 = 346.5$

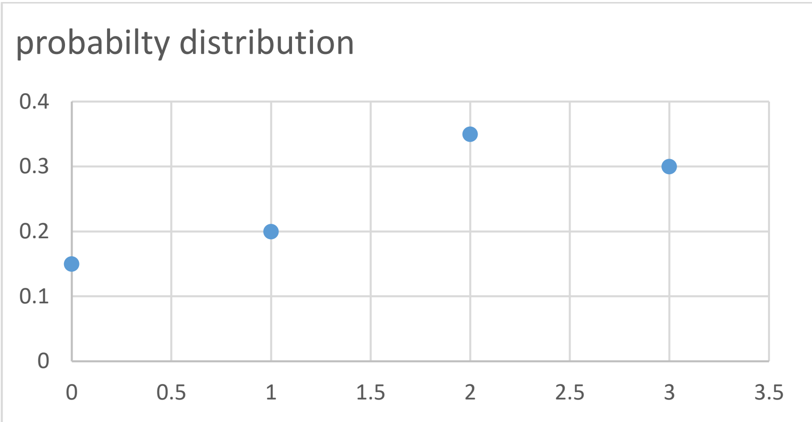
The age of the student added to the original sample from next line
$= 360.8 - 346.5$
$= 14.3$ years

SOLUTION SIX

(a)

(i) Continuous
(ii) Continuous
(iii) Discrete
(iv) Discrete
(v) Continuous

(b) (i)



(iii) $P(X = 2) = 0.35,$

$P(X \geq 2) = P(2) + P(3) = 0.35 + 0.3 = 0.65,$

$P(X \leq 2) = P(0) + P(1) + P(2) = 0.15 + 0.20 + 0.35 = 0.7$

(iii)

$$\mu = \sum xp(x) = 0 \times 0.15 + 1 \times 0.2 + 2 \times 0.35 + 3 \times 0.3 = 1.8$$

(iv) Standard deviation

$$\boldsymbol{S^2} = \sum (x - \mu)^2 p(x)$$
$$= (0 - 1.8)^2 \times 0.15 + (1 - 1.8)^2 \times 0.2 + (2 - 1.8)^2 \times 0.35 + (3 - 1.8)^2 \times 0.3$$
$$S = \sqrt{1.06} = 1.03$$

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.3: BUSINESS ECONOMICS

TUESDAY 18 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
   Section B: There are FIVE (5) questions in this section. Attempt question TWO (2) and any other THREE (3) questions from the remaining FOUR (4) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

QUESTION ONE

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 …………………….is an example of microeconomic theory.

A. Theory of Consumption
B. Theory of Economic Growth
C. Theory of Money
D. Theory of Income, Employment and Output

(2 marks)

1.2 Suppose the Zambian Government was paying subsidies to beekeepers. If the Government reduced or removed these subsidies, the most likely effect on the price of honey would be………

A. An increase in price, as there would be an increase in the demand for honey.
B. A decrease in price, as there would be a decrease in the demand for honey.
C. A decrease in price, as there would be an increase in the supply of honey.
D. An increase in price, as there would be a decrease in the supply of honey.

(2 marks)

1.3 In economics the concept of scarcity means…………

A. All resources will eventually be exhausted.
B. There are unlimited resources, we just have an allocation problem.
C. There are unlimited wants and limited resources.
D. There are limited wants and limited resources

(2 marks)

1.4 Given that the average fixed cost is K12.50 and the average variable cost is K81.25, at 8 units of output, then the total cost at this output level is:

A. K93.75.
B. K97.78.
C. K750.
D. K880.

(2 marks)

1.5 If the money supply increases due to an expansionary open market operation by the Central Bank then the price of treasury bills will…….

A. Rise as the short term interest rate rises.
B. Rise as the short term interest rate falls.
C. Fall as the short term interest rate rises.
D. Fall as the short term interest rate falls.

(2 marks)

1.6 The ………………… problem refers to the way in which resources or inputs are organized to produce the goods and services that consumers want.

A. What to produce
B. How to produce
C. For whom to produce
D. Full employment of resources

(2 marks)

1.7 The long-run rate of unemployment to which an economy always gravitates is the

A. Natural rate of unemployment.
B. Neutral rate of unemployment.
C. Minimum rate of unemployment.
D. Normal rate of unemployment.

(2 marks)

1.8 If the MPC = 0.6 and you wanted equilibrium output to rise by K60 Billion, the appropriate increase in G would be…………………………………

A. K15 B.
B. K24 B.
C. K36 B.
D. K40 B.

(2 marks)

1.9 An increase in the cost of production shifts the aggregate ……….. curve to the……….

A. Demand; right

B. Demand; left

C. Supply; right

D. Supply; left

(2 marks)

1.10 As a result of a decrease in the value of the Kwacha in relation to other currencies, Zambian imports decrease and exports increase. Consequently, there is a(n):

A. Increase in short-run aggregate supply.

B. Decrease in the quantity of aggregate output supplied in the short run.

C. Increase in aggregate demand.

D. Decrease in the quantity of aggregate output demanded.

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO (2) in this section is compulsory and must be attempted. Then attempt any THREE (3) from the remaining FOUR (4) questions.

QUESTION TWO – (COMPULSORY)

Kawambwa Tea Industries Ltd is Zambia's major commercial tea producer. The company processes 30 tons of tea per day and employs around 700 permanent staff, and grows five (5) different tea varieties across 423 hectares of land. Even though the company struggled in its early years, investment in good infrastructure and technology has greatly improved the quality of its products. The company currently produces five (5) different varieties of tea. Even though tea is largely consumed in Zambia, its major substitute is coffee. Coffee is also largely grown in Northern Province with an estimated number of employees of 2,000. The hardships of the economy have not spared the industries.

Required:

Assuming that the Tea Company discovers a technological breakthrough that only reduces the cost of producing Tea:

(a) Explain how the change in technology will affect each of the following:

- (i) Quantity of Tea produced (2 marks)
- (ii) Price of Tea (2 marks)
- (iii) Quantity of Coffee (3 marks)
- (iv) Price of Coffee (3 marks)

(b) Use a graph to illustrate how the technological breakthrough in the Tea industry will affect Wage-rate for Coffee workers in the labour market. (5 marks)

(c) Suppose that the market for Tea has the following supply and demand curves:

Demand = 80 - Q
Supply = 20 + 2Q

- (i) Calculate the equilibrium price and quantity traded for Tea. (2 marks)
- (ii) Suppose a tax of K6 is charged on Tea producers. Calculate the new equilibrium price and quantity and comment on the answer. (3 marks)

[Total: 20 Marks]

QUESTION THREE

In economics, the term market structure refers to how different industries are classified and differentiated based on their degree and nature of competition for services and goods. On one extreme end, Perfect competition occurs when there is a large number of small companies competing against each other. They sell identical products (homogeneous), they are price takers, and are free to enter or exit the market. Consumers in this type of market have full knowledge of the goods being sold. On the other hand, in a monopoly market, a single company represents the whole industry. It has no competitor, and it is the sole seller of products in the entire market. This type of market is characterized by factors such as the sole claim to ownership of resources, patent and copyright, licenses issued by the Government, or high initial setup costs. All the above characteristics associated with monopoly restrict other companies from entering the market.

Required:

Suppose the school shoes manufacturing industry is a perfectly competitive constant cost industry.

(a) Given that market demand for school bags is described by Q_d = 10,000 – 10P and individual firms have the long run cost functions of the Long Run Total Cost (LRTC) = $20{,}000+100q+2q^2$ and the marginal cost (MC) = $100 + 4_q$

- (i) Determine the market price. (4 marks)
- (ii) Calculate how much each firm produces. (2 marks)
- (iii) Determine how many firms are in the industry in the long run? (2 marks)

(b) Explain the relationship between the price and marginal revenue under

- (i) Perfect competition. (2 marks)
- (ii) Monopoly. (2 marks)

(c) Explain any four (4) arguments against monopoly (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Most economic arguments for government intervention, especially in a market economy, are based on the idea that the marketplace cannot provide public goods or handle externalities. One such market is the tobacco/cigarette market. To address the total sum of externalities caused by smoking and overall failure in the tobacco market, governments can adopt a comprehensive tobacco control policy including: tax increases on tobacco products and implementation of strategies such as; education and social marketing campaigns; regulations to ensure smoke-free places; bans on all forms of promotion of tobacco products and on sales to minors; the reason for a comprehensive policy is that, tobacco products, such as cigarettes are very addictive. The easiest intervention to implement is a tax on tobacco products, however, it may not be the most effective. An increase in tax would have the effect of raising the price of tobacco products and an increase in the price would lead to an increase Government revenue.

Required:

(a) Explain the following terms:

(i) Public goods. (2 marks)
(ii) Market failure. (2 marks)
(iii) Externalities. (4 marks)

(b) Describe how taxes and subsidies can be used to regulate market failure (4 marks)

(c) Explain why imposing a tax may not produce the desired result. (3 marks)

(d) List any five (5) features of a free market economy. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

There are four (4) main types of market structures. These are perfect competition, monopoly, oligopoly and monopolistic competition. Firms operating under each market structure faces different demand curves because of differences in market power. This in turn means that price elasticities of demand for the goods sold are also different. Further, market structures differ in terms of how well they allocate scare resources.

A perfectly competitive firm is identified by the following characteristics: large number of buyers and seller for a good, standardized or homogenous good, freedom of entry and exit, price taker, perfect information on the quality and prices of the goods on the market.

Required:

(a) Draw the demand curve face by a perfect competitor. (4 marks)

(b) Describe the price elasticity of demand curve faced by a perfect competitor. (4 marks)

(c) State one (1) example of an industry in Zambia which best meets the characteristics of perfect competition. (2 marks)

(d) Explain the effect of freedom of entry and exit under perfect competition. (5 marks)

(e) Explain whether or not it is necessary for the government to intervene in price setting under perfect competition (5 marks)

[Total: 20 Marks]

QUESTION SIX

Exchange rate dynamics in Zambia in 2023 were shaped by a combination of domestic and external factors, reflecting the country's efforts to navigate economic challenges and capitalize on opportunities for growth. As Zambia continues to pursue economic reforms and diversification, understanding the intricacies of exchange rate movements remains crucial for policymakers, businesses, and investors alike. The Zambian kwacha experienced a staggering depreciation of over 20% against the US dollar (USD) throughout 2023 (**Trading Economics, 2024).**

"A problem arises for a country's balance of payments when the country has a deficit on the current account year after year, although there can also be problems for a country which enjoys a continual current account surplus." ZiCA, Study Manual, 2017, p.287)

Required:

(a) Outline three (3) merits and three (3) demerits of free-floating exchange rates. (6 marks)

(b) Explain any two (2) impacts of the depreciation of the Kwacha on the Zambian economy. (4 marks)

(c) Outline four (4) consequences of a current account deficit to a country. (4 marks)

(d) Zambia trades with South Africa. The table below shows a summary of the trading activities.

Country	**Suji Lite in metric tons**	**Copper in metric tons**
Zambia	200,000	800,000
South Africa	100,000	300,000

With reference to comparative advantage, explain why trade between the two (2) countries is desirable despite Zambia having an absolute advantage in the production of both Suji Lite and Copper. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.3 BUSINESS ECONOMICS SUGGESTED SOLUTIONS

SOLUTION ONE

1.1	A
1.2	D
1.3	C
1.4	C
1.5	D
1.6	B
1.7	A
1.8	B
1.9	D
1.10	C

SOLUTION TWO

(a) **Technological breakthrough**

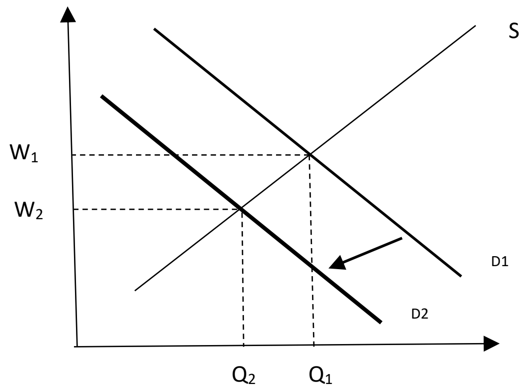
(i) The technological breakthrough lowers the cost of producing tea. The supply curve will shift downwards to the right. This will lead to an increase in the quantity of tea produced.

(ii) The price of tea will most likely reduce. This is because as the supply curve shifts downwards to the right, the new equilibrium price will be lower and a higher quantity.

(iii) Since tea and coffee are substitute goods, a reduction in the price of tea (which is as a result of the technological breakthrough) results in a reduction in the demand for coffee. This will result in a leftward shift of the demand curve for coffee and the new quantity for coffee will reduce.

(iv) The price of coffee will most likely increase. This is because as the demand curve shifts downwards to the left, the new equilibrium price will be lower.

(b) Given the labour market in the coffee industry, the technological breakthrough in the tea industry will lead to a reduction in the demand for coffee. This will in turn lead to a decrease in the demand for labour and the wage rate. As can be seen in the graph below, demand for labour will shift downwards from D1 to D2, and the wage rate will also go down from W1 to W2.



(c)

(i) The equilibrium is p = K60, Q = 20.

(ii) A tax of K6 charged on producers changes the supply curve to P= 20 +2Q +6
The new equilibrium P = K62, Q = 18.
As can be seen from the results, the quantity traded reduces and the price increases by K2, not the full amount of the tax.

SOLUTION THREE

(a)

(i) **MC = 100 +4q**

In the long run the firm satisfies two conditions.

- Profit maximization → MR = P = LMC
- a firm makes normal profits, п = 0 → P = LAC

Thus at output level of each firm LMC = LAC

$100 + 4q = 20000/q + 100+2q$

Price is P* = 500

(i) **Output is q* = 100**

(ii) At P = 500, industry output, from the demand curve, is Q = 10,000 – 10(500) = 5,000

The number of firms is thus 5,000/100 = **50**

(b) **The relationship between price and marginal revenue**

- Marginal revenue is the additional revenue from selling one more unit. Under perfect competition, MR = price because the firm is a price taker. It sells each additional unit at the same price as the previous one, so the additional revenue (MR) is the same as the price.
- Under monopoly, the MR is less than the price because the monopolist must reduce the price in order to sell an additional unit of output. Therefore, the additional revenue will be less than the previous one.

(c) **Arguments against monopoly**

- At the profit maximizing level of output, prices are likely to be higher while output is less than in a more competitive firm.
- The supernormal profits, which monopolies make, are naturally at the expense of customers.
- Monopolies are not technically efficient. At the profit maximizing level, the costs are not at their lowest level since the marginal cost is not equal to the average cost. This also implies that monopolies are not allocatively efficient.
- Monopolies are not threatened by competition, they tend to adopt a complacent Attitude known as 'x' inefficiency, and they may not be inclined to be innovative.
- There may be diseconomies of large-scale production due to the size of the Monopoly firm. The firm might become difficult to coordinate and control. Communication also becomes difficult and the morale of workers is low etc.

SOLUTION FOUR

(a)

(i) A **public good** is a good that is both non-excludable and non-rivalrous. Use by one person neither prevents access by other people, nor does it reduce availability to others.

(ii) **Market failure** is the economic situation defined by an inefficient distribution of goods and services in the free market. it is the failure of private decisions in the marketplace to achieve an efficient allocation of scarce resources.

(iii) **Externalities** occur when one person's actions affect another person's well-being and the relevant costs and benefits are not reflected in market prices.

- A positive externality arises when my neighbors benefit from my cleaning up my yard. If I cannot charge them for these benefits, I will not clean the yard as often as they would like. (Note that the free-rider problem and positive externalities are two sides of the same coin.)
- A negative externality arises when one person's actions harm another. When polluting, factory owners may not consider the costs that pollution imposes on others….

(b) Taxation and subsidies are two important tools used by governments to regulate market failure.

- Taxation can be used to reduce consumption of a good or service that is deemed socially undesirable, such as cigarettes or alcohol, by raising the price and making it more expensive.
- Subsidies, on the other hand, can be used to incentivize the production and consumption of a good or service that is deemed socially beneficial, such as renewable energy sources or public transportation.

By taxing undesirable goods and services and subsidizing desirable ones, governments can help reduce market failure and ensure the efficient allocation of resources.

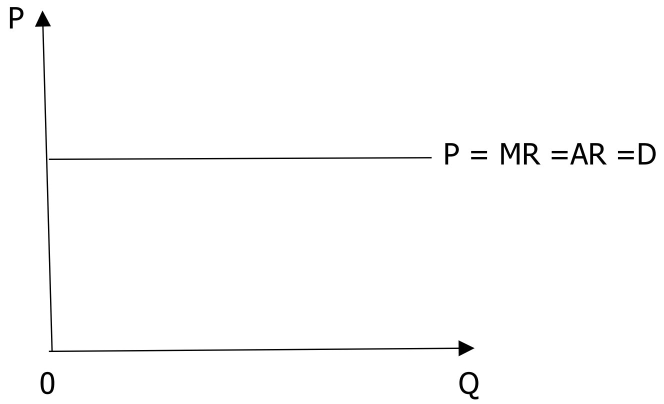
(c) One reason that cigarettes have an inelastic demand is because they are addictive. Those who are addicted will purchase cigarettes at nearly any price. Therefore, an increase in the price of cigarettes as a result of a tax, may not result in the reduction in the demand for cigarettes, as maybe desired.

(d) **Features of market economy**

- Private Property.
- Economic Freedom.
- Consumer Sovereignty.
- Competition.
- Profit motive.
- Voluntary Exchange.
- Limited Government Involvement.

SOLUTION FIVE

(a) The demand curve faced by an individual firm under perfect competition is a horizontal straight-line as shown below:



(b) The price elasticity of demand is described as perfectly elastic. The reason behind this is that each firm is a price taker; each firm can sell whatever quantity it wishes to sell at the going price

(c) Agriculture products or industry

(d) The effect of freedom of entry and exit under perfect competition is that firms operating in this market structure can make only normal profit in the long run. When existing firms and enjoying economic profit, other firms will enter the industry increasing the quantity supplied thereby depressing the price. Similarly, if existing firms are suffering economic losses, some firms will leave the industry reducing the quantity of the good supplied on the market, thereby pushing the prices upwards.

(e) Perfect competition allocates resources efficiently because firms equate marginal cost to society (supply curve) to marginal benefit to society (demand curve). There is, therefore no need for government intervention for price setting under perfect competition

SOLUTION SIX

(a) Free-floating or flexible exchange rate occurs when the exchange rate is left to the interaction of market forces of demand and supply of foreign exchange without any official financing at all. The merits (advantages) and demerits (disadvantages) of floating exchange include the following:

Merits (Advantages) of Floating Exchange Rates:

(i) **Automatic Adjustment:**
- Under a floating exchange rate system, currency values adjust automatically based on market forces of supply and demand. This allows for quick adjustments to changing economic conditions.

(ii) **Monetary Policy Autonomy:**
- Countries with floating exchange rates have greater flexibility in conducting independent monetary policies. Central banks can adjust interest rates and implement monetary tools to address domestic economic goals without being constrained by a fixed exchange rate.

(iii) **Market Efficiency:**
- Floating exchange rates promote market efficiency. Prices are determined by market participants based on information and expectations, allowing for more accurate reflection of economic fundamentals.

(iv) **Reduced Speculative Attacks:**
- Floating rates may reduce the likelihood of speculative attacks on a country's currency. Since exchange rates are determined by market forces, there is less pressure on central banks to defend a fixed peg, which can be susceptible to speculative attacks.

(v) **Adjustment to Shocks:**
- Floating rates provide a natural mechanism for absorbing economic shocks. When faced with external shocks, such as changes in commodity prices, a floating currency adjusts, helping to stabilize the economy

Demerits (Disadvantages) of Floating Exchange Rates:

(i) **Exchange Rate Volatility:**
- One of the primary criticisms of floating rates is the potential for volatility. Exchange rates can experience rapid and unpredictable fluctuations, which may create uncertainty for businesses engaged in international trade.

(ii) **Inflationary Pressures:**
- Floating exchange rates can contribute to inflationary pressures. Currency depreciation may lead to higher import prices, contributing to inflation and potentially eroding the purchasing power of consumers.

(iii) **Speculative Activities:**
- Floating rates can be susceptible to speculative activities in the foreign exchange market. Traders may engage in short-term speculation, leading to excessive volatility that is not necessarily reflective of underlying economic fundamentals.

(iv) **Uncertainty for Businesses:**
- The constant fluctuations in exchange rates can create uncertainty for businesses engaged in international trade. Planning and budgeting become more challenging when exchange rate movements are unpredictable.

(v) **Limited Policy Coordination:**

- Countries operating with floating rates may face challenges in coordinating monetary policies. Lack of coordination can lead to competitive devaluations and potentially disrupt global economic stability.

(vi) **Currency Misalignments:**

- Floating rates may result in currency misalignments, where exchange rates deviate significantly from their perceived equilibrium levels. This can lead to trade imbalances and other economic distortions

(c) While the depreciation of the Kwacha can benefit the export sector, it also poses challenges in terms of inflation, import costs, and overall economic stability. The potential effects of the Kwacha depreciation on the Zambian economy include the following:

- Export Sector: Positive Impact: A weaker Kwacha makes Zambian exports more competitive in the international market. This can boost export sales, particularly for commodities like copper, which is a major export for Zambia.
- Import Sector: Negative Impact: Import costs tend to rise when the local currency depreciates. This can lead to higher prices for imported goods and raw materials.
- Inflation: Negative Impact: Depreciation often contributes to inflation, as the cost of imported goods rises. This can erode the purchasing power of consumers, leading to higher living costs.
- Government Debt: Mixed Impact: If Zambia has significant foreign-denominated debt, a depreciation could increase the cost of servicing that debt. This may strain government finances.
- Consumer Spending: Negative Impact: Higher import prices and inflation can reduce consumers' real incomes. If prices rise faster than wages, households may cut back on spending, affecting overall domestic demand.
- Foreign Exchange Reserves: Negative Impact: A rapid depreciation could put pressure on foreign exchange reserves, especially if there is a high demand for foreign currency to pay for imports. This may limit the central bank's ability to stabilize the currency.
- Investor Confidence: Negative Impact: Persistent depreciation may undermine investor confidence in the stability of the currency and the overall economic environment. This could lead to reduced foreign direct investment and capital flight, negatively affecting long-term economic growth.

(d) A current account deficit occurs when a country's total imports of goods, services, and transfers exceed its total exports. This deficit has various consequences for the country:

- Trade Imbalance: Current account deficit can lead to a negative impact on domestic industries, especially if there is strong competition from foreign producers.
- Currency Depreciation: A persistent current account deficit may put pressure on the country's currency. If the deficit is financed by capital inflows, a decline in confidence may lead to a depreciation of the currency. A weaker currency can affect the purchasing power of consumers and increase the cost of imported goods.
- Foreign Debt Accumulation: To sustain a current account deficit, a country may need to borrow from the rest of the world. This can lead to an accumulation of foreign debt.
- Interest Rates and Inflation: To attract foreign capital and finance the deficit, a country may need to offer higher interest rates. This can impact domestic interest rates, potentially leading to increased borrowing costs for businesses and consumers. Moreover, a depreciating currency may contribute to imported inflation.
- Vulnerability to External Shocks: Countries with persistent current account deficits are more vulnerable to external economic shocks. Any disruptions in international trade, changes in global interest rates, or shifts in investor sentiment can have a more pronounced impact on the economy.

- Decreased Economic Sovereignty: Dependence on foreign capital to finance a current account deficit may compromise a country's economic sovereignty. It might be subject to the preferences and decisions of foreign investors, impacting the ability to implement independent economic policies.
- Impact on Employment: In certain cases, a persistent trade deficit may contribute to job losses in industries facing strong competition from imports. This can lead to structural unemployment and pose challenges for workforce adjustment.
- Structural Adjustment Challenges: Addressing a chronic current account deficit may require structural adjustments in the economy, including improvements in productivity, changes in industrial composition, and measures to enhance competitiveness. Implementing these changes can be politically and socially challenging.

(e) A country has a comparative advantage in the good it can produce at lower opportunity cost than its trading partner. To determine comparative advantage, it is necessary to compute the following four(4) ratios:

- Opportunity cost of suji lite in Zambia = 800,000/200,000 = 4 units of copper
- Opportunity cost of suji lite in South Africa = 300,000/100,000 = 3 units of copper
- Opportunity cost of copper in Zambia = 200,000/800,000 = 0.25units of suji lite
- Opportunity cost of copper in South Africa = 100,000/300,000 = 0.33 units of suji lite

From the above computations, South Africa has a comparative advantage in suji Lite production because its opportunity cost (3 units) is less than 4 units in Zambia.

Similarly, Zambia has a comparative advantage in copper production as it can produce copper at lower opportunity cost (0.25 units) compared to 0.33 units in South Africa.

Because each country has a comparative advantage in one good, beneficial trade can be undertaken despite the fact that Zambia has an absolute advantage in the production of both suji lite and copper.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 22 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.

2. This paper is divided into TWO (2) sections:

   Section A: Ten (10) compulsory multiple choice questions.

   Section B: There are FIVE (5) questions in this section. Attempt question TWO (2) and any other THREE (3) questions from the remaining FOUR (4) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

QUESTION ONE

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 Which one of the following is an unincorporated organisation?

A. General partnership.

B. Limited liability partnership.

C. Public limited company.

D. Private limited company.

(2 marks)

1.2 After six (6) months in employment, an employee is entitled to receive which of the following?

A. A written contract.

B. A written statement of particulars.

C. A written works handbook.

D. A written personnel manual.

(2 marks)

1.3 What is meant by the term "specific goods"?

A. Specific goods are goods that are identified and agreed upon at the time a contract of sale is made.

B. Specific goods are goods that have been specifically made to fulfil the buyer's order.

C. Specific goods are goods that have a specific (rather than a general) use.

D. Specific goods are goods that the seller has had to order specifically for the buyer.

(2 marks)

1.4 The maximum number of persons who are legally allowed to operate in a partnership is:

A. 2

B. 20

C. There is no limit

D. 100

(2 marks)

1.5 Which one of the following statements about limited liability partnerships (LLPs) is incorrect?

A. An LLP has a legal personality separate from that of its members.

B. The liability of each partner in an LLP is limited.

C. Members of an LLP are taxed as partners.

D. A limited company can convert to an LLP.

(2 marks)

1.6 Sparkle Ltd is a private limited company limited by shares. It has one director. How many shareholders does the law require it to maintain?

A. One provided it is a different person from the Director.

B. Five.

C. Two.

D. One which can be the same person as the Director.

(2 marks)

1.7 What case laid down the fundamental test for determining duty of care?

A. Bourhill v Young

B. Donoghue v Stevenson

C. Heaven v Pender

D. Yeun Kun Yeu v Atty-Gen of Hong Kong

(2 marks)

1.8 What is the doctrine of *stare decisis*?

A. A doctrine of statutory interpretation.

B. A doctrine of precedent.

C. A doctrine of legislative powers.

D. A doctrine of Parliamentary sovereignty.

(2 marks)

1.9 Regarding the appointment of a receiver, which one of the following statements is **NOT** true?

A. A receiver may be a natural person or a body corporate.

B. A charge-holder can appoint a receiver if the instrument that created the charge states so.
C. The court can appoint a receiver upon an application from a creditor.
D. An undischarged bankrupt cannot normally act as a receiver.

(2 marks)

1.10. Which of the following promises will not constitute valid consideration at common law?

A. C promises to pay the ambulance service ZMW 500 to be on standby with 4 ambulances at the musical festival he is organising. The ambulance service would normally provide five (5) ambulances free of charge at special events of that size anyway.
B. A promise by B to pay A ZMW 500 if he will stand in for C and give a character statement in support of B in court (if the judge agrees).
C. B promises not to sue on a contract he has with C if A pays B ZMW 500 as a full and final settlement.
D. A promises to give B a discount of ZMW 500 on the agreed contract price of ZMW 5000 if B gives the money to A the next day. The contractual date for payment is one month later.

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO (2) in this Section is Compulsory and must be attempted.

Then attempt any THREE (3) questions out of the remaining FOUR (4) questions.

QUESTION TWO - (COMPULSORY)

Kasongo is an agent for Malambo, a dealer in selling Television sets imported from USA. Malambo sold his last consignment of imported television sets to Agatha, another dealer in television sets based in Choma. The invoice to Agatha was for K100,000 and she was told to pass the money to Kasongo of Lusaka. Instead of sending a bank cheque or transferring cash, Agatha endorsed to Kasongo a cheque which was not honoured.

Required:

(a) Explain to the parties how an agency relationship is generally established? (10 marks)

(b) Regarding the fiduciary duties of an agent, distinguish the duty to avoid a conflict of interest from the duty not to make a secret profit? (10 marks)

[Total: 20 Marks]

QUESTION THREE

(a) You have a well-known reputation of being a Guru when it comes to the formation of Business Associations. In fact, some of your colleagues label you as an expert, specialist and authority on the subject. Bwalya, a keen follower of the subject approaches you for an explanation on the following classification of organizations: ***Sole Proprietorships, Partnerships and Companies.*** Kindly explain to him? (15 marks)

(b) Discuss the duty to render true accounts and information as a duty and authority of partners. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

Belview Industrial Company Limited has been operating in Zambia as a company limited by shares for over 15 years. The Articles of the Company provides for ordinary shares and preference shares but does not go into great detail about the rights of the preference shareholders. Among its shareholders are Brian, Sylvia, Andrew and Chanda who hold ordinary shares in equal proportion. In a recent transaction which was duly approved by the shareholders, the Company also issued preference shares to Comast Limited and Kontama General Limited.

After the coming in of the new Government, the business has been nationalized after following all the laid down procedures. According to reports from the Government, the Company will continue operating for now but this will be at a much smaller scale for which it will need far less capital. It has therefore been proposed that the Company reduces its capital by paying off Comast Limited and Kontama General Limited leaving the other shareholders unaffected.

Comast Limited and Kontama General Limited have vehemently opposed this arrangement arguing that this would rob them of the right to participate in the surplus assets in case of a liquidation. They have since threatened to sue if the Company proceeds to reduce its capital and pays them off. You have been retained as Counsel by the Company to advise all parties in this matter in order to avoid costly litigation.

Required:

(a) Prepare your legal opinion on the proposed reduction in capital and whether Comcast Limited and Kontama General Dealers are likely to succeed if they sued the Company. (10 marks)

(b) Explain the following terms:

(i) Partner by estoppel and General Partner (4 marks)

(ii) Director's duty against conflict of interest (2 marks)

(iii) Nominal Capital and issued Capital (4 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

(a) Explain what is meant by a Public Limited Company. (4 marks)

(b) Explain the procedure for dissolution by striking off the registrar. (6 marks)

(c) Discuss the three (3) phases of money laundering. (6 marks)

(d) Explain the difference between sale by description and sale by sample. (4 marks)

[Total: 20 Marks]

QUESTION SIX

A constitution is a set of rules or fundamental principles of a nation. This is the most fundamental source of law. The Zambian constitution, Act No. 2 of 2016 (Amendment) in Article 1 (1) expressly provides as follows:

> **"This Constitution is the supreme law of the Republic of Zambia and any other written law, customary law and customary practice that is inconsistent with its provisions is void to the extent of the inconsistency."**

Required:

(a) Discuss the Constitution as the primary and supreme source of law in Zambia? (10 marks)

(b) You have been invited on a special guest lecture at the KK International Conference Centre. The topic of discussion you intend to deliberate on is the **"Law Formation Process in Zambia."** Your starting point is that the stages a bill goes through in Parliament before it becomes law are called readings. After the third reading the bill goes to the President for assent or veto. Clearly explain the various stages involved in law making process. (10 marks)

[Total 20 Marks]

END OF PAPER

CA 1.4: COMMERCIAL AND CORPORATE LAW

SOLUTION ONE

1.1	A
1.2	A
1.3	A
1.4	B
1.5	D
1.6	D
1.7	B
1.8	B
1.9	A
1.10	B

SOLUTION TWO

(a) There is a distinction between the creation of the agency and the authority that an agent has to act on behalf of the principal, although the two issues are necessarily tangled together since the creation of an agency will involve conferment of authority. An agency may be created:

(i) by express or implied agreement between the principal and agent

(ii) where there is a representation by the principal to the third party that the agent has

(iii) authority (agency by estoppel)

(iv) where the principal ratifies an act by someone who, without authorisation, purported to

(v) undertake that act as an agent of the principal

(vi) where there is an agency of necessity

Typically, an agency is established by consent of both the principal and the agent (but not always. Normally, it will take the form of a contract, although this is not necessary: acting out of friendship and without payment does not preclude the existence of an agency. The consent may also arise by virtue of the principal's ratification after the agent has entered into the transaction

Where the agency is created by agreement between the principal and the agent no formalities are normally required. That the parties did not intend to create an agency may be suggested by the fact that the person carrying out the functions is paid through profit earned in trading rather than through commission, or is entitled to fix the price of the goods being sold, or retains money received from sales.

(b) The agent must always act in good faith and must not put himself in a position where his interest will conflict with that of the principal. The agent must not accept bribes or commission from a third party. This is a criminal act and can be prosecuted. He would be subject to instant dismissal and the principal can repudiate any contract made by an agent who was bribed. An agent is not allowed to make secret profit from his agency as that would be a conflict of interest. However, he can claim his commission if there was no fraud. There must be full disclosure to the principal; e.g. an agent employed to sell can only sell to himself if there is full disclosure to the principal. An agent is bound to pay to his principal all moneys received by him of his principal-regardless of whether or not the transaction from which the payment was derived was illegal or void, but not if the agency contract was illegal. Other duties are to keep an account of transactions done on behalf of the principal and keeping the principals" properties separate from the agent and produce the principal's accounts to the principal. An agent is bound to do what he has been contracted to do. He must carry out any express instructions from his principal. He should not depart from such instructions even though he believes that doing so would be the best interest of his principal.

SOLUTION THREE

(a) **Sole proprietor:** This is the common form of ownership business that is owned by one individual like the wood processing enterprise owned by Chilufya. This type of business is established with the registrar of business names. It is a type of business engaged on by persons on their own account, unlike other business activities like incorporated companies. A sole trader business is merged with the person meaning, there is no divide between the ownership and the management of the business. The sole trader is the only owner of the business as such; he or she can make any decisions concerning the business without consulting or enquiring the approval of others. Such types of businesses are typically small which may range from street shops and even businesses run from homes. They are often informal, meaning do not require a governing document incorporated companies and partnerships need to have.

Partnership is the voluntary association of two or more persons to carry on a business for profit as co-owners. Partners need only shake hands to establish this partnership of course there is need to negotiate a written agreement, a contract between them, that states the terms of their agreement to become partners. A written contract can avoid confusion, disputes and litigation later.

Partnership agreement is a contract, and therefore all partners must consent to the partnership agreement. Otherwise, they obviously lack the intent necessary to form the partnership. The partnership agreement is subjected to the provisions under the 1890 Act where section 19 provides too the variation of the rights and duties of the partnership one the rights and duties of the partners jointly. It is a common understanding that an individual partner cannot be sued for a partnership debt during subsistence of the partnership. Equally an individual partner cannot enforce a partner in a court. Every partner has equal voice in management regardless of the amount of the partner's capital contribution.

A Limited company under the Companies Act, is an entity which comes into existence when, upon application by one or more persons , the secretary of state of a state issues a certificate of incorporation and whose owners liability for its debts ordinarily is limited to the amount of their investment. By law a corporation is an independent entity, a "person." It has a life of its own, separate and apart from its owners, offices and employees. Once a company is incorporated, it then assumes corporate personality and becomes a distinct and separate legal entity from the members of establishing it and would not be deemed to be the urgent of the members (shareholders). The doctrine is well defined in the matter for **SALOMON AND CO-LTD.** The company is at law a different person from subscribers to the memorandum ,and though it may be that after incorporation the business is precisely the same as it was before, and the same persons are members and the same hands receives the profits, the company is not in the law the agent of the subscribers or trustees for them. These are subscribers as members liable, in any shape or form except to the extent and in the manner provided by the act.

(b) Section 28 of the Partnership Act 1890 provides that **'Partners are bound to render true accounts and full information of all things affecting the partnership to any partner or his legal representatives.'**

SOLUTION FOUR

(a) The question tests the student's understanding of the law and procedure for reduction of share capital. It also tests their understanding of the rights of classes of shareholders in general and preference shareholders in particular. The two main issues therefore are the legality of the reduction in share capital and the allegation that the reduction would disadvantage the preference shareholders as it would rob them of their right to participate in surplus assets.

Section 150 of the Companies Act No. 10 of 2017 provides that a company may subject to confirmation by the court reduce its share capital by passing a special resolution. The relevant subsection for purposes of the question is (1) (b) (ii) which provides that a company may pay off any paid-up share capital which is in excess of the wants of the company provided that the capital is not reduced below the prescribed minimum. The student should highlight the salient procedure provided for under section 150 of the Act for the reduction and also refer to section 151 which provides for the procedure for the confirmation of reduction of share capital by the Court.

The salient provisions include subsection (2) which provides for the requirement to circulate a notice for the proposed reduction, subsection (3) under which the company is required to apply to the Court for an order confirming the reduction and subsection (4) which requires that the company gives notice to the Registrar after the Court confirms the reduction. The student should be able to state that the reduction would be properly and legally done once this procedure is followed. The second part of the question should address the specific issue raised by the preference shareholders who argue that the arrangement would rob them of their right to participate in the surplus assets in case of liquidation. In response to this assertion, the student should be able to state that as a matter of general principle, preference shareholders have no right to participate in the surplus assets of the company in a liquidation.

The case of **Scottish Insurance Corporation Ltd v Wilsons and Clyde Coal Co Ltd [1949] 462** is an authority. In this case, the House of Lords rejected the argument that the preference shareholders were entitled, as a matter of right, to participate in the surplus assets of the company. The Court also held that the proposed reduction in the share capital was fair.

Based on the above, the student is expected to express their view of the chances of success in court by the two preference shareholders. Based on the judgment in Scottish insurance and the procedure in the Companies Act which allows for the reduction in share capital once procedure is followed, it is unlikely that Comcast Limited and Kontama General Limited would succeed if they sued Belview Industrial Company Limited.

(b)

(i) Partner by estoppel – This is a partnership by holding out (conduct). Thus if a person allows a partnership or others to hold themselves as if they are in partnership with him, they will be stopped (stopped) from denying that they are in partnership with him. The persons held out to be partners must be aware of that fact and have let things like that will doing anything to stop the holding out. Thus a creditor or any third party can sue them for breach of contract as part of the partnership whilst a General Partner is an ordinary partner with the rights to management of the partnership and all the other duties or roles arising from the partnership unless restricted by the partnership deed. He is a partner proper.

(ii) Duty not to have conflict of interest – A director must always act for the best interest of the company. Personal interest must not take precedence. In Regal (Hastings) Ltd v. Gulliver (1942) it was held that directors must account for any secret profit they must have made whilst standing in a fiduciary relationship.

(iii) (d) Nominal Capital – This is the authorized or registered capital of a company. It is the maximum amount of capital a company is allowed to raise by its articles of association. Whilst Issued Capital is part of nominal capital that has been issued or distributed or allotted to members. The members will have to pay for the shares issued to them only.

SOLUTION FIVE

(a) Public Limited Company – This is a business which sells its shares on the stock exchange, has no maximum limit for number of shareholders, is required to publish its audited accounts, shares are freely transferable, etc.

(b) The procedures for dissolution by striking off the register is seen under section 317 of the Companies Act provides a mechanism by which companies can be dissolved and struck off the register of companies. In the event that the Registrar has reasonable cause to believe that a company is not carrying on business or is not in operation, he may send to the company by registered post a letter requesting confirmation. Should the Registrar not receive a satisfactory response from the company within 1 month of the date of sending the letter he will publish a notice in the Zambian Gazette, that at the expiration of three months from the date of the published notice, the company will be dissolved unless cause is shown to the contrary.

Alternatively, a company may, by ordinary resolution, request the Registrar to strike it off the register upon lodging with the Registrar a copy of the resolution, summary of accounts, and a statutory declaration of two or more directors showing what disposition the company has made of its assets and that the company has no debts or liabilities. The Registrar shall cause to be published in the Gazette a notice to the effect that at the expiration of three months from the date of that notice, unless cause is shown to the contrary, the company will be dissolved.

The Registrar has the discretion to allow the strike off. As such, the decision to strike off will depend on the Registrar being satisfied before the strike off. If the strike off fails the company can still be wound up by voluntary liquidation or by the court.

(c) The process of money laundering involves 3 three phases as follows:

(i) Placement – this is the initial disposal of the proceeds of the illegal activity into apparently legitimate business activity or property e.g. 'smurfing' whereby small amounts are banked with a number of institutions in order to avoid suspicion and anti-money laundering reporting requirements.

(ii) Layering – this involves the transfer of monies from business to business or place to place to conceal the original source e.g. under- or overvaluing invoices to disguise the movement of money.

(iii) Integration – having been layered, the money has the appearance of legitimate funds, e.g. an individual may use cash to gamble at a casino and receive a cheque for any winnings. This cheque can then be banked as proceeds from gambling, regardless of the original source of the money.

(d) This is a contract where goods are described to the seller. Where there is a contract for the sale of goods by description, there is an implied condition that the goods will correspond with the description. Section 13 states:

> *'Where there is a contract for the sale of goods by description there is an implied condition that the goods shall correspond with the description; and if the sale be*

by sample as well as by description, it is not sufficient that the bulk of the goods corresponds with the sample if the goods do not also correspond with the description.'

If the buyer does not see the goods before he buys them (e.g. from a mail order catalogue or through the internet), there has clearly been a sale by description. Even where the buyer has seen the goods and selected them himself, it may still be a sale by description, if he has relied to some extent on a description.

While

Sale by sample entails the seller or buyer showing the sample to the seller or he seller showing the sample to the buyer. Section 15 deals with sale by sample. It provides as follows:

(1) A contract is a contract of sale by sample where there is a term in the contract, express or implied, to that effect.

(2) In the case of a contract for sale by sample:

(a) There is an implied condition that the bulk shall correspond with the sample in quality

(b) There is an implied condition that the buyer shall have a reasonable opportunity of comparing the bulk with the sample

(c) There is an implied condition that the goods shall be free from any defect, rendering them unmerchantable, which would not be apparent on reasonable examination of the sample.

A sample is simply a specimen, a model pattern, a likeness etc. It represents a statement, albeit in non-verbal form, about the subject matter of the contract. A contract of sale by sample is where there is a term in the contract, express or implied to that effect. Whether or not a sale is one by sample is dependent on the intention of the parties, as expressed in their contract.

SOLUTION SIX

(a) The Zambian constitution is supreme first, because it gives unlimited power to the governing body in the republic to legislate that is, apart from the constitution itself; there is no other law in the republic that has to be taken into consideration as being supreme so as to ensure the constitution conforms to that other law. Secondly, the constitution is supreme because any law that is to be enacted by Parliament has to ensure it conforms to the provisions of the constitution failure to which, the law enacted by Parliament would be declared void to the extent of the inconsistency.

Christine Mulundika & 7 Others v The People, **(1995)** it was held that In sum and for the reasons which we have given we hold that subsection 4 of section 5 the Public Order Act, CAP 104, contravenes Articles 20 and 21 of the constitution and is null and void, and therefore invalid for unconstitutionality. It follows also that the invalidity and the constitutional guarantee of the rights of assembly and expression preclude the prosecution of persons and the criminalisation of gatherings in contravention of the subsection pronounced against. Accordingly, a prosecution based on paragraph (a) of section 7 which depends on subsection 4 of section 5 would itself be inconsistent with the constitutional guarantees and equally invalid.

(b) **First reading-**A Bill will appear on the Order Paper of the relevant day. It is presented in 'dummy form' and deemed to be read a 'first time'. Alternatively, a Bill may be presented on order of the House. Following the purely formal introduction into Parliament, a date will be set for second reading and the Bill is supposed to be printed and published. **Second Reading-**It is at the second reading that a Bill will receive the first in depth scrutiny. The scrutiny occurs in the form of a debate, generally on the floor of the House, and is confined to matters of principle rather than detail. It is at second reading stage that the Minister in charge of the Bill must explain and defend the contents of the Bill.

Committee Stage-Standing committees are designed to scrutinise Bills in detail. In fact, they are not. The committee will be established for the purpose of examining a particular Bill and will then stand down. The function of the standing committee is to examine the Bill clause by clause. The Minister in charge of the Bill has the task of steering it successfully through committee stage. Members of standing committee may propose amendments. **Report Stage-**Once the Bill has been considered in standing committee, the Bill is reported back to the House as a whole. If amendments have been in the committee, the Bill will be reprinted. Further amendments may be introduced at this stage, but the speaker will be careful to void repetition of the debate in standing committee, so any proposed amendments previously considered will be rejected. **Third Reading-**The third reading represents the last chance for Parliament to examine a Bill before it received the presidential assent or, in the case of the United Kingdom, before it passes to the House of Lords. At this stage, the Bill cannot be amended other than to correct small mistakes such as grammatical or printing errors.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 17 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:

   Section A: Ten (10) compulsory multiple choice questions.

   Section B: There are FIVE (5) questions in this section. Attempt question TWO (2) and any other THREE (3) questions from the remaining FOUR (4) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

Attempt all ten (10) multiple choice questions in this section.

<u>QUESTION ONE</u>

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 Levels of strategy in an organisation by hierarchy include:

A. Business, Corporate and Functional.
B. Functional, Corporate and Business.
C. Corporate, Business and Functional.
D. Corporate, Functional and Business.

(2 marks)

1.2 Strategic capability of an organisation are its:

A. Strengths and weaknesses.
B. Resources and competences.
C. Strengths and competences.
D. Stakeholders and strategies.

(2 marks)

1.3 Difficulties of the Product Life Cycle concept include:

A. Knowing when to set the price.
B. Knowing when to develop a new product.
C. Knowing where the product stands in its life cycle.
D. Knowing when to decline.

(2 marks)

1.4 Goal congruence is……………

A. About setting goals together with all stakeholders in the organization.
B. Aligning the interest of directors and shareholders.
C. Aligning the interest of directors to the government agencies.
D. About achieving goals effectively.

(2 marks)

1.5 In Risk Management, uncertainty means:

A. Not knowing which risk will happen and its impact.

B. Not knowing how to manage a certain risk or whether to pay.

C. Not knowing the type of risk involved and whether to pay attention to it or not.

D. Not knowing all the possible outcome and /or the chances of each outcome occurring.

(2 marks)

1.6 ……………………………………………….is called Related-diversification.

A. Integrating relatives to be part of the business enterprise

B. Diversifying the business to offer similar product or services to what the completion is offering

C. Strategies of expanding the market to developing new frontiers for the export market

D. Strategy development beyond current products and markets but within the capabilities or value network of the organization

(2 marks)

1.7 In sustaining a competitive advantage, Lock-in is achieved when:

A. A company's product becomes the industry standard.

B. A competitive price is fixed for a certain period of time.

C. Long term contracts with suppliers or buyers is signed.

D. A particular attribute the customer likes is sustained for a long time.

(2 marks)

1.8 The AIDA model in Promotion means:

A. Action, Interest, Desire, Attention.

B. Attraction, Intent, Distinct, Action.

C. Attention, Interest, Desire, Action.

D. Action, Intent, Distinct, Attraction.

(2 marks)

1.9 In Business valuation, the Free cash-flow model is applied when:

A. Valuing a company on the basis of its predicted cash flow.

B. There is free cash flow to buy an acquisition or merger.

C. There shall be free cash flow after purchase of an acquisition or merger.

D. The free cash flow after the acquisition or merger is greater than the assets.

(2 marks)

1.10 In Ethics, egoism is…………………………………………………………….:

A. When managers use their ego to provide strategic direction.

B. When an act is ethically justified if decision-makers freely decide to pursue their own short term desires or their long term self interest.

C. When managers use their intuition and hunches to provide direction rather applicable principles.
D. When managers focus on enriching themselves at the expense of others in the organisation.

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO (2) in this section is compulsory and must be attempted. Then attempt any THREE (3) questions from the remaining FOUR (4) Questions.

<u>QUESTION TWO</u> – (COMPULSORY)

For any organization to be successful in business there is a need to have an effective management systems. A successful Manager needs to understand some fundamental theories of management. Henri Fayol has been regarded by many as the father of modern operational management theory, and his ideas have become a fundamental part of modern management concept.

Required:

(a) Describe Henri Fayol's five (5) functions of management? (15 marks)

(b) List down any five (5) principles of management according to Henri Fayol. (5 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) Describe any four (4) main features of a Public Limited Company and list three (3) advantages and three (3) disadvantages of establishing this form of business. (10 marks)

(b) Agriculture and agro-processing are considered to be among the top productive areas with greatest potential for growth in Zambia. Thus the Government is encouraging farmers to form co-operatives.

Mention three (3) benefits and three (3) limitations of co-operatives. (6 marks)

(c) Define Public Sector Organisations (PSO) and give three (3) examples of such organisations in Zambia.

(4 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

A renowned management theorist and writer transcribed that "management theories in the early period were not really theories, but some discrete practices or experiences. Theories of management today are the concepts and guidelines that a manager can use to manage different organizations for successfully running their operations. These theories offer different ways of managing modern organizations. Different management theories have evolved a long time ago and still, scholars are trying to search for new theories for the management of different work settings to avoid Agency problem or conflict of interest. Although some theories were developed a century ago, they still offer suitable ways to manage different work settings".

Required:

(a) Describe any four (4) essential skills of Managers? (8 marks)

(b) Explain the Agency problem. (2 marks)

(c) In resolving the Agency Problem, discuss three (3) options available for alignment of interest. (6 marks)

(d) Differentiate Span of control from Line of Authority. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Organizations are not just collections of individuals working alone; members are usually clustered into groups or teams. Teams can accomplish things that are difficult for individuals working alone. A Team refers to two or more individuals who have come together with a common objective. The members of a Team interact and are interdependent on each other with the view of achieving a particular objective.

Required:

(a) Describe the five (5) stages in Team formation identified by Tuckman. (10 marks)

(b) Name two (2) broad categories of Teams. (2 marks)

(c) Outline eight (8) Features of a Team. (8 marks)

[Total: 20 Marks]

QUESTION SIX

(a) What is the importance of planning in an organisation? (2 marks)

(b) Planning is an important function for managers meant to help the organization make coordinated decisions to remain and move in a well focused direction. Use Robert Anthony classification of managerial activity and planning to explain three (3) levels of planning that are there in an organization. (6 marks)

(c) Good work and social relationships among employees are believed to add value and raise productivity in an organization. Managers are therefore encouraged to nurture such relationships for the benefit of all. Describe four (4) formal relationships that exist in an organization. (8 marks)

(d) Define research and development and how it reduces some of the challenges faced by organizations in competition. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5: MANAGEMENT THEORY AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

1.1	C
1.2	B
1.3	C
1.4	B
1.5	D
1.6	D
1.7	A
1.8	C
1.9	A
1.10	B

SOLUTION TWO

(a) Explain the Henry Fayol's Five (5) Functions of management

(i) **Planning:** This is the first and most important function of management. According to Fayol, every company needs a good plan of action. However, a critical thing related to planning is the involvement of the entire organization.

(ii) **Organizing:** Organizations cannot survive unless they are properly organized. It also helps at coordination of tasks between various levels and departments.

(iii) **Commanding:** Commanding is an essential management function. The management should give clear commands to its workforce so it can produce the desired output

(iv) **Controlling:** Control or monitoring ensures that everything is running as per the plan. Evaluation is a very important component of this function. Managers should evaluate employee performance regularly to ensure adherence to the plan.

(v) **Co-ordinating**: Leadership must focus on coordination to ensure proper workflow, employee motivation as well as high productivity. All these things can be achieved through coordination.

(b) List down any five (5) principles of management according to Henry Fayol

(Any five of the 14 principles of management can be given)

(i) **Division of work-** work should be divided into jobs with separate areas of activity.

(ii) **Discipline-** Exercise of discipline at work place is an outward mark of respect for agreements between management and its members

(iii) **Unity of Direction-** One plan to direct the unity of action must be available for everyone to engage in.

(iv) **Equity-** there should be fairness and equity of treatment in dealing with employees thought out all levels of the organization.

(v) **Initiative-** employees at all levels can perform with enthusiasm and energy if they are allowed to use their initiative in the work they do.

SOLUTION THREE

(a) **Four (4) main features of a Public Limited Company and Three (3) advantages and Three (3) disadvantages**.

Features:

(i) A public limited company is formed and owned by at least two people, but there is no maximum legal limit to the number of shareholders.

(ii) Its name must end with the words public limited company abbreviated as Plc.

(iii) Shares in a public limited company can be offered for sale to the general public.

(iv) There is no legal restriction on the transfer of shares from one person to another.

(v) The day to day management of the business is in the hands of the Managing Director or Chief Executive.

Advantages:

(i) The company is a separate legal entity and as such the liability of shareholders is limited to the amount of shares they hold in the company.

(ii) It can raise more capital by the sale of shares on the stock exchange (i.e. LUSE).

(iii) It can employ professionals in such fields like Marketing,Accounting, Human Resource Management etc, which makes it more efficient.

(iv) Its size makes it possible for the company to buy modern equipment and technology.

(v) It has assured continuity.

Disadvantages:

(i) It has to comply with many regulations set to protect Employers, Employees and other Stakeholders.

(ii) There is little secrecy, as its accounts must be published annually. This is a legal requirement.

(iii) Decisions tend to be delayed because of the amount of administration or bureaucracy involved such as those that require the Board's approval.

(iv) The risk of takeover bids by other companies because shares of a public limited company can easily be bought on the stock exchange.

(b) **Three (3) benefits and Three (3) limitations of co-operatives:**

The main benefits of co-operatives are:

(i) Co-operatives help their members to develop their businesses by sharing efforts, activities and assets, thus members and their families benefit economically and socially.

(ii) By acting together, members of co-operatives are able to produce sufficient quantities of goods which gives them bargaining power when negotiating with their customers.
(iii) They are democratic organisations, and cannot be dominated by wealthy individuals.
(iv) They produce goods for local community, and when they operate successfully they can win the trust of their local customers.

Limitations of co-operatives:

(i) As they get bigger, they may become more difficult to organise.
(ii) Co-operatives do not a qualified management team result in poor management and in some cases closure of the co-operatives.
(iii) The amount of capital they can raise is restricted by the amount of capital that members can afford to contribute.

(c) **Definition of Public Sector Organisations (PSO)**

The public sector organisations are those organisations owned, operated or funded by the government, rather than private companies or individuals.
Examples of such organisations include; statutory bodies (i.e. ERB, RDA, ZICTA), parastatal organisations (i.e. ZNBC, ZSIC, ZESCO), government departments (i.e. Central government organised into Ministries and Departmets) and boards (i.e. Zambia National Tourists Board)

SOLUTION FOUR

(a) **The major skills required or expected out of managers are:-**

Technical skills – Pertaining to knowledge and proficiency in activities involving methods and procedures;

Human skills – Ability to work effectively with other persons and to build up cooperative group relations to accomplish organizational objectives;

Conceptual skills – Ability to recognize significant elements in a situation; and to understand the relationship among those elements; and

Design skills – Ability to solve problems in ways that will benefit the enterprise.

Interpersonal and Communication skills- Convey ideas and information to other and receive information and ideas from other effectively.

The Agency Problem derives from the principals the owners of the business not being able to run the business themselves and therefore having to rely on agents (directors) to do it for them. This separation of ownership from management can cause issues if there is a breach of trust by directors by intentional actions, omission, neglect or incompetence. This breach may arise because the directors may be pursuing their own interests rather than that of shareholders, or because they have different attitudes towards risk-taking from that of shareholders.

(b) **Options available for Alignment of interests**

(i) Profit-related Economic Value added pay: This is pay or bonuses related to the size of the profits or economic value added.

(ii) Reward managers with shares: this is done when a private company "goes public and managers are invited to subscribe in the company at an attractive offer price. In a management buy-out or buy-in the latter involving purchase of the business by new managers, the formers by existing managers, managers therefore become owner managers

(iii) Executive share option Plans (ESOPs): here selected employees are given a number of share options. Each gives the holder the right after a certain date to subscribe for shares in the company at a fixed price. The value of an option will increase if the company is successful and its share price goes up. This acts as an incentive for managers to increase the value of the company-actions which are congruent to the wider interests of shareholders.

(c) Distinguish between Span of control and line of Authority

- Span of control is the number of people managed effectively by a single superior in an organization.
- Line authority is the direct authority which a superior exercise over a number of subordinates to carry out orders and instructions. OR the power given to someone in a supervisory position to mandate actions by subordinates.

SOLUTION FIVE

(a) Explain the stages in Team formation identified by Tuckman

(i) Forming

This is a beginning stage and lasts only a few days (or weeks). Members begin by planning their work and their new roles. Moreover, the emotions here are positive. The Teams should begin by learning about team processes in preparation for the rough times ahead. However, it is crucial for them to learn the aspects of conflict resolution, communication, group decision-making and time management.

(ii) Storming

There exists a considerable amount of fights and arguments in this stage. People begin to feel the stress of frustration, resentment, and anger. Moreover, as the problem festers, the job remains undone. Managers also experience frustration and are worried about the situation, thereby, are tempted to intervene. Members experience a drastic emotional roller coaster from elation to depression. Moreover, the situation seems bleak. Usually, the storming period may last 1-2 months. Also, without effective training and support, the team may experience retarded growth. Conflicts are usually frowned upon. However, they are the definition of normal, natural, and even necessary events in an organization. It is critical for the group to handle it well because they are great in helping to build skill and confidence for the next stage

(iii) Norming

In the norming stage, the team works through individual and social issues. The team establishes its own norms of behaviour and begin to trust each other. Moreover, as the team develops interpersonal skills, it becomes all the more skilled. Members begin the art and knack of problem-solving. They also cross-train and learn new and adequate job skills. This stage usually lasts for 4-12 months.

(iv) Performing

In this stage, the team is ready to begin performing its respective task and assigned jobs. In this stage, the team has become well acquainted with one another and has clarity with regard to what needs to and has to be done. The performing stage begins when the team is comfortable to work and ends when the job is completed.

(v) Adjourning

Post the performing stage, the group is adjourned. The adjourning stage ends the process of group formation. Because the group is adjourned once the task that is assigned to the team is completed.

(b) Formal and Informal teams

(c) Features of a Team

(i) It consists of two or more persons who interact with each other.

(ii) Group members have reciprocal influence on each other. Each member influences and is influenced by others in the group.

(iii) People develop mutual perceptions and emotions. They perceive and recognise each other as members of the team.

(iv) Every team has:

- formal leader elected by team members, and
- Informal leader "who engages in leadership activities but whose right to do so has not been formally recognised by the organisation or team."

(v) Each individual performs specific role which influences expectations of group members from each other. Role structure is "the set of defined roles and inter-relationships among those roles that the team or team members define and accept."

(vi) Every team has team norms. "Norm is a standard of behaviour that the team accepts and expects of its members. It represents standards of work to promote team activity."

(vii) It maintains stability through team cohesiveness. Members

- develop liking for each other,
- develop sense of identification with each other, and
- Remain attached to each other.

(viii) Members work for common interests and goals

SOLUTION SIX

(a) Planning is important as it dictates how to effectively organize a business.

(b) The following is Robert Anthony classification of managerial activity and planning levels:

(i) Strategic/cooperate carried out by senior management concerned with direction-setting, policy making and crisis handling. The time frame and implication for this level of planning is typically 3-5 years.

(ii) Tactical/business level- concerned with establishing means to the cooperate end, mobilization of resources and innovating or finding ways of achieving the business goals. Decisions made at this level would have medium term implications.

(iii) Operational-done by supervisors and operatives is concerned with routine activity to carryout business level plans. Decisions at this level would deal with short term.

(c) The following are the four (4) formal relationships that exist in an organization:

i. Line relationship- exists when there is a direct line of authority in the chain of command between a manager and subordinate. for example, the managing director of a division has a line relationship with the heads of the functional departments in the division

ii. Functional relationship-the relationship between a function or person within the organization another function or a person who provides specialist advice or assistance.eg the relationship between the human resource department and departmental bosses, and the accounts department and functional department managers.

iii. Staff relationship-the relationship between a senior person with an individual who is appointed to provide assistance to the senior person for example the relationship between the executive officer and personal assistance.

iv. Lateral-relationships between individuals in different departments or sections who are usually at the same level of the organization hierarchy they are based on contact and consultations to help maintain coordination for effective organizational performance.eg the relationship between the sales and distribution managers.

(d) The following is the definition of (R&D)

Research and development (R&D) is concerned with developing new products new processes companies need to continue developing and modifying their products, in order to remain competitive on the market.it encourages managers to be more innovative by new creation.

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 19 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.

2. This paper is divided into TWO (2) sections:

   Section A: Ten (10) compulsory multiple choice questions.
   Section B: There are FIVE (5) questions in this section. Attempt questions TWO (2) and any other THREE (3) questions from the remaining FOUR (4) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A – (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

Each of the following sub questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks are indicated against each question.

1.1 Identify the role databases primarily serve within an accounting information system

A. Data Entry Automation.
B. Financial Reporting.
C. Data Storage and Retrieval.
D. Budget Allocation Management.

(2 marks)

1.2 State a primary function of IT general controls concerning authorization for access in an organization's IT infrastructure?

A. Data Encryption.
B. Firewall Configuration.
C. User Authentication.
D. Access Control Lists.

(2 marks)

1.3 …. is the name for a web page address.

A. HTML
B. Domain
C. Protocol
D. URL

(2 marks)

1.4 Which of the following is a form of real-time communications on the internet is…………

A. Listserv.
B. E-mail.
C. Internet relay chat.
D. Telnet.

(2 marks)

1.5 The status area of a window in Microsoft windows is known as………………………………..

A. Task bar area.
B. Notification area.
C. Indication area.
D. Restricted area.

(2 marks)

1.6 Which of the following is part of a formal report component?

A. Appendices.
B. Main body.
C. Salutation.
D. Enclosures.

(2 marks)

1.7 Which of the following are elements of a memorandum?

A. To: From: Subject: Time.
B. To: Bcc: Time: Date.
C. To: From: Date: Subject.
D. To: From: Ref: Date.

(2 marks)

1.8 Which of the following meeting officials sign the minutes?

A. Chairperson and Treasurer.
B. Secretary and Treasurer.
C. Chairperson and Secretary.
D. Chairperson and committee member.

(2 marks)

1.9 What is a correct sequence of ideas for a presentation in the following?

A. Introduction, Conclusion and Main body.
B. Main body, Conclusion and Introduction.
C. Main body, introduction and Conclusion.
D. Introduction, Main body and Conclusion.

(2 marks)

1.10 Employee reporting progress to a supervisor is an example of ______________.

A. Horizontal communication.

B. Lateral communication.

C. Downward communication.

D. Upward communication.

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO (2) in this section is compulsory and must be attempted.

Then attempt any THREE (3) questions from the remaining FOUR (4) questions.

<u>QUESTION TWO</u> – (COMPULSORY)

You are the Risk Champion of the Risk Management Committee at your place of work. Recently, you received several complaints from many members of staff concerning the quality of food and poor timings for various meals at the staff canteen. The nature of complaints includes unhygienic conditions in which the food is cooked, excessive cooking oil used, food being too spicy and no variation of food menus.

Required:

Write a report to the Managing Director of your organisation based on the information gathered and suggest means through which conditions can be improved. **[Total: 20 Marks]**

<u>QUESTION THREE</u>

(a) Zambia Industrial Commercial Bank (ZICB) is one of the leading banks in Zambia, offering a wide range of financial services to individual and corporate clients. With a vast customer base and significant financial transactions occurring daily, ZICB recognizes the importance of managing risks to the reliability of data and information to maintain trust, compliance, and operational efficiency.

Describe any five (5) components that could form part of a comprehensive strategy for ZICB to manage risks to the reliability of data and information within its banking operations. (10 marks)

(b) Integration of IS systems and the development of a single Information System is the most important feature for the survival and future growth prospects of the organization. The internet has transformed traditional business operations into a hypercompetitive electronic marketplace. Companies must strategically position themselves to compete in the e-commerce environment.

Outline any five (5) differences that exist between the **brick-and-mortar strategy** and the **click-and-mortar strategy.** (10 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Explain two (2) basic skills involved in operating spreadsheet software, which are crucial for any professional who works with spreadsheet software. (4 marks)

(b) Explain a Transaction Processing System (TPS) and provide two (2) areas of business in which TPS could be used by an organization. (6 marks)

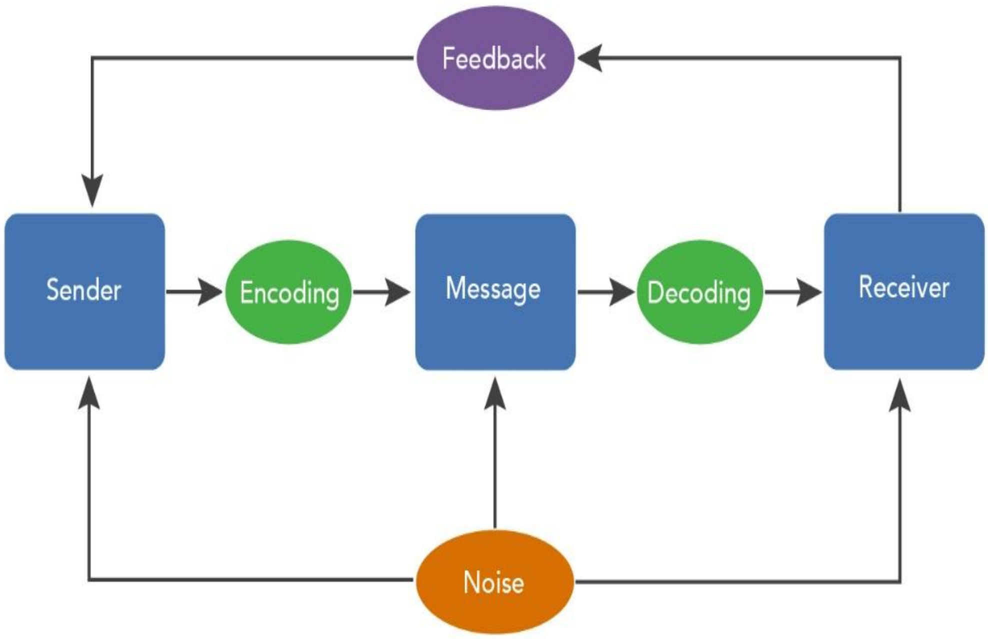
(c) Mention five (5) considerations that an organization such as the University of Zambia should have in order to implement effective password controls within its information system. (5 marks)

(d) Identify five (5) physical security measures that an organization such as the Medical Association of Zambia can implement to safeguard its assets. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Effective communication is a two-way process. Signals or messages are sent by the sender and received by the receiver, who sends back some form of confirmation that the message has been received as exemplified in the diagram below.



Required:

(a) Explain the difference between ***encoding*** and ***decoding***. (2 marks)

(b) Outline any four (4) roles of a receiver in the communication cycle. (8 marks)

(c) Explain any five (5) reasons why feedback is important in communication. (10 marks)

[Total: 20 Marks]

QUESTION SIX

The phrase "a picture is worth a thousand words" applies when it comes to using diagrams and charts in business communication. However, charts can either be an effective tool of communicating data to viewers, or they can be overly complicated. To make sure your chart or graph is an effective tool of communicating data to viewers, you need to consider a number of key principles.

Required:

(a) Explain any five (5) reasons using graphs in business communication is important. (10 marks)

(b) Explain any five (5) key principles that you would employ when designing diagrams and charts in order to communicate effectively. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.6: BUSINESS COMMUNICATION SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 C
1.2 C
1.3 D
1.4 C
1.5 B
1.6 A
1.7 C
1.8 C
1.9 D
1.10 D

SOLUTION TWO

MABWANA COMPANY LIMITED

REPORT ON THE POOR CONDITIONS AT THE STAFF CANTEEN

1. TERMS OF REFERENCE
   As requested by the managing director on 15th January2024, a research was conducted to ascertain the conditions of the staff canteen at Mabwana Company limited and provide a report.

2. PROCEEDURE
   - Interviews with members of staff.
   - Observations of the services provided at the canteen

3. FINDINGS
   - Responses gotten from majority members of staff interviewed indicated that the food prepared in the canteen had access cooking oil and most of it was too spicy.
   - After observing the operations of the canteen for more than one week, it was discovered that the canteen provides the same kind of food daily
   - It was also discovered that food not usually prepared on time thereby inconveniencing productivity after lunch.

4. CONCLUSION
   - The food at the canteen was too spicy and was not provided prepared on time.
   - The canteen does not provide variety on the food they serve

5. RECOMMENDATIONS
   - There is need for management to remind officers at the canteen to be mindful of time so that meals so that meals are provided on time.
   - Officers at the canteen need to be taken for a refresher course in food production or cookery.

Sitali. C
Chanda Sitali Mbewe
Risk Management Champion
Any date during examination time

SULUTION THREE

(a) Five (5) components that could form part of a comprehensive strategy for ZICB to manage risks to the reliability of data and information within its banking operations.

- **Data Governance Framework**: Establish a robust data governance framework to define policies, standards, and procedures for managing data quality, integrity, and security within ZICB's banking operations. This framework should include roles and responsibilities for data stewardship, data classification, and data lifecycle management.

- **Data Quality Assurance**: Implement data quality assurance processes to ensure the accuracy, completeness, and consistency of data used in ZICB's banking operations. Utilize data validation checks, data cleansing techniques, and data profiling tools to identify and rectify data errors and anomalies.

- **Data Access Controls**: Implement stringent access controls to restrict access to sensitive customer data and financial information within ZICB's banking systems. Utilize role-based access control (RBAC), least privilege principles, and multi-factor authentication (MFA) to enforce access controls and prevent unauthorized access to critical data.

- **Encryption and Data Protection**: Utilize encryption techniques to protect sensitive data in transit and at rest within ZICB's banking systems and databases. Implement strong encryption algorithms and key management practices to safeguard data confidentiality and prevent unauthorized access or tampering.

- **Data Backup and Recovery**: Establish robust data backup and recovery procedures to ensure the availability and resilience of critical data in the event of system failures, data corruption, or cyberattacks. Implement regular backups, off-site storage solutions, and disaster recovery plans to minimize data loss and downtime.

- **Data Retention Policies**: Define data retention policies to govern the storage, retention, and disposal of customer data and transaction records within ZICB's banking systems. Comply with regulatory requirements and industry standards while minimizing storage costs and preserving data integrity.

- **Monitoring and Auditing**: Implement comprehensive monitoring and auditing mechanisms to track data access, usage, and changes within ZICB's banking systems. Utilize logging, auditing trails, and intrusion detection systems to detect and investigate unauthorized activities or security incidents promptly.

- **Employee Training and Awareness**: Provide regular training and awareness programs to educate employees about the importance of data reliability and integrity in banking operations. Train employees on data handling best practices, security protocols, and regulatory compliance requirements to minimize human errors and mitigate risks.

- **Third-Party Risk Management**: Assess and manage risks associated with third-party vendors and service providers that have access to ZICB's banking systems and data. Conduct due diligence assessments, vendor audits, and contractual reviews to ensure that third parties comply with data security and privacy requirements.

- **Continuous Improvement**: Foster a culture of continuous improvement by regularly reviewing and updating data management practices, security controls, and risk management strategies. Conduct periodic risk assessments, security audits, and compliance reviews to identify emerging threats and vulnerabilities and adapt strategies accordingly.

(b) Five (5) differences that exist between the brick-and –mortar strategy and the click-and-mortar strategy

Brick-and-mortar strategy

- Operates solely in the traditional physical markets, shop or business office
- It can operate even with internet or ecommerce
- It focuses on one distinct way of doing business
- It makes customers have a feel or physical touch of product or good being bought
- Always assisted by someone who will explain or illustrate the product to customer or demonstrate on how to use or operate it

Click-and-mortar strategy

- Operates in the physical location but have added the ecommerce or use of the internet to the business activities
- Transactions occur in both physical and virtual environments
- It fully maximizes commercial opportunities in both domains
- Design and development of complex computing systems are required to support strategy
- Different skills are necessary to support the strategy to be used effectively

SOLUTION FOUR

(a) Two (2) basic skills involved in operating spreadsheet software, which are crucial for any professional who works with spreadsheet software.

- **Data Entry**: Ability to enter data accurately into spreadsheet cells, including numbers, text, and dates. Users should understand how to navigate between cells and input data efficiently.

- **Formatting**: Knowledge of formatting options to customize the appearance of spreadsheet elements, including fonts, colors, borders, and alignment. Users should be able to apply formatting consistently for clarity and visual appeal.

- **Formulas and Functions**: Understanding of basic mathematical functions (e.g., SUM, AVERAGE, MAX, MIN) and logical functions (e.g., IF, AND, OR) to perform calculations and manipulate data dynamically. Users should know how to create formulas and use cell references effectively.

- **Charts and Graphs**: Proficiency in creating visual representations of data using charts and graphs, such as bar charts, line graphs, and pie charts. Users should be able to select appropriate chart types and customize settings to convey information effectively.

- **Data Analysis**: Ability to analyze data using built-in analysis tools and features, such as sorting, filtering, and pivot tables. Users should understand how to organize and summarize data to extract meaningful insights and support decision-making.

(b) Transaction Processing System (TPS) and providing two (2) areas of business in which TPS could be used by an organization.

- TPS will be used in accounting system, which will record data on income and expenditure and will focus upon summarizing the data into financial reports and preparation of the financial statements.
- The company will require a basic accounting package such as Sage or TAS, which will record order data, invoice data, expenditure, revenue and salaries
- The company can utilize a basic production system which could help to schedule electronic devices deliveries from suppliers and which could schedule order production

(c) Five (5) considerations that you should have in order to implement effective password controls within its information system.

- **Password Complexity**: Require passwords to be of sufficient complexity, including a mix of upper and lower-case letters, numbers, and special characters. Implement minimum length requirements.

- **Regular Password Updates**: Enforce a policy mandating regular password updates to reduce the risk of password compromise. Users should be prompted to change their passwords periodically.

- **Multi-Factor Authentication (MFA):** Implement MFA wherever feasible, requiring users to provide additional verification, such as a one-time code sent to their mobile device, in addition to their password.

- **Password Storage**: Utilize secure encryption techniques to store passwords rather than storing them in plaintext. This helps prevent unauthorized access in the event of a data breach.

- **User Education**: Provide training and awareness programs to educate users about the importance of strong password practices, including avoiding common pitfalls such as sharing passwords or writing them down.

(d) Five (5) physical security measures that an organization can implement to safeguard its assets.

- **Restricted Access**: Control access to sensitive areas within MAZ premises using measures such as access cards, biometric scanners, or security guards stationed at entry points.

- **Surveillance Systems**: Install CCTV cameras in strategic locations to monitor activities within and around MAZ facilities. This serves as a deterrent to unauthorized access and provides evidence in case of security incidents.

- **Alarm Systems**: Deploy intrusion detection and alarm systems to alert security personnel in case of unauthorized entry or attempted breach of physical security barriers.

- **Secure Storage**: Safeguard valuable assets such as servers, networking equipment, and physical documents by storing them in locked cabinets, rooms, or data centers with restricted access.

- **Regular Security Audits**: Conduct periodic security assessments and audits to identify vulnerabilities and weaknesses in physical security measures. Address any identified issues promptly to maintain a robust security posture.

- **Security personnel**: having a security personnel or security guard manning the place 24/7 will prevent unauthorized people to have access to the assets.

SOLUTION FIVE

(a) Encoding v decoding
- Decoding is how a receiver is able to understand, and interpret the message.
- Encoding means converting the idea into words or gestures that will convey meaning. It consists in changing the information into some form of logical and coded message.

(b) Roles of a receiver
- Obtain the message
- Decode the message
- Understand the message
- Provide feedback
- Be in a position to receive messages

(c) Importance of feedback
- helps the sender check that their message has been understood and received
- it completes the communication cycle
- it shows courtesy
- it shows respect
- It can also help to prevent misunderstandings and conflicts

SOLUTION SIX

(a) Importance of using graphs
- They can be used for things like analyzing data
- They can be used to emphasize a point
- They can be useful when comparing multiple sets of data
- They are easy to understand and remember
- Many people understand a picture more quickly than blocks of text
- A compelling chart can help you make your point more convincingly and lend credibility to your presentation.

(b) Designing graphs
- Each graph should have a title
- Cite the source of the data
- Clearly label all elements of the diagram
- Keep textual material brief
- Keep the presentation simple
- Make the diagram large enough

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.1 : FINANCIAL REPORTING

MONDAY 17 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A:

This question is compulsory and must be attempted.

QUESTION ONE

Papa holds investments in Mama and Baba. Draft financial statements of the Papa Group for the year ended 31 March 2024 are as follows:

	Papa	Mama	Baba
	K'000	K'000	K'000
Assets			
Non-current Assets			
Property, Plant and Equipment	427,200	200,000	50,000
Investments	423,358	-	250,000
Other investments	100,000	200,000	52,000
Total Non-current Assets	950,558	400,000	352,000
Current Assets			
Inventories	136,000	80,000	64,000
Trade Receivables	120,000	72,000	57,600
Cash and Cash Equivalents	22,000	16,000	12,800
Total Assets	**1,228,558**	**568,000**	**486,400**
Equity and Liabilities			
Equity Shares of K1 each	212,000	160,000	128,000
Share premium	100,000	Nil	Nil
Retained Earnings	449,868	248,000	160,000
Total Equity	761,868	408,000	288,000
Non-current Liabilities			
Loan Notes	152,000	72,000	80,000
Deferred Consideration	99,172	Nil	Nil
	1,013,040	480,000	368,000
Current Liabilities			
Trade and Other Payables	89,918	72,000	86,400
Short-term Borrowings	125,600	16,000	32,000
Total Equity and Liabilities	**1,228, 558**	**568,000**	**486,400**

Additional information:

(1) Papa acquired 51.2 million equity shares of Baba at its date of incorporation and paid a consideration of K51.2 million in cash. This investment is recognised in Papa's draft financial statements at cost.

(2) On 1 April 2022, Papa acquired 120 million shares of Mama's shares when Mama's retained earnings were K128 million, on the following terms:

(a) Papa issued 2 shares for every 3 shares acquired in Mama. On the date of this acquisition, the market value of each of Papa share was K3.50 while that of Mama share was K2. Further, Papa incurred K2 million directly attributable (due diligence) costs on acquisition of Mama. This amount has been included in the carrying amount of the investment in Mama in Papa's separate statement of financial position within investments.

(b) On 31 March 2025, Papa will make a deferred cash payment of K1 per Mama share acquired. Papa's required rate of return at the date of acquisition was estimated at 10% per annum. Papa, agreed to pay a further amount on 1 April 2033 contingent upon the post-acquisition performance of Mama. At the date of acquisition, the fair value of this contingent consideration was assessed at K5 million but by 31 March 2024 it had become clear that the fair value of the amount due would be K6 million.

Papa has recorded only the share exchange consideration, directly attributable costs and provided for the deferred cash consideration.

(3) The directors of Papa carried out a fair value exercise to measure identifiable assets and liabilities of Mama at 1 April 2022. The following matters emerged:

(a) Plant and equipment with a carrying amount of K180 million had an estimated fair value of K196 million. At the time, the estimated remaining useful economic life of the plant was five years and this estimate is still valid. Mama has since disposed of 20% of this plant and equipment as at 31 March 2024.

(b) The carrying amount of an item of inventory was less than its fair value by K4.8 million. At 31 March 2024, this inventory had all been sold.

(4) It is group policy to value non-controlling interests in subsidiaries at the date of acquisition at fair value.

(5) Trade receivables of Papa include K12.8 million and K15 million due from Mama and Baba respectively while Trade payables of Mama and Baba include equivalent amounts payable to Papa.

(6) The figure for inventories in draft financial statements of Mama and Baba at 31 March 2024 includes components purchased from Papa during the year at a cost to Mama of K24 million and K20 million to Baba. Papa had applied a mark-up of 25% on this sale.

(7) An impairment test at 31 March 2024 on the consolidated goodwill concluded that it should be written down by K5 million.

Required:

(a) Prepare Papa's Consolidated Statement of Financial Position as at 31 March 2024.

(37 marks)

(b) Explain the accounting treatment of a business combination where a parent company acquires 100% of a subsidiary's equity at a cost which is less than the fair value of identifiable net assets of the subsidiary on the date of acquisition. (3 marks)

[Total: 40 Marks]

SECTION B:

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

The following trial balance relates to Mwenso Ltd, a company involved in the supply and installation of computers and related accessories for different organizations.

Mwenso Ltd's Trial balance as at 31 March 2024

	Dr K'000	Cr K'000
Revenue		70,800
Cost of sales	51,716	
Distribution costs	304	
Administrative expenses	792	
Loan interest paid	192	
Investment property	70,000	
Freehold property at cost (16 years useful life)	8,000	
Freehold property accumulated depreciation at 1 April 2023		1,500
Plant and equipment at cost	6,744	
Plant and equipment accumulated depreciation at 1 April 2023		1,944
License at cost	1,600	
License accumulated amortization at 1 April 2023		640
12% loan note issued at 1 April 2023		1,600
Current tax		800
Retained earnings at 1 April 2023		50,458
Deferred tax		400
Equity shares of K1 each		28,000
Share premium		500
Trade receivables	12,730	
Trade payables		1,408
Bank		780
Inventory at 31 March 2024	1,752	
Lease rental paid	5,000	
	158,830	158,830

Additional information:

(1) Mwenso Ltd decided to revalue its property for the first time on 1 April 2023. The directors accepted a report of an independent valuer who pegged the fair value of the freehold property at K5.98 million on that date. Mwenso Ltd had not yet accounted for the revaluation. In Mwenso Ltd's tax jurisdiction, the revaluation does not give rise to deferred tax liability.

(2) On 1 April 2023, Mwenso Ltd acquired a right to use asset, an item of plant, under an agreement that meets the definition of a lease under IFRS 16 Leases. The lease payments in the trial balance represents an initial deposit of K1 million paid on 1 April 2023 and the first annual rental of K4 million paid on 31 March 2024. The lease agreement requires further annual payments of K4 million each on 31 March until 2028. The present value of the future lease payments on inception of the lease was K13.2

million. The useful life of the plant is seven (7) years. The interest rate implicit in the lease is not readily determinable but Mwenso's borrowing rate is 8%.

Plant and equipment, (other than leased plant) are depreciated at 20% per annum on reducing balance basis.

No depreciation has yet been charged on any non-current assets for the year ended 31 March 2024. All depreciation and amortization of non-current assets are charged to cost of sales.

(3) On 1 April 2023, the directors of Mwenso Ltd decided to sell a piece of owned plant and equipment and the asset met the criteria to be classified as held for sale at that date. The plant had cost K2 million to buy and had a carrying amount of K1.2 million at 1 April 2023. At that date, the fair value less costs to sell was K0.8 million. No adjustments had been made to record this classification in the above trial balance. As at 31 March 2024, the fair value less costs to sale had not changed from what it was at the beginning. The plant is still owned by Mwenso at 31 March 2024.

(4) The investment property in the trial balance was recorded using the fair value model of IAS 40 Investment Properties. The value in the trial balance was the fair value at 1 April 2023. The fair value at 31 March 2024 was K73.5 million.

(5) Trade inventories of computers and associated accessories at 31 March 2024 included items with a cost of K72,000. In order to sell these items, they need an additional process that costs K2,000 at which point the inventory can then be sold for K68,000. These items had been included at cost in the trial balance.

(6) The license is being amortized on straight line basis at the rate of 10% per annum. No amortization had yet been charged for the year to 31 March 2024.

(7) On 20 March 2024, directors of Mwenso Ltd declared a dividend of K0.20 per share. No dividends were paid during the year to 31 March 2024.

(8) A provision of income tax for the year ended 31 March 2024 of K8.6 million is required. The balance on the current tax represents the under/overprovision of tax liability for the year ended 31 March 2023. At 31 march 2024, the tax base of Mwenso Ltd's net assets was K9 million less than their carrying amounts. The income tax rate of Mwenso Ltd is 25%.

(9) The 12% loan note is shown at its par value on issue date. The loan will be redeemed on 31 March 2026 at a substantial premium. The effective interest rate is 14%.

Required:

(a) Prepare the statement of profit or loss and other comprehensive income for Mwenso Ltd for the year ended 31 March 2024. (9 marks)

(b) Prepare the statement of financial position for Mwenso Ltd as at 31 March 2024. (11 marks)

[Total: 20 Marks]

QUESTION THREE

You work as a consultant for your firm Kapumpe Ltd, specialized in providing financial reporting, tax and audit services. Three (3) clients of your firm Mukufi Ltd, Chikwekwe Ltd and Ngoli Plc have approached your firm for advice on the required accounting treatment of different transactions that have arisen for their entities. All three (3) entities have annual reporting periods that end on 31 March.

Transaction 1: Mukufi Ltd

Mukufi Ltd issued an 8% convertible loan note on 1 April 2022 at its par value of K100 million. The loan note is redeemable at par on 31 March 2025 or convertible into equity shares at the option of the loan note holders on the basis of 50 shares of K1 each per K100 of loan. Interest is payable in arrears on 31 March each year. A similar instrument without the conversion option would have an interest of 10% per annum.

The present value of K1 receivable at the end of each year, based on discount rates of 8% and 10% are:

		8%	10%
End of year:	1	0.93	0.91
	2	0.86	0.83
	3	0.79	0.73
3 year cumulative		**2.58**	**2.49**

Required:

Advise Mukufi Ltd on the required accounting treatment of the above transaction for the year ended 31 March 2024. (7 marks)

Transaction 2: Chikwekwe Ltd

On 1 October 2023, Chikwekwe Ltd delivered and installed computers with one of its clients for immediate cash settlement of K6 million. Included in the sale price was a two (2) years servicing contract which will cost Chikwekwe K0.6 million to provide. The installation sale value was K0.25 million. Chikwekwe offers its servicing at markup of 25% to all clients.

Required

Explain to the Directors of Chikwekwe Ltd the effect of the above transaction on their financial statements for the year 31 March 2024 (7 marks)

Transaction 3 Ngoli Plc.

Ngoli Plc buys and sells goods and assets in Rand (R) but has a functional currency of Kwacha (K). On 1 October 2023, Ngoli Plc purchased goods for R50,000. At Ngoli's year end of 31 March 2024, this amount remains unpaid.

On 1 October 2023, Ngoli Plc sold goods on credit for R400,000. On 1 November 2023, Ngoli Plc received R200,000 from the customer. The remaining R200,000 is unpaid at 31 March 2024.

Relevant exchange rates are:

1 October 2023	R5	=	K1
1 November 2023	R5.7	=	K1
31 December 2023	R5.9	=	K1
31 March 2024	R6.5	=	K1

Required:

Explain to Ngoli Plc the required accounting treatment of the above transactions, showing amounts to report in its financial statements for the year ended 31 March 2024. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Zamveg is a public listed company based in Nchelenge. Its financial statements for the year ended 31 October 2024 are shown below:

Zamveg Plc Statement of profit or loss for the year ended 31 October 2024:

	K
Revenue	5,900
Cost of sales	(3,400)
Gross Profit	2,500
Sundry expenses	(1,330)
Net profit before tax	1,170
Taxation	(400)
Net profit after tax	770

Zamveg Plc Statement of Financial Position as at 31 October 2024:

ASSETS	**K**	**K**
Non-current assets		
Property, plant and equipment		3,510
Current assets		
Inventory	735	
Trade receivables	515	
Cash at Bank	15	
		1,265
Total assets		**4, 775**
Equity and Liabilities		
Ordinary shares K1 fully paid up		2,500
Retained earnings		1,280
Long-term loan		500
Current liabilities (All trade payables)		495
Total equity and liabilities		**4, 775**

Interest is charged on the long-term loan balance at the year end at 5% per year. This has been included within the expenses in the Statement of profit or loss.

Required:

(a) Calculate the following ratios for **Zamveg Plc for 2024**:

(i) Return on capital employed	(2 marks)
(ii) Net profit margin	(2 marks)
(iii) Acid test ratio	(2 marks)
(iv) Gross profit margin	(2 marks)
(v) Trade receivables collection period	(2 marks)
(vi) Trade payables payment period	(2 marks)
(vii) Inventory holding period	(2 marks)

(14 marks)

(b) The Chairman of Zamveg plc made the following statement in one of the board meetings: "it does not matter the basis used to prepare financial statements. A business can use either cash basis or accruals basis and the information provided to various stakeholders would still be useful."

Required:

Explain, to the non-financial Board members of Zamveg plc, the differences between financial statements prepared using accrual and those prepared on cash bases. (2 marks)

(c) Brian Musonda is thinking of investing in Zamveg plc. He believes that all he needs to do is check the financial statements of the company for the past 4 years with particular interest in its profitability. This is because he believes financial statements have no flaws and that they provide all information relevant for decision making.

Required:

Explain to Brian, with appropriate examples, any four (4) limitations of financial statements.
(4 marks)

[Total: 20 Marks]

QUESTION FIVE

Mubobo Ltd is an entity specialized in the manufacture and supply of office and school furniture. The entity is in the process of applying for a bank loan to meet its large order from various schools and organizations. Part of the requirements for loan processing by their banker is a statement of cash flows. Mubobo Ltd has provided you with the following financial statements:

Statement of financial position as 31 March:

	K'000	**K'000**
Non-current Assets:		
Property, plant and equipment	42,400	63,200
Development expenditure	8,000	3,500
Total non-current assets	50,400	66,700
Current Assets:		
Inventory	10,200	7,400
Trade receivables	12,400	10,400
Cash and cash equivalents	9,400	4,800
Total current assets	32,000	22,600
Total assets	**82,400**	**89,300**
Equity and liabilities:		
Equity shares of K1 each	26,000	24,000
Share premium	6,000	-
Revaluation surplus	-	6,400
Retained earnings	10,200	10,040
Total equity	42,200	40,440
Non-current liabilities:		
Lease obligations	8,000	6,400
6% loan notes	3,200	9,360
Deferred tax	800	3,000
Government grants	5,600	3,600
Total non-current liabilities	17,600	22,360
Current liabilities:		
Trade and other payables	16,200	12,700
Bank overdraft	-	4,200
Government grants	2,400	1,600
Lease obligations	3,600	3,200
Current tax payable	400	4,800
Total current liabilities	22,600	26500
Total equity and liabilities	**82,400**	**89,300**

The following additional information is relevant:

(1) Profit or loss extract for the year ended 31 March 2024.

	K'000
Operating profit	1,080
Finance costs	(1,040)
Investment income	160
Profit before tax	200
Income tax expense	(40)
Profit for the year	160

(2) During the year ended 31 March 2024, Mubobo Ltd successfully completed development of the new office furniture design. The amortization charge for capitalized development expenditure for the year ended 31 March 2024 was K2.2 million.

(3) On April 2023, property, plant and equipment were revalued downwards by a total of K6.8 million. The revaluation decrease was used to reduce the previous revaluation surplus and the balance was recognized in the statement of profit or loss within operating expenses.

Further, Mubobo Ltd sold an item of plant and machinery for K48 million which had a carrying amount of K30.2 million. Profit on sale of this plant was included in the operating profit above. Accumulated depreciation on the disposed of plant amounted to K4.8 million.

Other details of Mubobo Ltd property, plant and equipment are as follows:

	31 March 2024	31 March 2023
	K'000	K'000
Cost	64,000	80,800
Accumulated depreciation	(21,600)	(17,600)
Carrying amounts	42,400	63,200

(4) Plant acquired under lease arrangement during the year amounted to K6.8 million.

(5) During the year ended 31 March 2024, Mubobo received a grant of K3.8 million towards purchase of plant, property and equipment.

Amortization of the Government grant had been credited to profit or loss statement for the year to 31 March 2024.

(6) Included in trade and other payables is interest accrued on loans and leases for the years ended 31 March 2024 and 31 March 2023 amounting to K3.3 million and K4.8 million respectively.

(7) During the year to 31 March 2024, 2 million shares were issued at a price of K4 each. Mubobo Ltd did not pay any dividends during the year ended 31 March 2024.

Required:

Prepare a statement of cash flows for Mubobo Ltd for the year ended 31 March 2024 in accordance with IAS 7 Statement of Cash Flows.

[Total: 20 Marks]

END OF PAPER

CA 2.1 FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Papa Group

Consolidated Statement of Financial Position as at 31st March 2024

Assets	**K'000**
Non-current Assets	
PPE [427,200 + 200,000 + 7,680 FVA (w1)]	634,880
Goodwill (w2)	141,358
Other investments (100,000 +200,000)	300,000
Investment in Associate [51,200 + 64,000 (w4) – 1, 600, urp (w4)]	113,600
	1, 189,838
Current Assets	
Inventories [136,000 + 80,000 - 4,800 URP, (w4)]	211,200
Trade Receivables [120,000 + 72,000 - 12,800 intra-group]	179,200
Cash and Cash Equivalents [22,000 + 16,000]	38,000
Total Assets	**1,618,238**
Equity and Liabilities	
Equity	
Equity shares of K1 each	212,000
Share premium	100,000
Group retained earnings (w4)	570,960
Total Equity	882,960
NCI (w3)	105,470
Non-current Liabilities	
Deferred Consideration (w5)	109,090
Contingent consideration	6,000
Loan notes [152,000 + 72,000]	224,000
Current Liabilities	
Trade & Other Payables [89,918 + 72,000 - 12,800 intra-group]	149,118
Short-term Borrowings [125,600 + 16,000]	141,600
Total Equity and Liabilities	**1,618,238**

Workings for Solution 1: all workings are in K'000

Group structure: **Mama** (120/160) = 75%, therefore a subsidiary; & NCI = 25%. Baba is an associate (51.2/128) =40%.

(1) **Mama's Net Assets Table**

	At Acq *K'000*	**At Reporting** *K'000*	**Movement** *K'000*
Equity Shares Capital	160,000	160,000	Nil
Retained Earnings	128,000	248,000	120,000
Property, Plant and Equipment*	16,000	7,680	(8,320)
Inventory	4,800	Nil	(4,800)
	308,800	415,680	106,880

*NBV of PPE at reporting date is **K7.68 million** (i.e. K16m x $^3/_5$ x 80%).
Post-acquisition increase in Net Assets=**K106.88 million** (K415.84 – K308.80).

(2) **Goodwill at acquisition of Mama**

Cost of Investment:	
Share Exchange [75% x 160,000 x $^2/_3$ x K3.50]	280,000
Contingent consideration	5,000
Deferred Consideration [(75% x 160,000 x K1) ÷ 1.1^3]	90,158
Fair Value of NCI [25% x 160,000 x K2.00]	80,000
	455,158
Net assets at acquisition (w1)	(308,800)
	146,358
Less impairment loss	(5, 000)
	141,358

(3) **NCI**

Fair Value at Acquisition (w2)	80,000
Impairment loss (K5,000 x 25%)	(1,250)
25% Share of increase in Net Assets of K106.880 million (w1)	26,720
	105,470

(4) **Group Retained Earnings**

Papa's per question	449,868
Unwinding of Discount of Deferred Consideration (99,180 x 10%)	(9,918)
Papa's Share in increase in Mama's Net assets [(415,680-308,800) x 75%] (w1)	80,160
Papa's Share in Baba's Post Acquisition Profits [40% x 160,000]	64,000
Unrealised Profit on Sales to Mama [24,000 x $^{25}/_{125}$]	(4,800)
Unrealised Profit on Sales to Baba [(20,000 x $^{25}/_{125}$) x 40%]	(1,600)
Increase in contingent consideration	(1,000)
Due diligence costs	(2,000)
Impairment loss (5, 000 x75%)	(3,750)

		570,960

(5) **Deferred Consideration**

At 1 April 2023	99,172	
Unwinding of Discount	9,918	
	109,090	

(6) **Contingent Consideration**

Post change in contingent consideration of K1,000.00 should be debited to retained earnings.

(7) **Due diligence costs**

K2 million should be expensed as per revised IFRS 3, business combinations.

b) The acquisition of a 100% subsidiary where the fair value of the subsidiary's identifiable net assets exceeds the cost of acquisition exemplifies where negative goodwill (discount on acquisition) arises. IFRS 3 Business Combinations requires that the fair value of the identifiable net assets and the purchase consideration must be reviewed to confirm that the negative goodwill.

The negative goodwill is accounted for by recognising it as a gain in the consolidated statement of profit or loss in the year of acquisition.

Alternative Answer:

The consideration given for the business may be less than the fair value of the net assets acquired, leading to what is often described as negative goodwill. A careful check is recommended, of the value of the assets acquired and the bargain price.

The reasons for this include:

(a) Bargain purchase – occurs when a vendor is in poor financial position and need to realize assets quickly, or good negotiating skills of acquirer.
(b) Anticipated future losses – acquirer may take into account the cost of anticipated future losses and post-acquisition reorganization expenditure in determining the amount of consideration it is willing to pay.
(c) Some liabilities may have been omitted or understated thereby increasing fair value unnecessarily.
(d) Fair values of net assets may be incorrectly valued.

SOLUTION TWO

Mwenso Ltd's statement of profit or loss and other comprehensive income for the year ended 31 March 2024.

	K'000
Revenue	70,800
Cost of sales (W6)	(56,822)
Gross profit	13,978
Administrative expenses	(792)
Distribution costs	(304)
Operating profit	12,882
Finance costs (1,056 W2+224 W7)	(1,280)
Fair value gain of investment property (W8)	3,500
Profit before tax	15,102
Income tax (W9)	(9,650)
Profit for the year	5,452

Mwenso Ltd statement of financial position as at 31 March 2024

	K'000
Non-current assets:	
Intangible Non-current assets (W4)	800
Tangible Non-current assets	
Property, plant, and equipment (5,520+2,880+11,360)(W1)	19,760
Investment properties (W8)	73,500
Total Non-current assets	94,060
Current assets:	
Inventories (W5)	1,746
Trade receivables	12,730
Non-current assets held for sale and discontinued operations (W3)	800
Total current assets	15,276
Total assets	109,336
Equity and liabilities:	
Equity:	
Equity shares of K1 each	28,000
Share premium	500
Retained earnings (50,458+5,452-[28,000*K0.20])	50,310
Total equity	78,810
Non-current liabilities:	
12% loan notes (W7)	1,632
Lease obligation (W2)	7,076
Deferred tax (W9)	2,250
Total Non-current liabilities	10,958
Current liabilities:	
Trade payables	1408
Bank overdraft	780
Lease obligation (W2)	3,180
Dividends payable (W10)	5,600

Current tax payable (W9)	8,600
Total current liabilities	19,568
Total equity and liabilities	109,336

WORKINGS

1. Property, plant, and equipment

	Freehold property K'000	Plant and equipment K'000	Leased plant K'000
Cost/valuation b/f	8,000	6,744	14,200
Less accumulated depreciation	(1,500)	(1,944)	-
Carrying amounts b/f	6,500	4,800	14,200
Revaluation decrease	(520)	-	-
Revalued amounts	5,980	4,800	14,200
NCA held for sale	-	(1,200)	-
Depreciable amounts	5,980	3,600	14,200
Depreciation expense:			
Freehold property (5,980/13)	(460)		
Plant and equipment (20%* 3,600)		(720)	
Leased plant (14,200/5 yrs)			(2,840)
Carrying amounts at 31 March 2024	5,520	2,880	11,360

2. Leased plant

ROUA initial measurement	K'000
PV of future lease payments	13,200
Add: deposit made at inception	1,000
Total	14,200

Lease liability table:

	Balance b/f K'000	Effective interest @ 8% K'000	Lease rental paid K'000	Balance c/f K'000
Year ended 31/3/2024	13200	1056	(4000)	10,256
Year ended 31/3/2024	10,256	820	(4000)	7,076

Finance cost for y/e 2024	1,056
Non-current liability	7,076
Current liab(10,256-7,076)	3,180

ROUA carrying amount: K11,360 (14,200/5 yrs) = 2,840
14,200-2,840

3. Held for sale Non-current asset:
The Non-current asset held for sale and discontinued operation to be eliminated from Non-current assets from date of classification and be re-classified as a current asset. From date of classification, asset not to be depreciated as it would no longer be

classified under Non-current assets. It has to be carried in the books at its lower of carrying amount and fair value less costs to sale from date of classification.

Therefore, carrying amount = K1,200
Fair value less costs= K800 and asset to be carried at K800 while difference of K400 would be recognized as impairment loss in profit or loss statement.

4. License

	K'000
Cost b/f	1,600
Less accumulated amortization	(640)
Less amortization charge for the year	(160)
Carrying amount at 31 March 2024	800

5. Inventories:

	K'000
Per trial balance	1,752
Less difference between cost and NRV	(6)
Revised value	1,746

Cost of inventory	72
Net realizable value	66 (68-2)
Difference	6

6. Cost of sales:

	K'000
Per trial balance	51,716
Inventory adjustment (W5)	6
Depreciation expense:	
Property (W1)	460
Plant (W1 and 2) [720+2,840]	3,560
Impairment loss of property revalued	520
Impairment loss of plant held for sale	400
Amortization of License	160
	56,822

7. 12% loan note

	Balance b/f	Effective interest @ 14%	Interest paid at 12%	Balance c/f
	K'000	K'000	K'000	K'000
Year ended 31/3/2024	1,600	224	(192)	1,632

8. Investment property

	K'000
Fair value b/f	70,000
Fair value gain	3,500
Fair value c/f	73,500

9. Income tax payable account

	K'000		K'000

Balances c/f:		Balances b/f:	
Current	8,600	Current tax	800
Deferred	2,250	Deferred tax	400
		Profit and loss (bal fig)	9,650
	10,850		10,850

10. Dividends payable
    Number of shares in issue * K0.20/share
    28,000 shares * K0.20/share
    <u>K5,600</u>

SOLUTION THREE

Transaction 1: Mukufi Ltd

The transaction is a convertible loan note which requires the splitting of the instrument into liability and equity components at inception, that is, date of issue using split accounting (W1). When the splitting is done, a liability of K92.920 million (W1) will arise and an equity of K7.08 million will be recognized on date of issue. The liability component will be amortized for the year ending 31 March 2023 and 31 March 2024 to give values for the year ending 31 March 2024 of liability K95.633 million and finance cost K9.421 Million. The equity component will be the same throughout the period of redemption, ie K7.08 Million to be recognized in years ending 31 March 2023 and 31 March 2024.

W1.

	K'000
Split accounting	
Present value of proceed (K100,000 X 0.73)	73,000
Present value of interest (8% X K100,000 X 2.49)	19,920
Liability component	92,920
Equity component	7,080
Total proceed	**100,000**

Amortization of liability component.

	Balance b/f	Effective Finance cost	Nominal interest paid	Balance c/f
		K'000	K'000	K'000
		10%	8%	
Year end 31/03/2023	K92,920	K9,292	(K8,000)	K94,212
Year end 31/03/2024	K94,212	K9,421	(K8,000)	K95,633

Transaction 2 Chikwekwe

The transaction would be accounted for using IFRS 15 Revenue from Contracts with Customers. This sale is a bundled sale and recognition depends on whether performance obligations were satisfied at a point in time or over time.

For the supply of computers, the sale value of K5 Million [K6 million – (125/100 X K0.6m) – K0.25m] will be recognized in full for the year ended 31March 2024.

The sale value of the installation of K0.25 million will equally be recognized in full upon installation.

However, the sale value of servicing will be recognized to the extent that performance obligations are satisfied. In this case, the K0.75 million is for two years, by 31 march 2024, only six (6) months servicing obligation would have to be recognized as part of the revenue in the statement of profit or loss amounting to K0.1875 million (6/24 X K0.75 million) the total balance of K0.5625 million would be split into current liability of K0.375 (12/24 x K0.750 million) and non-current liability of K0.1875 (K0.5625-K0.375).

Transaction 3: Ngoli Plc

The accounting for these transactions is guided by IAS 21 Foreign Currency Translations. As Ngoli has a functional currency of Kwacha, the transactions would have to be recorded in Kwacha. Monetary items require retranslation upon settlement of balance and upon reporting period end to ascertain the exchange losses and gains.

The purchase of goods on 1 October 2023 would be recognized in purchases and trade payables at K10,000 (R50,000/5.0).

At reporting date, the amount remained unpaid hence a payable would be recalculated as K7,692 (R50,000/6.5) to be reported under current assets in the statement of financial position.

An exchange gain, therefore, of K2,308 (K10,000-K7,692) arose and would be credited to profit or loss.

For the sales on 1 October 2023, the transaction will be translated at spot rate hence a value of sales and receivables of K80,000 (R400,000/R5).

On 1 November, a customer paid for half of the sales value an amount of K35,087 (R200,000/R5.70) instead of K40,000 (R200,000/R5) that could have been received had the sale been paid right at the date of transaction. On date of receipt of money, an exchange loss occurred of K4,913 to be debited to profit or loss.

The balance of receivable of R200,000 which remained unpaid at 31 March 2024 would be translated to K30,769 (R200,000/6.5). It would have been valued at K40,000 (R200,000/R5) had there been no changes in exchange rates. The balance on retranslation therefore leads to an exchange gain of K9,231 (K40,000 – K30,769).

SOLUTION FOUR

Zamveg Ltd
(i) Return on capital employed

$$= \frac{\text{Profit before interest and taxation}}{\text{Capital employed}} \times 100\%$$

Return on capital employed (1,170+25) /4,280 x 100 %= **27.9%**

(ii) Net profit margin

$$= \frac{\text{Net profit before interest and tax}}{\text{Revenue}} \times 100\%$$

Net profit before tax to sales (1,170/5,900) x 100 %=**19.8%**

(iii) Acid test ratio

$$= \frac{\text{Current asset } \textbf{less} \text{ inventory}}{\text{Current Liabilities}}$$

Acid test ratio (1,265-735)/495 = **1.07:1**

(iv) Gross profit margin

$$= \frac{\text{Gross profit}}{\text{Revenue}} \times 100\%$$

Gross profit margin (2, 500/5,900) x 100% =**42.4%**

(v) Trade receivables collection period

$$= \frac{\text{Trade receivables}}{\text{Revenue}} \times 365\text{days}$$

Trade receivables collection period (515/5,900) x 365 = **32 days**

(vi) Trade payables payment period

$$= \frac{\text{Trade payables}}{\text{Credit Purchase/Cost of sales}} \times 365 \text{ days}$$

Trade payables payment period (495/3,400) x 365=**53 days**

(vii) Inventory holding period

$$= \frac{\text{Average inventory}}{\text{Cost of sales}} \times 365 \text{ days}$$

Inventory holding period (735/3,400) x365 = **79 days**

(a) It is clear from his comments that the Chairman of Zamveg Limited does not know the differences between the two bases of accounting, cash and accruals. The cash basis of accounting recognises revenues when cash is received and expenses when they are paid. Under accruals basis of accounting on the other hand, revenues and expenses are recorded when they are earned, regardless of when the money is actually received or paid. Consequently, accruals method recognises accounts receivable or accounts payables which are not recognised under cash method of accounting. Cash basis of accounting shows a track record of how much the business actually has at any time while accrual accounting does not provide any awareness of cash flow.

(b) Financial statements are of course useful in decision making. However, they have their own flaws and do not provide all the information which may be very useful in making an investment decision as can be seen in the following limitations associated with them:

- Financial statements are **historical** in terms of reporting. They report on transactions which have already taken place. They do not reflect conditions of the company prevailing at the time they are being prepared. For example, financial statements for the year ended 31 December 2023 would have to be prepared in 2024.

- Financial statements include **estimates** such as provisions for depreciation, the site restoration cost which may be unrealistically high or low as they involve use of judgement. For example, assuming that a motor vehicle would have an economic useful life of 5 years for the purposes of calculating depreciation may not be realistic. This is because motor vehicles still remain useful even after being fully depreciated. Further, the number of drivers and their respective skills, lifestyles and experiences are ignored in determining the economic useful life of motor vehicles.

- Financial statements are not very informative as they may exclude **non-financial information** which may provide predictive characteristics needed by users of financial statements to make informed decisions. For instance, financial statements may not include information on quality of services or products being offered by the company. They may also not reflect the skill and education of the company's employees. These are some of the pieces of information needed by users of financial statements to determine the sustainability of the company's profitability.

- Financial statements may not be comparable across companies because of **varying accounting policies** adopted. One company may, for example choose to subsequently measure its non – current assets using revaluation model of IAS 16 another may simply stick to the standard cost model.

- Financial statements can easily be **manipulated** in order to portray good performance by the company. For instance, the directors may choose to inflate income or understate expenses in order to report a high profit or may decide to keep liabilities off their financial statements in the quest to improve gearing of the company and have access to cheaper sources of finance as it may be perceived to be a low risky company.

SOLUTION FIVE

Mubobo's

Statement of cash flows for the year ended 31 March 2024

	K'000	K'000
Cash flows from operating activities:		
Profit before tax		200
Adjust for:		
Depreciation expense (W1)		8,800
Finance cost		1,040
Investment income		(160)
Grant amortization (W3)		(1,000)
Profit on disposal (W1)		(17,800)
PPE impairment loss (6,800-6,400)		400
Amortization of development expenditure		2,200
		(6,320)
Increase in inventory (10,200-7,400)		(2,800)
Increase in receivables (12,400-10,400)		(2,000)
Increase in trade payables (12,900-7,900) W7		5,000
Cash generated from operations		(6,120)
Interest paid W5		(2,540)
Tax paid (W6)		(6,640)
Net cash outflow on operating activities		(15,300)
Cash flows from investing activities:		
Cash paid to acquire property, plant and equipment (W1)	(18,200)	
Cash expenditure on development project (W4)	(6,700)	
Government grant received (W3)	3,800	
Proceeds from disposal of property, plant and equipment (W1)	48,000	
Interest received	160	
Net cash inflow from investing activities		27,060
Cash flows from financing activities:		
Proceeds from the issue of shares (26,000+6,000-24,000)	8,000	
Lease rental paid (W2)	(4,800)	
Loans repaid (9,360-3,200)	(6,160)	
Net cash outflow on financing activities		(2,960)
Net increase in cash and cash equivalents		8,800
Cash and cash equivalents at start		600
Equals cash and cash equivalents at the end		9,400

WORKINGS:

1. Property, plant and equipment account

	K'000		K'000
Balance b/f	63,200	Depreciation expense	8.800
ROUA (W2)	6,800	Decrease in revaluation	6,800
Bank (bal. fig)	18,200	Disposal	30,200
		Balance c/d	42,400
	88,200		88,200

Accumulated depreciation a/c

	K'000		K'000
Disposal	4,800	Balance b/f	17,600
Balance c/f	21,600	Depreciation expense Bal. fig	8,800
	26,400		26,400
		Balance b/d	21,600

Profit or loss on disposal of plant and equipment:

	K'000
Proceed	48,000
Carrying amount	(30,200)
Profit on disposal	17,800

2. Lease liability account

	K'000		K'000
Lease rental paid (bal fig)	4,800	Balances b/f:	
Balances c/f:		current	3,200
Current	3,600	Non-current	6,400
Non-current	8,000	ROUA (PPE a/c)	6,800
	16,400		16,400

3. Deferred credit liability

	K'000		K'000
Profit and loss (bal.)	1,000	Balances b/f:	
Balances c/d:		Current	1,600
Current	2,400	Non-current	3,600
Non-current	5,600	Bank (grant received)	3,800
	9,000		9,000

4. Development expenditure

	K'000
Balance c/f	8,000
Add amortization expense	2,200
Less balance b/f	(3,500)
Expenditure during the year	6,700

5. Interest paid

	K'000
Balance b/f	4,800
Profit and loss charges	1,040
Less balance c/f	(3,300)
Bank (bal.)	2,540

6. Tax paid:

	K'000		K'000
Bank (bal fig)	6,640	DT	3,000
Balances c/f:		Current tax	4,800
Current	400	Profit and loss	40
Non-current	800		
	7840		7840

7. Trade and other payables:

	2024	2023
	K'000	K'000
Per question	16,200	12,700
Less accrued interest	(3,300)	(4,800)
Trade payables	12,900	7,900

8. Cash and cash equivalents

	2024	2023
	K'000	K'000
Bank	9,400	4,800
Bank overdraft		(4,200)
Cash and cash equivalents	9,400	600

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 18 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This Question is compulsory and MUST be attempted.

QUESTION ONE - (COMPULSORY)

Kalyamamina Plc (K Plc) manufactures three products known as X, Y and Z. Each product is started in the Machining Department and completed in the Finishing Department. It also has two (2) Service Departments, a Canteen and a Machine Maintenance Department. Shown below are next year's budgeting production data and manufacturing costs for the company.

Budgeted overheads	Total	Machining Dept	Finishing Dept.	Canteen Dept.	Machine Maintenance Department
	K	K	K	K	K
Allocated overheads	161,960	62,344	50,396	25,700	23,520
Depreciation and insurance of equipment	56,000				
Rent, rates, cooling and lighting	36,000				
Additional data:					
Book value of equipment	480,000	240,000	90,000	30,000	120,000
Floor space occupied(square metres)	21,600	7,200	4,800	3,600	6,000
Numbers of employees		16	10	8	6
Products:		**X**	**Y**	**Z**	
Production (units)		6,800	5,600	3,200	
Prime cost, per unit:					
Direct materials		K20	K16	K18	
Direct labour:					
• Machining department		K2	K2.5	K3	
• Finishing department		K4	K3	K2	
Machine hours, per unit in the machinery department		1 hour	2 hours	4 hours	

It has been estimated that approximately 80 per cent of the Machine Maintenance Department's costs are incurred in servicing the Machining Department and the remainder are incurred in servicing the Finishing Department.

Required:

(a) Examine the objectives of calculating manufacturing overhead absorption rates. (2 marks)

(b) Calculate the following budgeted overhead absorption rates:

(i) A machine hour rate for the machining department. (5 marks)

(ii) A rate expressed as a percentage of direct wages for the finishing department.

(5 marks)

(iii) Calculate the budgeted manufacturing overhead cost per unit of product Z.

(2 marks)

Costs can be classified according to their nature or the purpose for which the analysis is being undertaken.

Required:

(c) Explain each of the following cost classifications and give one example for each.

(i) Period costs
(ii) Product costs
(iii) Variable costs
(iv) Opportunity costs

(6 marks)

K Plc holds raw material inventory. The material control system includes a perpetual ledger card system.

The following data relates to material MX:

- Annual requirements for material MX: 28,800 units
- Ordering cost: K25 per order
- Holding cost per annum: 10% of purchase price
- Purchase price per unit: K10

Required:

(d) Calculate for material MX:

(i) The economic order quantity
(ii) The number of orders needed per year
(iii) The total cost of ordering and holding material MX for one year.

(5 marks)

Although inventories of materials may be planned to maximize profitability when inventory records cards are compared to actual physical inventories, differences may arise.

Required:

(e) Discuss possible reasons for these differences. (5 marks)

Costs are frequently described as 'relevant' or 'non-relevant'.

Required:

(f) From a management accounting viewpoint, discuss the factors in the relevant costs approach to decision making.

(5 marks)

A master budget is created by the integration of many individual budgets.

Required:

(g) Explain the reasons why managers may be reluctant to participate in setting budgets. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) Questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

Better Deals Limited (BDL) is a local Zambian company that manufactures and sells a single product. The company operates a system of flexible budgeting and usually undertakes to identify the principal budget factor when preparing its budgets. The company also compares budgets against actual to determine variances with appropriate control measures implemented. A newly recruited assistant finance officer prepared a budget report attempting to compare the pervious budget and the current budget. Further, the Assistant Finance Officer calculated variances by comparing the current 2024 budget and the actual performance. Prior to him preparing the full report including the variance commentary on the performance, the assistance finance officer has shared the report with you for review. The draft budget report prepared by the Assistant Finance Officer is shown below:

Budget Report for 2024

	2023 Budget (K)	**2024 Budget (K)**	**2024 Actual (K)**	**Variance (K)**
Material cost	93,750	99,375	90,900	8,475 F
Labour cost	118,750	125,875	124,000	1,875 F
Production overheads	162,600	170,850	158,550	12,300 F
Other Costs	160,000	166,000	162,700	3,300 F
Administration costs	150,000	150,000	156,100	6,100 F
Selling & Distribution	188,750	200,075	177,600	22,475 F

	2023 Budget (Units)	**2024 Budget (Units)**	**2024 Actual (Units)**	**Variance Units**
Production units	25,000	26,500	24,800	1,700 A
Sales units	25,000	26,500	22,200	4,300 A

Required:

(a) Explain the importance of identifying the Principal Budget factor when preparing the budget for BDL. (3 marks)

(b) Explain three (3) problems in the budgetary control report prepared by the Assistant Finance Officer. (6 marks)

(c) Prepare a revised budget report suitable for budgetary control. (11 marks)

[Total: 20 Marks]

QUESTION THREE

ABC Ltd is a manufacturing company that uses a standard costing system to control costs and revenues through variance analysis. In operating the standard costing system, the company has determined appropriate standard unit costs and selling price.

The company manufactures a single product called Stove cleaner and the following information is available.

Activity		K
Direct Materials A	2 litres @ K7.50	15
Direct labour	2 Hours @ K5	10
Budgeted Sales units	12,000 bottles	
Budgeted Selling price	K50	
Productions OH are absorbed	@ K5 per bottle.	

Actual Results were as follows:

Sales	14,000 bottles	
Selling price	K48 per bottle	
Productions	15,000 bottles	
Material used	28,000 litres of material A costing	K224,000
Direct labour costs	32,000 hours costing	K192,000
Idle time labour hours	1,000	

Required:

(a) Calculate the following variances:

(i) Sales price valiance (1 mark)

(ii) Sales volume variance (2 marks)

(iii) Direct material A price variance (1 mark)

(iv) Direct material A usage variance (2 marks)

(v) Direct labour rate variance (1 mark)

(vi) Direct labour efficiency variance (2 marks)

(vii) The idle time variance (1 mark)

(b) Explain the interrelationship of the following variances:

(i) Sales price and volume variances (2 marks)

(ii) Direct materials price and usage variances (2 marks)

(iii) Direct labour rate and efficiency variances (2 marks)

(c) Explain the expected variance analysis results when the following performance standards are used:

- **(i)** Ideal standards
- **(ii)** Attainable standards
- **(iii)** Current standards.
- **(iv)** Basic standards

(4 marks)
[Total: 20 Marks]

QUESTION FOUR

Mwembeshi Church is constructing a house for its local pastor who ministers in that local area. The church has hired Mr Mweemba the contractor to execute the project within 12 months as per agreed contract. The total completion cost is K102,000,000. The project will be executed in the agreed phases so as to allow the church meet agreed instalment payments throughout the project period.

Mwembeshi Church is audited by an international auditor who has audited the church and has produced the following report to management on the happenings on the project as at 31 December 2023.

Activities	**Costs (K)**
Purchase of special materials for the project taken to site	55,000,000
Material from stores sent to project	3,000,000
Rejected materials returned to stores	900,000
Wages for casual workers	10,500,000
Site direct labour expenses	1,700,000
Plant sent to site	4,889,000
Plant returned from site	850,000
Architect’s fees	1,500,000
Sub-contracts works of blasting stones on the foundation	7,000,000
Overheads for head office charged at 12.5% of wages for casual workers	
Materials on site on 31 December	1,600,000
Plan on site on 31 December	2,500,000
Cost of work done but not yet certified (work in progress)	3,100,000
Prepayments for material not yet received	200,000
Pending project payment for the work done	400,000

Certified works by experts	78,900,000
Retention on certified works	10%

The auditor interviewed Mr Mweemba who indicated that the project was behind schedule due to numerous challenges he faced when digging the foundation. He further informed the auditor that he intends to vary the contract in order for him not to make a loss on the project.

Required:

(a) Prepare the contract account for Mwembeshi Church showing clearly the cost of work certified carried forward and work in progress carried forward. (12 marks)

(b) Calculate the profit taken on the contract. (4 marks)

(c) Explain how a loss on contract account is treated in the books of account. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Chisamba Milling (CM Ltd) has produced a new product on the market. This product is made of mealie meal and rice and it is called RIME. RIME is packed in 10Kg bags and supplied to all government hospitals, clinics and prisons in a country called Zamale. The government of Zamale recommends this product to government institutions because of its nutritional values.

Cost estimates for RIME for the month of December 2023 are as follows:

Activity		K
Direct Materials	20Kg @ K5	100
Direct Labour	10hrs @ K6	60
Machine Production Variable Cost	2hrs @ K5	10
		170

It is CM Ltd policy to charge 20% profit on the full production costs of RIME.
Fixed production overheads are budgeted at K250,000 per month. Due to shortage of machine capacity, the company will use 12,000 hours of machine time per month. Overheads will be absorbed at the rate of direct labour hours and budgeted direct labour hours are 25,000 per month.

CM Ltd has an opportunity of producing an alternative product other than RIME and obtain a minimum contribution of K10 per machine hour for producing the alternative product.

Required:

(a) Calculate the expected selling price if the machine time opportunity cost is excluded and ignored. (6 marks)

(b) Calculate the expected selling price if the machine time opportunity cost is included.

(4 marks)

(c) Explain the concept of responsibility accounting and clearly outline the four (4) responsibility centres. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.2: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) The main objectives of calculating overhead absorption rates are**:**

(i) **For Pricing purposes.**

If a firm is not a price taker, it must calculate a price using some variant of ' cost plus' formula. For this purpose, it must be able to estimate an average unit cost.

(ii) **For inventory valuation purposes**. IAS 2 requires that inventories are valued at the lower of cost or net realizable value. By cost is meant 'full cost' incurred in getting the product into its present location and condition. Such costs include production overheads based on normal level of activity for the year.

However, the danger is that reliance may be placed upon the resulting 'unit cost' for decision making purposes. It has little relevance here. Decisions should be based on relevant incremental costs, and it would be beneficial if the absorption system at least allowed for the distinction between fixed and variable costs. This would also be helpful in the pricing decision, where the price has to be based on marginal costs only.

(b) (i) **Overhead Analysis Sheet**

Item of overhead	Basis of Apportionment	Total	Machining Dept	Finishing Dept	Canteen	Machine maint'nce Dept.
		K	K	K	K	K
Allocated overhead	Direct	161,960	62,344	50,396	25,700	23,520
Depreciation and insurance	GBV	56,000	28,000	10,500	3,500	14,000
Rent, rates ,etc	Floor space	36,000	12,000	8,000	6,000	10,000
		253,960	102,344	68,896	35,200	47,520
Canteen	Number of employees	_	17,600	11,000	(35,200)	6,600 54,120
Maintenance Department		_	43,296	10,824	_	(54,120)
Total O'hds.		253,960	163,240	90,720	_	_
			÷	÷		
Budgeted Activity (W.1)			30,800 Machine hrs	K50,400 direct wages		
*<u>**OAR**</u>			<u>**K5.32**</u>	<u>**180%**</u>		

			(b)(i)	(b)(ii)		

***OAR = Total Budgeted Overhead Costs ÷ Total Budgeted Activity**

WORKINGS

W.1

Budgeted Machine Hours	Budgeted Direct Wages
X: 6,800 units x 1/K4 = 6,800 hrs	K27, 200
Y: 5,600 units x 2/K3 = 11,200 hrs	K16, 800
Z: 3,200 units x 4/K2 = 12,800 hrs	K6, 400
30,800hrs	**K50, 400**

(b)(iii) **Budgeted manufacturing overhead cost for producing one unit of product Z**

	K
Machinery department – 4 hours x K5.32	21.28
Finishing Depart. – 180% x K2	3.60
	24.88

(c) **Explanation of classifications with examples of the type of costs that may be included**.

Period costs are those related to a certain costing or accounting period which should be written off against the profit of that period and not carried forward in the cost of inventory or work-in-progress to be charged against a succeeding period.
Period costs include administration, selling, distribution and research overheads.

The opposite of a period cost is a **product cost**, which is related to a product and charged against revenue only when that product is sold in a subsequent cost period.
Product costs include all the costs incurred in manufacturing the product, e.g. direct labour, materials and a fair proportion of the overheads expenses of the factory.
Variable costs describe costs which change in direct proportion to the volume of production. A variable cost per unit does not change but when the number of units produced is increased, so variable cost in total increases in proportion. Cost behavior determines whether a cost is variable or fixed, but it must be stressed that as circumstances change so a cost may behave in a different manner, i.e. a cost which is fixed in one situation may become variable as conditions change. Examples or variable costs include direct material per kg, selling costs per unit sold, etc.

Opportunity cost concerns the cost of fore going the next best alternative use of resources in a business. As such the concept of opportunity cost is important in decision –making.
The cost of using scare production hours on making product X might be the profit forgone by not using those resources to make product Z instead.

(d) (i) Material MX:

(1) **EOQ**

$$= \frac{\sqrt{2\,CD}}{H}$$

$$= \frac{\sqrt{2 \text{ X K25X } 28{,}800}}{[\text{K10 X } 10\%\,]}$$

$$= \frac{\sqrt{1{,}440{,}000}}{1}$$

$$= \sqrt{1{,}440{,}000}$$

= **1,200 units**

Orders per year = $\frac{D}{Q} = \frac{28{,}800}{1{,}200}$ =24

The number of orders needed per year = 24.

(2) Ordering cost = $\frac{D}{Q}$ x C = 24 x K25= K600

Holding cost $\frac{Q}{2}$ x H = 1200 x K1 = K600

K1, 200

The total cost of ordering and holding material MX for one year = K1, 200

(d) (ii) The recorded balances may differ from actual physical balances due to:

1. Clerical errors in the record card
2. Storekeeper's errors, clerical and physical(e.g. over issues)
3. Errors in procedure (e.g. failure to record returned material on a material on a materials returned note);
4. Unrecorded losses due to evaporation or breaking;
5. Pilferage and falsification of documents

(e) **Relevant and Non-relevant Costs**

It is important for the management accountant to distinguish between relevant and non-relevant costs for decision making purposes. The ability to make this distinction enables him to concentrate solely on those costs which will be affected by the decision under consideration. In some cases, the use of the contribution approach will help to make the distinction, but this would ignore fixed costs which were affected by the decision and should therefore be included in the analysis.

A relevant cost may be defined as:

1. **An expected future cost**, and
2. A **cost which differs among alternatives** whether a cost is relevant to a particular decision.

Future costs should be considered as future cash flows. This helps to overcome the conceptual problem of when a future cost becomes a past cost.

Costs which differ among alternatives. The essence of this, is that if a **cost is unaffected** by **a particular decision**, then it is **not relevant** to that decision, and can be omitted from the analysis. It is often believed that fixed costs will fall into this category, and often they do, but there are such costs as relevant fixed cost which will be affected by a particular decision. For example, if the firm is considering a special order which will require the use of a special machine which will be rented for the order at a cost of K10, 000, this item will normally be classified as a fixed cost. In this example, it is also a relevant fixed cost, as it will be affected by the acceptance of the order.

Opportunity costs, as future cash flows, perhaps from the alternative use of materials could be related to the sales value of those materials.

Relevant costs will also include the cost of items which might seem to have only an indirect link with the decision. If there is a problem such as a capacity constraint, then the relevant cost approach would include the loss of contribution from any items which cannot be produced as a direct consequence of the fact that limited capacity is to be used for another purpose, such as a special order.

(f) **Employee Participation in Budgeting**

Managers may be reluctant to participate in setting budgets, because 'participation' may not be on an acceptable basis. According to the management style of a business the term may cover almost any degree or lack of consultation.

At one extreme minimal discussion may be used as the basis for an authoritarian, imposed budget. At the other extreme a laissez-faire to set budgets which provide real targets for improvement. For participation in budgeting to be successful it must **stem from full and frank discussion between managers at all levels**. It must be based on accepted areas of responsibility and full knowledge of the objectives to be achieved and of the interaction of one department's activities with those of others. Managers must be also be capable of understanding the financial and accounting implications of their actions, and may need to be given training in these subjects.
Finally any budget will be based on forecasts of future circumstances and these will often be **imperfect**. In exercising control against budgets, therefore it is necessary to judge whether a managers' achievement has been satisfactory in relation to the actual circumstances then prevailing. This is not to say that the ultimate profit objective should be abandoned, but that 'participation' shall be a continuous activity in modifying detailed targets where necessary in order to approach the achievement of the required profit in a different way.

SOLUTION TWO

(a) **The principal budget factor** is basically a limiting factor or bottleneck. This is the factor or resource that would limit the operations of the company. It is therefore important to determine the principal budget factor first as all other budget such as functional budgets would be based on the availability of the limiting factor.

(b) **Problems**

The budget does not provide a complete a historical performance including the actual results for the year 2023 for comparison purposes.

1. Variances from the budget are calculated by comparing the budget against the actual results which have different levels of activities.
2. The budget does not provide any details on cost behaviour and therefore left to assumption.

(c)

Revised Budget Report for 2024

	2024	**2024**	**Variance**
Activity	**Flexed Budget**	**Actual**	
Material cost (K)	93,000	90,900	2,100 F
Labour cost (K)	117,800	124,000	6,200 A
Production overheads (K)	161,500	158,550	2,950 F
Other Costs (K)	159,200	162,700	3,500 A
Administration costs (K)	150,000	156,100	6,100 A
Selling & Distribution (K)	167,610	177,600	9,990 A
Production units	24,800	24,800	0
Sales units	22,200	22,200	0

Workings:

Material cost is a variable cost: K3.75 per unit

Labour cost is a variable cost: K 4.75 per unit

Production overhead cost is a mixed cost: K5.5 per unit + K25,100

Other costs is a mixed cost: K4 per unit + K60,000

Selling and distribution is a variable cost varying with sales units: K7.55 per unit.

SOLUTION THREE

Calculation of variances

(i)	Sales price variance	K'000
	Sales revenue from 14,000 units should have been (× K50)	700
	but was (× K48)	672
	Selling price variance	28 A
(ii)	Sales volume variance	
	Budgeted sales volume	12 000 bottles
	Actual sales volume	14 000 bottles
	Sales volume variance in units	2 000 bottles (F)
	X Standard profit per bottle [50 – (15+10+5)]	x K20
	Sales Volume variance	K40 000 (F)
(iii)	Direct materials price variance	K'000
	28,000 litres of material A should have cost (× K7.50)	210
	but did cost	224
	Material A price variance	14 A
(iv)	Direct Material A usage variance	
	15,000 bottles should have used (x 2 lit\res)	30 000 litres
	But did use	28 000 bottles
	Direct material A usage variance in litres	2 000 litres (F)
	X Standard cost per litre (x K7.50)	x K7.50
	Direct material A usage variance	K15 000 (F)
(v)	Direct labour variance	K'000
	32,000 hours should have cost (× K5.00)	160
	but did cost	192
	Direct bour rate variance	32 A
(vi)	Direct labour efficiency variance	
	15,000 bottles should have taken (x 2 hours)	30 000 hours
	But did take (32,000 – 1,000)	31 000 hours
	Direct labour efficiency variance in hours	1 000 hours (A)
	X Standard cost per hour (x K5.00)	x K5.00
	Direct labour efficiency variance	K5 000 (A)
(vii)	The idle time variance	
	1,000 hours (x K5.00/hour)	K5 000 (A)

(a) Interrelationship between variances

(i) Sales price and volume variances

A reduction in the sales price might stimulate bigger sales demand, so that an adverse sales price variance might be counterbalanced by a favourable sales volume variance. Similarly, a price rise would give a favourable price variance, but possibly at the cost of a fall in demand and an adverse sales volume variance.

(ii) Direct materials price and usage variances
If cheaper materials are purchased in order to obtain a favourable price variance, materials wastage might be higher and an adverse usage variance will occur. If more expensive material is purchased, the price variance will be adverse but the usage variance might be favourable.

(iii) Direct labour rate and efficiency variances
If employees in a workforce are paid higher rates for experience and skill, using a highly skilled team might lead to an adverse rate variance and possibly a favourable efficiency variance. In contrast, a favourable rate variance might indicate a larger-than-expected proportion of inexperienced workers which could result in an adverse labour efficiency variance.

(b) Explanation of the expected variance analysis results when the following performance standards are used:

(i) **Ideal standards**
If an ideal standard is used, variances will always be adverse because this standard is based on perfect operating conditions: no wastage, no spoilage, no inefficiencies, no idle time, no breakdowns.

(ii) **Attainable standards**
If an attainable standard is used, we should expect small variances around the standard from one period to the next because this standard is based on the hope that a standard amount of work will be carried out efficiently, machines properly operated or materials properly used. Some allowance is made for wastage and inefficiencies.

(iii) **Current standards**.
If a Current standard is used, we should expect small variances around the standard from one period to the next because this standard is based on current working conditions (current wastage, current inefficiencies).

(iv) **Basic Standard** is used when we expect to measure against the original standard which has not been changed. This standard is helpful when forecasting to measure the variance between the current and original standard.

SOLUTION FOUR

(a)

Contract account			
Activities	**Amount (K)**	**Activities**	**Amount (K)**
Purchase of special materials for the project taken to site	55,000,000	Rejected Material's returned to stores	900,000
Material from stores sent to project	3,000,000.00	Plant Returned from Site	850,000
Wages for casual workers	10,500,000	Materials on site	1,600,000
Site direct labour expenses	1,700,000	Plant on site	2,500,000
Plant Sent to Site	4,889,000	Prepayments	200,000
Architect's fees	1,500,000		
Sub Contract Works	**7,000,000**	**C/d**	
Overheads for head office charged at 12.5% of site wages)	1,312,500.00	Certified works	76,151,500
Pending Project payment	400,000	Cost of work done but not yet certified (Work in Progress)	3,100,000
TOTAL	85,301,500	TOTAL	85,301,500

Workings
TOTAL WORK DONE

DEBIT TOTALS 85,301,500
CREDIT Total (LESS CERTIFIED WORK & WIP)= 6,050,000 (900+850+1,600+2,500+200)

79,251,500

Cost of work done but not yet certified (WIP) 3,100,000

CERTIFIELD WORKS 76,151,500

(b) **Profit**

Profit Taken =3/4 x of Notional profit X Cash Payments from progress/Value of Certified Works.

Notional Profit =Value of Work Certified - Cost of work Certified.

Notional Profit	
Certified works by experts	78,900,000
Certified works	(76,151,500)
Notional Profit	**2,748,500**

Cash payment =Certified Works -Retention= 78,900,000-(10% x 78,900,000) = **71,010,000**

Profit Taken =3/4 x of Notional profit. X Cash Payments from progress/Value of Certified Works.

Notional Profit	2,748,500
Certified Works by Experts	78,900,000
Cash Payment =Certified Works -Retention	71,010,000.0
0.75	

Profit= ¾ x 2,748,500x71, 010,000/78,900,500**= K1, 855,225.74 or K1,855,238**

(C) In contract costing, it is possible to make a profit or loss.

When a loss occurs, a total expected loss should be taken into account as soon as it is recognized, even though the contract is not yet complete

The contract account should be debited with amount of anticipated future loss. (full contract price less final cost of contract less cost of works at present less value of certified work at present) and the income statement should be debited with the total expected loss (Final costs of contract less Full contract price)

Any loss on a contract should be disclosed as a deduction from the amount for long term contracts included under inventories in the statement of financial position.

SOLUTION FIVE

(a)

Direct materials			100.00
Direct labour			60.00
Variable production Overheads	Machine		10.00
Production fixed OH per Month Budgeted	K10	10 hours	100.00
Full Cost Product			$\boxed{270 .00}$
Profit Mark up	@	20%	54.00
Selling Price			**324.00**

(b)

Full Cost Product		270
Opportunity Cost	2 x 10	20
Adjusted Full Cost		290
Profit Markup	@ 20% x 290	58
Selling Price		**348**

(c)

- **Responsibility accounting**

  This is a system of accounting that segregates revenues and costs into areas of personal responsibility in order to monitor and assess the performance of each part of an organisation.

  Budget centres should be organised so that all the revenues earned by an organisarion, all the costs it incurs, and all the capital it employs are made the responsibility of someone within the organisation, at an appropriate level of authority in the management hierarchy.

- **Responsibility centres**

(i) A **cost centre** in an area of the business for which costs can be ascertained. This may be the entire factory or a smaller area such as a single machine. The manager responsible for this cost centre has authority regarding the costs incurred by his/her area of responsibility and should be held responsible for controlling the costs.

(ii) A **revenue centre** is an area of the business for which revenues can be ascertained. The revenue centre manager will be responsible for revenue.

(iii) A **profit centre** is an area of the business for which both revenues and costs can be ascertained and, therefore, a profit or loss for a period can be determined. Often profit centres are larger areas of the business such as an entire division or geographical sales area. The manager of the profit centre has authority over both costs and income and is responsible for the profit and, thereby, variances for both costs and revenues.

(iv) An **investment centre** is similar to a profit centre, the difference being that the manager of an investment centre is responsible not only for the profit that is earned by the area of the business but also the net assets of the area of the business. Investment centres will often be entire divisions. The manager of an investment centre not only has authority over the costs and income of the centre but also over its assets and liabilities. A measure called [a] return on capital employed [i] is calculated to determine how well the manager of an investment centre is performing.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 20 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – COMPULSORY

Lukanga Ltd is a company in the manufacturing industry and is involved in the manufacturing of a wide range of furniture. The company has a purchasing department responsible for the procurement of raw materials and components required for production. Annually, the company advertises for suppliers to be included on the list of approved suppliers with whom the company will deal. Procurement of materials and components is initiated by the Stores Manager upon reaching the set re-order levels. A pre-numbered purchase requisition is raised and approved by the Stores Manager and forwarded to the purchasing department. On receipt of the requisition, inquiries are made by the purchasing department from a minimum of three (3) suppliers on the approved list. For purchases below K50,000 the purchasing department selects the supplier and places an official purchase order which is approved by the Purchasing Manager. For purchases above K50,000 the award is made by a tender committee. Based on the minutes of the tender committee, an order is raised and approved as required.

Deliveries of materials and components purchased are made directly to the stores warehouse. Before raising a pre-numbered Goods Received Note(GRN) all items received are subject to quality control checks by the Stores Manager and this is evidenced in writing by him signing on the relevant space on the Goods Received Note(GRN). Items not meeting the quality control requirements are not received into stores and are returned to the supplier with a note on the delivery note which accompanied the items. Payments for goods purchased are made by the accounts payables department on the basis of an original supplier invoice, a payment copy of the purchase order and a payment copy of the Goods Received Note(GRN). No payment is processed based on photocopies of any of the supporting documents.

The Board of Directors of Lukanga Ltd acknowledged its responsibility for internal controls. To this effect the board resolved that an internal audit department be set up as it is an integral function in the monitoring of controls. Respective departments in Lukanga Ltd are responsible for putting in place internal controls to manage activities within their control. The Board of Directors of Lukanga Ltd is concerned about the increased rate of wastage during production and is of the view that value for money is not being achieved. There is also a noted increase in fraud by employees that usually involves theft of raw materials and components as well as finished goods.

Lukanga Ltd sells its products on warranty and repairs any defects within the warranty period and replaces any items that are irreparable. The financial statements of Lukanga Ltd contain a warranty provision which is determined by the Production Manager at the end of each accounting period. During the year ended 31 December 2023 a provision of K1.1 million was recognized in the profit or loss account. The opening balance brought forward on the warranty provision account is K1.5 million.

Your firm of chartered accountants has been appointed auditor of Lukanga Ltd and this will be the first time that the company will be subjected to an external audit. In a pre-audit meeting with Management of Lukanga Ltd, the Audit Committee chairperson argued that in view of the fact that the company has established an internal audit department which is involved in conducting internal audits, the audit fee should be reduced further from the amount earlier agreed upon. The Engagement Partner has requested you to write a report that he will use in a meeting with the Audit Committee chairman to explain the differences between internal and external auditors.

Required:

(a) (i) Explain five (5) internal control activities in the purchasing and inventory systems of Lukanga Ltd. (5 marks)

(ii) Explain the control objectives for each of the control activities in (a) (i) above. (5 marks)

(iii) Suggest suitable tests of controls for each of the control activities in (a) (i) above. (5 marks)

(b) (i) Explain four (4) differences between internal auditors and statutory auditors. (8 marks)

(ii) Explain four (4) roles that internal audit can perform in Lukanga Ltd using the information in the scenario. (8 marks)

(c) Describe six (6) audit procedures for warranty provisions in the audit of the financial statements of Lukanga Ltd and state the assertions being tested for each audit procedure. (9marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

You are a Senior Audit Assistant in your firm of chartered accountants. You have been assigned to the audit of the financial statements of Warthog Ltd for the year ended 31 December 2024. You have just attended the planning meeting for the audit and the Engagement Partner has emphasized on the need for the audit team to obtain sufficient appropriate audit evidence which will form the basis for a reasonable assurance.

You have been assigned to perform procedures on receivables' confirmation and evaluate the effectiveness of the internal controls for the sales and receivables systems. The total receivables balance in the receivables control account at the period end of Warthog Ltd has been provided to you.

Below is the summary of the age analysis of the receivables balance:

	Details	**Balance** **K'000**	**Current** **K'000**	**30 Days** **K'000**	**60 Days** **K'000**	**>60 Days** **K'000**
1	Dr. Balances	6,545	3,210	1,132	900	1,303
2	Cr. Balances	(510)	(219)	(109)	-	(182)
3	Nil balances	-	-	-	-	-
	Total	6,035	2,991	1,023	900	1,121

An examination of customer reconciliations shows that a number of receivables make round sum payments on account without specifying the invoices being paid. This has caused reconciliation problems for some receivables accounts.

Warthog Ltd employs sales representatives whose responsibility is defined by specific market segments. The sales representatives decide on the customers that should be extended credit and based on the recommendation credit is extended. A number of Warthog Ltd.'s customers have exceeded the agreed credit limits and this has resulted in the write off of some receivables balances. In the current year, a total of K1.2 million owed by four (4) customers has been written off. Write off of receivables balances is authorized by the respective sales representatives after all efforts to collect the amount owing fail. Payments for credit sales are made by customers by cheque given to the cashier who deposits the cheques once in a week together with any cash sales proceeds. Direct payments by customers are receipted upon receipt of deposit details from customers. The list of unallocated deposits has grown over the last three (3) months and the unallocated amounts are held in an unallocated amounts control account which is not regularly cleared.

Required:

(a) (i) Explain the type of balances that you will include in the sample for the receivables' confirmation in the audit of the financial statements of Warthog Ltd. (4 marks)

(ii) Describe the procedure that you will follow in carrying out the receivables' confirmation in the audit of the financial statements of Warthog Ltd. (4marks)

(b) Explain the meaning and characteristics of reasonable assurance in the audit of the financial statements of Warthog Ltd. (4 marks)

(c) Suggest four (4) control activities in the sales and receivables systems of Warthog Ltd and for each control activity explain the control objective. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Kafubu Stores (KSL) Ltd, sells household goods in all ten (10) provinces of Zambia and each outlet is manned by a Branch Manager. The Board of Directors at KSL Ltd consists of Mr. Jonas Banda, a founder member, the Finance Director, Operations Director and the Human Resources Director. Except for the Human Resources Director, the rest are family members. In order to save KSL Ltd.'s financial resources, the Board Chair who is also the Managing Director, opposed the setting up of an Audit Committee and a Nominations Committee arguing that such committees were a waste of financial resources. All Branch Managers are appointed by the Managing Director.

Due to lack of transparency and accountability at KSL Ltd, the Human Resources Director and Payroll Accountant resigned. The Payroll Accountant has since been replaced by a newly appointed Trainee Human Resources Manager. From the time the Payroll Accountant resigned, all matters related to Payroll are handled by the newly employed Trainee Human Resources Manager. The labour turnover is high but there is no decline in payroll costs as expected. Other Accountants were engaged to establish the correct numbers of employees in the company and to confirm if the disparity in numbers of staff and payroll costs was due to errors or ghost employees on the payroll. The Finance Director argued that the Accountants from KSL Ltd are not suitable to carry out such a task since they are employees of the company and bemoaned the lack of internal audit function at KSL Ltd.

During the Annual General Meeting (AGM), Halls Chartered Accountants (Halls) were appointed as auditors for KSL Ltd. Christine, a Trainee Auditor at Halls was requested to draft the engagement letter after confirming that the preconditions for an audit had been met. The Trainee Auditor was not sure as to what the preconditions for an audit were and the contents of the engagement letter as it was her first time to perform such a task. After drafting the engagement letter, the firm's first task involved verifying KSL Ltd.'s payroll costs to establish the correct numbers of staff and payroll costs.

An Audit Senior at Halls Chartered Accountants conducted a quality control review of some of the working paper files compiled by trainee auditors. He was not satisfied with some of the work he found on the files and suggested that an in-house training be organized in order to acquaint trainees with the rights and duties of external auditors. When asked why there was evidence of incomplete work in the working paper files, the trainee auditors claimed that client staff could in most cases not provide the requested documents. In other instances, the client staff claimed to be busy and that audit staff should go back later for the requested information. A training need was identified requiring that the trainee auditors needed to know the duties and rights of the auditors.

Required:

(a) Explain three (3) benefits to KSL Ltd of engaging external auditors. (3 marks)

(b) (i) Define the term 'pre-conditions for an audit'. (2 marks)

(ii) State any five (5) contents of an engagement letter. (5 marks)

(c) Explain five (5) weaknesses in the governance structure of KSL Ltd. (5 marks)

(d) Explain three (3) rights and two (2) duties of an external auditor. (5 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

Your firm of chartered accountants is auditor of Jingos Ltd. You are the Audit Manager on the audit of the financial statements for the year ended 31 December 2024.

The audit is in the final stage and the following matters have been brought to your attention for your action:

Matter 1.
A customer of Jingos Ltd sued the company for the supply of defective equipment during the year under audit which led to a fatal accident resulting in the death of an employee. The customer was required to pay compensation amounting to K5 million and the courts determined that this amount should be paid. In turn, the customer sued Jingos Ltd so that it could recover the money that will be paid in compensation to the estate of the deceased employee.

The legal advisor of Jingos Ltd is of the view that the case is likely to be ruled in favor of the customer. Jingos Ltd declined to make a provision in the financial statements at the period end. The court case had not been concluded by the courts at the time of signing the audit report.

Matter 2.
A fraud involving inventory was discovered in January 2025. The fraud involved the Warehouse Manager who fraudulently supplied spares of equipment worth K3 million which were not ordered or paid for. The value of the spares fraudulently supplied is included in the year-end inventory amount in the financial statements. Displinary action was taken against the Warehouse Manager who admitted the fraud and has since been relieved of his duties.

Matter 3.

Jingos Ltd held an investment in a financial institution valued at K2 million at the reporting date. Subsequent to the period end, before the financial statements were authorized, the financial institution faced litigation by the regulators for not complying with regulations. This resulted in a significant fall in the value of the investments held by Jingos Ltd. The Audit Senior recommended that the financial statements for the year ended 31 December 2024 should be adjusted on account of the fall in value of the investment. Management declined the request to amend the figure for investments in the statement of financial position.

A review of the work done on going concern showed that management of Jangos Ltd made an assessment of the ability of the company as a going concern and concluded that the company was a going concern. The assessment by management was for a period of nine (9) months from the period end. A request by the Audit Senior to extend the evaluation was declined by management.

The results of the audit work done on going concern by the audit team shows that there exists material uncertainty with regards the ability of Jangos Ltd as a going concern. This is on account of the company failing to pay its debts and the continued poor liquidity of the company. The Audit Senior wants your guidance on what should be done on the existence of the material uncertainty and the impact it has on the audit report. Assume that the preparation of the financial statements based on a going concern basis by Jingos Ltd is appropriate.

Required:

(a) Distinguish, giving examples, adjusting from non-adjusting events. (2 marks)

(b) For each of items (1) to (3) in the scenario, evaluate the accounting treatment and the impact on the financial statements for the year ended 31 December 2024. (12 marks)

(c) Explain the reporting implications of the existence of material uncertainty with regards the going concern ability of Jingos Ltd. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Muchinga Ltd is a company in the car spares and accessories business and it has three (3) outlets in Lusaka. Each of the outlets is managed by a Shop Manager and three (3) Shop Assistants. The majority of sales are on cash basis and at the end of each day the company's Sales Supervisor collects the cash from the Shop Managers. The only evidence of cash collected is a signed acknowledgement form of the cash collected signed by the Sales Supervisor and only one (1) copy of the acknowledgement is raised and retained by the Shop Manager. The cash collected is deposited with the cashier at Head Office who banks the cash every Friday.

The company uses an integrated inventory and sales system whereby the Shop Managers know the inventory held by each of the three (3) shops. In the event that a shop runs out of an item that a customer wants and it is available in the other shops, the Shop Manager simply calls the

Shop Manager who has the item in stock to send that item using courier services. Head Office replenishes shop inventory when re-order levels are reached and there is no evidence of goods transferred to other shops. Monthly inventory counts are conducted at all the three (3) shops and this information helps Head Office to plan for which items to import. There are no independent inventory records maintained for stock items in the shops and an annual inventory count is conducted at the end of the financial year at all the locations.

The Head Office cashier maintains a cash book and is required to prepare bank reconciliations on a monthly basis. Due to pressure of work, the bank reconciliations have not been prepared for the last three (3) months and this was noticed by the audit team. Bank reconciliations are not independently checked and are filed away once prepared.

You work for Mumba & Associates a firm of chartered accountants and you have been assigned the audit of the financial statements of Muchinga Ltd for the year ended 31 December 2024. The audit plan shows that the audit team will undertake a risk assessment during the first week of January 2025 in line with the provisions of ISA 315 *Identifying and assessing the risks of material misstatement through understanding the entity and its environment.* You intend to attend the year-end inventory count at all the three (3) shops and the main warehouse at Head Office. The bank balance is a significant amount in the financial statements of Muchinga Ltd and you are required to prepare an audit plan for the audit of the bank balance which will be used by the Audit Assistant to perform audit procedures.

Required:

(a) Explain four (4) weaknesses in the internal control activities in Muchinga Ltd and suggest suitable improvements. (8 marks)

(b) (i) Describe four (4) methods of obtaining evidence that may be used in the audit of the financial statements of Muchinga Ltd. (6 marks)

(ii) Describe four (4) substantive audit procedures for the bank balance in the statement of financial position of Muchinga Ltd. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.3 AUDITING PRINCIPLES AND PRACTICE SUGESTED SOLUTIONS

SOLUTION ONE

(a). (i). Internal controls:

	(i) Control activities	(ii) Control objectives	(iii) Tests of control
1	Reorder levels at which point purchase initiated.	To avoid stock-outs by initiating purchase so that goods arise before stores run out.	For a sample of stores items confirm by inspection that re-order levels have been set.
2	Pre-numbered purchase requisition.	So that purchases are made on the strength of accountable documents and no unauthorized purchase can be initiated and acted upon.	Inspect used and unused purchase requisitions and confirm that they are pre-numbered.
3	Authorization of purchase requisitions by the Stores Manager	So that no unauthorized purchases are initiated and acted upon.	For a sample of purchase requisitions raised inspect and confirm they are authorized by the Store Manager.
4	Authorization of purchase orders by the Purchase Manager.	To prevent unauthorized purchase and committing the company to unauthorized purchases.	For a sample of purchase orders raised in the past, examine and confirm that they were approved by the Purchasing Manager.
5	Purchases above K50 000 subject to tender committee approval.	To ensure purchases are made considering the authority given and that no purchase above limit without following tender procedure.	For a sample of purchases above K50 000 examine the supporting documents and confirm supposed by minutes of a dully convened tender committee.
6	Goods Received Notes numbered and raised for all goods received.	To ensure that the company will only pay for goods received. Further to ensure that no payment will be made based on a fake GRN	For a sample of purchases made in the past confirm that one of the supporting documents is a pre-numbered Goods Received Note.
7	Quality controls on receipt of goods and evidenced in writing.	To ensure the company does not receive defective or damaged goods.	For a sample of Goods Received Notes confirm goods were inspected by confirming that relevant part on the GRN for inspection is signed by the responsible person for quality control.
8	All payments for goods supported by relevant payment copies of the GRN, Purchase order and the original copy of the invoice.	To avoid duplicate or fraudulent payments using the same documents already used in another payment.	For a sample of paid amounts inspect the supporting documents and ensure they are the correct copies and photocopies used to support a payment.

(a) (ii) Differences between internal auditors and statutory auditors:

		Internal auditors	External auditors
1	Appointment	Internal auditors are appointed by management. The qualifications required are determined by management.	External auditors are appointed are appointed by shareholder and they do possess formal qualifications.
2	Objectives	To improve the operations of the company and monitor the effectiveness of the company internal controls.	Objective of the external auditors is to form an opinion on the financial statements.
3	Reporting	The internal audit reports are addressed to management and is usually for internal use only.	Report to the shareholders and the audit report part of the documents containing the financial statements. In some cases report may be published for use by other stakeholders.
4	Scope of work	Is wide and covers the operations of the company and may include operational audits and value for money audits which external auditors do not involve themselves in.	Scope limited to the financial statements of the organization. Internal controls are tested for the purposes of obtaining evidence on the financial statements.
5	Relationship with the company	They are employees of the company and so lack objectivity due to lack of independence.	They are not part of the organization they are independently appointed by the shareholders providing some degree of independence and ultimately objectivity.

(iii) Roles of internal audit in Lukanga Ltd:

1. The internal audit function can conduct operational audits to ensure laid down procedures are followed.
2. The internal audit function can assess the adequacy of internal controls put in place by the different functions within the company.
3. Internal auditors can test the controls that exist for effectiveness and report to management.
4. Internal auditors can perform value for money audits to ensure that the three principles of economy, efficiency and effectiveness are followed.
5. Internal audit department can be used to conduct investigations of fraud and suspected fraud in the company.
6. Internal auditors may be involved in risk management unless there is a separate risk department.

(b) Audit procedures for warranty provisions:

	Audit procedures	Financial statement assertion
1	Confirm opening warranty provision balance correctly brought forward to the current year.	Accuracy, completeness
2	Review management's computation of current year warranty provision and check assumptions for reasonableness.	Accuracy, completeness
3	Check that the reduction in provision from the opening balance of K0.4m is correctly accounted for by reducing the opening balance position. The charge to profit or loss of K1.1 million is incorrect.	Accuracy
4	Review prior year provision made by management and compare with actual cost of repairs in the current year to establish management's ability to make accounting estimates.	Accuracy
5	Examine post year expenditure on warranty provision and compare with the year-end provision before the audit report is signed.	Accuracy
6	Obtain written representations from management asserting that it believes the warranty provision is reasonable and adequate.	Accuracy

SOLUTION TWO

(a) (i) Types of balances to include in third party confirmation list:

The sample of receivables to be subjected to third party confirmation from the schedule of receivables balances provided by Warthog Ltd should include the following:

- Accounts with credit balances showing that Warthog Ltd is owing them money.
- Receivables with nil balances should be included in the sample for third party confirmations.
- The sample from receivables with debit balances should include those with small balances and those with large balances.
- The sample should include receivables with amounts that have been written off during the year under audit.
- Receivables who pay round sums on account without stating the invoices being paid.
- Receivables with balances more than 30 days according to the age analysis.

(ii) Procedure to follow in carrying out receivables confirmation:

- Permission of Warthog Ltd will need to be obtained by the audit team to carry out a third party confirmation to receivables.
- The audit team will need to extract a sample of receivables to confirm from the age analysis provided by Warthog Ltd.
- The details of the selected receivables will be given to the client to enable the company to write using its letter head to the receivables to confirm balances directly to the auditors. The audit team will decide on whether a positive or negative confirmations are required.
- The audit team will collect the signed letters and will post the letters to the receivables.
- Follow up of non-responses and exceptions will be made by the auditors with the help of Warthog Ltd if necessary.

(b) Meaning of reasonable assurance:

Reasonable assurance is a level of assurance where audit risk is reduced to acceptable levels. A reasonable assurance is issued by the auditor after the audit of financial statements.

The following are the characteristics of reasonable assurance:

- It is a high level of assurance but is not absolute level of assurance.
- The conclusion is reached after the auditors conduct the audit in accordance with auditing standards and high level of testing based on risk assessment.
- The opinion is in a positive way where the auditor expressly states whether the financial statements show a true and fair view or not.

(c) Suggested internal control activities:

	Internal control activity:	Control objective
1	Segregation of duties – currently the sales representatives authorize credit and also authorize the write off of receivables.	This will prevent fraudulent activities by the sales representatives who may give credit to customers who are not credit worthy and also write off amounts that are collectable
2	Offering of credit to customers should be based on vetting done in writing and authorized by a responsible official such as a Credit Controller.	To reduce the chance of giving credit to customers that are not credit worthy which could result in writing off of debts.
3	Writing off of debts should be made after all efforts to collect have failed and should be authorized in writing by a responsible official and not the sales representatives.	To ensure that debts are written off only when all efforts to collect fail.
4	Reconciliations of customer accounts should be done on a regular monthly basis and reconciliations should be independently checked.	This will help identify any disputes or incorrect posting to accounts quickly and reduce the extent of balance disputes with customers.
5	Regular clearing of the unallocated receipts account and this should be checked by a responsible official.	To ensure that customer accounts reflect the correct balance position taking into account all payments made by customers directly into the bank.

SOLUTION THREE

(a) The following are the benefits of engaging external auditors:

1. The external auditors that are involved in the audit are more independent as opposed to internal auditors. Therefore, the level of assurance is high.
2. There is greater accountability as external auditors are regulated by an accounting body such as ZiCA.
3. The level of assurance given by external auditors is much more reasonable than that of internal auditors
4. They act as a second eye on the quality of internal controls around financial reporting and are well placed to recommend any improvements.

(b) (i) A pre-condition for an audit is the agreeing of an applicable financial reporting framework that will be used by management when preparing financial statements and the acknowledgment by management of its responsibility for the preparation of the financial statements.

(ii) The following are the contents of an engagement letter:

1. The responsibility of both Hall auditors and management at KSL Ltd are clarified.
2. Audit fees charged by Hall Chartered Accountants can be reflected and how the billing will be done
3. The limitations and other constraints that will be placed on the auditors in terms of liabilities.
4. That management at KSL Ltd will be able to provide draft financial statement and other information so that external auditors can complete the audit within the set time table.
5. An explanation of the laws and regulations that will govern the conduct of an audit with reference to local legislation, International Accounting Standards and ethical standards**.**

(c) The following are the weaknesses in the Governance system of KSL ltd:

1. The Managing director is also the Chairman of the Board of Directors (BOD).
   It is against the principles of good governance as there will be no accountability and transparency if one person holds both positions.

2. The refusal by the Managing Director to set up an audit committee

   An audit committee will provide confidence in the financial reporting system. It also strengthens the position of internal audit.

3. The Managing Director appointing Branch Managers single handedly. There should be a process of advertising for position and later holding interviews so that the right persons are employed. As it is, there is a possibility of employing staff who may not have the right qualifications.

4. The absence of the nominations committee: the absence of this committee will entail that the Directors that are appointed to serve at board level will be hand-picked and highly compromised.

5. Lack of an internal audit function

The lack of an internal audit function will lead to lack of an independent check on internal controls in the accounting system and it can lead to loss of company assets. In addition, it will be difficult to discover fraud and errors**.**

(d) Rights of external auditors:

1. To receive notices of meetings from the company. Once these notices are sent to auditors, they are expected to send representatives to the meeting.
2. To attend important meetings such as Annual General Meetings (AGM) so that they too can be heard on matters that concern them.
3. Right to speak at the annual general meeting concerning matters of concern by auditors.
4. Right to access records required for the purpose of the audit.
5. Right to information and explanations from management and others relating to the audit.

Duties of external auditors:

1. To conduct an audit and obtain sufficient appropriate audit evidence which will form the basis of the audit opinion.
2. Duty to report on the profit or loss and statement of financial position through the audit report which contained the audit opinion.

SOLUTION FOUR

(a) **Distinction between adjusting and non-adjusting events:**

Non-adjusting events – These are events that take place after the period end which do not give evidence of conditions that existed at the period end. They do not require that the figures in the financial statements should be amended.

For example, a fire that occurs after the period end resulting in the destruction of inventory is a non-adjusting event and does not require that the inventory value at the period end should be adjusted because the inventory did exist at the period end.

Adjusting events – These are events that take place after the period end and that give evidence of conditions that existed at the period end necessitating that the figures at the period end be adjusted.

For example, a legal case not determined at the period end and a provision made but which is determined by the court after the period end determining a different amount. The provision in the financial statements will require to be adjusted considering the amount determined by the court.

(b) **Subsequent events and impact on the financial statements:**

Matter	**Accounting treatment**	**Impact on the financial statements.**
1	The matter is an adjusting event because it related to the year under review. Management of Jingos Ltd should be requested to make a provision if the amount meets the provisions of IAS 37.	Provisions will be understated as a result of the refusal by Jingos Ltd to make a provision in the financial statements.
2	Even if the fraud was discovered in the subsequent accounting period, it is an adjusting event. The fraudulently supplied inventory is included in the inventory value in the financial statements. Management should be requested to restate the inventory value so that it excludes the spares fraudulently supplied by the Warehouse Manager.	The inventory value is misstated by the value of the inventory that did not exist at the period end. The financial statements will be misstated by that amount.
3	The fall in the value of the investments took place in the subsequent accounting period. This was on account of an event that took place after the period end. This is a non-adjusting event and should not necessitate the adjustment of the value of investments at the period end. Management is correct by declining to make the adjustment.	The refusal by management to make an adjustment will have no impact on the financial statements under audit. This may necessitate a disclosure in the financial statements.

(c) **Implication of material uncertainty on the audit report:**

The existence of material uncertainty with regards the going concern ability of Jingos Ltd will have an impact on the audit report. In the case of the audit of the financial statements of Jingos Ltd, the preparation of the financial statements using the going concern basis is appropriate. The impact will depend on the extent of the disclosure of the material uncertainty in the financial statements by management.

There will be two possible situations as follows:

1. Adequate disclosure by management in the financial statements:
   If the management of Jongos Ltd adequately disclose the material uncertainty in the financial statements, an unmodified opinion will be appropriate. The auditors will include and explain the material uncertainty in the audit report in a paragraph titled 'Material Uncertainty Related to Going Concern'.

2. Inadequate disclosure in the financial statements:
   In the event that there is inadequate disclosure in the financial statements with regards the material uncertainty, the audit opinion will be modified. This may result in a qualified or adverse opinion depending on the materiality and pervasiveness of the matter causing the material uncertainty.

SOLUTION FIVE

(a) **Internal control weaknesses in Muchinga Ltd:**

	Internal control weakness	Suitable improvement
1	There is no evidence of the amount given to the Sales Supervisor by the Shop Managers and this could result in loss of cash by the shop staff.	There should be daily summaries of the sales whose amount should be agreed to the cash handed over to the Sales Supervisor.
2	Only one copy of the document acknowledging receipt of money by the Sales Supervisor is kept. This copy could be destroyed and replaced by a different one to conceal any theft of cash.	A minimum of two acknowledgement sheets should be raised and one should be retained by the Shop Manager.
3	Cash received by the Head Office cashier is banked once a week on Friday. There is a risk of loss of cash kept in the office and also cash being used for personal use hoping that it will be replaced.	Cash should be banked on a daily basis or at the latest by the following working day from the day cash is collected.
4	Verbal requests for items from other shops could result in loss of inventory and also fraudulent requests for items could be made and no cash received.	All stock transfers between shops should be evidenced in writing by way of an accountable stock transfer request dully authorized.
5	Lack of inventory count records at the shops could lead to loss of inventory through theft or pilferage. The monthly inventory count records should be compared with the inventory balances per the inventory records.	Inventory records should be introduced and the monthly inventory counts compared with the records. Discrepancies should be investigated by the Shop Managers.
6	The irregular preparation of bank reconciliations by the cashier could lead to a loss of funds at the bank. It will also take much longer to identify any errors made by the bank.	Bank reconciliation should be prepared on a regular monthly basis and should be independently checked by a senior person.

(b) (i) Methods of obtaining evidence:

1. **Inquiry** – This is the method of obtaining evidence by finding out and inquiring from management and staff of a client company about specific matters. In the audit of the financial statements of Muchinga Ltd this method can be used during planning the audit in gaining an understanding of the entity and its environment.
2. **Observation** – This method involves seeing what is happening and in the case of the audit under consideration it could be used during attendance of inventory count by the auditors to confirm if the count is being conducted in line with the inventory count instructions.
3. **Confirmation** – is a method of obtaining evidence from third parties which is more reliable in view of eh fact that the evidence is from an independent third party. In the case of the audit of Muchinga Ltd this method could be used in confirming the bank balances at the period end.
4. **Inspection** of tangible non-current assets- This involves the physical inspection of assets recorded in the financial statements for existence. In the case of the audit of Muchinga Ltd it could mean inspecting the motor vehicles that belong to the company.

(ii) Substantive audit procedures in the audit of bank balance:

1. Verify that the bank balance in the statement of financial position agrees with the balance in the cash book.
2. Re-perform the bank reconciliation for the year end for accuracy and correctness.
3. Obtain direct confirmation from the bank and review response.
4. Check and follow up cheques outstanding at the period end to the following accounting period and confirm have been cleared. Obtain explanations if still outstanding.
5. Verify balances per cash book according to the bank reconciliation by inspecting the cash book, bank statement and the general ledger.
6. Review the draft financial statements for adequacy of disclosures in accordance with relevant accounting standards.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 20 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. A Taxation table is provided from page 2 to page 6 of the question paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

TAXATION TABLE
Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K0.01 to K61,200	first K61,200	0%
K61,201 to K85,200	next K24,000	20%
K85,201 to K110,400	next K25,200	30%
Over K110,400		37%

Income from farming for individuals

K0.01 to K61,200	first K61,200	0%
Over K61,200		10%

Company income tax rates

On income from manufacturing and other	30%
On income from farming	10%
On income from mineral processing	30%
On income from mining operations	30%
On income of Banks and other Financial Institutions	30%

Mineral Royalty

Mineral Royalty on Copper

Norm price range per tonne	Incremental value	Mineral Royalty rate
Less than US$4,000	First $3,999	4.0% of norm value
From US$4,000 but less than US$5,000	Next $1,000	6.5% of norm value
From US$5,000 but less than US$7,000	Next $2,000	8.5% of norm value
US$7,000 and above	Over $7,000	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Cobalt and Vanadium	8% of norm value
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Standard wear and tear allowance	25%
	Used in manufacturing and leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing **(Cost up to K100,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax

Annual Turnover	
K0.01 to K12,000	0%
K12,001 to K800,000	4%

Rental income Tax

Rental income band	**Taxable amount**	
K0.01 to K12,000	First K12,000	0%
K12,001 to K800,000	Next K788,000	4%
On income above K800,000		12.5%

Presumptive tax for transporters

Seating capacity	**Tax per annum**	**Tax per quarter**
	K	K
Less than 12 passengers and taxis	1,080	270
From 12 to 17 passengers	2,160	540
From 18 to 21 passengers	4,320	1,080
From 22 to 35 passengers	6,480	1,620
From 36 to 49 passengers	8,640	2,160
From 50 to 63 passengers	10,800	2,700
From 64 passengers and over	12,960	3,240

Property transfer tax

Rate of tax on realised value of land (including buildings, structures or improvements thereon)	5%
Rate on realised value of intellectual property	5%
Rate on realised value of mining right for an exploration licence	5%
Rate of tax on realised value of a mining right for a mining licence	10%
Rate of tax on realised value on a mineral processing licence	10%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

	Aged 2 to 5 years		Aged above 5 years	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged above 5 years	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc	22,561	29,329	18,049	23,463
SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732

Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	Aged 2 to 5 years		**Aged above 5 years**	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs				
GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,697	13,302	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	33,766	14,632	26,531	11,497
Panel Vans				
GVW not exceeding 1.0 tonne	13,353	5,786	7,630	3,061
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	13,907	10,662	6,413	4,916
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	15,453	11,847	7,726	5,923
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	9,272	7,108
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,462	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1.	**Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	30%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Cylinder capacity of 1500 cc and less	20%
	Cylinder Capacity of more than 1500 cc	30%
2.	**Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**	
	Customs Duty	
	Percentage of Value for Duty Purposes	15%
	Minimum specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
3.	**Buses/coaches for the transport of more than ten persons**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Seating Capacity of 16 persons and less	25%
	Seating Capacity of 16 persons and more	0%
4.	**Trucks/lorries with gross weight exceeding 20 tonnes**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE - (COMPULSORY)

Cynthia Kanema has run a farming business as a sole trader for many years. She also owns a chain of retail shops through which she sales farm produce. In January 2024, Cynthia estimated the provisional business profits from farming operations for the tax year 2024, to be K1,145,000, whilst the provisional taxable profit from retail operations was estimated to be K825,600. She computed provisional income tax relating to the tax year 2024, correctly and paid it on the relevant due dates.

At the end of the tax year 2024, the actual final taxable profit from retail operations after capital allowances for the tax year 2024, has been established to be K875,000. The final taxable profit from farming operations for the tax year 2024, has however not yet been determined.

Cynthia has presented you with the following statement of profit or loss relating to her farming operations for the year ended 31 December 2024:

	Note	K	K
Gross profit			6,469,900
Add: Other income	(1)		323,150
			6,793,050
Less expenses			
Wages & salaries	(2)	3,044,150	
Repairs & renewals	(3)	103,900	
Legal and professional fees	(4)	133,200	
Gifts and entertainment	(5)	81,900	
General operating expenses	(6)	2,533,900	
			(5,897,050)
Profit for the year			896,000

The following additional information is available:

Note 1: Other income.

This comprised the gross rental income arising from letting of bare farm land of K144,000, consultancy fees K35,700 (net), Copyright royalties of K51,850 (net), dividends of K53,550 (net), fixed deposit interest of K19,550 (gross) and profit on sale of a tractor of K18,500.

Note 2: Wages and salaries

These included employees' salaries of K2,350,000, salary of K480,000 for Cynthia, employer's NAPSA contributions of K117,400, NHIMA contributions of K23,500, skills development levy of K11,750 and PAYE penalties of K61,500.

Note 3: Repairs and renewals

Included in repairs and renewals is expenditure incurred on repair works for Cynthia's family farm house of K25,400, repair works on irrigation equipment of K58,500 and initial repair costs of K20,000 incurred on a second hand Mitsubishi delivery truck which was bought at a cost of K350,000 and brought into use on 1 March 2024. The repairs were necessary to put the motor vehicle into a usable state.

Note 4: Legal and professional fees

These comprised the following:

	K
Fees on transfer of title to newly acquired farm land	18,500
Legal fees on defending title to existing farm land	55,500
Fees on personal legal advice	22,400
Legal fees in connection with recovery of trade debts	36,800
	133,200

Note 5: Gifts and entertainment.

These comprised the following:

	K
Donations to approved public benefit organisations	25,000
Donations to political party	5,500
Gifts of farm produce to customers valued at K250 per customer	18,500
Entertainment expenses for employees	22,400
Entertaining business associates	10,500
	81,900

Note 6: General expenses

These included expenditure on animal feed & pesticides of K575,600, subscriptions to the Farmer's Union of K15,000, expenditure on overalls for farm workers of K38,500, uniforms for guards of K24,200, depreciation of K799,000, loss on disposal of the Ford Ranger Double Cab van of K26,000 and motor vehicle running expenses of K55,500. The balance represents allowable farm operating expenses. One third of the motor running expenses relates to Cynthia's personal private motor vehicles which she partly used for business purposes during the year. It has been agreed with the Commissioner General that 60% of the mileage done by Cynthia in the vehicles related to the farming business.

Note 7 Unrelieved Tax loss from farming

At 1 January 2024, there was an unrelieved tax loss from farming of K367,500 which was is the remaining balance of a tax loss from farming suffered two years ago.

Note 8 Implement, plant and machinery and other expenditure.

At 1 January 2024, the business held the following implements, plant and machinery:

Date of acquisition	Asset	Original cost
		K
10 March 2022	Tractor	450,000
25 June 2022	Ford Ranger double cab van (see note (6))	860,000
21 July 2023	Irrigation equipment	450,000

During the year ended 31 December 2024, the following purchases and disposals of assets took place:

Date		Cost/(Proceeds)
		K
1 March 2024	Purchase of Mitsubishi delivery Truck (see also note 3)	350,000
26 April 2024	Sold Ford Ranger double cab van for	(490,000)
10 April 2024	Construction of four (4) farm dwellings for employees	840,000
1 May 2024	Purchase of Toyota Hilux double Cab van	960,000
25 June 2024	Sale of tractor for	(465,000)
15 August 2024	Development of banana plantation	260,000
26 August 2024	Purchase of farm implements	380,000
10 Sept 2024	Drilling of boreholes	230,000

Both the Ford Ranger Double Cab Van and the Toyota Hilux Double cab van were used by Cynthia for both business and private purposes. It has been agreed with the Commissioner General that Cynthia had business use of 60% of each vehicle during the tax year 2024.

Required:

(a) Calculate the amount of provisional income tax paid by Cynthia in respect of the tax year 2024 and state the due date(s) and amount(s) paid on each due date. (7 marks)

(b) Compute the maximum amount of capital allowances claimable by Cynthia in the tax year 2024. (11 marks)

(c) Calculate Cynthia's actual taxable farming profit for the tax year 2024. (11 marks)

(d) Calculate the final amount of income tax payable by Cynthia for the tax year 2024. (11 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

Smith Wessels was born in a foreign country located in the Southern Part of Africa, where he has always lived until 1 July 2024, when he was appointed as the Chief Executive Officer for Kizon Stores Ltd, a clothing and textile retailer operating in the ten (10) provinces of Zambia.

Wessels arrived in Zambia to take up the position on 1 July 2024 and he was entitled to a monthly salary of K135,000. He was paid a settling in allowance of K90,000. He was provided with a personal to holder motor car with a cylinder capacity of 3500cc, which the company acquired at a cost of K300,000 in October 2024. The company also paid for all the motor car running expenses which amounted to K5,250 per month.

On his arrival in Zambia on 1 July 2024, Wessels was accommodated at the Comfort Hotel and the company paid all the expenses relating to his accommodation and meals which amounted to K24,000 per month until 30 September 2024. On 1 October 2024, he shifted into a furnished apartment which the company leased on his behalf where he is expected to stay until the expiry of his three-year contract, when he will return to his home country. The company paid lease rentals of K18,000 per month and utility bills of K5,000 per month in relation to the apartment.

The company further paid the educational fees of K55,000 for his children, who were immediately enrolled at a famous Zambian International School upon his arrival into the country. Being an ardent golf lover he joined a local Golf club and the company paid his golf membership fees of K6,500 as well his membership fees to a local fitness gym amounting to K6,000. The company also paid his professional membership fees to the Institute of Directors amounting to K10,000.

Wessels is a great philanthropist and during his stay in Zambia in the tax year 2024, he made donations amounting to K30,000 to various approved public benefit organisations.

The following statutory deductions where made from his earnings by the company during the tax year 2024:

	K
Employee's NAPSA contributions	8,945
Employee's NHIMA contributions	8,100
Income tax under PAYE	285,223

Income from foreign sources

Wessels has investments in companies which are resident in the Southern African of his origin. The following income was credited to his Zambian account in respect of these investments in December 2024:

	K
Dividends income from foreign companies	29,250
Fixed deposit interest from foreign sources	21,600

The amount of the dividends was net of withholding tax at the rate of 35% deducted in the foreign country and the amount of the fixed deposit interest was net of withholding tax at the rate of 25% deducted in the foreign country. There is no double taxation agreement between Zambia and the foreign country. Any double taxation relief on the foreign income is given by way of unilateral relief.

Required:

(a) Explain giving reasons, why Wessels will be regarded as being resident and ordinarily resident in Zambia in the tax year 2024. (3 marks)

(b) Calculate the amount of income tax payable by Wessels for the tax year 2024. You should indicate by the use of zero (0) for all the emoluments that are not taxable. (17 marks)

[Total: 20 Marks]

QUESTION THREE

You are employed in a firm of Chartered Accountants and you have been provided with the following information relating to your clients.

Daniel Mulauzi

Daniel Mulauzi is in the business of transportation of passengers using local routes in Lusaka. In the charge year 2024, he used the following vehicles in his business as follows:

(1) A Toyota Hiace bus with a seating capacity of sixteen (16) passengers which operated from 10 January 2024 up to 31 December 2024.

(2) A Mitsubishi Rosa bus with a seating capacity of thirty–two (32) passengers which operated from January 2024 up to 30 September 2024 when he sold it.

(3) A Tata bus having a seating capacity of forty-eight (48) passengers which he bought in August 2024 and was operational from 15 August 2024 to 31 December 2024.

(4) A Toyota Vits car he used as a Taxi having a seating capacity of four (4) passengers which he purchased in October 2024 and was operational from 5 October 2024 up to 31 December 2024

Joe Mangalita

Joe wishes to commence a retail business in January 2025 as a sole trader. In order to raise capital, he made the following transfers of assets during the year ended 31 December 2024.

(1) On 10 January 2024, he sold a house for gross proceeds of K120,000 to his duly adopted child. The house had an open market value of K300,000 as determined by the Government valuations department. The House was acquired at a cost of K250,000 in 2019.Transaction costs incurred amounted to K6,500.

(2) He sold a residential Plot to his Father in law on 15 February 2024 for gross proceeds of K90,000. The plot had an open market value of K350,000 as determined by the Government valuations department. The plot was acquired at a cost of K270,000 in 2020. No transaction costs were incurred on the transaction.

(3) On 28 March 2024, he sold farm land for cash proceeds of K400,000 to a Lusaka business man. He acquired this farm land in 2016 at a cost of K280,000. The open market value of the land was determined to be K410,000 by the Government valuations department. He incurred professional fees amounting to K12,000 to complete the sale transaction.

(4) On 4 April 2024, he sold a Toyota Hilux Double Cab Van at a price of K500,000. He paid K17,000 for repairs. He acquired this vehicle in 2023 at a cost of K460,000. The open market value of the motor vehicle was K600,000.

(5) On 1 May 2024, he gifted a commercial building to his daughter who recently graduated from the University. The commercial building was built in 2021 at a cost of K520,000. The open market value of the commercial building at date ownership was being transferred to his daughter was determined to be K900,000.

(6) On 28 May 2024, he sold 5,000 equity shares he held in Muki Limited, a Zambian resident private company, for K18 per share. The nominal value of each share is K1. The open market value of the shares was determined to be K15 per share using the approved share valuation methods. He acquired the shares at a cost of K10 per share in 2017.

(7) On 4 August 2024, he sold 9,000 equity shares he held in Kinge Plc, a Zambian resident company listed on the LuSE, for K15.00 per share. The shares have a nominal value of K1 each. He acquired these shares in 2015 at a cost of K6.00 per share. The shares were quoted on the Lusaka Securities Exchange at K12 per share.

Required:

(a) Explain the types of persons required to pay presumptive taxes for transporters. (2 marks)

(b) Compute the total amount of tax paid by Daniel on his transportation business for the tax year 2024. (4 marks)

(c) Explain the property transfer tax implications arising on the capital transactions made by Joe. Your answer should include a computation of property transfer tax paid on each transaction if any. (14 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

Mary Kabanki intends to commence business on 1 January 2024. She will register her business as Chikwa General Dealers. She is considering setting up the business in one of the following sectors:

Health sector
Under this sector, all the supplies she will make will be zero rated for VAT purposes.

Mining sector
All the supplies she will make under the mining sector will be standard rated for VAT purposes.

Tourism sector
All the supplies she will make under this sector will be exempt for VAT purposes under this sector.

Additional Information
Regardless of which sector she will trade in, her estimated sales for the year ended 31 December 2024 will be K1,350,000, excluding VAT. Her VAT inclusive standard rated purchases will be K487,200 whilst her VAT inclusive standard rated operating expenses are expected to be K208,800 for the year ending 31 December 2024. All the purchases and expenses will be directly attributed to her supplies in each respective sector.

Kabanki would like to find out the VAT implications of trading in each of the above sectors and her VAT obligations if she were to register for VAT.

Required:

(a) Explain to Kabanki whether she will be required to register for VAT in each of the three (3) business sectors. (6 marks)

(b) Calculate the amount of VAT payable or refundable that will arise in each of the above sectors Kabanki is considering. (9 marks)

(c) State any five (5) obligations Kabanki will have under VAT regulations if she registers for VAT. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

You are employed in a firm of Chartered Accountants as a Tax Consultant. You have been assigned to deal with the tax affairs of Mukonka Logistics Ltd, a Zambian resident company engaged in transportation of goods. The company was incorporated on 1 January 2024, and it is owned by Zambian entrepreneurs.

The Managing Director of the company wishes to know the meaning of tax evasion and its consequences. The Director further wishes to know the amount of import taxes payable on the importation of motor vehicles. The following are the motor vehicles imported by the company:

(1) In January 2024, the company imported a second-hand truck at a cost of $10,500 (free on board). The truck has a Gross Vehicle Weight (GVW) of 4.5 tonnes and was manufactured in December 2018. The company paid insurance and freight costs up to the port of entry into Zambia amounting to $3,500 and $3,000 respectively.

(2) The company also imported a brand-new Toyota Vitz Hatchback car in January 2024 at a cost of $7,000 (free on board). The Vitz car has a cylinder capacity of 1,399 cc and was manufactured in July 2023. The company paid insurance and freight charges up to the port of entry into Zambia amounting to $3,000 and $2,000 respectively.

At the date of importation, the exchange rate as quoted by a local Bureau De Change averaged K26.80 per US$1. The Bank of Zambia exchange rate, which the Commissioner General approved, averaged K25.10 per US$1.

Required:

(a) Explain the meaning of tax evasion, and any four (4) practices of tax reduction which may constitute tax evasion. (6 marks)

(b) State three (3) consequences of tax evasion in the economy. (3 marks)

(c) Calculate the import taxes paid on the importation of:

(i) Second hand truck (5 marks)

(ii) Toyota Vitz car (6 marks)

[Total: 20 Marks]

END OF PAPER

CA2.4 TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) COMPUTATION OF PROVISIONAL INCOME TAX

	K
Provisional taxable retail profits	825,600
Provisional taxable farming profits	1,145,000
Total Provisional income	1,970,600
Provisional income Tax retail profits	
On first K61,200 x 0%	0
On next K24,000 x 20%	4,800
On next K25,200 x 30%	7,560
On excess (K825,600-K110,400) x 37%	264,624
	276,984
Provisional income Tax farming profits	
(K1,145,000 x 10%)	114,500
Provisional income tax	391,484
Provisional income tax per quarter: K391,484/4 =	97,871

Due dates

Quarter	Due Date	Amount
1	10 April 2024	K97,871
2	10 July 2024	K97,871
3	10 October 2024	K97,871
4	10 January 2025	K97,871

(b) COMPUTATION OF CAPITAL ALLOWANCES

	K		K
Tractor			
ITV b/f	0		
Proceed restricted to cost	(450,000)		
	(450,000)		(450,000)
Irrigation equipment			
Wear & tear allowance			0
Mitsubishi Delivery Truck			
Wear & tear allowance			
(K350,000 + K20,000) x 25%			92,500
Ford Ranger Double cab			
Cost	860,000		
Less total allowances			
(K860,000 x 20% x 2yrs)	(344,000)		
ITV b/f	516,000		
Proceeds	(490,000)		
Balancing allowance	26,000	X 60%	15,600
Farm dwellings			
Wear & tear allowance			
(K100,000 x 100 x 4)			400,000
Toyota Hilux			
Wear & tear allowance			
(K960,000 x 20% x 60%)			115,200
Banana plantation			
Wear & tear allowance			
(K260,000 x 10%)			26,000
Purchase of farm implements			
Wear & tear allowance			
(K380,000 x 100%)			380,000
Drilling of boreholes			
Wear & tear allowance			
(K230,000 x 100%)			230,000
			809,300

(c) COMPUTATION OF TAXABLE PROFIT

	K	K
Net profit as per accounts		896,000
Add		
Cynthia's salary	480,000	
PAYE penalties	61,500	
Repairs of family farm house	25,400	
Initial repairs of delivery truck	20,000	
Fees for transfer of title	18,500	
Fees on personal legal advice	22,400	
Political party donations	5,500	
Gift of farm produce	18,500	
Entertaining business associates	10,500	
Depreciation	799,000	
Loss on sale of Ford Ranger	26,000	
Motor vehicle running expenses		
(K55,500X1/3) x 40%	7,400	
		1,494,700
		2,390,700
Less		
Rental income	144,000	
Consultancy fees	35,700	
Royalties	51,850	
Fixed deposit interest	19,550	
Dividends	53,550	
Profit on sale of tractor	18,500	
Capital allowances	809,300	
		(1,132,450)
		1,258,250

(d) CYNTHIA

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	Total	Non-farming income	Farming income
Non -farming income	K	K	K
Taxable Profit from retailing	875,000	875,000	
Consultancy fees (K35,700 x 100/85)	42,000	42,000	
Royalties	61,000	61,000	
Total non-farming income	978,000	978,000	
Taxable profit from farming	1,258,250		1,258,250
Less loss relief	(367,500)		(367,500)
Final taxable income	1,868,750	978,000	890,750
Income Tax on non-farming income			
On first K61,200 x 0%		0	
On next K24,000 x 20%		4,800	
On next K25,200 x 30%		7,560	
On excess			
(K978,000 – K110,400) x 37%		321,012	
Tax on non-farming income			333,372
Income Tax on farming profits			
(K890,750 x 10%)			89,075
Total Income Tax liability			422,447
Less tax already paid			
WHT on Consultancy fees (K42,000 x15%)			(6,300)
WHT on Consultancy fees (K61,000 x15%)			(9,150)
Provisional income tax			(391,484)
			15,513

SOLUTION TWO

(a) Reasons why Smith Wessels is Resident and ordinarily resident

(i) Primarily, an individual is regarded as resident in Zambia if that person is physically present in Zambia for a period of not less than 183 days, in a charge year. Additionally, individuals who normally live in Zambia are resident and ordinarily resident in Zambia.

(ii) Similarly, individuals who come to Zambia with the intention of staying for more than 12 months are deemed to be resident and ordinarily resident in Zambia, from the date of arrival.

(iii) Smith Wessels will be regarded as resident and ordinary resident in Zambia because he was physically present in Zambia for a period of 184 days in the tax year 2024.

(iv) The fact that he has intention of staying in Zambia for a period that will exceed a period of 12 months having taking up the position as Chief Executive Officer on a three-year contract means that he will be regarded as resident and ordinary resident upon his arrival in Zambia on 1 July 2024.

(1 mark for each valid point up to maximum of 3 marks)

(b) WESSELS

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

Income from Zambian sources	K	K
Salary (K135,000 x 6)		810,000
Settling in allowance		90,000
Personal-to-holder car		0
Motor car running expenses		0
Hotel accommodation & meals		0
Subscription to the Institute of Directors		0
Lease rentals for the apartment (K18,000 x 3)		54,000
Utility bills (K5,000 x 3)		15,000
Education fees		55,000
Golf club membership fees		6,500
Fitness gym fees		6,000
		1,036,500
Less allowable deductions:		
Donations to approved public benefit organisation		(30,000)
		1,006,500
Income from foreign sources		
Dividends (K29,250 x 100/65)	45,000	
Interest (K21,600 x 100/75)	28,800	
		73,800
Taxable income		1,080,300
Computation		
First K61,200 @0%		0
Next K24,000 @20%		4,800
Next K25,200 @30%		7,560
Excess (K1,080,300 – K110,400) @37%		358,863

Income tax liability		371,223	
Less:			
Income tax paid under PAYE		(285,223)	
Double taxation relief:			
Dividends	15,463		(W1)
Interest	7,200		(W2)
		(22,663)	
Income tax payable		63,337	

Workings

(1) Double taxation relief on the dividends from foreign sources:
This will be the lower of:

(i) Foreign tax on the dividends

(K45,000 x 35% = K15,750; and

(ii) The Zambian Tax Charge computed as:

$\frac{45,000}{1,080,300} \times 371,223$

= K15,463

DTR will therefore be K15,463 being the lower amount.

(2) Double taxation relief on the debenture interest from foreign sources:
This will be the lower of:

(i) The foreign tax paid on the debenture interest:

K28,800 x 25% = K7,200 and

(ii) The Zambian Tax Charge computed as:

$\frac{28,800}{1,080,300} \times 371,223$

= K9,896

DTR will therefore be **K7,200** being the lower amount.

SOLUTION THREE

(a) Types of persons required to pay presumptive taxes for transporters

Individuals and partnerships carrying on businesses in the transport sector, for transportation of passengers, are liable to pay presumptive taxes, based on the seating capacities of their transportation vehicles.

(b) Computation of presumptive taxes to be paid by Daniel in the tax year 2024

	K
Toyota Hiace bus	
Presumptive tax =K540 x 4 quarters	2,160
Rosa Bus	
Presumptive tax =K 1,620 x 3 quarters	4,860
Tata Hiace bus	
Presumptive tax =K2,160 x 2 quarters	4,320
Toyota Vits	
Presumptive tax =K 270 x 1 quarter	270
Total presumptive taxes	11,610

(c) Property transfer tax implications are as follows:

(1) Joe will be required to pay property transfer tax on the transfer of the house to his duly adopted child at the actual price of the transfer. Property transfer tax is calculated at a rate of 5% of the realized vale. The realized value is the higher of consideration received and the open market value. In this case the realized value is K120,000 actual amount as duly adopted child falls under the immediate family members.
Property transfer tax payable will be: K120,000 x 5% = K6,000.

(2) Joe will be required to pay property transfer tax on the transfer of Plot to his father in law. Property transfer tax is calculated at 5% on the realized value. The realized value of the plot is K350,000 which is the higher of actual consideration.
Property transfer tax payable will be: K350,000 x 5% =K17,500.

(3) He sold a Farm Land to the business man. Property transfer tax will be payable on the transfer of the Farm Land and the realized value of the Farm Land is K410,000 which is the higher of actual consideration.
Property transfer tax payable will be: K410,000 x 5% =K20,500.

(4) He will not be required to pay property transfer tax on the transfer of the Toyota Hilux van. This is so because transfer of chattels falls outside the scope of property transfer tax.

(5) Property transfer tax will not be payable on the transfer of commercial building as a gift to his daughter. This is because the daughter falls in the category of immediate family members.

(6) Property transfer tax will be payable on the transfer of equity shares held in Muki Limited. The realised value is K18 x 5,000 =K90,000.
PTT therefore will be K90,000 x 5% =K4,500.

(7) Property transfer tax will not be payable on the transfer of equity shares held in Kinge Plc because transfer of shares listed on Lusaka Securities Exchange is exempt from property transfer tax.

SOLUTION FOUR

(a) Explanation on whether Kabanki will be required to register for VAT is as follows:

Health sector

If Kabanki sets up a business in the health sector where all her supplies will be zero rated for VAT purposes, she will be permitted to register for VAT because zero rated supplies are taxable supplies and the turnover of these supplies excluding VAT is expected to exceed the registration threshold of K800,000 for a twelve months' period.

Mining sector

If Kabanki sets up a business in the mining sector where all her supplies will be standard rated for VAT purposes, she will be required to register for VAT because the VAT exclusive turnover is expected to exceed the registration threshold of K800,000 for a period of twelve months.

Tourism sector

If Kabanki sets up business in the tourism sector where all her supplies are exempt supplies for VAT purposes, she will not be required to register for VAT because traders who make exempt supplies cannot register for VAT.

(b) Computation of VAT payable by Kabanki

Health sector

If Kabanki sets up a business in the health sector where all her supplies are zero rated, her VAT position will be as follows:

Output VAT	K	K
Zero-rated sales (K1,350,000 x 0%)		0
Input VAT		
Purchases (K487,200 x 4/29)	67,200	
Operating expenses (K208,800 x 4/29)	28,800	
		(96,000)
VAT refund		(96,000)

Mining sector

If Kabanki sets up a business in the mining sector where all her supplies are standard rated, her VAT position will be as follows:

Output VAT	K	K
Standard rated sales (K1,350,000 x 16%)		216,000
Input VAT		
Purchases (K487,200 x 4/29)	67,200	
Operating expenses (K208,800 x 4/29)	28,800	
		(96,000)
VAT payable		120,000

Tourism sector

If Kabanki sets up a business in the tourism sector where all her supplies are exempt supplies, she will not charge VAT and she will not be able to recover the input VAT incurred on purchases and operating expenses.

(c) Obligations if she registered for VAT

(i) She will be required to issue tax invoices for all supplies she makes.

(ii) She will be required to charge VAT on all taxable supplies that she makes.

(iii) She will be required to file VAT returns and pay VAT not later than the 18th day of month following the month to which the VAT and the return relate.

(iv) She will be required to display her VAT registration certificate on her business premises.

(v) She will be required to maintain proper accounting records and retain them for a minimum period of six (6) years.

(vi) She will be required to notify the Commissioner General of any changes in her business. For example, change of business address.

SOLUTION FIVE

(a) Tax evasion refers to the use of illegal means to avoid or reduce tax liabilities. The main aim of the tax payer practicing tax evasion is to defraud the government of the tax revenue. The illegal means of evading tax include the following:

(1) Deliberate concealment of income, including overstatement of tax credits or exemptions and suppression of profits
(2) Deliberate misrepresentation of material fact, manipulation of accounts, disclosure of unreal expenses for deductions, showing personal expenditure as business expenses.
(3) Hiding relevant documents which may help in the computation of taxable income, and eventually tax payable.
(4) Tax payers' failure to maintain proper accounting records of all the business transactions.
(5) Tax payer's failure to report taxes such as VAT, PAYE and withholding tax which are collected on behalf of the government.

(b) The following are the consequences of tax evasion:

(1) Loss of revenue for the government which directly affect its debt level and jeopardize its capacity to provide services and fund programmes that meet the needs of our ever-changing society.
(2) People who comply with the law shoulder a heavier tax burden than they should because they must compensate for others who participate in the underground economy.
(3) Businesses that fulfil their tax obligations face unfair competition from non-compliant businesses.

(c) Computation of import taxes

(i) Importation of second hand truck

	$
Cost	10,500
Insurance	3,500
Freight charges	3,000
VDP in US$	17,000
Exchange rate	x K25.10
VDP in ZMW	426,700

	Value of the vehicle	Import taxes
	K	K
Customs value	426,700	
Customs duty (specific)	15,453	15,453
	442,153	
Excise duty (specific)	11,847	11,847
	454,000	
Import VAT 16%	72,640	72,640
Total value of the vehicle	526,640	
Total import taxes		99,940

(ii) Importation of brand new Toyota Vitz car

$

Cost	7,000
Insurance cost	3,000
Freight charges	2,000
VDP in US$	12,000
Exchange rate	x K25.10
VDP in ZMW	301,200

	Value of the vehicle	Import taxes
	K	K
Customs value	301,200	
Customs duty @30%	90,360	90,360
	391,560	
Excise duty @20%	78,312	78,312
	469,872	
Import VAT @16%	75,180	75,180
Total value of the vehicle	545,052	
Total import taxes		243,852

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 21 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. Formulae, Present Value and Annuity tables are attached at the end of the paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is Compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

Tiger Plc is a manufacturing company that has recorded a historical high P/E ratio, which the Marketing Director has attributed to probably high financial gearing. Tiger Plc manufactures different class of clothing from the factories spread across the country. However, the directors of Tiger Plc are considering closing one of the business's factories located in the Southern part of the country where there is high unemployment. This is due to a reduction in demand for the type of clothes made at the factory in question in recent years.

The factory is leased, and there are still five (5) years of the lease remaining. The Directors are uncertain as to whether the factory should be closed immediately or at the end of the period of the lease. Lion Plc has offered to sublease the premises from Tiger Plc at a rental of K160,000 a year for the remainder of the lease period.

The machinery and equipment at the factory cost K5 million, and have a net book value of K550,000. However, if the factory is closed immediately, the machinery and equipment can be sold for scrap at K250,000. The working capital at the factory is K500,000, and could be liquidated for that amount immediately, if required. Alternatively, the working capital can be liquidated in full at the end of the lease period. Immediate closure would result in redundancy payments to employees of K215,000.

If the factory continues in operation until the end of the lease period, the following operating profits (losses) are expected:

Year	**1**	**2**	**3**	**4**	**5**
	K'm	K'm	K'm	K'm	K'm
Operating profit (loss)	1.2	(0.1)	1.05	(0.5)	(0.7)

The annual depreciation for machinery and equipment which has been included in the above figures is K850,000. The residual value of the machinery and equipment at the end of the lease period is estimated at K200,000. Redundancy payments are expected to be K170,000 at the end of the lease period if the factory continues in operation.

The company is financed by 1 million 50 ngwee ordinary shares with an ex div market value of K15 each and K1.5 million of 10% irredeemable loan inventory with an ex interest market value of K1,050 each issued at a par value of K1,000.The dividend which has just been paid is the constant amount of K3 per share. Tiger Plc applies its current cost of capital to investment projects of this nature. All cash flows occur at the end of the relevant period.
Ignore taxation.

Required:

(a) Calculate the current weighted average cost of capital for Tiger Plc. (8 marks)

(b) Evaluate whether Tiger Plc should close the factory immediately or continue until the end of the lease period using the Net Present Value technique. You should state the reason for including each relevant cash flow in your evaluation. (21 marks)

(c) Discuss the validity of the observation made by the marketing director in relation to the financial gearing. (11 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

BAU Ltd is a small service company which has carried out some research regarding its service provision. The research shows that the business could provide a standard service that it has recently developed or alternatively invest its money at the rate of 20% a year and earn K1.2 million after five (5) years. The provision of the service by BAU Ltd would require investment in a machine that would cost K1 million, payable immediately. The scrap value of the machine is estimated at K200,000. Sales of the service would be expected to occur as follows:

Year	Number of units
1	10,000
2	22,000
3	33,000
4	32,000
5	12,000

BAU Ltd expects to sale its new service for K50 per unit. The related variable cost of the service is K16 per unit. The allocated fixed costs are K100,000 per year. There are no project related annual incremental fixed costs. The company plans to finance the investment using the retained earnings. The corporate tax is payable at the rate of 30% per year and BAU Ltd uses a 20% discount factor to appraise its proposed investments.

Required:

(a) Evaluate whether BAU Ltd should invest in the machine or invest its money at the rate of 20%. (15 marks)

(b) Discuss the advantages and disadvantages of retained earnings as a source of finance for the proposed investment. (5 marks)

[Total: 20 Marks]

QUESTION THREE

Bright Hotels Ltd, a company in the hospitality industry based in Luanshya town is currently considering taking over a smaller private limited company, Moonga Hotels Ltd also in the same industry. The board of Bright Hotels Ltd is in the process of making a bid for Moonga Hotels Ltd but first needs to place a value on the company. Bright Hotels Ltd has gathered the following data:

Bright Hotels Ltd

Weighted average cost of capital	12%
Price earnings ratio	12
Shareholder's required rate of return	15%

Moonga Hotels Ltd

Current EPS	K0.37
Number of ordinary shares	5 million
Current dividend payment	K0.27/share

The following are the dividends for the past five (5) years:

Years	1	2	3	4	5
Dividends (K/share)	0.15	0.17	0.18	0.21	0.23

It is estimated that the shareholders in Moonga Hotels Ltd required a rate of return of 20% higher than the shareholders of Bright Ltd due to the higher level of risk associated with Moonga Hotels Ltd. Bright hotels Ltd estimated that cash flows at the end of the first year will be K2.5 million and these will grow at an annual rate of 5%. Bright Hotels Ltd also expects to raise K5 million in two (2) years' time by selling off hotels of Moonga Hotels Ltd that are surplus to its needs assuming the takeover is successful.

Required:

Given the above information, estimate values for Moonga Ltd using the following valuation methods:

(a) Price/earnings ratio valuation method (6 marks)

(b) Dividend growth valuation model (8 marks)

(c) Cash flow valuation method (6 marks)

[Total: 20 Marks]

QUESTION FOUR

The current assets and current liabilities of Yummy Foods Ltd at the end of December 2023 are as follows:

	K'000	**K'000**
Inventory	5,700	
Trade receivables	6,575	
		12,275
Trade payables	2,137	
Overdraft	4,682	
		(6,819)
Net current assets		5,456

For the year ended 31 December 2023, Yummy Foods Ltd had domestic and foreign sales of K40 million, all on credit, while cost of sales amounted to K26 million. Trade payables related to both domestic and foreign suppliers.

For the year to end of December 2023, Yummy Foods Ltd has forecast that credit sales will remain at K40 million while cost of sales will fall to 60% of sales. The company expects current assets to consist of inventory and trade receivables, and current liabilities to consist of trade payables and the company's overdraft.

Yummy Foods Ltd also plans to achieve the following target working capital ratio values for the year to the end of December 2024:

Inventory days:	60 days
Trade receivables days:	75 days
Trade payables days:	55 days
Current ratio:	1.4 times

Required:

(a) Calculate the working capital cycle (cash collection cycle) of Yummy Foods Ltd at the end of December 2023. (4 marks)

(b) Explain the implication of a positive and negative working capital cycle. (4 marks)

(c) Calculate the target quick ratio (acid test ratio) and the target ratio of sales to net working capital of Yummy Foods Ltd at the end of December 2024. (3 marks)

(d) Analyse the current asset and current liability positions for December 2023 and December 2024, and how the working capital financing policy of Yummy Foods Ltd would have changed. (9 marks)

[Total: 20 Marks]

QUESTION FIVE

FC Plc is a company in the manufacturing industry. FC Plc management is concerned with its increasing levels of gearing. An extract of its capital structure is provided below:

	KM
Ordinary Share Capital	20
Ordinary Share premium	6
Preference share capital	3
Reserves	5
Total	**34**
Debentures 10%	16
Trade payables	16
Bank overdraft	10
Total Equity & Liabilities	**76**

FC Plc is considering the purchase of a new machine to manufacture car batteries. FC Plc has had a market research survey conducted at a cost of K200,000. This predicts demand of 4,000 batteries per annum at a selling price of K750 per battery for ten (10) years.

The machine will cost K2 million, payable in two equal instalments on 1 January 2021 and 31 December 2022. Depreciation of K180,000 per annum over the next ten (10) years will be provided to write down the machine to its scrap value.

FC Plc will also make use of some existing equipment which originally cost K150,000 that has a book value of K75,000 and would cost K200,000 to replace. FC Plc is currently negotiating the sale of this machine for K100,000.

The variable cost per battery will be K600, and in accordance with the normal policy K250,000 of fixed overheads will be apportioned to the new product line per annum.

The machine will require its first service one (1) year after purchase, and from then on will be serviced every year. Each service costs K50,000. The machine will be brought into use immediately to build up inventory; however, the first revenues will not be received until 31 December 2022. The variable costs are payable annually at the same time as the revenues are received.

The management is also concerned about the management of trade receivables and it has engaged you to suggest how the company can manage its trade receivables.

Required:

Calculate the following:

(a) The Net Present Value at the company's cost of capital of 15%. (5 marks)

(b) The sensitivity of your advice based on the NPV computed in part (a) to errors in the estimates of:

  (i) The required rate of return. (2 marks)

  (ii) The selling price per unit. (3 marks)

  (iii) The level of demand. (2 marks)

  Your answer should also include a comment on the sensitivities calculated.

(c) Explain how the company can manage the trade receivables. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 x \frac{(1 + i_c)}{(1 + i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_aN(d_1) - P_eN(d_2)e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA 2.5: FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Cost of Capital:

Cost of equity = 3/15 x 100% = 20%

Cost of debt = 100/1050 x 100% = 9.52%

MV of equity= 1million X K15= K15million

MV of Debt = 1,050/1,000 x K1.5m = 1.575million

WACC = (15/ 16.575 x 20%) + 1.575/16.575 x 9.52% = **19%**

(b) Financial Evaluation

0	Note	0	1	2	3	4	5
		Km	K'm	K'm	K'm	K'm	K'm
Operating profit (loss)			1.2	(0.1)	1.05	(0.5)	(0.7)
Addback depreciation	1		0.85	0.85	0.85	0.85	0.85
Operating cash flows			**2.05**	**0.75**	**1.9**	**0.35**	**0.15**
Sale of machinery	2	(0.25)					0.2
Redundancy costs	3	0.215					(0.17)
Sublease rentals	4		(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Working capital invested	5	(0.5)					0.5
Net Cashflow		**(0.535)**	**1.89**	**0.59**	**1.74**	**0.19**	**0.52**
Discount@19%		1.000	0.840	0.706	0.593	0.499	0.419
Present value		**(0.535)**	**1.5876**	**0.41654**	**1.03182**	**0.09481**	**0.21788**
NPV		**2.81365**					

Based on the financial evaluation, the NPV is positive of **K2.8million** and therefore, the viable decision is to continue operations rather than close immediately. The shareholders would be better off if the directors took this course of action. This decision is likely to be welcomed by employees and government since it would avoid high unemployment levels to increase further.

Notes:

1) Each year's operating cash flows are calculated by adding back the depreciation charge for the year to the operating profit for the year. In the case of the operating loss, the depreciation charge is deducted.

2) In the event of closure, machinery could be sold immediately. Thus an opportunity cost of K0.25million is incurred if operations continue.
3) By continuing operations, there will be a saving in immediate redundancy costs of K0.215million. However, redundancy costs of K0.17million will be paid in four years' time.
4) By continuing operations, the opportunity to sublease the factory will be foregone.
5) Immediate closure would mean that working capital could be liquidated. By continuing operations this opportunity is foregone. However, working capital can be liquidated in four years' time.

(c) The P/E ratio measures the relationship between the market price of a share and the earnings per share. Its calculation involves the use of the share price, which is a reflection of the market's expectations of the future earnings performance, and the historic level of earnings.

The financial gearing of the firm expresses the relationship between debt and equity in the capital structure. A high level of gearing means that there is a high ratio of debt to equity. This means that the company carries a high fixed interest charge, and thus the amount of earnings available to equity will be more variable from year to year than in a company with a lower gearing level. Thus the shareholders will carry a higher level of risk than in a company with lower gearing. All other things being equal, it is therefore likely that the share price in a highly geared company will be lower than that in a low geared firm. The historic P/E ratio is dependent upon the current share price and the historic level of earnings. A high P/E ratio is therefore more likely to be found in a company with low gearing than in one with high gearing. In the case of Tiger Plc, the high P/E ratio is more probably attributable to the depressed level of earnings than to the financial structure of the company.

SOLUTION TWO

(a) Financial Evaluation Using NPV						
Year	0	1	2	3	4	5
	K	K	K	K	K	K
Selling price	-	50	50	50	50	50
Variable cost	-	16	16	16	16	16
Contribution per unit	-	34	34	34	34	34
Units	-	10,000	22,000	33,000	32,000	12,000
Contribution	**-**	**340,000**	**748,000**	**1,122,000**	**1,088,000**	**408,000**
Tax@30%	**-**	- 102,000	- 224,400	- 336,600	- 326,400	- 122,400
Investment Cost	- (1,000,000)	-	-	-	-	-
Scrap	-	-	-	-	-	200,000
Net Cash Flow	- (1,000,000)	238,000	523,600	785,400	761,600	485,600
Discount@20%	1	0.833	0.694	0.579	0.483	0.402
Present Value	**- (1,000,000)**	**198,254**	**363,378**	**454,747**	**367,853**	**195,211**
NPV	**579,443**					

The project can be accepted on financial grounds because the NPV (K686,518) is positive. This means the wealth of the shareholders will be increased by this amount.

Presentation						
		K				
Expected Future Value		1,200,000				
Discount@20% year 5		0.402				
Present Value		**482,400**				

Based on the financial evaluation, it would be profitable to invest in the production because the NPV is higher by K97,043 (K579,443 - K482,400).						

(b)

Advantages of using retained earnings

(i) Retained earnings are a flexible source of finance; companies are not tied to specific amounts or specific repayment patterns.
(ii) Using retained earnings does not involve a change in the pattern of shareholdings and no dilution of control.
(iii) Retained earnings have no issue costs.

Disadvantages of using retained earnings

(i) Shareholders may be sensitive to the loss of dividends that will result from retention for reinvestment, rather than paying dividends.
(ii) Not so much a disadvantage as a misconception, that retaining profits is a cost-free method of obtaining funds. There is an opportunity cost in that if dividends were paid, the cash received could be invested by shareholders to earn a return.

SOLUTION THREE

(a).

<u>Calculation of the value of Moonga Ltd. using P/E ratio</u>:

Moonga Ltd share price = 12 x 37n = K4.44

NOTE:

Any candidate who uses an adjusted P/E ratio in a 30% range should be given full credit.

We will assume that the market will expect Bright Ltd to achieve a level of return on Moonga Ltd comparable to that which it makes on its own assets. Hence:

Total market value = 5m x K4.44 = k22.2m

(b).

To use the historical growth model, we must find g and Ke

Here g is given by (0.27/0.15)^1/5 - 1

= 12.47%

Ke = 15% x 1.20 = 18%

Therefore, Po = (K0.27 x (1.1247))/(0.18 – 0.1247) = K5.49

Total market value = 5m x K5.49

=27.46

(c).

Using future cash flows and discounting these to infinity using Bright Ltd WACC as a discount rate:

Present value = (K2.5 m/ (0.12 – 0.05)) + (5/1.12^2) = K39.7 m

SOLUTION FOUR

(a)

Inventory days = 365 x (5,700/26,000) = <u>80 days</u>

Trade receivables days = 365 x (6,575/40,000) = <u>60 days</u>

Trade payables days = 365 x (2,137/26,000) = <u>30 days</u>

Working capital cycle of Yummy Foods Ltd = 80 + 60 – 30 = <u>110 days</u>

(b)

The working cycle of Yummy Foods Ltd is positive and the company pays its trade suppliers 110 days (on average) before it receives cash from its customers. This represents a financing need as far as Yummy Foods Ltd is concerned, which could be funded from a short-term or long-term source.

If the working capital cycle had been negative, Yummy Foods Ltd would have been receiving cash from its customers before it needed to pay its trade suppliers. A company which does not give credit to its customers, such as a supermarket chain, can have a negative working capital cycle.

Even if companies might generally prefer to be paid by customers before they have to pay their suppliers, the question of whether the working capital cycle should be positive or negative implies that companies are able to make such a choice, but this is not usually the case. This is because the length of the working capital cycle depends on its elements, which are inventory days, trade receivables days and trade payables, and these elements usually depend on the nature of the business undertaken by a company and the way that business is conducted by its competitors. The length of the working capital cycle is usually therefore similar between companies in the same business sector, but can differ between business sectors.

(c)

At the end of December 2024:

Cost of sales = 40,000,000 x 0.6 = K24,000,000

Inventory using target inventory days = 24,000,000 x 60/365 = K3,945,205

Trade receivables using target trade receivables days = 40,000,000 x 75/365 = K8,219,178

Current assets = 3,945,206 + 8,219,178 = K12,164,384

If the target current ratio is 1.4 times, current liabilities = 12,164,384/1.4 = K8,688,846

The target quick ratio (acid test ratio) = 8,219,178/8,688,846 = <u>0.95 times</u>

Net current assets at the end of December 2024 = 12,164,384 – 8,688,846 = K3,475,538

Target sales/net working capital ratio = 40,000,000/3,475,538 = <u>11.5 times</u>

(d)

The current liabilities at the end of December 2024, calculated in part (b), can be divided into trade payables and the forecast overdraft balance.

Trade payables using target trade payables days = 24,000,000 x 55/365 = <u>K3,616,438</u>.

The overdraft (balancing figure) = 8,688,846 – 3,616,438 = <u>K5,072,408</u>

Comparing current assets and current liabilities:

	Dec -2023		Dec -2024	
	K'000	K'000	K'000	K'000
Inventory	5,700		3,945	
Trade receivables	6,575		8,219	
		12,275		12,164
Trade payables	2,137		3,616	
Overdraft	4,682		5,072	
		6,819		8,688
Net current assets		5,456		3,476

The overdraft as a percentage of current liabilities will fall from 69% (4,682/6,819) to 58% (5,072/8,688). Even though the overdraft is expected to increase by 8.3%, current liabilities are expected to increase by 27.4% (1,869/6,819). Most of this increase is expected to be carried by trade payables, which will rise by 69.2% (1,479/2,137), with trade payables days increasing from 30 days to 55 days.

At the end of December 2023, current liabilities were 56% of current assets (100 x 6,819/12,275), suggesting that 44% of current assets were financed from a long-term source. At the end of December 2024, current liabilities are expected to be 71% of current assets (100 x 8,688/12,164), suggesting that 29% of current assets are financed from a long-term source. This increasing reliance on short-term finance implies an aggressive change in the working capital financing policy of Yummy Foods Ltd.

SOLUTION FIVE

(a) **NPV @ 15%**

Year		**CASH FLOW**	**DF @ 15%**	**PV**
0	Deposit	-1000	1	-1000
0	Sales proceeds foregone	-100	1	-100
2	Instalment	-1000	0.756	-756
2-11	Contribution	600	4.367 (W1)	2620
1-10	Service costs	-50	5.019	- 250.95
10	Scrap proceeds	200	0.247	49.4
	NPV			**562.5**
	Total			

Since the NPV is positive, the project should be accepted.

(W1) AF 2-11 = AF 1-10 X DF 1 YR

= 5.019 X 0.870

= 4.367

Note 1: It would be acceptable to omit this opportunity cost

Note 2: Annul contribution = (K750-K600) X 4000 = K600,000

Annual contribution – service costs = K600,000 – K50000 = K550,000

1

(b) **Sensitivity**

(i) **The required rate of return**

[(21.4 -15)/15] x 100 = 42.7%

(ii) **The selling price per unit**

The relevant cash flow affected is the present value of sales revenue. This equals:

K750 × 4,000 units × AF2-11

= K750 × 4,000 × 4.367 = K13,101

Therefore:

(K562/K1310) x 100 = 4.3%

(iii) **The level of demand**

The relevant cash flow affected is the present value of contribution. Therefore:

K562 / (K600 x 4.367) x 100 = 21.4%

(iv) **Comment on the sensitivities calculated.**

The actual return is 42.7% higher than the estimated cost of capital. This suggests there is ample buffer and should not be a cause of concern.

The level of demand could fall by 21.4% (from 4,000 units per annum to 3,142) before the project would no longer be worthwhile. It is therefore suggested that the market research is thoroughly reviewed to ensure the reasonableness of the conclusions drawn.

The greatest concern is over the selling price. If this fell by more than 4.3% (from K750 to just K718), the project would no longer be worthwhile. Again, it is recommended that the market research report is revisited in an attempt to assess the probability of this happening.

(c) Management of trade receivables

1. Introducing early settlement discounts – will help reduce the receivables balance and hence the cost.
2. Assessing the credit worthiness of both existing and new customers. To minimize the risk of irrecoverable debts occurring, a company should investigate the creditworthiness of all new customers immediately and should continue to assess existing customers periodically.
   Information for assessing creditworthiness may come from a variety of sources, such as bank references, trade references, competitors, published information, credit reference agencies. Company sales records or credit scoring.
3. Setting credit limit. Credit limits should be set for each customer to reflect both the amount of credit available and the length of time allowed before payment is due. A ledger account should be set up and monitored for each customer.

4. Invoicing and collecting overdue debts efficiently and effectively. Perhaps using a factoring or an in-house debt recovery unit. However, the cost of collection should be minimal.

END

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.6: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 19 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.

2. This paper is divided into TWO sections:

   Section A: One (1) compulsory scenario question.

   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. **Do NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u> – (COMPULSORY)

Absa Bank Zambia PLC- Raising the Bar in Corporate Social Responsibility

Absa Bank Zambia PLC is a leading financial institution in Zambia, offering an integrated set of products and services across corporate and investment banking, business banking with solutions for SMEs and retail banking. Absa Bank Zambia PLC is part of Absa Group Limited, one of Africa's largest diversified financial services groups. The Group has a presence in 12 African countries and representative offices in London and New York.

Absa is a truly African brand with global reach, inspired by the people they serve. The bank's focus is on bringing possibilities to life by pursuing avenues where it can positively impact the communities in which it operates, has resulted in award-winning success; Absa Bank Zambia PLC won the Global Banking and Finance award for the Best Corporate Social Responsibility (CSR) Bank in Zambia earlier this year. When Global Banking and Finance Review editor Wanda Rich interviewed Ndela Sichizya, Marketing & Communications Manager at Absa Bank Zambia, he confirmed how such recognition drives the organisation's motivation. In his response, he said it was very important to the bank as it adds to the proof points of our competitiveness and strong position as a leading bank in the country of Zambia. He further said "Absa Bank Zambia PLC has a strong and longstanding commitment to managing social impact and recognizing that the success of the bank is closely linked to that of the communities it operates in. As a bank, we remain focused on adding value in these communities in order to reach the grassroots."

Over the years, Absa Zambia's efforts have included partnering with the Catholic Relief Services and the Worldwide Fund for Nature to launch a Plant and Grow a Million Trees campaign, taking place over a period of three (3) years valued at K1,500,000. The bank has also partnered with World Vision to build a 1×3 classroom block valued at K350,000 at Chipapa Community School in Kafue District, as well as equipping the new block with desks, with the aim of positively impacting over 20,000 youths in the Chipapa catchment area.

In 2023, the bank awarded three-year scholarships to underprivileged students in Zambia to attend tertiary education to the value of ZMW 3.2 million. Ndela reported that 45 students out of the 51 successfully graduated. In April the bank made an additional investment of K450,000 to benefit six students from various tertiary institutions for three years. Under the education and skills umbrella, Absa Zambia undertakes various other initiatives aimed at empowering youths. Absa believes that as young people make a critical transition from education into the world of work or entrepreneurship; they need skills such as work skills, people skills, money skills and entrepreneurial skills to young people in primary, secondary and higher learning institutions.

The conversation moved to Absa's approach to business banking, Ndela highlighted the various ways in which the organization serves the distinct needs of SMEs. "We offer the full suite of business banking products with specific focus on asset-based finance, forex hedging, working capital solutions, purchase order finance, invoice discounting, trade finance, transactional banking, and vehicle and asset finance," he revealed. "We provide efficient systems and platforms to transact on, including dedicated relationship management, a wide branch network and a call center, as well as access to our digital and mobile solutions". He further stated that, 'Absa has invested in information technology to create a robust digital platform. This has enhanced accessible channels to provide business advisory, technical support and an array of networking opportunities and access to markets for SMEs".

Source: https://www.globalbankingandfinance.com

Required:

(a) Based on the information presented in the case above, Absa has adopted a 'Multiple Stakeholder Obligations Stance' on corporate social responsibility. Discuss how this approach contributes to Absa's competitiveness in Zambia. (10 marks)

(b) Absa bank's focus is on bringing possibilities to life and embraces social responsibility as part of the corporate philosophy. Demonstrate how carrying out social audits can help Absa achieve this objective. (10 marks)

(c) Discuss the three (3) levels strategic information systems. (15 marks)

(d) Explain how SMEs can leverage on the use of Information Communication Technology platform provided by Absa. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this Section.

Attempt any THREE (3) questions.

QUESTION TWO

(a) Government provides public goods and services for its citizens through its policies. It has the responsibilities of enforcing and creating a stable framework in which business can be done.

Required:

Identify three (3) important things that are evidence of quality government policy. (6 marks)

(b) Companies in crisis complain of unstable economy, stiff competition bad government policies and many other things as the reasons for poor performance. Company B business is in terminal decline and is facing closure or takeover as the situation stands.

Required:

Explain two (2) strategies for rapid change that will be more appropriate to redeem company B. (4 marks)

(c) Suggest to company B five (5) practical ways of reducing direct costs and five (5) ways for revenue generation. (10 marks)

[Total: 20 Marks]

QUESTION THREE

There are a lot of constraints companies identify and complain about which hinder the profitability, relationships inside and outside the organization due to a lot of misgivings and incorrect way of doing things by those in charge and other stakeholders. Much of these factors degenerates into operational risks.

Required:

(a) Explain how the OECD guidelines on corporate governance can be used to improve operations of such companies. (4 marks)

(b) Explain any five (5) corporate governance principles companies can adhere to in order to improve their relations inside and outside. (10 marks)

(c) Identify three (3) operational risks that can affect the company. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The procurement department of a state-owned enterprise, tasked with acquiring goods and services for public projects, is facing a significant ethical problem related to a potential conflict of interest. One of the senior officials in the procurement department has a close personal relationship with a key executive from Contractor A. This relationship could create a conflict of interest as Contractor A competes for a significant government contract alongside Contractor B.

Required:

Discuss five (5) ethical problems the senior official in the procurement department is likely to face. (10 marks)

(b) First Quantum Minerals' strategy on sustainability and social responsibility is an intrinsic part of everything the business does. First Quantum Minerals proactively invests in sustainability initiatives, employee well-being programs, and community development projects. The company conducts regular environmental impact assessments and implements eco-friendly practices in its operations.

Required:

Evaluate four (4) social responsibility approaches as suggested by Carol and assess with justification which FQM has adopted. (8 marks)

(c) Mention one (1) advantage of good ethics in management. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

The CEO at Mulley company expresses a lot of fear in the way he deals with issues. He sometimes says yes when he means no because he doesn't have the courage to take responsibility of the consequences of his actions as a leader. Currently the company is facing a big strategic problem and a decision has to be made because failure to do so may result in closure or takeover which will be more disastrous. Though the decision has high risks the returns are worth the risk.

Required:

(a) What three (3) factors should the director and organization depend on when approaching such a risk? (6 marks)

(b) Give three (3) examples of significant strategic risks that will have major impacts on costs, prices, products and sales and sources or finance used. (6 marks)

(c) Discuss four (4) corporate governance roles of the CEO in building up profitability of an organization (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.6: STRATEGIC BUSINESS ANALYSIS SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Absa's Multiple Stakeholder Obligations Stance on corporate social responsibility**:

Organizations that adopt this stance accept the legitimacy of the expectations of stakeholders other than shareholders and build those expectations into the organizations' stated purposes. This position is true with Absa and contribute to its competitiveness in the sense that:

(i) Absa Bank Zambia PLC has a strong and longstanding commitment to managing social impact and recognizing that the success of the bank is closely linked to that of the communities it operates in.

(ii) The argument for this approach is that performance should not only be measured simply through the financial bottom line. The bank's focus on bringing possibilities to life by pursuing avenues where it can positively impact the communities in which it operates has resulted in award-winning success; like the Global Banking and Finance award for Best CSR.

(iii) The other view is that long-term survival is dependent on social and environmental performance as well as economic (financial) performance. Absa Zambia's efforts have included partnering with the Catholic Relief Services and the Worldwide Fund for Nature to launch a Plant and Grow a Million Trees campaign, taking place over a period of three years, and valued at K1, 500,000.

(iv) Under the education and skills umbrella, Absa Zambia undertakes various other initiatives aimed at empowering youths. As young people make a critical transition from education into the world of work, they need skills that will prepare them.

(v) Creating linkages with the SMEs

(b) **Carrying out social audits can help Absa achieve this objective through**:

(i) Recognizing Absa Bank's rationale for engaging in socially responsible activities.

(ii) Identifying programmes which are congruent or are in alignment with the mission of the Absa Bank.

(iii) Setting objectives and priorities related to any social responsibility programme.

(iv) Specifying the nature and range of resources required.

(v) Evaluating Absa Bank's involvement in such programmes (past, present and future).

(c) Three levels of strategic information system are

- **Executive information system (EIS)**
  This system pulls data from internal and external sources and makes information available to senior managers in an easy to use form in order to make strategic decisions.
- **Management Information system(MIS)**
  This coverts data from mainly internal sources into information. This enables managers to make timely and effective decisions.
- **Decision support systems (DSS**)
  This system combines data and analytical models or data analysis tools to support semi structured and un structured decision making.

(d) **SMEs can leverage on the use of information communication technology platforms provided by Absa in the following ways:**

- Digital transactions
- Mobile banking
- Real-time/online transactions
- Financial skills
- Invoice discounting and trade finance

SOLUTION TWO

(a) The three (3) important provisions that are evidence of quality government policy are:

(i) Infrastructure – transport, communication networks, water
(ii) Social infrastructure -education, welfare safety net, law enforcement, equal opportunities
(iii) Market infrastructure- enforceable contracts, policing corruption.

(b) The most appropriate strategies for company B will be to reducing direct costs and revenue generation through productivity.

(c) the five (5) practical ways of reducing direct costs and five (5) ways for revenue generation.

REDUCING COSTS	INCREASE REVENUE
Cut costs or labor and senior management	Tailor marketing mix to key market segments
Improve productivity	
Ensure clear marketing focus on target market segments	Review pricing policies to maximize revenue
Financial controls	Focus activities on target market segments
Strict cash management controls	Exploit revenue opportunities if related to target segments
Reduce inventory	Invest in growth areas
Cut unprofitable products and services	

SOLUTION THREE

(a) The OECD definition of corporate governance, is a set of relationships between a company's directors, its shareholders and other stakeholders.it also provides the structure through which the objectives of the company are set, and the means of achieving those objectives and monitoring performance, are determined.

(b) The following are the corporate governance principles useful for companies' improvement of performance and relationships within and outside the organization:

(i) Transparency-open and clear disclosure of relevant information to shareholders and other stakeholders as well as concealing information when it may affect decisions. It means openness, discussions and default position of information provision rather than concealment.
(ii) Independence-avoidance of being unduly influenced by vested interests and free from any constraints that would prevent a correct course of action being taken. Ability to stand apart from inappropriate influences and free of managerial capture. Avoiding compromising cliques that are unproductive for the company.
(iii) Probity-honesty acting with integrity avoiding bribes
(iv) Responsibility-acceptance of credit or blame for governance decisions.it implies clear definition of the roles and responsibilities of the roles of senior management.
(v) Corporate accountability-an organization, directors and all responsible must be accountable for their actions for the growth of the organization.
(vi) Reputation- good ethical reputation based on morals truthfulness and honesty.
(vii) Judgement-making decisions that enhance the long-term prosperity through acquisition of knowledge on how to do business.
(viii) Integrity-straight forward dealing and completeness which will depend on those who are involved in the business.
(ix) Skepticism- not taking every thing as truth but be able to scrutinize everything
(x) Sustainability through the provision of focus, pursuing strategies that will bring progress

(c) The following are examples of risks that relate to the internal environment that are under the organization control:

Legal risk of breaching the laws in day-to-day activities e.g., operational risks

Information technology risk e.g., system failure resulting in the loss of a day's data

SOLUTION FOUR

(a) **Five (5) ethical problems the senior official in the procurement department is likely to face are**:

(i) **Extortion**: This is where an official threatens to close the operations of the company unless suitable payments are made.

(ii) **Bribery:** Refers to payments for services to which a company is not legally entitled.

(iii) **Grease money**: Some companies are sometimes unable to obtain services to which they are legally entitled because of deliberate stalling by some officials. Cash payment to the right people may be requested to oil the machinery of bureaucracy.

(iv) **Gifts:** In some cultures, gifts are regarded as an essential part of civilized negotiation. However, in other contexts this may appear dubious.

(v) **Conflict of interest**: A conflict of interest in business refers to a situation in which an individual's interest conflict with the interest of their employer.

(b) Carroll's approaches to social responsibility are:

(i) **Proactive strategy**: A strategy which a business follows where it is prepared to take full responsibility for its actions. Taking the initiative in formulating and putting in place new programs that serve as role models for industry.

(ii) **Reactive strategy**: This involves allowing a situation to continue unresolved until the public, government or consumer groups find out about it.

(iii) **Defense strategy**: This involves minimizing or attempting to avoid additional obligations arising from a particular problem.

(iv) **Accommodation strategy**: This involves taking responsibility for actions when i.e. perception that failure to act will result in government intervention.

NOTE: First Quantum Minerals has adopted a proactive strategy because sustainability and social responsibility is an intrinsic part of everything the business does. Also the business has taken initiative to invest in social responsibility without any pressure from stakeholder groups.

(c) Mention one advantage of good ethics in management

-Ethics encourages prudence in resource management

SOLUTION FIVE

(a) The following are the three (3) factors organization should depend on when approaching risk:

(i) Risk appetite - the nature and strengths of risk that an organization is willing to accept in the pursuit of value.
(ii) Risk attitude – the directors' views on the level of risk that they consider desirable. Different organizations have different attitude towards risk aversion and seeking.
(iii) Risk capacity – describes the maximum amount of risk the organization can bear.

(b)

(i) legal risks of breaching the law in day-to-day activities - operational risks also concerning stricter health and safety legislation
(ii) information technology risks system failure resulting in loss of a day's data, using obsolete technology
(iii) damage to the company's reputation

(c) The following are the corporate governance roles of the CEO that can build up profitability in an organization:

(i) they are responsible for the running of the business and for proposing and developing and overall commercial objectives in consultation with directors and the board.
(ii) Implementation of the decisions of the board and its committees
(iii) Developing the main policy statement.
(iv) Reviewing the business's organizational structure and operational performance

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 17 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. Present value and Annuity tables are attached at the end of this paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

The following consolidated financial statements relate to MIYACHI Plc Group for the year to 30 September 2024:

Consolidated Statement of Profit or Loss and Other Comprehensive Income for the year ended 30 September 2024.

		K'million
Revenue		20,000
Cost of sales		(17,000)
Gross profit		3,000
Other income		1,000
Distribution and Administrative costs		(1,880)
Finance cost		(140)
Share of associate profit after tax		360
Profit before tax		2,340
Taxation		(340)
Profit for the period		2,000
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Revaluation surplus		148
Other comprehensive for the year		148
Total comprehensive income		2,148
Profit for the period attributable to:		
Equity shares of parent		1,672
Non – controlling interest	328	
		2,000
Total comprehensive income attributable to:		
Equity shares of parent		1,820
Non – controlling interest		328
Total comprehensive income		2,148

Consolidated statements of financial position as at:

	30 September 2024	30 September 2023

		K'million		
K'million				
Assets				
Non – current				
Intangible	1,200		600	
Property, plant & equipment	7,000		5,836	
Goodwill	356		392	
Investment in associate	680		220	
Financial assets	584		684	
		9,820		7,732
Current				
Inventories	488		544	
Trade receivables	920		1,024	
Other receivables	144		180	
Bank	80		664	
		1,632		2, 412
Total assets	11,452		10,144	
Equity & liabilities				
Equity				
Equity share K1 each	3,800		3,120	
Share premium	1,280		560	
Revaluation reserve – Land	412		264	
Retained earnings	2,200		624	
Non – controlling interest	1,600		1,036	
Total equity	9,292		5,604	
Non – current liabilities				
Deferred tax	336		436	
Defined benefit plan	192		180	
13% Loan notes	548		1,628	
		1,076		2,244
Current liabilities				
Trade payables	592		1,600	
Current tax	340		480	
Interest payable	152		216	
		1,084		2,296
Total liabilities	2,160		4,540	
Total equity & liabilities	11,452		10,144	

The Directors of MIYACHI Plc group are confused over several issues relating to the application of IAS 7 Statement of Cash Flows. They wish to know the principles applied by the International Accounting Standards Board in determining how cash flows are classified, including how entities determine the nature of the cash flows being analysed.

Additional information:

(1) MIYACHI Plc acquired 90% of the equity shares of Nchelenge Plc five (5) years ago for cash consideration amounting to K2,412 million when the fair value of Nchelenge's net assets stood at K2,600 million. The fair value of non-controlling interest at that date was K284 million.

On 10 September 2024, MIYACHI Plc disposed of 70% of the equity shares in Nchelenge Plc for cash consideration amounting to K2,356 million. This left MIYACHI Plc with a 20% equity holding in Nchelenge Plc whose fair value stood K600 million. MIYACHI Plc is able to exercise significant influence in Nchelenge Plc in respect of the remaining holding.

The fair value of identifiable net assets of Nchelenge Plc at the date of disposal were:

	K'million
Trade receivables	264
Bank	48
Trade payables	(168)
Current tax	(112)
Property, plant and equipment	2,600
Inventory	128

The gain on the disposal of 70% equity shares in Nchelenge Plc has been included in other income.

(2) Intangible assets relates to MIYACHI Plc's development expenditure that met recognition criteria in accordance with IAS 38 Intangible assets. During the year to 30 September 2024, the company incurred additional amounts of development expenditure. The development project is not yet complete and hence, there has been no amortization of development costs to date.

(3) It is MIYACHI Plc's policy to value non–controlling interest at fair value. Consolidation goodwill impaired during the year to 30 September 2024 relates to Mwense Plc, a subsidiary that was acquired four years ago. MIYACHI Plc has owned 88% of the equity shares in Mwense Plc since acquisition. The goodwill in other subsidiaries did not suffer any impairment losses.

(4) Kwacha is the functional and reporting currency of MIYACHI Plc. As part of hedging strategies, MIYACHI Plc maintains two accounts, Zambian Kwacha account and United States Dollars account. The company has maintained a balance of $1 million in the dollar account since 30 September 2023. This figure has been appropriately translated to Kwacha with any exchange gains and losses reported as part of other income in profit or loss.

Kwacha to dollar exchange rates:

30 September 2023	K23.20
Average rate for the year to 30 September 2024	K24.00
30 September 2024	K24.80

(5) An item of plant, with a carrying amount of K400 million, was disposed of on 21 August 2024 by MIYACHI Plc. As at 30 September 2024, 20% of the disposal proceeds had not been settled. This amount is shown as other receivables. The gain on disposal has been included in other income. There were no other separate disposals of items of property, plant and equipment during the year to 30 September 2024.

Depreciation charged to cost of sales for the year ended 30 September 2024 amounted to K1,080 million.

(6) The financial assets figure relates to financial assets classified as 'fair value through profit or loss' in accordance with IFRS 9 Financial Instruments. During the year to 30 September 2024, MIYACHI Plc sold for cash, a financial asset with a carrying amount of K95 million at a profit of K200 million. The gain on disposal and any re-measurement gain or loss on the financial assets has been included in other income. There were no additions to financial assets in the year to 30 September 2024.

(7) MIYACHI Plc acquired 18% of Kawambwa Plc's equity shares for cash consideration amounting to K100 million on 30 December 2023. MIYACHI Plc is able to exercise significant influence in Kawambwa Plc as a result this holding. Investments in associate were not impaired during the year to 30 September 2024. There were no disposals of investments in associates during the year to 30 September 2024.

(8) MIYACHI Plc operates a funded defined benefit pension plan to which it paid total contributions amounting to K60 million during the year to 30 September 2024. Pension benefits amounting to K144 million were paid during the year to 30 September 2024. There were no re-measurement gains or losses in respect of the net plan liability during the year. The interest on the net plan liability for the year to 30 September 2024 amounted to K19 million and has been reported within finance costs in the statement of profit or loss.

(9) On 20 May 2024, MIYACHI Plc acquired 76% of the equity shares of Mansa Plc for cash consideration amounting to K2,520 million. The fair value of non-controlling interest at that date was K640 million. The fair value of Mansa Plc's identifiable net assets at that date were as follows:

K'million

Deferred tax	(232)
Current tax	(64)
Property, plant and equipment	3,120
Inventory	92
Trade payables	(152)
Trade receivables	204
Bank	72

(10) During the year to 30 September 2024, MIYACHI Plc converted K200 million carrying amount of loan notes into equity, in addition to issuing further shares for cash consideration.

(11) In addition to the information contained above, the balance of other income as reported in the statement of profit or loss relates to interest received from financial assets.

Required:

(a) Discuss the principles behind the classification of cash flows in the statements of cash flows. (4 marks)

(b) Prepare a consolidated statement of cash flow of MIYACHI Plc Group using the indirect method for the year ending 30 September 2024 in accordance with the requirements of IAS 7 'Statement of cash flows'. (36 marks)

Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) Questions.

QUESTION TWO

The Conceptual Framework for Financial Reporting (March, 2018) was formulated for the purpose of assisting the International Accounting Standards Board (IASB) in developing and revising International Financial Reporting Standards (IFRSs) that are based on consistent concepts, to help preparers to develop consistent accounting policies for areas that are not covered by a standard or where there is choice of accounting policy, and to assist all parties to understand and interpret IFRSs. The framework acknowledges that historical basis is the most commonly used measurement basis. Even in times of inflation, published financial statements continue to be prepared under the historical cost convention despite its alleged limitations. The Directors of Twalumba plc believe that some International Financial Reporting Standards are not consistent with the Framework. They have made the following comments:

Comment 1.
The recognition of an expense in respect of an equity-settled share-based payment scheme, in accordance with IFRS 2 Share-based Payments, is not in line with the Framework's definition of an expense.

Comment 2.
Internally generated brands meet the definition of an asset, and so the fact that IAS 38 Intangible Assets prohibits their recognition in the financial statements contradicts the Framework.

Comment 3.
The recognition of a liability in respect of non-refundable deposits received from customers, in accordance with IFRS 15 Revenue from Contracts with customers, is not in line with the Framework's definition of a liability.

In addition to the above comments, the directors of Twalumba Plc have presented you with their **proposed** accounting policies of various items of the financial statements for your review. Some of the proposals include the following:

Proposal 1
Inventories will always be shown at cost.

Proposal 2
There will be no amortisation of intangible assets.

Proposal 3
Change in depreciation rate from 20% to 25% will be applied retrospectively.

Required:

(a) Discuss criticisms of historical cost accounting and some advantages associated with its use. (5 marks)

(b) Discuss the extent to which each of the Directors' comments is valid. (9 marks)

(c) Assess the appropriateness of the proposed accounting policies as stated above. (6 marks)

[Total: 20 Marks]

QUESTION THREE

Brownies Plc is based in Luapula and it prepares financial statements to 31 December each year. The following transactions for the year ending 31 December 2024 have arisen for Brownies Plc and you have been approached as a Financial Reporting Consultant to advise on the appropriate accounting treatment.

Transaction one (1)
On 26 February 2025, Brownies Plc received communication from a customer who owed K6 million as at 31 December 2024 that they had filed for bankruptcy and unlikely to pay the balance. Further, on 13 March 2025, Brownies Plc made an issue of shares to existing shareholders for a cash consideration of K10 million. Also, on 31 December 2024, Brownies Plc had not included the impact of an outstanding legal action against a local government for losses suffered as a result of incorrect enforcement of local business regulations. On 18 March 2025 Brownies Plc was awarded damages of K60 million by the courts. Brownies' financial statements for the year to 31 December 2024 were authorized for issue on 31 March 2025. (6 marks)

Transaction two (2)
On 1 April 2024, the directors of Brownies Plc. decided to sell Brownies Plc.'s fishing division. The division was available for immediate sale, but Brownies Plc. had not succeeded in disposing of the operation by 31 December 2024 (the reporting date). Brownies Plc. identified a potential buyer for the division, but negotiations were ongoing; the directors are, however, certain that the sale will be completed within the next two (2) months.

The fishing division's carrying amount at 1 April 2024 was K1,686,000 and it had a fair value of K1,646,000. Brownies Plc.'s directors have estimated that Brownies Plc. will incur consultancy and legal fees for the disposal of K110,000. (7 marks)

Transaction three (3)
Brownies Plc purchased a non-current asset on 1 January 2020 at a cost of K60,000. At that date, the asset had an estimated useful life of ten years. Brownies Plc does not revalue this type of asset, but accounts for it on the basis of depreciated historical cost. At 31 December 2021, the asset was subject to an impairment review and had a recoverable amount of K32,000. At 31 December 2024, the circumstances which caused the original impairment to be

recognised have reversed and are no longer applicable, with the result that the recoverable amount is now K80,000. (7 marks)

Required:

Advise the appropriate accounting treatment of each of the above transactions by Brownies Plc for the year ended 31 December 2024.

[Total: 20 Marks]

QUESTION FOUR

(a) **Mwense Plc**

On 1 June 2022 Mwense Plc, granted to each of its senior management team either 260,000 shares in Mwense Plc or a cash equivalent equal to the market price of 240,000 shares. The right is conditional on the Managers remaining in employment at Mwense Plc until 31 May 2024. Mwense Plc reserves the right to choose whether to settle the scheme in cash or shares. However, in the past, Mwense Plc has always opted to settle similar schemes in cash. If the shares are issued, they must be held for two (2) years from 31 May 2024 before being sold.

Mwense Plc's price per share was K3,400 on the 1 June 2022 and K3,600 on 31 May 2023. It rose to K3,700 on 20 June 2023, the date the financial statements were authorised for issue. The fair value of the shares alternative was calculated at K3,240, K3,440 and K3,540 at the same dates respectively. At 1 June 2022, there were 120 members of the senior management team. As at 1 June 2022 no members of the team were expected to leave during the vesting period. However, due to a buoyant job market, eight (8) Managers left in May 2023 and as at 31 May 2023, a further twelve (12) Managers were expected to leave within a few months of the year end

Required:

Explain the appropriate accounting treatment of the above transaction for the year ended 31 May 2023. (7 marks)

(b) **Mansa Plc**

On 1 January 2023, Mansa issued 10,000 bonds with a face value of K100 each at a market price of K95. Bond brokers charged fees totaling K18,000 in relation to the bond issue. The bonds carry a coupon rate of 5% and are redeemable in three (3) years at face value. The bonds have an original effective interest rate of 7.62%. Coupon payments are due on 31 December each year over the term to maturity of the bonds.

In determining appropriate accounting treatment of the bonds, Mansa Plc has concluded that the bonds are a non derivative liability and that the fair value option must not apply. This is in accordance with IFRS 9 Financial Instruments. However, there was some confusion about how the bonds should be accounted for. Currently, the cash received from the bond issue net of the broker fees has been recognized as a non-current liability. The first coupon payment on 31 December 2023 has been expensed (included in finance costs) in arriving at profit before tax.

Required:

Explain how the bonds must be accounted for in Mansa Plc's financial statements for the year to 31 December 2023, including any adjustments to the draft financial statements. (6 marks)

(c) **Kawambwa Plc**

On 1 October 2021, Kawambwa Plc granted share options to 400 senior executives. The options will vest on 30 September 2024 subject to the following conditions:

Each executive will be receiving 2,000 options if the cumulative profit in the three (3) year period from 1 October 2021 to 30 September 2024 exceeds K60 million. If the cumulative profit for this period is between K70 million and K80 million, then 3,000 options will vest. If the cumulative profit for the period exceeds K80 million, then 4,000 options will vest. If an executive leaves during the three-year vesting period, then that executive would forfeit any rights to share options. Notwithstanding the above, no options will vest unless the share price at 30 September 2024 exceeds K10.

Details of the fair values of the share options and the shares to which they relate at relevant dates are as follows:

Date	**Fair value per Share K**	**Fair value per Option K**
1 October 2021	8.00	1.00
30 September 2022	8.80	1.20
30 September 2023	9.20	1.50

The estimate of the cumulative profit for the three-year period ending 30 September 2024 was revised each year as follows:

Date	**Expected profit for the three-year period K' million**
1 October 2021	64
30 September 2022	78
30 September 2023	90

On 1 October 2021, none of the relevant executives were expected to leave in the three-year period from 1 October 2021 to 30 September 2024 and none left in the year ended 30 September 2022. As at 30 September 2022, no executives were expected to

leave in future. However, 20 executives left unexpectedly on 30 September 2023. As at 30 September 2023, none of the remaining executives are expected to leave before 30 September 2024. Kawambwa correctly reflected this arrangement in its financial statements for the year ended 30 September 2022.

Required:

Explain how Kawabwa Plc must account for the share options in its financial statements for the year to 30 September 2023 showing amounts to report in profit or loss and in the statement of financial position. (7 marks)

[Total: 20 Marks]

QUESTION FIVE

Zamtech Plc is a retailer of various Computer spare parts, based in Muchinga province. The company was formed eight (8) years ago and it sells its spares to various customers through its retail outlets. The Directors of Zamtech Plc were concerned about the company's overall performance in 2024 accounting period attributable mainly to stiff competition face from various competitors.

The following are the financial statements of Zamtech Plc for the year to 31 December 2024 and 31 December 2023.

Statement of profit or loss and other comprehensive income for the year ended 31 December:

	2024	2023
	K'000	K'000
Revenue	10,240.00	10,560.00
Cost of sales	(4,032.00)	(3,168.00)
Gross profit	6,208.00	7,392.00
Other income	192.00	264.00
Distribution cost	(1,880.00)	(1,848.00)
Administrative cost	(3,360.00)	(3,168.00)
Finance cost	(600.00)	(342.00)
Profit before tax	560.00	2,298.00
Taxation	(112.00)	(460.00)
Profit for the period	448.00	1,838.00
Other comprehensive income		
Items that will not be reclassified to profit or loss:		
Revaluation gain/(deficit) on property	180.00	(60.00)
Re-measurement of defined benefit pension plans	126.00	(46.00)
Total comprehensive Income for the year	754.00	1,732.00

Statement of financial position as at 31 December:

	2024	2023
	K'000	K'000
Assets		
Non-current assets		
Property, plant and equipment	8,260.00	5,706.00
Investment property	2,198.00	1,742.00
Other intangible assets	1,210.00	1,108.00
	11,668.00	8,556.00
Current assets		
Inventory	396.00	528.00
Trade Receivable	720.00	824.00
Cash & cash equivalents	308.00	112.00
	1,424.00	1,474.00
Total Assets	13,092.00	10,030.00
Equity and liabilities		
Equity		
Equity shares of K2 each	1,536.00	1,108.00
Other components of equity	1,124.00	68.00
Retained earnings	2,098.00	2,290.00
Total Equity	4,758.00	3,466.00
Liabilities		
Non-current liabilities		
Employee benefits	1,240.00	1,626.00
Deferred Tax	990.00	686.00
Unsecured bank loan	4,800.00	3,028.00
	7,030.00	5,340.00
Current liabilities		
Trade payables	624.00	708.00
Taxation	80.00	174.00
Finance cost payable	600.00	342.00
	1,304.00	1,224.00
Total Liabilities	8,334.00	6,564.00
Total equity and liabilities	13,092.00	10,030.00

Additional information:

(1) Zambia is currently experiencing a drought induced energy shortage, caused by the EI Nino and climate change. This has adversely impacted hydro power generation and supply of electricity across the country. As part of its strategy during this challenging period, Zamtech Plc resolved to switch to alternative sources of energy. It acquired seven (7) generators in January 2024 for use when there is power outage due to power rationing by the Bonipower utility company. In the second half of the year, power rationing was increased from 12 hours to 16 hours every day.

(2) Zamtech Plc imports all its spare parts. Average exchange rate in 2024 accounting period was K28 per United States Dollar compared to K24 per United States Dollar in 2023 accounting period.

(3) Zamtech Plc uses fair value model as allowed by IAS 40 for its investment property and revaluation model as allowed by IAS 16 property, plant and equipment. There were no disposals of investment property and property, plant and equipment in both financial years.

(4) Zamtech Plc reduced selling price of spares by 25% effective March 2024. Sales volume of spare parts was 24,000 and 16,000 in 2024 and 2023 respectively.

(5) Other income relates to rental income received from investment property. Zamtech Plc lost a major customer in May 2024 and has not been replaced.

(6) On 1 October 2024, Zamtech Plc opened four (4) new outlets. These were in rented buildings. The number of outlets was 16 and 20 in 2023 and 2024 respectively.

(7) Zamtech Plc paid out interim dividends of K500,000 in the year to 31 December 2024 and final dividends of K700,000 in the year to 31 December 2023. Further the company proposed to pay a final ordinary dividend of K144,000 for the year. The proposed dividends have not yet been accounted for.

(8) A meeting is scheduled with Zamtech's main suppliers to discuss a reduction in costs for bulk orders.

Required:

Write a report to the Directors that evaluates the position and performance of Zamtech Plc for the year to 31 December 2024. **(you answer should include relevant calculations).**

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2 w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$\text{WACC} = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 \text{x} \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 \text{x} \frac{(1 + i_c)}{(1 + i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA 3.1: ADVANCED FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

There are two classification principles which could be used to determine the classification of cash flows. Cash flows can be classified in accordance with the nature of the activity to which they relate which is most appropriate to the business of the entity, or cash flows can be classified consistently with the classification of the related or underlying item in the statement of financial position. Generally speaking, cash flows in IAS 7 should be classified in accordance with the nature of the activity to which they relate which is the most appropriate to the business of the entity. The following elements could be used to help identify the nature of the cash flows being analysed:

– the cause or reason for which the cash flow is received or paid,

– the counterparty who receives or pays the cash flow,

– whether cash flows result from transactions which enter into the determination of profit or loss, or

– the predominant source of cash flows.

The statement of cash flows analyses changes in cash and cash equivalents during a period. Cash and cash equivalents comprise cash in hand and demand deposits, together with short-term, liquid investments which are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value. IAS 7 does not define 'short term' but does state 'an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition'. Consequently, equity or other investments which do not have a maturity date are excluded from cash equivalents unless they are, in substance, cash equivalents. This three-month time limit is somewhat arbitrary but is consistent with the concept of insignificant risk of changes in value and a purpose of meeting short-term cash commitments.

(b)

MIYACHI Group
Consolidated statement of cash flow for the year ended 30th September 2025.

	K'million	K'million
Cash flow from operating activities		
Profit before tax		2,340
Adjustments for:		
Interest expense		140

Goodwill impairment loss W8		60
Depreciation charge		1,080
Share of associate profit		(360)
Other income		(1,000)
Decrease in inventories 544+92-128-488		20
Decrease in trade receivables 1,024+204-264-920		44
Decrease in other receivables		180
Decrease in net pension liability (192-180-19)		(7)
Decrease in trade payables 1,600+152-168-592		(992)
Cash generated from operations		1,505
Tax paid W9		(764)
Interest paid W10		(185)
Net cash inflow from operating activities		556
Cash flow from investing activities		
Dividends from investment in associate W7	600	
Cash paid to acquire property, plant and equipment W6	(1,976)	
Proceeds from disposal of plant (80/20 x K144)	576	
Cash paid to acquire Mansa Plc 2,520-72	(2,448)	
Proceeds from disposal of Nchelenge Plc 2, 356-48	2, 308	
Interest from financial assets W4	83.4	
Proceeds from disposal of financial assets (200+95)	295	
Intangible asset (1,200 -600)	(600)	
Cash paid to acquire shares in Kawambwa Plc	(100)	
Net cash outflow from investing activities		(1,261.60)
Cash flow from financing activities		
Dividends paid to non-controlling interest W1	(104)	
Dividends paid W11	(96)	
Repayment of 13% loan notes 1,628-548-200	(880)	
Proceeds from issue of shares 3,800-200+1,280-3,120-560	1,200	
Net cash inflow from financing activities		120
Cash flow changes in cash and cash equivalent		(585.6)
Non-cash flow changes in cash & cash equivalents 24.8-23.20		1.6
Total changes in cash & cash equivalents (decrease)		(584)
Opening cash and cash equivalent		664

Closing cash and cash equivalent	80

Workings

W1 Dividends paid to NCI - Non-controlling interests A/c

	K' million
Opening balance	1,036
Other comprehensive income	328
Mansa Plc	640
Nchelenge Plc 284+{10% x (2,760-2,600)}	(300)
Dividends paid (bal. fig)	(104)
Closing balance	1,600

W2 Disposal of 70% equity shares in Nchelenge Plc

	K'million
Proceeds	2, 356
Fair value of retained interest	600
Non-controlling interest W1	300
Fair value of net assets at disposal:	
Tangible assets	(2,760)
Goodwill (2,412+284)-2600	(96)
Gain on disposal	400

W3 Disposal of plant

		K'million
Proceeds	100/20 x K144m	720
Carrying amount		(400)
Profit on disposal		320

W4 Disposal of financial assets

	K'million
Proceeds (bal.fig)	295
Carrying amount	(95)
Profit on disposal	200

Therefore, Cash interest received = 1,000-400-320-200- 1.6(24.8-23.20) = K78.4million

W5 Interest received from financial assets

		K'million
Other income in PL		1,000
Remove:		
Gain on diposal of Subsidiary (W2)	(400)	
Exchange gain on USD cash 24.8-23.2)X1	(1.6)	
Gain on disposal of plant (144/o.2-400)	(320)	
Gain on disposal of financial assets	(200)	
Remeasurement of financial assets (584+95-684)	5	

	83.4

W6 Property, plant and equipment

	K'million		
Opening balance	5,836		
Revaluation surplus	148		
Mansa Plc	3,120		
Nchelenge Plc	(2, 600)		
Disposal of plant		(400)	
Depreciation charge		(1,080)	
Cash paid (bal.fig)			1,976
Closing balance			7,000

W7 Investment in associate

	K'million
Opening balance	220
Nchelenge Plc	600
Kawambwa Plc	100
Statement of profit or loss	360
Dividends received (bal.fig)	(600)
Closing balance	680

W8 Goodwill

	K'million
Opening balance	392
Mansa Plc (2,520+640)-3,040	120
Nchelenge Plc (2412+284) -2,600	(96)
Impairment loss (bal.fig)	(60)
Closing balance	356

W9 Taxation

	K'million
Opening balances 436+480	916
Statement of Profit or loss	340
Mansa Plc 232+64	296
Nchelenge Plc	(112)
Cash paid (bal.fig)	(764)
Closing balance 336+340	676

W10 Interest paid

	K'million
Opening balance	216
Statement of profit or loss (140-19)	121

Cash paid (bal.fig)	(185)
Closing balance	152

W11 Dividends paid to owners of parent - Retained earnings A/c

	K'million
Opening balance	624
Profit for period attributable to parent	1,672
Dividends paid (bal.fig)	(96)
Closing balance	2,200

SOLUTION TWO

(a)
Historical cost accounting (HCA) has been criticised on the following grounds.

(i) Reported results may be distorted as a result of the matching of current revenues with costs incurred at an earlier date. The full distribution of profits calculated on that basis may result in the distribution of sums needed to maintain capital. A distribution which appears well covered when measured against historical cost profit may appear much less well covered when compared with a measurement of profit that takes account of changing prices.
(ii) The amounts reported in a statement of financial position in respect of assets may not be realistic, up-to-date measures of the resources employed in the business.
(iii) As a result of (i) and (ii), calculations to measure return on capital employed may be misleading.
(iv) Because holding gains or losses attributable to price level changes are not identified, management's effectiveness in achieving operating results may be concealed.
(v) There is no recognition of the loss that arises through holding assets of fixed monetary value and the gain that arises through holding liabilities of fixed monetary value.
(vi) A misleading impression of the trend of performance over time may be given because no account is taken of changes in the real value of money.

HCA has remained the principal basis for preparing accounts in most countries for many years, so it must have some **advantages**. Among these advantages are the following:

(i) It is more objective than adjusted-price methods. The cost of a non-monetary asset is a fact established in the past, whereas the current value of such an asset is a subjective opinion, whether the basis for the value is replacement cost, net realisable value or economic value.
(ii) HCA is well established with users aware of its limitations when they make decisions from accounts drawn up under this basis.
(ii) In times of low inflation, such as the present, HCA's problems are less serious. If one believes that inflation has been permanently squeezed out of the world economy, then there is little advantage in shifting to methods of current value accounting.

(b)

Share-based payment

The Framework defines an expense as a decrease in economic benefits that result in decreases in equity (other than those related to distributions to equity participants). In the case of a cash-settled share-based payment, the entity has an obligation to pay cash in the future. This therefore meets the definition of an expense. However, in the case of an equity-settled share-based payment, the entity is providing equity as payment for the good/service. There is therefore no reduction in an asset or increase in a liability in accordance with the definition of an expense. Indeed an equity-settled share-based payment has no net impact on equity (expenses reduce retained earnings, but the other side of the transaction increases other components of equity). Although IFRS 2 Share-based Payment requires the recognition of an expense for equity-settled schemes, it can be argued that this is not in accordance with the definitions in the Framework.

Internally generated brands

The Framework defines an asset as a resource controlled by an entity as a result of a past event that will lead to a probable inflow of economic benefits. Brands, whether internally generated or purchased, do therefore meet the definition of an asset. The Framework says that items are recognised in the financial statements if they meet the definition of an element, and if the cost or value can be measured reliably. The cost of an internally generated brand cannot be measured reliably. This is because the costs of developing a brand cannot be separated from the day-to-day running costs of the business. Therefore, the fact that internally generated brands are not recognised in the financial statements is consistent with the Framework.

Non-refundable deposits.

The Framework defines a liability as a present obligation from a past event which is expected to result in an outflow of economic benefits to settle the obligation. In this example, there is no obligation to repay the cash because the deposit is nonrefundable. Consequently, it is sometimes believed that the deposit amount should not be recognised as a liability but, instead, as income. Nonetheless, there is an obligation to transfer the related goods or services to the customer and these represent economic benefits, thus appearing to meet the definition of a liability. However, it can be argued that this obligation to transfer goods/services should be recognised at the cost to the entity of providing the goods/services rather than the price that was charged to the customer.

(c)

Appropriateness of proposed accounting policy

IAS 8 '*Accounting Policies, Changes in Accounting Estimates and Errors'* is applied in selecting and applying accounting policies, accounting for changes in estimates and reflecting corrections of prior period errors. The standard requires compliance with any specific IFRS applying to a transaction, event or condition, and provides guidance on developing accounting policies for other items that result in relevant and reliable information. However, Twalumba PLc is allowed to use judgement where a transaction, event or condition is not adequately covered by accounting standards or where it feels that full compliance to a particular accounting standard will make the financial statements so misleading that it would conflict with the objective of financial statements set out in the Framework.

Inventories

The fundamental principle of IAS 2 '*Inventories*' is that inventories should be carried at the lower of cost or net realisable value. Thus carrying inventories only at cost may be in conflict with fundamental principle. However, if the directors strongly believe that the goods that Twalumba Plc will be dealing in will always have a higher net realisable value, then the policy may not negatively affect valuation of inventories. Further, the policy may be acceptable if the goods will only be supplied by Twalumba PLc; that is if the company will be a monopoly. In that case the company will always be assured of selling above its cost.

Intangible

Amortisation of intangible assets over their useful lives should reflect the pattern in which economic benefits are expected to be enjoyed by Twalumba PLc though straight line method is a default. Moreover, classification of intangible assets into indefinite life and finite life will determine whether the asset is subject to amortisation. If Twalumba PLc classifies its intangible assets as indefinite life then no amortisation will be required. However, if they are classified as finite life then they will need to amortise them. Thus the policy will only be in conformity with the provisions of IAS 38'*Intangible assets*' when Twalumba PLc will only have intangible assets classified as indefinite life, in which case the impairment reviews must be done annually.

Change in depreciation

IAS 8'*Accounting Policies, Changes in Accounting Estimates and Errors*' states that changes in accounting policies and corrections of errors are generally retrospectively accounted for, whereas changes in accounting estimates are generally accounted for on a prospective basis. The change in depreciation rate (20% to 25%) refers to a change in accounting estimate. It should therefore be accounted for prospectively. If on the other hand Twalumba PLc forgot to charge depreciation in the financial statements of prior period, then that error would be accounted for retrospectively.

SOLUTION THREE

Transaction one

Communication received confirms the debt becomes irrecoverable before financial statements are authorized. It needs to be accounted for as an adjusting event hence at 31 December, receivables to be reduced by K6 million and an expense of K6 million as irrecoverable debt to reduce retained earnings.

The issue of shares after the reporting date is a non-adjusting event and so no adjustments to any element as at 31 December 2025 but a disclosure note describing the transaction – issue of shares and the financial value of K10 million so as to make users more informed of transactions yet to affect entity's financial statements in the near future.

The court case is an adjusting event so Brownies Plc will have to recognize a receivable as at 31 December 2025 and other income in profit or loss for the year ended 31 December 2025 to the value of K60 million.

Transaction two

The assets of the fishing division should be valued at the lower of its carrying amount and fair value less costs of disposal. They had satisfied the requirements of non current assets held for sale as per IFRS 5. This is the net fair value of K1,536,000 (K1,646,000-K110,000) being lower than carrying amount of K1,686,000.

Since the asset was not sold yet by 31 December 2025, it should be shown at the lower of net fair value of K1, 536,000 in the statement of financial position under current assets.

Further, Brownies Plc would be required to recognize an impairment loss of K150,000 (K1,686,000-K1,536,000) in the statement of profit or loss for the year ended 31 December 2025.

Transaction three.

An asset or a cash-generating unit(CGU) is impaired if its recoverable amount is below the value currently shown on the statement of financial position, the asset's current carrying amount. Recoverable amount is taken as the higher of: fair value less costs to sell (net realisable value), and value in use. The Value in use is determined by estimating future cash inflows and outflows to be derived from the use of the asset and its ultimate disposal (if any), and applying a suitable discount rate to these cash flows. The objective is to set rules to ensure that the assets of an entity 'are carried at no more than their recoverable amount.

Year ended 31 December 2022	K
Asset cost at 1 January 2021	60,000
Depreciation to 31 December 2022 (60,000 × 2/10)	(12,000)
Carrying amount at 31 December 2022	48,000
Recoverable amount	(32,000)
Impairment loss	**16,000**

The asset is written down to K32, 000 and the impairment loss of K16, 000 is charged to profit or loss. The depreciation charge per annum in future periods will be K4, 000 (K32, 000 × 1/8).

Year ended 31 December 2025	K
Carrying amount at 31 December 2022 as above	32,000
Depreciation to 31 December 2025 (3/8)	(12,000)
Carrying amount at 31 December 2025	20,000
Recoverable amount	80,000
Impairment loss	Nil.

There has been no impairment loss. In fact, there has been a complete reversal of the first impairment loss. The asset can be reinstated to its **depreciated historical cost** i.e. to the carrying amount at 31 December 2025 if there **never had been an earlier** impairment loss.

	K
Asset historical cost at 1 January 2021	60,000
Historical cost depreciation to 31 December 2025 (5/10)	(30,000)
Historical carrying amount at 31 December 2025	30,000
Impaired carrying amount as above	20,000
Reversal of impairment loss	10,000

The **reversal of the** loss is recognised by increasing the **asset** by **K10, 000** (K30, 000 – K20, 000) and recognising a gain of K10, 000 in profit or loss. It should be noted that the whole K16, 000 original impairment cannot be reversed. The impairment can only be reversed to a **maximum amount of depreciated historical cost, based upon the original cost** and estimated useful life of the asset. Take note, there is no reversal of impairment loss on goodwill.

SOLUTION FOUR

(a)

This is a share-based payment transaction where the entity (Mwense plc) has a choice of settlement. IFRS 2 *Share-based Payment* requires the transaction to be treated as cash-settled if there is a present obligation to settle in cash. If there is no obligation, the transaction should be treated as equity settled. Here, Mwense plc's past practice of always settling in cash has created a valid expectation in employees that they will receive cash. Therefore, there is a constructive present obligation for Mwense plc to settle in cash and Mwense plc should account for the scheme as a cash settled transaction.

Cash-settled share-based payments are accounted for as follows:

- An expense should be recognised over the vesting period (2 years)
- A corresponding liability should be recorded in the statement of financial position
- The liability should be measured at fair value and this fair value updated each year end to give the best estimate of amount to be paid
- Any expected leavers over the vesting period should be removed from the number of employees as they will not receive the share-based payment (the best estimate at each year end should be used).

Calculation

The fair value of the liability at the year-end is valued using the year end share price as this represents the cash value at that date.

The liability as at 31 May 2024 and the corresponding expense to be recognised in profit or loss for the year ended 31 May 2024 is calculated as follows:

[(120 managers – 20 leavers) x 240,000 shares x K3, 600 year end fair value x ½ vested] **= K43, 200, 000, 000.**

(b)

Under the IFRS 9 amortised cost model, the financial liabilities should initially be recognised at the fair value including transaction costs. Therefore, at initial recognition the bonds should be measured at:

	K
Fair value of consideration received	950,000
Less: transaction costs	(18,000)
Carrying amount	932,000

The initial recognition and measurement of the financial liabilities has been carried out correctly in Mansa's financial statements.

The journal entires are

Dr Cash	932,000	
Cr Financial Liability		932,000

Subsequently, the bonds must be measured at amortised cost using the effective interest rate method as follows:

Carrying amount at 1.1.2024		932,000
Finance cost to charge in PL for the y/e 31.12.2024	7.32%X932,000	68,222
Less cash paid	5%XK10,000X100	(50,000)
Carrying amount to report in SFP at 31.12.2024		950,222

(c)

The share optons granted to Kawambwa's senior executives constitute a share based payment an must therefore be accounted for in accordance with IFRS 2 Share Based Payments. It is an equity settled payment.

At 30 September 2024, Kawambwa Plc must recognise a Share Based Payment (SBP) Reserve within equity based on the total SBP expense accrued to date. The SBP reserve at 30.9.2024 will be computed as follows:

(400-20-0)X4000X1X2/3 = K1.01 million.

In profit or loss for the year to 30 September 2024, Kawambwa must report a SBP expense computed as follows:

	K'm
SBP reserve at 30.9.2024	1.01
Less SBP reserve at 30.9.2024 (400-0)X3000X1X1/3	(0.4)
SBP expense for the year	0.61

SOLUTION FIVE

To: The Directors – Zamtech Plc
From: Accountant
Date:
Subject: **Evaluation of position and performance of Zamtech Plc**

1.0 Introduction

The evaluation of position and performance of Zamtech Plc for the year ended 31 December 2025 is based on the financial and non-financial information for two years. Ratio analysis used is based on calculations in the workings and additional information provided in the question.

2.0 Evaluation of position and performance

2.1 Profitability

Revenue has decreased by 3%**W1** despite increased sales volume from 16,000 to 24,000 spare parts representing 50%**W1**. The decrease in revenue was mainly attributable to reduction in selling price by 20% which was not over turned by increased sales volume. The increase in sales volume showed the positive effects of selling price reduction as supported by increased number of spare parts sold per retail outlet from 1,000**W1** to 1200**W1**. However, it could also be attributable to four (4) newly opened retail outlets. There is need therefore to establish contribution of newly opened outlets to total sales volume to appreciate the real impact of reduction in selling price.

Gross profit margin reduced from 70% to 61% **W1**. Similarly, operating profit margin reduced from 25% to 11% **W1**. The decrease in the said ratios is owing to 20% reduction in selling price and increased cost of spare parts arising from depreciation of the Kwacha from K24/US$ to K28/US$. In addition, distribution and administrative costs were increase by opening of four (4) retail outlets and increased load shading hours from 12 to 16 which increased amount spent on fuel to run the generators. The new outlets increased rental and wage costs in addition to overhead costs. The profitability ratios have also been adversely affected by a reduction in other income from K264,000 to K192,000 caused by loss of a major customer. Moreover, recalculation of net operating profit, ignoring other income K192,000 in 2025 and K264,000 in 2024 and increase in fair value of investment property of K456,000 (K2, 198,000 – K1,742,000), would give K512,000 in 2025 and K2, 376,000 in 2024. This would change net operating profit margin to 5% and 23% in 2025 and 2024 respectively.

Return on capital employed has shown a similar downward trend. It has drastically reduced from 30% to 10% **W1**. This is attributable to investment in property, plant and equipment, their revaluation gain, increase in fair value of investment property and a reduction in the company's profitability.

2.2 Liquidity and working capital

Current ratio has reduced from 1.20 to 1.09**W2**. Quick ratio on the other hand has slightly increased from 0.77 to 0.79 **W2**. The change in these ratios is mainly due to decrease in inventory and trade receivables and increase in interest payable. Further, trade receivables' collection period reduced from 28 days to 26 days **W2**. Zamtech Plc's trade payables' payment period also reduced from 82 days to 56 days **W2.**

Inventory turnover has reduced from 61 days to 36 days **W2**. This is attributable to increased level of business activity. This is because sales volume increased from 16,000 to 24,000. Moreover, inventory figure also reduced from K528,000 to K396,000. The reduction in inventory turnover was also attributable to increased cost of sales.

2.3 Gearing Ratios

The gearing level in relative terms has increased from 47% to 50%**(W3)** as can be seen from capital gearing ratios and from 87% to 101%**(W3)**. However, in absolute terms debt has increased from K3,028,000 to K4,800,000 representing 59%**(W3)**. This has had the effect of reducing interest cover from 7.72 times to 1.93 times **(W3)**. This is also attributable to reduction in the company's profitability. Adversely, additional loan of K1,772,000**(W3)** was obtained at increased interest rate of 15%**(W3)** compared to 11%(K342,000/K3,028,000) in 2024. This showed an increase in Zamtech Plc's risk profile.

2.4 Investor Ratios

Zamtech Plc's earnings per share has reduced from K3.32 to K0.58 **(W4)**. This is caused by reduction in the company's profitability and increased number of equity shares. Dividend per share reduced from K1.26 to K0.65 **(W4).** The current dividend per share is still not sustainable because of the worsened company's profitability.

3.0 Conclusion

Zamtech Plc's position and performance has declined drastically. The company's profitability has declined despite increase in sales volume while liquidity and working capital management has shown improvement. The company needs to work on its profitability and manage its debt to sustainable levels. However, it seems Zamtech Plc considers the decline in position and performance short – term judging by the material investment in property, plant and equipment.

Appendix

WORKINGS

		2025	2024
W1	**Profitability Ratios**		
	Percentage increase in revenue = Change in revenue / Revenue for last year		
	= (10,240 - 10,560) / 10,560	(320.00) / 10,560.00	
		-3%	
	Percentage increase in sales volume = Change in sales volume / Volume for last year		
	= 24,000 – 160000 / 16,000	8 000.00 / 16 000	
		50%	
	Average sales per outlet		
	= Total sales / Number of outlets	10,240.00 / 20.00	10,560.00 / 16.00
		K512.00	**K660.00**
	Average sales volume per outlet		
	= Total sales volume / Number of outlets	24 000.00 / 20.00	16 000. / 16.00
		1 200.00	1 000.00
	Return on capital employed = PBIT / CE = (560+600): (2,298+342) / (13,092-1, 304): (10,030 - 1,224)	1,160.00 / 11,788.00	2,640.00 / 8,806.00
		10%	**30%**

Operating profit margin = PBIT = (560+600): (2,298+171)	1,160.00	2,640.00
Revenue 10,240 : 10,560	10,240.00	10,560.00
	11%	**25%**
Gross profit margin = GP =	6,208.00	7,392.00
Revenue	10,240.00	10,560.00
	61%	**70%**
Asset turnover = Revenue	10,240.00	10,560.00
Capital employed	11,788.00	8,806.00
	0.87	**1.20**
Total Expenses as a percentage of sales= Expenses	5,840.00	5,358.00
Revenue	10,240.00	10,560.00
	57%	**51%**

W2 Liquidity and working capital Ratios

Current ratio = Current assets	1,424.00	1,474.00
Current liabilities	1,304.00	1,224.00
	1.09	**1.20**
Quick ratio = Current assets – inventory	1,028.00	946.00
Current liabilities	1,304.00	1,224.00
	0.79	**0.77**
Inventory days = Inventory x 365 days	396 x 365	528 x 365
Cost of sales	4,032.00	3,168.00
	36 days	**61 days**
Receivable collection period = Trade receivables x 365 days	720 x 365	824 x 365

Revenue	10,240.00	10,560.00
	26 days	**28 days**
Payables payment period = Trade payables x 365 days	624 x 365	708 x 365
Cost of sales	4,032.00	3,168.00
	56 days	**82 days**

W3 Gearing Ratios

Capital gearing = Prior charge capital x 100%	4,800.00	3,028.00
Prior charge capital + Equity	9,558.00	6,494.00
	50%	**47%**
Debt to Equity ratio = Debt x 100%	4,800.00	3,028.00
Equity	4,758.00	3,466.00
	101%	**87%**
Interest cover = PBIT	1,160.00	2,640.00
Interest charges	600.00	342.00
	1.93	**7.72**
Percentage increase in debt= current debt-debt for last year	1,772.00	
debt for last year	3,028.00	
	59%	
Percentage increase in interest= current interest-interest for last year	258.00	
interest for last year	342.00	
	75%	
Interest rate for additional loan= current interest-interest for last year	258.00	
additional loan	1,772.00	

15%

W4 Investor Ratios

Earnings per share = Profits attributable to equity shareholders / Weighted average number of shares	448.00 / 768	1,838.00 / 554
	0.58	**3.32**
Dividend cover = Profits attributable to equity shareholders / Dividends paid	448.00 / 500.00	1,838.00 / 700.00
	0.90	**2.63**
Dividends per share = Dividends paid / Number of shares	500.00 / 768	700.00 / 554
	0.65	**1.26**

END SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATION

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 20 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:
   Section A: One (1) compulsory question.
   Section B: Four (4) Optional questions. Attempt any three (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – COMPULSORY

You are an Audit Manager in Fumba & Associates (Fumba), responsible for the audit of Zamefa Co (Zamefa), a company which produces copper cables on the Copperbelt which are sold to manufacturers of electrical equipment.

It is the first time that you have managed this audit client, taking over from the previous Audit Manager. You have just set up the audit team to conduct the audit of Zamefa. The company has been an audit client of your firm for the last five (5) years and no annual evaluation of continuance has been conducted. Quality control systems are not in place in Fumba & Associates and you have been tasked to ensure that quality control systems are introduced in the firm. In the pre-audit team meeting you emphasised the need for conducting a quality audit.

The audit planning for the year ended 30 June 2024 is about to commence, and the audit Engagement Partner has informed you that he will be meeting with the other Partners to discuss forthcoming audits and related issues, and he is aware that you recently had a meeting with the Finance Director of Zamefa where the matters below were discussed.

Business overview

Zamefa's principal business activity is the production of copper cables. Some of the key materials used in production are insulation materials, all of which are imported. In January 2024 a contract with a new foreign supplier based in South America was signed, and all of the company's insulation materials are now supplied under this contract. Purchases are denominated in United States Dollars (USD), but the company does not use foreign exchange hedging in relation to its imports of insulation materials.

Zamefa has two (2) factories, one (1) of which produces copper cables for the international market, and the other produces copper cables for the local market. 60% of its copper cables are exported, but the export market is suffering due to competition from new cheaper producers. Most domestic sales are made under contract with approximately ten (10) customers.

Current developments

In early May 2024, production ceased for a month at the factory which manufactures for the local market. A number of major customers returned goods sold to them, claiming faults in the copper cables supplied. On inspection, it was found that the insulation materials used were unsuitable for the production of copper cables, so they were melting.

All customers were contacted immediately and, where necessary, products recalled and replaced. The faulty copper cables remaining in inventory have been identified and separated from the rest of the cables.

To diversify and respond to the competition, work recently started on a new product which will ensure that Zamefa meets new Zambia Bureau of Standards (ZABS) regulatory requirements which prohibit the use of certain insulation materials, which will come into force in December 2024. A loan of K300 million with an annual interest rate of 10% was negotiated with the bank. The loan is repayable over five (5) years, and K275 million is for funding the capital expenditure necessary for the new project, while K25 million of the loan is a convertible loan note.

Several of Zamefa's Executive Directors including the Finance Manager left in May 2024, to set up a company specialising in the production of television sets (TVs). This new company is not considered to be in competition with Zamefa's operations. The directors left on good terms, and replacements for the directors have been recruited.

An extract from draft statement of comprehensive income for the year ended 30 June 2024 and 30 June 2023 is as follows:

	2024	**2023**
	K' Million	K' Million
Revenue	100	125
Operating profit	20	40
Profit/ (loss) before tax	(5)	5

The draft statement of financial position as at 30 June 2024 shows total assets of K1.8 billion, and cash at bank is K1.3 million. Based on draft figures, the company's current ratio is 1.2, and the quick ratio is 0.5.

The Finance Director informed you that Zamefa submitted an insurance claim on 1 June 2024 for K50 million which he estimated as a receivable from the insurance firm to cover the amount receivable in relation to insured copper cables which were returned by major customers. The returned copper cables cannot be sold elsewhere, hence the insurance claim. The insurance claim of K50 million has been recognised in the financial statements and is part of the receivables figure in the statement of financial position at 30 June 2024.

Other matters

One (1) of Fumba's Audit Managers recently attended interviews for the position of Finance Manager at Zamefa. He has been offered the position and has taken it up before the conclusion of the audit of the financial statements of Zamefa.

At Zamefa's most recent board meeting, the audit fee was discussed. The board members expressed concern over the audit fee, given the company's loss for the year. The board members resolved to request the audit firm to consider agreeing on a contingent based fee on an agreed percentage of operating profit as against the fixed amount earlier agreed upon.

Fumba is facing competition from other audit firms, and the partners have been considering how the firm's revenue could be increased. A suggestion has been made that the Engagement Partners can be encouraged to sell non-audit services to audit clients by including in their remuneration package a 15% bonus for successful sales of non-audit services.

The audit of the financial statements of Zamefa is nearing completion. In your review of the audit working papers you noted that no analytical reviews were conducted as part of the overall review at the end of the audit. From the discussions with the Audit Senior it is clear that he does not understand the importance and use of analytical procedures at this stage considering that the audit team obtained sufficient appropriate audit evidence during the substantive audit stage.

Required:

(a) Evaluate five (5) business risks faced by Zamefa Co. (10 marks)

(b) Identify and explain five (5) risks of material misstatement to be considered in planning the audit of Zamefa Co. (10 marks)

(c) Describe four (4) audit procedures that should be performed, in respect of the insurance claim. (6 marks)

(d) Discuss three (3) ethical matters in the audit of the financial statements of Zamefa and for each matter suggest a suitable safeguard. (6 marks)

(e) (i) Describe the use of analytical procedures as part of the overall review at the end of the audit of Zamefa. (2 marks)

(ii) Explain two (2) other stages of the audit when analytical procedures could have been used in the audit of Zamefa. (2 marks)

(f) Describe four (4) ways in which the quality control provisions of ISA 220 *Quality control for audits of historical financial information* will have been met in the audit of the financial statements of Zamefa. (4 marks)

[Total 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

You are an Audit Manager in Vanga & Associates (Vanga), responsible for the audit of the Nganga Group, which has been an audit client of your firm for several years. The group companies all have a financial year ending 30 June 2024, and you are the group auditors. The group has three (3) local subsidiaries and one (1) newly acquired foreign subsidiary (a wholly owned subsidiary) located in South Africa.

Your firm audits all components of the group with the exception of a newly acquired foreign subsidiary, which will be audited by the component auditors, based in South Africa.

You are currently reviewing the audit working papers and draft audit report on the financial statements of one (1) of the local subsidiaries within the Nganga Group. The draft financial statements recognise revenue of K8.5 million, profit before tax of K1 million, and total assets of K175 million. During the year, the subsidiary's Head Office was extended by the self-construction of a new building at a total cost of K5 million. Included in the costs capitalised are borrowing costs of K100, 000 incurred during the six (6) month period of construction. A loan of K4 million carrying an interest rate of 5% was obtained for the construction on 1 August 2023, when construction started. The new building was ready for use on 1 February 2024 and began to be used on 1 April 2024. Its estimated useful life is fifteen (15) years.

A prospective audit client has invited Vanga to submit an audit proposal (tender document) for their consideration. This client started its operations five (5) years ago, but has grown rapidly, and this will be the first year that an audit of its financial statements will be undertaken. Your audit firm is so excited, because having this client as your audit client will help your firm to generate more revenue, and you have been asked to review the audit tender document before it is sent to the prospective audit client. In their invitation to tender for audit services, it is clearly indicated that the prospective client is looking for an audit firm that will offer a competitive audit fee and quality audit services.

Required:

(a) (i) Explain four (4) factors that should be considered in placing reliance on the work of component auditors. (4 marks)

(ii) Describe the extent of involvement of the group engagement team in the audit of the South African subsidiary assuming it is a significant component. (3 marks)

(b) (i) Discuss three (3) matters that should be considered by the audit team regarding the audit of the construction of the new building. (3 marks)

(ii) Describe the audit evidence you expect to find in the working papers regarding the audit of the construction of the new building. (3 marks)

(c) Recommend five (5) matters expected to be included in the audit proposal other than that relating to the audit fee. (5 marks)

(d) Explain the ethical guidance on lowballing according to the IFAC Code of Ethics. (2 marks)

[Total 20 marks]

QUESTION THREE

Jumbo Co (Jumbo), an audit client of your firm, is a large privately owned manufacturing and trading company whose operations involve production of a range of orange drinks and selling of Boom, a cleaning product. The directors of Jumbo have been seeking to diversify their drinks portfolio as a growth strategy. To achieve this, they have recently identified Yoyo Co (Yoyo) as a potential acquisition. Yoyo produces lemon drinks, therefore, this will be a good diversification. Preliminary discussions have been held between the directors of the two (2) companies with a view to the acquisition of Yoyo.

This will be the first acquisition, and the management team of Jumbo has recommended that a due diligence review should be undertaken. Your firm has been asked to perform a due diligence review on Yoyo prior to acquisition.

You have been provided with the following information regarding Yoyo:

(1) Yoyo is owner-managed, with four(4) of the eight(8) board members being the original founders of the company, which was incorporated twenty(20) years ago. The company recently acquired a piece of land on which a new Head Office is to be built. The company has grown rapidly in the last six (6) months and has experienced a significant increase in its revenue. To fund this growth, a significant bank loan was obtained.

(2) Yoyo enjoys a good reputation, though this was tarnished this year by a complaint by a famous politician who sued the company claiming that the lemon drink contained a chemical which made him severely sick. No provision has been recognised in the financial statements of Yoyo. The case has attracted wide media and public attention and the consumer protection agency has expressed concern over an increase in companies selling food not fit for human consumption.

(3) Yoyo's financial year end is 30 June 2024. Its accounting function is outsourced to Smart Accounting and Tax Services (SATS).

Jumbo purchases Boom from a manufacturer of detergents. Jumbo employs approximately five hundred (500) sales staff around the country who sell Boom across the country. Around 85% of Boom sales are cash-based and each of the sales staff prepares a daily cash sales report. All the sales staff deposit cash from daily sales in one (1) bank account on a daily basis to avoid theft. The Finance Director transfers all the money deposited in this bank account every week electronically into an off-shore bank account in the company's name on which the two (2) major shareholders of Jumbo are signatories.

The shareholders of Jumbo have agreed that the funds in the off-shore bank account are for real estates business and a significant number of transactions involving the purchase and selling of expensive and luxury properties in various international locations have occurred.

Required:

(a) Describe five (5) additional information which should be made available for your firm's due diligence review; and explain the need for the information. (10 marks)

(b) (i) Explain four (4) procedures which should be put in place by the audit firm in relation to an anti-money laundering programme. (4 marks)

(ii) Evaluate two (2) indicators of money laundering activities, which Jumbo may be involved in. (4 marks)

(c) Explain the ethical guidance to auditors in respect of reporting money laundering activities. (2 marks)

[Total 20 marks]

QUESTION FOUR

You are an Audit Manager in Mango & Associates (Mango), and the Engagement Partner has given you the information below, in respect of your audit client, Kandolo Co (Kandolo).

Internal control system notes

The Warehouse Manager has been working with a Sales Officer to dispatch goods to a fictitious customer which the Warehouse Manager has created on the dispatch system. The sales orders are input by the Sales Officer into the dispatch system which is not directly linked to the invoicing and accounting systems.

After the Goods Dispatch Note is issued by the Warehouse Manager and the goods leave the warehouse for delivery to the fictitious customer, the Sales Officer cancels the original order. The Warehouse Manager reverses the dispatch immediately so that the daily report on inventory movement used to generate invoices in the sales system does not reflect the movement of the goods. The Sales Officer sells these goods and shares the proceeds with the Warehouse Manager. The Warehouse Manager supervises and participates in all stock counts and this way ensures he is able to adjust the records of inventory to conceal the missing items. The Procurement Director has informed you that no authorisation is required for either the cancellation of orders or the reversal of dispatch notes.

Internal audit function

Kandolo has a well-established internal audit department which is tasked with a range of activities including providing assurance to management over internal controls and risk management. The Engagement Partner has requested you to consider making use of the internal audit function of Zamefa in conducting the audit after conducting an evaluation as necessary.

Short-term investments

Kandolo has a treasury department, which deals with short-term and long-term investments. In January 2024 K180 million was invested in a portfolio of equity shares held in a listed company. The investment will be held for a short-term as a speculative investment. The shares are recognised as a financial asset at cost of K180 million in the draft statement of financial position. The fair value of the shares at 30 June 2024 is K160 million. The fair value of this investment is material to the total assets in the financial statements.

Required:

(a) Evaluate three (3) deficiencies in Kandolo's internal control system and explain how they contributed to the fraud; and provide recommendations to prevent such a fraud reoccurring. (6 marks)

(b) (i) Discuss four (4) matters that should be considered by the audit team in deciding to use the work of internal audit in the audit of the financial statements of Kandolo Co. (4 marks)

(ii) Discuss the two (2) possible ways in which the audit team could make use of internal audit in the audit of the financial statements of Kandolo Co. (2 marks)

(c) Describe four (4) audit procedures to be performed in the audit of the short-term investment. (4 marks)

(d) Explain, using an example, the difference between materiality for the financial statements as a whole and performance materiality. (4 marks)

[Total 20 Marks]

QUESTION FIVE

(a) Your firm has been engaged to perform a separate assurance engagement on corporate social responsibility (CSR) report of the Community Development Foundation (CDF) and you are part of the engagement team. An extract from the draft CSR performance report is shown below:

(1) Donations of K550 million were made to five (5) local universities.

(2) K750 million was spent on the local universities scholarships and 5,000 children were admitted by the five (5) local universities.

Required:

Recommend four (4) procedures to be performed to obtain assurance on the validity of the performance information in the CSR performance report. (4 marks)

(b) You are the Audit Manager responsible for four (4) audit clients of Mwambo & Associates (Mwambo), a firm of Chartered Certified Accountants. The year end in each case is 30 June 2024. You are currently reviewing the audit working paper files and the Audit Seniors' recommendations for the auditors' opinions. Details are as follows:

Client One

In January 2024, the Board of Directors approved a loan amounting to K175,000 for the Chief Executive Officer, who was recruited after the former Chief Executive Officer resigned. Following a review of the board minutes, it was discovered that the directors agreed that the amount was insignificant and have, therefore, not disclosed the loan in the notes to the financial statements.

The Audit Senior is satisfied that there is no need to disclose the loan in the financial statements and has suggested that an unmodified opinion should be given.

Client Two

The directors' report states that investment property rental income represents 35% of total revenue. However, a note to the financial statements shows that property rental income represents only 5% of total revenue for the year.

The Audit Senior is satisfied that the revenue figures are correct and has suggested that a modified opinion should be given due to the inconsistency between the financial statements and the directors' report.

Client Three

The Audit Senior has concluded that the use of the going concern assumption is appropriate, but that there is significant doubt over the company's ability to continue as a going concern. He has advised the company's Audit Committee that a note is required in the financial statements to describe the significant doubt over going concern. The audit committee has agreed that a brief note will be included.

The Audit Senior has suggested that a disclaimer of opinion should be given, because a brief note will be included in the financial statements.

Client Four

On 15 July 2024, this client acquired a subsidiary, a company (Tusha) offering hotel services to local and international guests across the country. Tusha represents a significant acquisition, but this has not been referred to in the financial statements.

The Audit Senior has suggested that an adverse audit opinion should be issued on account of the non-disclosure of the acquisition in the notes to the financial statements.

Required:

For each of clients one (1) to four (4), evaluate the appropriateness of the Audit Senior's proposals for the auditors' opinion. (16 marks)

[Total 20 marks]

END OF PAPER

CA 3.2 ADVANCED AUDIT AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Business risks faced by Zamefa:

1. Exchange rate fluctuations
   This exposes the company to exchange rate volatility and consequentially cash flow fluctuations, especially that there is no foreign exchange hedging to mitigate the risk.

2. Exchange gains and losses
   This can also cause volatility in profits, and as the company already has a loss for the year, any adverse movements in exchange rates may quickly increase this loss.

3. Reliance on a single supplier
   Reliance on one overseas supplier is extremely risky, as any disruption to the supplier's operations, for example, due to financial difficulties or political interference, could result in the curtailment of supply, leading to stock outs, loss of revenue and customers goodwill due to halted production.

4. Competitive industry
   Zamefa operates in a very competitive market. With many suppliers chasing the same customers, there will be extreme pressure to cut prices in order to remain competitive. Operating margins are already low, so this will pressure on its survival.

5. 10 major customers
   Zamefa depends on 10 key customers to generate its domestic/local revenue, which accounts for approximately 40% of its total revenue. The same customers are returning the goods; this will affect its cash flows, revenue and profit margin.

6. Non-compliance with regulatory issues
   New regulation comes into force within a few months after the year end. This creates a significant compliance risk, which could lead to closure of production, fines, or penalties and bad publicity, if the regulation is not complied with.

7. K300 million loan
   A loan representing 16.7% of total assets is material. This is a significant amount, increasing the company's gearing, and creating an obligation to fund interest payments of K30 million per annum and principal. This will affect the cash flow.

8. Liquidity ratios
   The current and quick ratios also indicate that Zamefa would struggle to pay debts as they fall due, since its cash and bank balance is already low. These may indicate cash flow problems.

9. Change in key management personnel
   The loss of several directors during the year is a business risk, because it means loss of important experience and skills. The new directors will need time to understand the business, develop and implement successful business strategies.

(b) Risks of material misstatement:

1. Foreign currency transactions – initial recognition
   According to IAS 21 foreign currency transactions should be initially recognised having been translated using the spot rate, or an average rate may be used if exchange rates do not fluctuate significantly.
   The risk on initial recognition is that an inappropriate exchange rate may be used in the translation of the amount, leading to expenses, current liabilities and inventory to be over or understated in value.

2. Exchange gains and losses
   According to IAS 21 foreign currency transactions, payables denominated in a foreign currency must be retranslated using the closing rate, with exchange gains or losses recognised in profit or loss for the year.

   The risk is that the year-end retranslation does not take place, or that an inappropriate exchange rate is used for the retranslation, leading to over or understated current liabilities and operating expenses.
3. Obsolete inventory
   According to IAS 2 Inventories, measurement should be at the lower of cost and net realisable value. The faulty goods cannot be sold elsewhere, so the inventory should be written down.

   The risk is that inventory may not have been reduced in value, leading to overstated current assets and overstated operating profit.

4. Returned faulty products
   If the customer had already paid for the goods, a provision should be recognised for the refund, as the original sale and subsequent product recall would create an obligation.

   There is a risk that this has not been done, leading to understated current liabilities and expenses and overstated operating profit.
   There is also risk of overstated operating profits and current assets and understated allowance for receivables or expenses/bad debts.

5. Capital expenditure on new project – K275 million
   The new production process would appear to be a significant piece of capital expenditure, and it is crucial that directly attributable costs are appropriately capitalised according to IAS 16 P.P.E and IAS 23 Borrowing Costs.

   There is a risk that expenses are understated. This could be achieved by treating items of revenue expenditure as capital expenditure, which would overstate non-current assets and overstate operating profit.

6. K300 million - loan
   The loan taken out is a financial liability and must be accounted for in accordance with IFRS 9 Financial Instruments. The loan should also be correctly split into current and non-current liability since its repayable over 5 years.

   There is a risk that the split has not been done and disclosure is not appropriately done as required by IFRSs. (IFRS 7)

7. K30 million - finance cost

Finance cost of K30 million should be recognised in the statement of profit or loss as the loan attracts a 10% interest rate per year.

There is a risk that this interest is omitted or understated to understate the expenses and liabilities and overstate operating profit.

8. K25 million – convertible loan notes
   The convertible loan notes accounting treatment should be done correctly as this a financial instrument, which is complex as it should be split into debt and equity correctly.

   There is a risk that the accounting treatment (initial measurement or subsequent measurement) is not correct. For example, equity may be re-measured subsequently when it should not.

9. Impairment of existing factory:
   According to IAS 36 Impairment of Assets, adverse change in the legal environment is an external indicator of potential impairment; therefore, management should perform an impairment review.

   There is a risk that the existing production facilities are impaired. This is due to the new regulations which come into force and may make at least part of the existing facilities redundant.

(c) Audit procedures for insurance claim:

1. Obtain details of how the amount being claimed has been arrived at by management.
2. Request for the details of the insurance cover and confirm that claim is overfed in the agreement.
3. Review any correspondence with the insurance company to establish reasonableness of amount being claimed.
4. Obtain written representations from management regarding the reliability of the accounting estimate.
5. Review any post year settlement of the claim by the insurance company and compare with the amount provided for in the financial statements.

(d) Ethical issues:

1. **Former Audit Manager appointed Finance Manager of Zamefa:**
   An Audit Manager being employed as financial manager at Zamefa Co will create a familiarity threat as audit team will lose objectivity, fail to challenge him sufficiently and lose professional scepticism.

   The above gives rise to a familiarity threat to the audit team that will be assigned and also an intimidation threat to the junior staff on the audit team.

Safeguard:

- Appoint more experienced audit team members.
- Change the approach to the audit and bring in unpredictability.
- Work that would have been performed before leaving the audit team should be subject to review by someone senior.

2. **Contingent fee based on a % of operating profit:**
According to IFAC's Code, contingent fee arrangements create self-interest threats to the auditor's objectivity and independence that are so significant that they cannot be eliminated or reduced to an acceptable level by the application of any safeguards.

Safeguard:
The audit fee must not depend on contingencies. The basis for the calculation of the audit fee is agreed with the audited entity each year before significant audit work is undertaken. The suggestion by the client should not be accepted.
Contingent fees give rise to self-interest threats.

3. **Bonus to partners for securing non audit services from audit clients:**
The audit partners getting a 15% bonus on successful sale of a non-audit service to audit clients creates a potential self-interest threat according to IFAC's Code of Ethics for Professional Accountants.

The bonus offered will give rise to a self-interest threat to the partners concerned and will result in a loss of objectivity.

The significance of the threat depends on factors such as:
- The proportion of the individual's compensation or performance evaluation that is based on the sale of such services.
- The role of the individual on the audit team; and
- Whether promotion decisions are influenced by the sale of such services.

Safeguard:
Therefore, the bonus scheme should not be offered to partners as it creates an unacceptable threat to objectivity.

(e)(i) Analytical procedures on the financial statement:

Analytical procedures are used at the review stage of the audit in order for the auditors to establish whether the financial statements are in line with the evidence that has been gathered.

There are certain relationships of figures contained in the financial statements and these will be confirmed through the use of analytical procedures by the senior members of the audit team during reviews. The analytical reviews will confirm whether the results are in line with the knowledge that the auditors have and confirm with general industry results.

(ii) Use of analytical procedures in the audit of Zamefa:

At planning stage of the audit – Analytical procedures will have been used at the planning stage of the audit in assessing risk. This is one(1) of the methods used to gain an understanding of the entity and could be for example be by way of calculating ratios and comparing them with industry ratios.

During substantive tests – Analytical procedures can be used during the stage of gathering evidence to detect any misstatements that may exist in the figures contained in the financial statements. For example depreciation for a class of assets could be proved in total by computing the depreciation charge based on information for the class of assets and comparing the result with the depreciation charge in the financial statements.

(f) Quality control issues:

1. Leadership and responsibility for quality control – At the individual audit level the Engagement Partner should take responsibility for quality control and should know his/her responsibilities in this regard.
2. Ethical requirements- A key matter with regards client acceptance and continuance is that there should be no ethical dilemmas that will cause the firm to decline/discontinue an engagement. The firm should have a code of ethics which should be followed by all staff in the firm. If this is not in place it should be introduced and policies should be put in place to ensure that all firm staff are aware of the existence of the code of ethics and what should be done in case of ethical dilemmas being faced by staff. The Engagement Partner should monitor adherence to ethics by audit team members.
3. Assignment of audit team members - Guidance on quality control at the individual audit level requires that care should be taken in assigning staff to audits. This is meant to ensure that staff with suitable skills and competences will be assigned to the audit of the financial statements of Zamefa. Clear policies should be made to ensure that this is done.
4. Continuance assessment – Zamefa has been an audit client of Fumba & Associates for the past five(5) years. According to quality control guidance of ISA 220, the firm is required to assess on an annual basis whether to continue the engagement relationship considering ethical and other client acceptance matters.
5. Engagement performance – There should be clear guidelines with regards the performance of individual audits. The Engagement Partner takes responsibility for this and they will delegate some of this responsibility to senior member of the audit team.

   Engagement Performance will include the following matters:
   - Close supervision of the work as it progresses.
   - Review of the work by someone other than the person who performed the work.
   - Guidelines on consolations that may require to be made in case of disagreement within the audit team.

SOLUTION TWO

(a)(i) Factors to be considered when deciding the extent of reliance on work of component auditors:

1. Independence and other ethical issues
   According to ISA 600, the component auditors are subject to the same ethical requirements that are relevant to the group audit. This means that component auditors and, the group auditors are bound by IFAC's Code of Ethics for Professional Accountants.

2. Qualifications and professional competence
   The professional competence of component auditors must be considered. The qualifications, skills and competence will influence the quality of their work.

3. Resources
   The component auditors should have the necessary resources (staff, time, machinery, etc.) needed to carry out the audit efficiently and effectively.
4. Experience
   The experience of the component auditors should be considered to assess whether they have the necessary experience in auditing companies like this foreign subsidiary.

5. Monitoring and regulation
   How the component auditors are monitored and regulated should be considered. This would enhance not only the firm's ethical status, but also adds credibility to its competence (e.g. membership with the professional body).

6. Audit evidence gathering
   It should be considered whether the group engagement team will be involved in the work of the component auditor to the extent necessary to obtain sufficient appropriate audit evidence on material matters.

(ii) Extent of involvement of group engagement team in significant component audit:

Guidance on the extent of involvement in the audit of the financial statements of a significant component is given in ISA 600 *Special considerations – audit of group financial statements (including the work of component auditors)*

1. The group engagement team will require a full audit of the South African subsidiary either by the component auditors or by the group engagement team.
2. The group engagement team may carry out procedures for specific account balances considered to be risky and other procedures for areas assessed as having significant risks.
3. The group engagement team will require to discuss with the component auditors the susceptibility of the component financial statements to misstatements arising from fraud or error and
4. The group engagement team many consider reviewing the component auditor's documentation of identified significant risks of material misstatements.

(b) (i) Matters to consider and evidence in the audit of the construction of the new building:

1. The classification of expenditure between revenue and capital expenditure. Misallocation of expenditure could result in the misstatements of the financial statements.
2. The accounting for borrowing costs and ensuring that this is in accordance with the provisions of the relevant accounting standard.
3. The accounting for overheads to ensure that only directly attributable overheads to the construction are included and capitalised.
4. The presentation of the new building in the financial statements to ensure it meets the requirements of the IAS 16.

(ii) Evidence expected in the audit working papers for the audit of the newly constructed building:

1. A breakdown/schedule of the components showing the capitalised costs and verify that they all qualify for capitalisation.
2. Agreement of a sample of the capitalised costs to supporting documentation (e.g. invoices for tangible items such as cement, and labour costs).
3. Details of the audit plan (audit procedures) performed by the audit team on the newly constructed building.
4. Conclusions reached based on the evidence obtained from the audit work conducted.
5. Copy of the work completed certificate as evidence of the completion of the work.
6. Confirmation that the additions to property, plant and equipment are disclosed in the required note to the financial statements and included in assets register.

(c) Matters to be included in the audit proposal/tender document:

1. Outline of audit firm
   A brief outline of the audit firm, including a description of different services offered, locations (local or international), network, membership and registration. Outline the services which the firm can provide, and any specialism which the firm has in auditing prospective client.

2. Identify the audit requirements
   Brief details of the needs of the audit client from the point of view of the auditors in order to ensure there is a common understanding with the prospective client.

3. Audit approach
   Brief details of how the firm intends to meet the requirements of the proposed client.

4. Additional non-audit and assurance services:

The audit proposal should describe the various non-audit and assurance related services which the audit firm would be able to offer to the prospective client.
This discussion should clearly state and emphasise that the provision of such services is subject to meeting ethical requirements and will be completely separate from the audit service

5. Profiles of senior personnel – audit partners
   The profiles outlining the qualifications and experiences of audit partners that are relevant to the audit of the clients in the industry in which the prospective client operates.

6. Details of any clients in the same industry as that of Nganga Group and the experience gained from these audits.

(d) Lowballing guidance:

IFAC's Code does not prohibit this practice (lowballing), where a firm obtains an audit appointment at a significantly lower fee than that quoted by competitors or the predecessor audit firm.

The audit firm should however demonstrate that:

- The audit has been conducted in accordance with applicable auditing standards>
- That suitable staff possessing required skills and competences were assigned to the audit.
- The audit was conducted having the necessary resources in terms of time and financial resources.

SOLUTION THREE

(a) Additional information and its need/importance:

1. Certificates of incorporation and registration
   These will provide evidence as to whether the company is legally incorporated and registered with the relevant authorities or agencies like ZRA, PACRA, NAPSA, etc.

2. An organisational structure
   This will provide information about key members of management and key personnel and their roles within Yoyo. After acquisition, Jumbo may wish to retain or not retain the services of some key members of management.

3. Contracts of employment
   Key personnel (directors) and other key employees' contracts of employment will be needed to see if there are any contractual settlement terms/liabilities if the contract of employment is terminated after the acquisition.

4. Legal documentation – Land acquired
   Purchase documentation regarding the land obtained for the purpose of building a new head office. This will provide information regarding the ownership, location and size of land.

5. Legal correspondence - Court case
   This will show the amount claimed for damages against the company, and the timescale as to when the case will go to court and amount of legal fees incurred so far.

6. A copy of any press statements
   This will provide information about the impact of negative publicity on the reputation of Yoyo and its lemon drink. This can adversely affect future sales.

7. The signed loan agreement
   This will be needed to know the exact amount and terms of the loan, including the interest rate, any other finance charges, whether the loan is secured on company assets, the repayment terms, and any covenants attached to the loan.

8. The contract between Yoyo and Smart
   This will provide information about the services offered, costs of services offered and the reputation of the service provider. This information is needed because Jumbo may wish or not wish to outsource the accounting function to Smart after acquisition.

9. Prior year/immediate audited financial statements
   These financial statements will also provide useful information regarding assets, liabilities, equity, revenue and expenses values, as well as contingent liabilities, the liquidity position, accounting policies, etc.

10. The most recent management accounts

They will reveal any significant changes in the company's position or performance since the last audited accounts, for example, if revenue has decreased significantly, or significant changes have occurred.

11. Forecasts and budgets for future periods
Attention should be paid to the cash flow forecast as this will provide information about the future of the company. The budgets will provide information about incomes and expenditure expected.

(b)(i) **Procedures for anti-money laundering programme**

1. An anti-money laundering programme should be established and experienced senior money laundering reporting officer (MLRO) appointed.

2. Internal reporting lines should be established for reporting any suspicions/actual money laundering activities.

3. Staff should receive appropriate training on compliance with the anti-money laundering requirements and how to report the issues to the MLRO.

4. Staff who have suspicions of money laundering activities should disclose/report these suspicions to the MLRO as soon possible.

5. The internal report on suspected money laundering may include the name of the suspect, the amounts potentially involved, and the reasons for the suspicions with supporting evidence if possible, and the whereabouts of the laundered cash.

6. Establish the anti-money laundering programme such as client due diligence.

7. Provide further staff training in Know Your Customer (KYC) and maintaining adequate records for client identification.

(ii) Evaluation of possible indicators of money laundering activities

In the case of Jumbo, the circumstances which may be indicative of money laundering activities include the following:

1. Cash intensive business:
Jumbo has a high level of cash-based sales (85%) and a high volume of individual sales reports. The nature of its business therefore creates a significant risk that illicit cash funds are being passed off as legitimate sales. Cash - intensive business is used as placement.

2. Electronic or wire transfer
The Finance Director transfers on a weekly basis money into an off-shore bank account electronically. This is an example of layering. It is also suspicious that the shareholders are the signatories of the off-shore bank account.

3. Purchasing expensive and luxury properties
These transactions of purchasing expensive and luxury properties may be examples of real estate laundering. It is possible that they may be purchasing these properties with illegal funds. This is an example of placement.

4. Selling expensive and luxury properties
   These transactions of selling expensive and luxury properties may be examples of real estate laundering. It is possible that they may be selling them to make funds appear legitimate. This is an example of integration.

(c) Ethical guidance to auditors regarding reporting money laundering activities:

One of the ethical fundamental principles of accountants is that of confidentiality. This means that auditors should not disclose to third parties information that comes to their attention during the course of their work and some of the information may be sensitive such as is the case at hand.

Money laundering activities are a breach of the law against money laundering. Auditors may wish to seek legal advice if not sure whether a crime has been committed.
There are exceptions to this rule:
Generally reporting a crime that a client has committed will not amount to a breach of the ethical principle on confidentiality. The auditors have a duty to report to competent authority any criminal activity by their client.

ISA 250 (Revised) *Consideration of laws and regulations in an audit of financial statements* guides that if auditors become aware of a suspected or actual instance of non-compliance with law and regulation which gives rise to a statutory right or duty to report to the proper authority.

SOLUTION FOUR

(a) Control deficiencies and recommendations:

1. Lack of segregation of duties and authorisation of new customers
   There is a lack of segregation of duties, lack of authorisation and approval of transactions. The Warehouse Manager is able to create new customers on the system without authorisation. This has allowed fictitious customers to be created.

   Recommendation:
   New customers should be created by the accounts department not the sales/dispatch teams and authorised by someone senior like the Director Finance.

2. Lack of authorisation of order cancellation
   The ability of the sales officer to cancel orders and the ability of the Warehouse Manager to reverse dispatches without authorisation has created an opportunity to commit fraud through collusion.

   Recommendation:
   Authorisation process for cancelled orders/returns should be introduced and authorisation done by senior personnel such the procurement director.

3. Lack of reconciliation of the sales orders
   Lack of reconciliation of the sales orders to the amounts invoiced allowed the cancellation of deliveries fraudulently to go un-detected.

   Recommendation:
   Regular reconciliations should be done, say, weekly so that all orders cancelled are identified, reported and checked and approved/authorised appropriately.

4. Un-integrated inventory system
   The existence of the inventory system in isolation from the invoicing and accounting system allowed for incomplete information to be conveyed further up within the business and allowed the fraud to unnoticed/detected.

   Recommendation:
   Integration of the sales order and invoicing systems into the management information system is needed, so that sales orders that are subsequently not invoiced are identified and investigated.

5. Lack of controls over stock counts.
   The lack of segregation of duties between warehouse staff and inventory count staff allowed the fictitious fraud to pass unnoticed/un-detected since there was on independent check.

   Recommendation:
   Regular inventory counts to be performed by staff independent of the warehouse and sales staff, so that fraud like this one is detected/noticed timely.

(b) (i) Matters to be considered in deciding to use work of internal audit:

According to ISA 610 *Using the Work of Internal Auditors*, the external auditor may decide to use the work of the audit client's internal audit function to modify the nature or timing, or reduce the extent, of audit procedures to be performed directly by the external auditor.

Matters to consider

1. Organisational status, policies and procedures
   The extent to which the internal audit function's organisational status and relevant policies and procedures support the objectivity of the internal auditors.

2. Competence and experience
   The level of competence and experience of the internal audit function/staff.

3. Audit approach
   Whether the internal audit function applies a systematic and disciplined approach.

4. Quality control
   Quality control issues, including how the audit work is planned, documented, directed, supervised and reviewed.

5. Objectivity
   The internal audit department should be unbiased in their work and be able to report their findings without being subject to the influence of others.

6. Independence
   The internal audit department should report directly to the audit committee or to those charged with governance in order to maintain their independence.

(ii) **Ways to make use of Internal audit:**

1. Relying on work done by internal audit – This involves the auditors relying on work that has been done by internal audit department for the purposes of the audit.
2. Seeking direct assistance of internal audit – This is where the auditors require to use the services of internal audit to perform some tasks under the supervision of the auditors.

(c) Audit procedures on the short-term investment:

1. Confirm the original cost of the investment to cash book and bank statements.

2. Agree the fair value of the shares held as investments to stock market share price listings at 30 June 2024.

3. Discuss the accounting treatment with management and confirm that an adjustment will be made to recognise the shares at fair value.

4. Review the notes to the financial statements to ensure that disclosure is sufficient to comply with the requirements of IFRS.

5. Review board minutes to confirm the authorisation and approval of the amount invested.

6. Review documentation relating to the scope, policies and procedures on how investments are monitored.

7. Enquire with the treasury management function as to whether there have been any disposals of the original shares held and reinvestment of proceeds into the portfolio.

8. For dividends received from the investment, confirm the number of shares held to supporting documentation such as dividend received certificates or vouchers.

(d) Materiality and Performance materiality:

Materiality for the financial statements as a whole:
This is the materiality level that is set by the auditors at the planning stage of the audit taking into consideration all the factors such as risk.

For example, an amount of K5 000 may be set using certain benchmarks as materiality level for the financial statements as a whole.

Performance materiality
This is the materiality level that the auditors will set and be used in the conduct of the audit. It is set at an amount set by the auditor at less than materiality for the financial statements as a whole.

The aim is to reduce the risk that uncorrected misstatements will not exceed the materiality level set for the financial statements as a whole. Using the example above, the performance materiality level may be set at K4 000 and this is the materiality level that will be used in the conduct of the audit.

SOLUTION FIVE

(a) (i) Audit procedures on CSR Report:

1. Obtain a summary of all amounts donated to universities and agree a sample to the cash book and bank statements.

2. For large donations above a certain limit, confirm that authorisation for the payment has been made, e.g. by agreeing to minutes of management meetings.

3. Review correspondence with universities for confirmation of the amounts paid.

4. Review relevant press releases and publications for local universities scholarships.

5. For the amounts spent on the local universities' scholarships, obtain a breakdown of the amounts spent and verify that they were paid to the right universities.

6. For a sample of students, verify that they are in the scholarship register and confirm that their fees were paid for by the CDF.

(b) Evaluation of proposed audit opinions:

Client one:
Matters to consider in evaluating proposed opinion

1. The loan represents a related party transaction as it is between the company and one of its key management personnel (Chief Executive Officer).
2. The value of the loan may be insignificant; and may not be material to the financial statements by value. However, related party transactions are material by nature.
3. The loan must be disclosed in the financial statements, including the amount of the loan, who the loan has been made to and the amount outstanding at the end of the year.
4. The auditor in this circumstance will disagree with management on the treatment of the loan as it not in line with IAS 24 Related Party Transactions.
5. The auditor should request that the additional disclosures are added to the financial statements.

Opinion:

1. If management refuses to make the adjustments to the financial statements, then the financial statements are materially misstated due to a lack of appropriate disclosure.
2. The adjustment is material by nature, but not pervasive to the financial statements as a whole.
3. In view of the above points, the recommendation of the Audit Senior to issue an unmodified opinion is not correct. The auditors will require to issue a modified opinion on account of the materiality of the matter causing the financial statements to be misstated.

Client two:
Matters to consider in evaluating proposed opinion

1. The directors' report is not a part of financial statements prepared under International Financial Reporting Standards (IFRS).
2. Auditors are required to read other information in documents containing audited financial statements (e.g. the directors' report) to identify material inconsistencies with the audited financial statements.
3. Inconsistency exists when other information contradicts information contained in the audited financial statements. Clearly, 35% is inconsistent with 5%.

Opinion:

1. If the inconsistency is resolved (e.g. because the directors' report is corrected) an unmodified/ (unqualified opinion) auditor's report will be given.
2. If the inconsistency is not resolved, the audit opinion on the financial statements cannot be qualified (because the inconsistency is in the directors' report).
3. The suggestion by the Audit Senior that a modified opinion should be issued is incorrect. The auditors will require to explain the inconsistences in the other information paragraph contained in the audit report and issue an unmodified opinion as explained above.

Client three:
Matters to consider in evaluating proposed opinion

1. The fact that the use of the going concern basis in preparing the financial statements is appropriate.
2. The fact that there exists material uncertainty with regards going concern and that management has agreed to include a brief note in the financial statements. The assumption in answering this question is that there is inadequate disclosure of the material uncertainty.
3. The use of going concern is appropriate but the disclosure of material uncertainty is not considered adequate.

Opinion

Considering the above facts, the suggested opinion by the Audi Senior of issuing a disclaimer of opinion is not correct. This can only be issued when there is a limitation of scope which is not the case at hand.

In view of the assumption that the disclosure is not adequate, a modified opinion will be used and the basis for modified opinion will give the reasons for such opinion.

Client four:
Matters to consider in evaluating proposed opinion

1. According to IAS 10 Events After the Reporting Period, the acquisition of a subsidiary after the year-end is a non-adjusting event, as it is unrelated to a condition existing at the year-end.
2. If non-adjusting event after the reporting date is material, this should be disclosed in the financial statements.

Opinion:
Considering the fact that the acquisition is a non-adjusting event that occurred after the period end and the fact that this has not been disclosed is unlikely to be a cause for the issue of an adverse audit opinion.

The Audit Senior should discuss with management and suggest that the matter be disclosed and management is unlikely to refuse the request especially that disclosure does not negatively impact the company. An unmodified audit opinion will be appropriate in this case.

END OF SUGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4: ADVANCED TAXATION

THURSDAY 20 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. A Taxation table is provided from page 2 to page 6 of the question paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

TAXATION TABLE
Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K0.01 to K61,200	first K61,200	0%
K61,201 to K85,200	next K24,000	20%
K85,201 to K110,400	next K25,200	30%
Over K110,400		37%

Income from farming for individuals

K0.01 to K61,200	first K61,200	0%
Over K61,200		10%

Company income tax rates

On income from manufacturing and other	30%
On income from farming	10%
On income from mineral processing	30%
On income from mining operations	30%
On income of Banks and other Financial Institutions	30%

Mineral Royalty

Mineral Royalty on Copper

Norm price range per tonne	Incremental value	Mineral Royalty rate
Less than US$4,000	First $3,999	4.0% of norm value
From US$4,000 but less than US$5,000	Next $1,000	6.5% of norm value
From US$5,000 but less than US$7,000	Next $2,000	8.5% of norm value
US$7,000 and above	Over $7,000	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Cobalt and Vanadium	8% of norm value
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Standard wear and tear allowance	25%
	Used in manufacturing and leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing	**(Cost up to K100,000)**	
Wear and Tear Allowance		10%
Initial Allowance		10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax

Annual Turnover	
K0.01 to K12,000	0%
K12,001 to K800,000	4%

Rental income Tax

Rental income band	**Taxable amount**	
K0.01 to K12,000	First K12,000	0%
K12,001 to K800,000	Next K788,000	4%
On income above K800,000		12.5%

Presumptive tax for transporters

Seating capacity	**Tax per annum**	**Tax per quarter**
	K	K
Less than 12 passengers and taxis	1,080	270
From 12 to 17 passengers	2,160	540
From 18 to 21 passengers	4,320	1,080
From 22 to 35 passengers	6,480	1,620
From 36 to 49 passengers	8,640	2,160
From 50 to 63 passengers	10,800	2,700
From 64 passengers and over	12,960	3,240

Property transfer tax

Rate of tax on realised value of land (including buildings, structures or improvements thereon)	5%
Rate on realised value of intellectual property	5%
Rate on realised value of mining right for an exploration licence	5%
Rate of tax on realised value of a mining right for a mining licence	10%
Rate of tax on realised value on a mineral processing licence	10%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

	Aged 2 to 5 years		Aged above 5 years	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged above 5 years	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not	18,049	23,463	13,357	17,598

exceeding 3000 cc				
Cylinder capacity exceeding 3000 cc	22,561	29,329	18,049	23,463
SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	Aged 2 to 5 years		**Aged above 5 years**	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs				
GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,697	13,302	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	33,766	14,632	26,531	11,497
Panel Vans				
GVW not exceeding 1.0 tonne	13,353	5,786	7,630	3,061
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	13,907	10,662	6,413	4,916
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	15,453	11,847	7,726	5,923
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	9,272	7,108
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,462	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston**	37,086	28,432	13,907	10,662

engine

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:

Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty

Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:

Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. **Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:

Percentage of Value for Duty Purposes	15%

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u> – (COMPULSORY)

For the purposes of this question, you should assume that today's date is 1 December 2023.

Kaonga has been employed by a Zambian resident company for many years. He is married to Naonga and has a son Taonga who is aged 22 years. Kaonga is planning to take early retirement from his current employment on 31 December 2023 and start running a family business on 1 January 2024, engaged in retailing. He intends to prepare the first accounts to 31 December 2024 and then annually thereafter. Kaonga wishes to involve his wife Naonga who is currently employed as an accountant at an annual salary of K360,000 and his son Taonga who is currently unemployed in running the family business.

Kaonga is not sure whether from a taxation point of view it will be beneficial to involve his wife Naonga and his son Taonga as employees and run the business as a sole proprietorship, form a partnership and involve Naonga and Taonga in running the business as partners or form a limited company and run the company together with his wife and son as full-time working directors.

The business will acquire two motor vehicles on 1 January 2024, regardless of how it is run. The vehicles will be a Toyota Hilux Double cab van costing K850,000 having a cylinder capacity of 2,900cc and an Isuzu single cab van costing K800,000 having a cylinder capacity of 2,600cc. Kaonga will drive the Toyota Hilux double cab van, while Naonga will drive the Isuzu single cab van. Each individual will use each vehicle for both business and private purposes. Private use of each vehicle by each individual will be 35%. No vehicle will be provided to Taonga, regardless of how the business is run, but he will be entitled to a transport allowance.

The following additional information is available for each of the three (3) options.

Alternative 1

Under this alternative Kaonga will trade as a sole trader and will involve his wife and son in the business as employees. Kaonga and Naonga will draw annual salaries of K380,000 and K360,000 respectively, whilst Taonga will be entitled to an annual salary of K192,000 and an annual transport allowance of K90,000.

The net profit as per accounts is expected to be K1,825,000, before deducting the above payments to each individual and any NAPSA contributions arising.

Alternative 2
Under this alternative Kaonga will form a partnership and involve Naonga and Taonga as partners in running the business sharing profits and losses in the ratio of 5:3:2 respectively. Kaonga and Naonga will draw annual salaries of K380,000 and K360,000 respectively, whilst Taonga will be entitled to an annual salary of K192,000 and an annual transport allowance of K90,000.

The net profit as per accounts is expected to be K1,825,000, before deducting the above payments to each individual. No NAPSA contributions will arise under this option.

Alternative 3
If the business is run as a company, the company will be called Kalwit Ltd. Kaonga, Naonga and Taonga will be the only shareholders and full-time working directors of the company.

Kaonga and Naonga will draw annual salaries of K380,000 and K360,000 respectively, whilst Taonga will be entitled to an annual salary of K192,000 and an annual transport allowance of K90,000. NAPSA contributions will be payable where applicable by both the directors and Kalwit Ltd at the rate of 5% of each individual's gross earnings.

The net profit as per accounts is expected to be K1,825,000, before deducting the above payments to each individual and any NAPSA contributions arising.

NAPSA Earnings threshold
The NAPSA earnings threshold for the year ending 31 December 2024 is K357,792 per annum.

Required:

(a) Compute the income tax and NAPSA contributions payable by, Kaonga, Naonga and Taonga for the tax year 2024 under **Alternative 1**. (11 marks)

(b) Compute the income tax payable by, Kaonga, Naonga and Taonga for the tax year 2024 under **Alternative 2**. (10½ marks)

(c) Compute the income tax and NAPSA contributions payable by, Kaonga, Naonga, Taonga and Kalwit Ltd for the tax year 2024 under **Alternative 3**. (13½ marks)

(d) Advice the family on the best alternative of running the business from a taxation point of view. Your evaluation should show the family's net income after payment of all statutory obligations. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any three (3) questions.

<u>QUESTION TWO</u>

You are employed in a firm of Chartered Accountants as a Senior Tax Consultant. Your supervisor has assigned you to deal with the tax affairs of Kabompo Copper Mines (KCM) a Zambian resident company engaged in mining.

The company has been your client since 2016 and therefore has built a good relationship with the Key Management Personnel of KCM. Your firm was appointed the auditor of KCM and extended the services to include accounting and taxation services.

KCM is engaged in the mining and sale of copper. The company usually sales and exports its copper at the end of each quarter. During the year ended 31 December 2024, the company exported the following quantities of copper at the end of each quarter at the following London Metal Exchange (LME) cash prices as indicated on returns filed with ZRA:

Quarter ended	Quantity of copper	LME cash price per tonne
31 March 2024	1,800 tonnes	US$3,800
30 June 2024	2,200 tonnes	US$5,900
30 September 2024	1,900 tonnes	US$7,670
31 December 2024	1,500 tonnes	US$8,400

The Mineral Royalty Tax (MRT) for the copper sold on 31 March 2024, at the end of the of the first quarter, was actually paid on 31 May 2024 when the return for that quarter was also submitted, whilst the mineral royalty sold on 30 September 2024, at the end of the third quarter, was paid on 31 October 2024. The mineral royalty return for the quarter ended 30 September 2024 was also filed in on 31 October 2024.

The mineral royalty for the copper sold at end of the quarters ending on 30 June 2024 and 31 December 2024 was paid on the appropriate due dates. The mineral royalty returns relating to coppers sales at the end these two quarters were also filed in on the relevant due dates. However, after reviewing the exportation documents, you have discovered that the actual quantity of copper exported on 31 December 2024 relating to the copper extracted in that last quarter was 2,000 tonnes, whilst the total quantity of copper actually extracted in the third quarter and sold on 30 September 2024 was 2,300 tonnes.

You have approached the directors of KCM over these issues and have advised them to make appropriate adjustments and submit amended returns. However, they have told you that these were just simple mistakes and therefore, no disclosure should be made since the tax returns have already been submitted and there have been no queries from the ZRA in relation to the returns. The directors have also indicated that disclosure of this anomaly will affect the relationship your firm shares with the company, as this might lead to termination of all of the assignments your firm has with the company.

The average Zambian Kwacha to one US Dollar (US$1) mid exchange rate as determined by the Bank of Zambia and approved by the Commissioner General during the year should be taken to be K24.80.

You should assume that the Bank of Zambia discount rate was 9.85% per annum throughout the year ended 31 December 2024.

Required:

(a) Explain the ethical implications arising from the non-disclosure of and under declaration of mineral royalty for the last two (2) quarters of the year. (3 marks)

(b) Evaluate other ethical threats (apart from the ones discussed in part (a) above) you face in relation to provision of tax services to KCM for the year ended 31 December 2024 and recommend appropriate course(s) of action in each case. (6 marks)

(c) Advise the directors of the amount of penalties and interest on overdue tax arising from late payment of mineral royalty and late submission of returns for the quarters ended 31 March 2024 and 30 September 2024. (11 marks)

[Total: 20 Marks]

QUESTION THREE

You are employed in a firm of Chartered Accountants as a Senior Tax Consultant and you are dealing with the tax affairs of InvestPro Bank Plc a Zambian resident bank. The bank listed its shares on the Lusaka Securities exchange (LuSE) in 2022. Indigenous Zambians hold 54% of the issued share capital of the company while the remaining 46% is held by foreign investors. The following information is available:

Chief Executive Officer

The Chief Executive Officer of InvestPro Bank Plc is Chileshe Mbewe. He is due for retirement in 2025 when his current contract expires. He, therefore, wishes to take up some personal financial protection products offered by insurance companies. He is considering the following options:

(1) Whole of life assurance

(2) Critical illness insurance

(3) Permanent health insurance

He is seeking advice on the nature and income tax implications of each of the above personal financial protection products.

Financial results for InvestPro Bank

The following is extract of the statement of profit or loss InvestPro Bank Plc for the year ended 31 December 2024 has been provided to you:

		K
Net interest income		56,200,100
Net foreign exchange gain	(Note 1)	24,800,400
Other income	(Note 2)	2,300,000
Operating expenses	(Note 3)	(39,600,200)
Income before tax		43,700,300

The following additional information is available:

(1) Net foreign exchange gain includes unrealised foreign exchange gain of K5,200,000, realised foreign exchange gain of K2,400,000, realised exchange losses of K1,400,000 and unrealised exchange losses of K4,800,000. The balance is made up of the profit on foreign exchange (FOREX) trading.

(2) Other income is made up of dividends from Zambian companies K344,250 (net), royalties K999,600 (net) and profit on disposal of old office building K956,150.

(3) Employee's remuneration expenses, which included salaries and wages of K24,008,900 and employee's pension benefits of K2,010,400. The figure for employee's pension benefits represents gratuity accruing on services rendered by employees relating to the year ended 31 December 2024, accounted for using the relevant accounting standard. Actual gratuities paid on employee contracts which expired during the year amounted to K1,130,420.

(4) Other operating expenses were made up of the following:

	K
Depreciation & amortization expenses	3,100,000
Impairment losses	308,900
Donations to approved public benefit organisations	1,818,200
Other revenue allowable expenses	8,353,800
	13,580,900

The donations of K1,818,200 to approved public benefit organisations shown above, include a donation of K310,000 made to an approved public benefit organization from which the bank received free advertisement in each of that organisation's four (4) quarterly magazines published during the year. The organization normally charges K4,000 per edition to advertise in its magazines.

(5) Provisional income tax paid during the year ended 31 December 2024 amounted to K4,411,800. During the same year, withholding tax deducted from interest income amounted to K5,002,400.

(6) The only asset qualifying for capital allowances as at 1 January 2024 was an old office building with an income tax value of K2,240,000. The building was acquired at a cost of

K3,000,000 including the cost of land amounting to K200,000. The building was sold during the year for cash proceeds amounting to K4,100,000 including proceeds relating to land amounting to K800,000.

During the year, the company installed Automated Teller Machines (ATMs) at a cost of K15,800,000. The company also acquired pool motor cars at a cost of K2,000,000 and a newly constructed head office building at a cost of K12,000,000 including the cost of land amounting to K1,000,000.

Required:

(a) Advise Chileshe Mbewe of the nature and income tax implications of each of the following personal financial protection product he is considering to take up:

(i) Whole of life assurance (2 marks)

(ii) Critical illness insurance (2 marks)

(iii) Permanent health insurance (2 marks)

(b) Calculate the amount of taxable business profit and the amount of income tax payable by InvestPro Bank Plc for the year ended 31 December 2024. (14 marks)

[Total: 20 Marks]

QUESTION FOUR

You are employed in a tax practice and you are dealing with the tax affairs of Astute Limited a Zambian resident company which manufactures a wide range of products both for the Zambian market and for export to other countries. Astute owns 45% of the ordinary share capital of Kelzon plc, and 30% of the ordinary share capital of Tizon plc. Both of these companies are incorporated in foreign countries.

Astute Ltd's profit before tax from its Zambian operations for the year ended 31 December 2024 was K18,600,000. This profit figure is after making the relevant adjustments for tax purposes but before making any adjustments for tax purposes in relation to the following transactions which took place between Astute Ltd and its two related companies Kelzon plc and Tizon plc:

(1) Astute Ltd received net dividends of K480,000 and K81,000 from Kelzon plc and Tizon plc respectively during this year.

(2) On 1 January 2024, Astute exported finished goods to Tizon plc at a transfer price of K3,750,000 being the full production cost of the goods to Astute Ltd. Astute Ltd included the exports at this amount within sales revenue when computing the profit before tax

for the year. Astute makes a profit margin of 25% on all sales of goods of this type on the Zambian market.

(3) During the year, Astute Ltd imported raw materials from Kelzon plc at a value of K4,000,000, to be used by Astute Ltd in one of its production processes to manufacture goods which are sold by the company on the local Zambian market. Kelzon plc would have sold the raw materials to an unconnected party at a fair open market value of K2,600,000.

Other information

The results of Kelzon plc and Tizon Ltd for the year ended 31 December 2024 were as follows:

	Kelzon Plc		***Tizon Plc***	
	K	K	K	K
Trading profit		1,800,000		750,000
Company income tax		(337,500)		(262,500)
Distributable profits		1,462,500		487,500
Dividends paid				
Net	1,080,000		270,000	
Withholding tax	270,000		180,000	
		1,350,000		450,000
Retained profits		112,500		37,500

The Chief Financial Officer of Astute is Luwi Mukape, who is resident and ordinary resident in Zambia. She owns shares in each of the above three (3) companies from which she received the following net dividends:

	K
Astute Ltd	57,800
Kelzon plc	72,000
Tizon plc	10,125

Luwi additionally received annual gross emoluments of K740,000, from employment. Income tax of K142,500 was deducted under the Pay As You Earn system from her gross emoluments and employee's NAPSA contributions of K17,890 were deducted from her gross pay.

In the absence of double taxation conventions between Zambia and the countries where both Kelzon plc and Tizon plc are based, any double taxation relief is given to Zambian residents unilaterally in Zambia by way of crediting the foreign taxes paid against Zambian income tax.

Required:

(a) Calculate the income tax payable by Astute Ltd for the tax year 2024. (10 marks)

(b) Calculate the income tax payable by Luwi Mukape for the tax year 2024. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

For the purpose of this question the earnings threshold for the purposes of NAPSA contributions should be taken to be K357,792 per annum.

Musonda, a skilled professional, has recently received two job offers from two companies ZCB limited and Q- Petroleum Limited. Regardless of which offer is accepted, he will commence work on 1 January 2024.

The information relating to each offer is as follows:

Offer from ZCB Limited

Under this offer he will be entitled to a basic salary of K60,000 per annum, lunch allowance of 10% of the basic salary, medical allowance of K5,000 per annum and education allowance of 20% of his basic salary per annum. The company will pay his professional subscription fees to the Zambia Institute of Chartered Sales Directors (ZICSD) of K3,000 per annum. In addition, ZCB will pay telephone expenses of K1,200 per month and house rentals of K2,200 per month on his behalf.

Musonda will use his own private car, a Nissan Juke car with a cylinder capacity of 1,500cc, which he bought in 2023 for K170,000, partially for employment purposes. ZCB Limited will pay him K6,000 per month for the use of his motor car. It is estimated that Musonda will use the vehicle 60% for business purposes and he will incur annual motor car running expenses of K36,000.

Offer from Q- Petroleum Limited

Q- Petroleum Limited is also offering a basic salary of K60,000 per annum. The company will pay school fees of K45,000 per annum for his school going child. Musonda will be accommodated in a company owned house for which he will pay no rent. The house has a market rental value of K2,200 per month. The company will pay security fees of K1,200 per month and annual utility expenses amounting to K3,000. He will be provided with free meals from the staff canteen costing the company K6,000 per month. However, he will be required to pay his professional subscription fees to the Zambia Institute of Chartered Sales Directors (ZICSD) of K3,000 per annum.

He will be provided with a personal to holder motor car having a cylinder capacity of 1,500cc which the company acquired in 2023 at a cost of K170,000. His business use of the vehicle is expected to be 60%. Motor car running expenses of K3,000 per month will be paid by the company in relation to the vehicle.

Other information

Regardless of which offer is accepted, the employer will deduct employee's NAPSA contributions of 5% of his gross earnings and 1% of his basic salary as employee's NHIMA contributions.

Required:

(a) Compute the amount of income tax payable by Musonda in the tax year 2024 if he accepts the offer of employment from:

(i) ZCB Limited (7 marks)

(ii) Q- petroleum Limited (6 marks)

(b) Advise Musonda as to which offer is more beneficial from a taxation point of view. Your answer should be supported by a computation of the amount income after statutory deductions and other relevant expenses arising under each offer.

(7 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4 – ADVANCED TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) KAONGA'S
COMPUTATION OF TAXABLE INCOME AND INCOME TAX PAYABLE

	K	K
Profit as per accounts		1,825,000
Less		
Naonga' Salary	360,000	
Taonga's Salary	192,000	
Taonga's Transport allowance	90,000	
		(642,000)
Employee's NAPSA contributions for		
Naonga (K357,792 x 5%)	17,890	
Taonga (K192,000 + K90,000) x 5%	14,100	
		(31,990)
Capital allowances on :		
Toyota Hilux (K850,000 x 20% x 65%)	110,500	
Isuzu van (K800,000 x 25%)	200,000	
		(310,500)
		840,510
Income Tax		
On first K110,400		12,360
On excess (K840,510 - K110,400)		270,141
		282,501

COMPUTATION OF INCOME TAX PAYABLE BY:	NAONGA	TAONGA
	K	K
Salary	360,000	192,000
Transport allowance	---------	90,000
	360,000	282,000
Income Tax		
On first K110,400	12,360	12360
On excess (K249,600/K171,600) x37%	92,352	63,492
Income Tax payable	104,712	75,852
Employee's NAPSA Contributions		
(K357,792/K282,000) x 5%	17,890	14,100

(b) COMPUTATION OF FINAL TAXABLE PROFITS

	K	K
Profit as per accounts		1,825,000
Capital allowances on:		
Toyota Hilux (K850,000 x 20% x 65%)	110,500	
Isuzu van (K800,000 x 25% x 65%)	130,000	
		240,500
		1,584,500

ALLOCATION OF PROFITS AND COMPUTATION OF INCOME TAX PAYABLE

	Total	Kaonga	Naonga	Taonga
Salaries	932,000	380,000	360,000	192,000
Transport allowance	90,000	---------	----------	90,000
Total appropriations	1,022,000	380,000	360,000	282,000
Balance	562,500	281,250	168,750	112,500
	1,584,500	661,250	528,750	394,500
Income Tax				
On first K110,400		12,360	12,360	12,360
On excess (K550,850/K418,350/284,100) x 37%		203,815	154,790	105,117
Income Tax payable		216,175	167,150	117,477

Total Marks

(c) COMPUTATION OF INCOME TAX PAYABLE BY:

	Kaonga	Naonga	Taonga
Salaries	380,000	360,000	192,000
Transport allowance	-----------	---------	90,000
Taxable income	380,000	360,000	282000
Income Tax			
On first K110,400	12,360	12360	12360
On excess (K269,600/K249,600/K171,600) x 37%	99,752	92,352	63492
Income Tax payable	112,112	104,712	75,852
Employee's NAPSA Contributions			
K357,792/ K282,000 x 5%	17,890	17,890	14,100

COMPUTATION OF INCOME TAX PAYABLE BY KALWIT LTD

	K	K
Profit as per accounts		1,825,000
Add personal to holder motor car benefit		48,000
		1,873,000
Less		
Director's emoluments		
Kaonga's salary	380,000	
Naonga' Salary	360,000	
Taonga's Salary	192,000	
Taonga's Transport allowance	90,000	
		1,022,000
Employee's NAPSA contributions for		
Kaonga (K357,792 x 5%)	17,890	
Naonga (K357,792 x 5%)	17890	
Taonga (K192,000 +K90,000) x 5%	14100	
		(49,880)
Capital allowances on :		
Toyota Hilux (K850,000 x 20%)	170,000	
Isuzu van (K800,000 x 25%)	200,000	
		(370,000)
		431,120
Company income tax (K431,120 x 30%)		129,336

(d) COMPUTATION OF NET INCOME UNDER ALTERNATIVE

	Alternative 1	**Alternative 2**	**Alternative 3**
Profit as per question	1,825,000	1,825,000	1,825,000
Personal income Tax	(463,065)	(500,802)	(292,676)
Company income tax			(129,336)
NAPSA contributions	(63,980)		(99,760)
Net income	1,297,955	1,324,198	1,303,228

Alternative 2 which involves running the business as a partnership should be chosen as it gives the highest net income of K1,324,198. (½ mark)

SOLUTION TWO

(a) The principle of integrity requires a member to be straightforward and committed not to mislead or deceive. This means that a member providing taxation services should not knowingly associate himself/herself with reports, tax returns, communications and other communications or calculations that a member believes to be false or misleading.

The errors discovered on the returns confirms that the information submitted with ZRA is false and misleading; therefore, non-disclosure of the anomaly means a member will be knowingly be associated with this wrong information.

The directors under declared the values of mineral royalty for quarters ended 30 June 2024 and 31 December 2024 and seem to be a deliberate action by the directors which amounts to tax evasion.

You should immediately inform the supervisor about this matter for guidance, and if possible, report the issue to the relevant authorities.

(b) The following are the threats to compliance with the fundamental ethical principles:

(1) Familiarity threat

This is a threat that due to a close or long relationship with the client, a member becomes too sympathetic to their interests or too accepting of their work. KCM has been a client of the firm since 2016 which is a long time, hence a member may be too sympathetic and accepting of the work.

Course of action/safeguard

Have senior personnel rotated of the assignment. Or have an independent profession review the work done for this client

(2) Self-review threat

This is a threat that a member may have to review the work they have previously done. Since KCM has been a client of the firm for audit and other services, the member will be reviewing the work previously done by the firm giving rise to a self-review threat. It may be difficult for the member to identify any shortcomings in their work and re-evaluate their own previous judgement objectively.

Course of action/safeguard

Use different personnel od departments to perform the audit work and the non-audit work. Or have an independent profession review the work done for this client

(3) Intimidation threat

This is a threat that a member may be deterred from acting objectively due to actual or perceived pressures, including attempts to exercise undue influence over the member. The directors of KCM have indicated that disclosure of any anomalies discovered may affect the good relationship they have with the firm which may result in termination of contracts. This is intimidation threat to deter the member from acting objectively.

Course of action/safeguard

If the matters cannot be resolved with the directors amicably, you firm will have to terminate the relationship.

(c) KCM will be charged penalties for late payment of mineral royalty and submission of mineral royalty tax returns.

Late payment of tax

(1) The mineral royalty for the quarter ended 31 March 2024 should have been paid not later than 14th April 2024 but it was paid on 31 May 2024. This means that the tax was paid late by 47 days or 1 month 16 days.
(2) The penalty for late payment of tax is 5% of the unpaid tax per month or part thereof.

The penalty is therefore: K6,785,280 x 5% x 2 = K678,528.

The interest on overdue tax is charged at the Bank of Zambia discount rate plus 2%. Interest on overdue tax to be paid is: K6,785,280 x 11.85% x 2/12 = K134,009.

(3) The mineral royalty for the quarter ended 30th September 2024 should have been paid not later than 14th October 2024 but was paid on 31st October 2024. This means that the mineral royalty was paid late by 17 days.
(4) The penalty for late payment of tax is calculated at a rate of 5% of the unpaid tax per month or part thereof. The penalty will therefore be: K21,772,267 x 5% x 1 month = K1,088,613.
(5) Interest on overdue tax is also charged at the Bank of Zambia discount rate plus 2%. The amount of interest to be paid is: K21,772,267 x 11.85% x 1/12 = K215,001.

Mineral royalty payable

Quarter ended 31 March 2024	K
US$3,800 x 1,800 x K24.80 x 4%	6,785,280
Quarter ended 30 September 2024	
First US$3,999 x 1,900 x K24.80 x 4%	7,537,315
Next US$1,000 x 1,900 x K24.80 x 6.5%	3,062,800
Next US$2,000 x 1,900 x K24.80 x 8.5%	8,010,400

Balance US$671 x 1,900 x K24.80 x 10%	3,161,752
	21,772,267

Late submission of returns

(1) The mineral royalty returns for the quarter ended 31 March 2024 should have been submitted not later than 14th April 2024 but was submitted on 31st May 2024. The return was therefore submitted late by 47 days or 1 month 16 days.
(2) The penalty for late submission of returns is 2,000 penalty units or K600 per month or part thereof for companies. The penalty to be charged on KCM will therefore be: 2,000 penalty units x 2 = 4,000 penalty units or K1,200.
(3) The return for the quarter ended 30th September 2024 should have been submitted not later than 14th October 2024 but was submitted on 31st October 2024. The return was submitted late by 17 days.
(4) The penalty is 2,000 penalty units per month or part thereof for companies. The penalty to be charged on KCM is: 2,000 units x 1 month = 2,000 units or K600.

SOLUTION THREE

(a) The income tax implications of the personal financial protection products are as follows:

(i) Whole of life assurance

This policy pays out the sum assured as a lumpsum on the death of life/lives assured to the grantee, who need not necessarily be the life assured or their beneficiaries, whenever death occurs.
The insurance premiums paid are not tax deductible if paid by an individual and similarly the policy proceeds are not taxable.

(ii) Critical illness insurance

This policy provides a lump sum benefit payable on the diagnosis of one from a list of life-threatening conditions. The life-threatening conditions include cancer, coronary artery bypass surgery, heart attack, kidney failure, major organ transplant, multiple sclerosis and stroke.
The insurance premiums paid by an individual are not allowable for tax purposes, and the policy proceeds are not taxable.

(iii) Permanent health insurance

This policy provides income replacement, payable in the event of the inability to perform own or suited or any occupation or activities of daily living following the expiration or a predetermined deferral period due to illness or disability.
The insurance premiums paid are not tax allowable if paid by an individual. Similarly, the premium proceeds are not taxable.

(b) COMPUTATION OF TAXABLE BUSINESS PROFITS AND COMPANY INCOME TAX PAYABLE BY INVESTPRO BANK PLC FOR THE TAX YEAR 2024

	K	K
Income before tax		43,700,300
Add:		
Unrealised foreign exchange losses	4,800,000	
Employee pension benefit expenses	2,010,400	
Depreciation and amortization	3,100,000	
Impairment losses	308,900	
Donations to approved PBO – free advertisement	310,000	
		10,529,300
		54,229,600
Less:		
Unrealised foreign exchange gain	5,200,000	

Dividends	344,250		
Royalties	999,600		
Profit on sale of office building	956,150		
Gratuities paid	1,130,420		
Capital allowances (W)	4,010,000		(W)
		(12,640,420)	
Adjusted business profits		41,589,180	
Add:			
Royalties: K999,600 x 100/85		1,176,000	
Total taxable income		42,765,180	
Company income tax (30% - 5%) = @25%		10,691,295	
Less:			
WHT – Interest income	5,002,400		
WHT – royalties (K1,176,000 x 15%)	176,400		
Provisional income tax	4,411,800		
		(9,590,600)	
Income tax payable		1,100,695	

Workings – capital allowances

<u>Old office building</u>	K	K
ITV b/f	2,240,000	
Proceeds restricted to cost		
(K3,000,000 – K200,000)	(2,800,000)	
Balancing charge	(560,000)	(560,000)
<u>Automated Teller Machines</u>		
Wear & tear (K15,800,000 x 25%		3,950,000
<u>Pool motor cars</u>		
Wear & tear (K2,000,000 x 20%)		400,000
<u>Head office building</u>		
Wear & tear (K12,000,000 – K1,000,000) x 2%		220,000
Total capital allowances		4,010,000

SOLUTION FOUR

(a) ASTUTE
COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K
Business profits as per question	18,600,000
Add:	
Dividends from Kelzon plc	
(K480,000 x 1,350,000/1,080,000)	600,000
Dividends from Tizon plc	
(K81,000 x 450,000/270,000)	135,000
Transfer pricing adjustment on exports	
(25/75 x K3,750,000)	1,250,000
Transfer pricing adjustment imports	
(K4,000,000 – K2,600,000)	1,400,000
Final taxable income	21,985,000
Company income tax	
(K21,985,000 x 30%)	6,595,500
Less Double Taxation Relief on:	
Dividend from Kelzon plc (W1)	(120,000)
Dividend from Tizon plc (W2)	(40,500)
Company income tax payable	6,435,000

Workings

(1) Double taxation relief on dividend from Kelzon plc is the lower of:

(i) Foreign withholding tax paid

= K270,000/1,350,000 =20% x K600,000

= K120,000

(ii) Zambian company income tax on the dividend

= 30% x K600,000

= K180,000

The double taxation relief is therefore K120,000 which is the lower.

(2) Double Taxation Relief on dividend from Tizon plc is the lower of:

(i) Foreign withholding tax paid

= K180,000/450,000 = 40% x K135,000

= K54,000

(ii) Zambian company income tax on the foreign dividend

= 30% x K135,000

= K40,500

DTR is therefore K40,500 being the lower amount.

(b) LUWI MUKAPE

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K	K	
Income from Zambian Sources			
Annual salary		740,000	
Foreign dividends from			
Kelzon plc (K72,000 x K1,350,000/K1,080,000)	90,000		
Tizon plc (K10,125 x K450,000/K270,000)	16,875		
		106,875	
Taxable income		846,875	
Computation			
On the first K110,400		12,360	
On the balance			
(K846,875 – K110,400) x 37%		272,496	
Zambian tax Liability		284,856	
Less:			
Income tax deducted under PAYE		(142,500)	
Double taxation relief			
Dividend from Kelzon plc	18,000		(W)
Dividend from Tizon plc	5,442		(W)
		(23,442)	
Income tax payable		118,914	

Workings

(1) Total assessable income

	K
Income chargeable to income tax	846,875
Gross Zambian dividend (K57,800 x 100/85)	68,000
Total assessable income	914,875

(2) Total amount of Zambian tax charge

	K
Income Tax	284,856
Withholding tax on Zambian dividend (15% x K68,000)	10,200
Total Zambian tax charge	295,056

(3) Double taxation relief on dividend from Kelzon plc is the lower of:

(i) Foreign withholding tax paid

(K90,000/K1,350,000) x K270,000
= K18,000

(ii) Zambian income tax attributed to the foreign dividend

Gross amount of foreign income x Zambian Tax charge
Total Assessable income

= K90,000/ K914,875(W1) x K295,056(W2)

= K29,026

DTR is therefore K18,000 being the lower amount.

(4) Double taxation relief on dividend from Kelzon plc is the lower of:

(i) Foreign withholding tax paid

= K16,875/K450000 x K180,000

= K6,750

(ii) Zambian income tax attributed to the foreign dividend

= K16,875/ K914,875(W1) x K295,056(W2)

= K5,442

DTR is therefore K5,442 being the lower amount.

SOLUTION FIVE

(a) (i) COMPUTATION OF INCOME TAX PAYABLE UNDER THE ZCB LTD OFFER

	K	K
Basic salary		60,000
Lunch allowance		6,000
Medical allowance		5,000
Education allowance (20% x K60,000)		12,000
Telephone expenses K1,200 x 12		14,400
Motor expenses K6,000 x 12		72,000
Rentals K2,200 x 12		26,400
		195,800
Less tax allowable expenses		
Motor car running expenses		
(60% x K36,000)	21,600	
Capital allowances		
(K170,000 x 20% x 60%)	20,400	
Total allowable expenses		(42,000)
Taxable income		153,800
Income tax		
First K110,400		12,360
(K153,800 – K110,400)@ 37%		16,058
Income tax payable		28,418

(ii) COMPUTATION OF INCOME TAX PAYABLE UNDER THE Q LTD OFFER

	K
Basic salary	60,000
School fees	45,000
Accommodation benefit	0
Personal to holder motor car benefit	0
Motor car running expenses	0
Staff canteen meals	0
Utility expenses	3,000
Security fees K1,200 X 12	14,400
	122,400
Less professional fees	(3,000)
Taxable income	119,400
Income tax	
First K110,400	12,360
(K119,400 – K110,400)@ 37%	3,330
Income tax payable	15,690

(b) Computation of net income for the tax year 2024

ZCB LTD OFFER	K	K
COMPUTATION OF NET INCOME		
Gross emoluments		195,800
Less:		
Income tax payable	28,418	
Employee's NAPSA contributions		
(K195,800 x 5%)	9,790	
Employee's NHIMA contributions		
(K60,000 x 1%)	600	
Motor car running expenses	36,000	
		(74,808)
Net income		120,992

Q-PETROLEUM OFFER		
Computation of Net Income		
Gross emoluments		122,400
Less:		
Income tax payable	15,690	
Employee's NAPSA contributions		
(K122,400 x 5%)	6,120	
Professional fees	3,000	
Employee's NHIMA contributions		
(K60,000 x 1%)	600	
		(25,410)
Net income		96,990

Musonda should accept the offer from ZCB Limited as his net income will be higher by K24,002 (K120,992 – K96,990).

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 18 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. Present Value and Annuity Tables are attached at the end of the question paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This Question is compulsory and must be attempted.

QUESTION ONE- (COMPULSORY)

Shamwari Ltd (Shamwari Ltd) has been operating over (15) fifteen years and it manufactures a wide range of products. Its direct labour represents only a small fraction of total costs and overhead costs are a significant part of total costs. Over the period of fifteen (15) years Shamwari Ltd's operations have become increasingly automated with computer controlled robots replacing labour operatives. The manufacturing environment and products design are diverse and complex.

Currently Shamwari Ltd uses a single blanket overhead absorption rate based on direct labour hours to absorb overhead costs.

The production overhead costs for the year to 31 December, 2023 were as follows:

	K'000
Machinery cost	250
Machinery maintenance cost	50
Technician's salaries	170
Storemen salaries	70
Dispatch salaries	80
	620

During the year Shamwari Ltd engaged Robert Kaplan Consultants (RKC) to conduct a review of cost accounting systems. An extract of RKC's comment is as follows:

We have reviewed your cost accounting system and noted that absorbing overhead costs in individual products on a labour hour absorption basis is meaningless and overhead costs should be attributed to products using an Activity Based Costing (ABC) system. We have identified the following as being the most significant activities:

- Receiving component consignments from suppliers
- Setting up machinery for production runs
- Quality inspections
- Dispatching goods orders to customers

Our research has indicated that, in the short term, your overheads are 30% fixed and 70% variable. Approximately 40% of the variable overheads vary in relation to direct labour hours worked and 60% vary in relation to the number of quality inspections. This model applies only to relatively small changes in the level of output during a period of two years or less.'

Machinery operations and maintenance expenses are apportioned as follows:

- Component stores (20%), manufacturing i.e. set-ups (60%) and goods dispatch (20%).

Technician salaries are apportioned as follows:

- Machinery maintenance (20%), setting up machinery for production runs (50%) and quality inspections (30%).

During the year to 31 December, 2023, the following activities were carried out:

- A total of 4,000 direct labour hours were worked (paid at K6 per hour),
- 1,960 component consignments were received from suppliers,
- 2,040 production runs were set up,
- 1,280 quality inspections were performed, and
- 840 goods orders were dispatched to customers.

Shamwari Ltd's production during the year included components A, B and C. The following information is available:

	A	B	C
Direct labour hours worked	50	960	100
Direct material costs	K2,400	K5,800	K3,600
Component consignments received	84	48	56
Production runs	32	36	24
Quality inspections	20	16	36
Goods orders dispatched	44	170	92
Quantity produced	1,120	25,600	4,800

Required:

(a) Calculate the product cost per unit for components A, B and C using the existing cost accounting system. (5 marks)

(b) (i) Explain how an ABC system would be developed using the information given. (3 marks)

(ii) Calculate the product cost per unit of components A, B and C using the ABC system. (8 marks)

On receiving the RKC's report the Management Accountant commented as follows:

'It is often claimed that ABC provides better information concerning product costs than traditional management accounting techniques. It is also sometimes claimed that ABC provides better information as a guide to decision-making. However, one should treat these claims with caution. ABC may give a different impression of product costs but it is not necessarily a better impression. It may be wiser to try improving the use of traditional techniques before moving to ABC'.

Required:

(c) Evaluate the reported claim that ABC gives better information as a guide to decision making than do traditional product costing techniques. (7 marks)

Just-In-Time (JIT) and Total Quality Management (TQM) are considered a good approach to manufacturing where a modern manufacturing environment exists. Better manufacturing would lead to future success. To achieve this future success there is need to monitor a number of critical success factors.

Required:

(d) (i) Explain the roles that JIT and TQM play in modern manufacturing environment. How might the introduction of such techniques improve performance? (6 marks)

(ii) Recommend one critical success factor which could assist Shamwari Ltd to achieve future success. (3 marks)

As a multi-producer of a wide range of products, Shamwari Ltd supplies a small chain of four (4) department stores in and around Lusaka. These stores are subsidiaries of Shamwari Ltd. Recently Shamwari Ltd implemented in all stores, a point of sale system with linkages to a central computer. Previously the stores used conventional cash registers. You have been asked to evaluate the success of the conversion to the new system.

Required:

(e) Evaluate four (4) approaches to system changeover. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

ComTech Solutions is a software solutions company based in Zambia. The organisation writes customized software programs for large corporate and multinational firms based abroad. ComTech Solutions delivers quality products, which includes website development, mobile and web application development. Their main selling point is their cost advantage.

The Government supports the IT sector by providing tax and other concessions. However, the government is a coalition of several parties which each have different priorities and therefore the stability of government is not assured.

ComTech Solutions has a good market share in foreign countries. However, a debate is taking place in European countries regarding the outsourcing of jobs. The issue is that outsourcing causes unemployment in the countries that are outsourcing.

There are a number of new software companies emerging in the market who are providing cutting-edge software.

Consumers are demanding more user-friendly software that can teach them when a problem appears. The teaching should be given vocally, not in written form. These demands are two large challenges for ComTech Solutions.

The Government of many countries (within which ComTech Solutions has customers) has imposed tariffs/ duties on companies that import software from abroad, increasing the trend of globalisation in the IT sector.

The appreciation of the domestic currency has also affected the performance of the company. However, the company has adopted hedging techniques to deal with the situation.

The demand for talented professionals continues to increase causing wage rates to increase rapidly. However, considering the requirement for talented and efficient IT professionals, Government is providing support to increase the talent pool in the form of providing grants to colleges and universities.

The expansion of the economy is leading to an increase in the rate of inflation. Foreign Direct Investment (FDI) in the country and the economy of the country are developing fast and the country's banking sector is doing well. One other sector which is performing very well is the transport sector. These economic opportunities lured ComTech Solutions to diversify and register a company three (3) years ago. The company is called You Will Be There Ltd (UWBT Ltd).

Required:

(a) Evaluate the impact of political climate change, market conditions and funding on the performance of ComTech Solutions. (10 marks)

UWBT Ltd operates bus services throughout the major towns of Zambia. Most of the competitors in the passenger transportation industry constantly seek to reduce costs, often at the expense of the customer service. However, for UWBT Ltd, the foundation of its business strategy is to provide a superior and excellent quality service to its customers, staff courtesy, Wi-Fi service, internal toilets, movies and music, announcements and reliability. Its mission is to be a market leader, providing unparalleled customer service, inside bus comfort and on time bus service in the passenger bus sector. UWBT Ltd considers customers to be the focus of its strategic development and values its workers in harnessing its success.

Required:

(b) (i) Distinguish between the concepts of missions and objectives. (4 marks)

(ii) Illustrate how the mission of UWBT Ltd could be translated into Strategic objectives. (6 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

The Ultra Sound Hospital (USH) is a specialized hospital in fertility problems with its head office abroad. The hospital offers a wide number of services such as pregnancy management, fertility testing, boosters and DNA verification.

USH has faced some challenges due to the nature of the services which requires high technological equipment. USH has recently appointed a new Chief Executive who has a background in both retail operations and information technology solutions. He has just completed an initial review of systems and technology within USH.

The opportunities for the use of information technology [IT] need to be grasped, particularly in the implementation and running of the information system network in support of management operations in the hospital so that the delivery of results is done within minutes unlike where it takes seven (7) days for results to be delivered to clients from the head office.

Systems are generally weak and the benefits of modern software applications lacking. The accuracy and completeness of information received by the hospital from headquarters needs to improve and there needs to be better coordination of activities.

Internet services are poor and slow and this has affected the delivery of services to client. Data capturing of clients is critical but currently the system does not capture such important information. The documents are scanned manually to the head office. The new CEO is determined to have all services computerised and take full advantage of software capabilities.

The financial system is struggling to cope with the rapid growth of the hospital. This system was being managed by a manager who left and has not yet been replaced. Replacement software is due to go ahead within the next six months. Although the software does not fit existing business processes exactly, it has the clear advantage of giving USH access to an industry best practice system and is identical to that used by all its main competitors.

The CEO is happy that the USH is moving toward achieving strategic information systems to improve processes and services in order to gain competitive advantage.

The least problematic implementation approach is a phased approach, and a program of events for implementing was drawn up by the previous project manager who has now left USH. The CEO has said that there is need to appoint a project manager to oversee the implementation of the project as a matter of priority.

Required:

(a) Explain how USH can make use of the following:

- (i) Information systems (IS) Strategy. (2 marks)
- (ii) Information Technology (IT) Strategy. (2 marks)
- (iii) Information Management (IM) Strategy. (2 marks)

(b) Discuss the CEO's analysis of ways of overcoming potential problems in the implementation. (8 marks)

(c) Identify the main individuals and groups USH Human Resources Department should target first for training. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Zambia is a developing country with over 60% of economic activities dependent on mining. The mining sector remains to be the largest forex earner for the country. However, this sector in Zambia is dominated by large multinational companies with complex operational systems that enable them minimize their costs and maximize profits. One such system used by these large multinational companies is transfer pricing. The current weak tax regime in Zambia has enabled these large companies to externalize large sums of money through transfer pricing while consistently reporting losses.

In the 'five forces model', one of the conclusions reached by Michael Porter is that firms or strategic business units (SBUs) compete with their customers and suppliers. The same model can be used to evaluate the competitive environment of the SBUs of large, complex organizations such as those of the mining sector in Zambia. In such organizations, some of the SBUs may be customer and supplier to one another. This leads to management accountants becoming involved in negotiations leading to the agreement of appropriate transfer prices between these SBUs.

Required:

(a) Explain two (2) roles that the modern strategic Management Accountant would play in light of the Zambian economy. (2 marks)

(b) Explain how the forces exerted in a customer-supplier relationship led Michael Porter to conclude that firms compete with their customers and suppliers. (8 marks)

(c) Discuss the issues to be considered when negotiating and agreeing transfer prices between SBU's within a large, complex organisation such as the major mining companies in Zambia. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

World of Glass (WOG Ltd) manufactures specialty glass (such as frosted, tinted, mirror glasses) and tile ceramics. it is a world leader in these products because of implementing the Total Quality Management (TQM) philosophy and the Business Process Re-engineering techniques. After intensive years of training and a decade of applying the TQM approach, all the employees of WOG Ltd had bought into the quality concept. The directors of WOG Ltd are now considering introducing JIT to work well with Environmental Management Accounting(EMA) so that WOG can minimise environmental problems and improve its environmental impact by incorporating environmental costs into its accounting practices. It is hoped that the EMA will help in fulfilling its social role by respecting environmental legislation and preserving the environment. However, as far as JIT is concerned, it is split on this decision. The introduction of JIT system will lead the company to manufacturing processes being more efficient, more competitive and cheaper to run in the longer term. Benefits from the investment today will not be fully realised until after five (5) years. There are two (2) opposing views.

The Finance Director stresses that, although the effect on profit over the next five (5) years will be severe while the company goes through the transformation, the long-term goals are well worth the expense if they are achieved.

The Chief Executive is unhappy and stresses the effect of such big reductions in profits will have on the share price and on the shareholders, many whom are pensioners, who rely on their high dividends to supplement their old age pensions.

Required:

(a) Evaluate the two (2) positions of the Finance Director and the Chief Executive Officer and show how the two (2) schemes are in conflict. (8 marks)

(b) Environmental management accounting attempts to make all relevant, significant environmental costs visible so that they can be considered when making business decisions. Evaluate three (3) methods that may be used for accounting for environmental costs. (6 marks)

(c) The "BPR" technique has contributed to good business performance for WOG Ltd. Explain the term "Business Process Re-engineering" and evaluate how its application might have enabled overall business performance of WOG Ltd to be improved.

(6 marks)

[Total: 20 Marks]

END OF PAPER

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA3.5 SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

Product cost per unit using the current system

	A	B	C
	K	K	K
Direct material	2,400	5,800	3,600
Direct labour	300	5,760	600
Prime cost	**2,700**	**11,560**	**4,200**
Overheads: (K155x50/960/100)	7,750	148,800	15,500
	10,450	160,360	19,700
	÷	÷	÷
Units produced	1,120	25,600	4,800
Production cost per unit	**K9.33**	**K6.26**	**K4.10**

Working:

W.1 OAR = K620, 000 ÷ 4,000 direct labour hours
= K155 per direct labour hour

(b)(i) Explanation of How ABC Would be Developed

In an ABC system, resources are assigned to activities and are assigned to cost objects, based on consumption estimates using cost drivers to attach the activity cost to outputs.

In the given scenario, the total manufacturing overhead costs for the year ended 31 December, 2023 must first be split into cost pools and relevant cost drivers must be identified for each pool. Applying the cost driver rate to each component's use of the activity will then determine the appropriate overhead to be assigned.

The cost pools that comprise the K620, 000 total must be calculated from activities identified in the question. The consultants (RKC) have already identified the cost drivers that should be used.

The steps are further exemplified in part(b)(ii).

(b)(ii) Product cost per unit using ABC

	A	B	C
	K	K	K
• Prime cost Part(a)	2,700	11,560	4,200
• Overheads			
Receiving supplies	5,863	3,350	3,909
K69.80 x 84/48/56			
Set-ups	4,477	5,036	3,358
K139.90 x 32/36/24			
Quality Inspection	797	637	1,434
K39.84 x20/16/36			
Dispatching goods	7,689	29,709	16,078
K174.76 x 44/170/92			
	21,526	50,292	28,979
	÷	÷	÷
Goods produced	1,120	25,600	4,800
Cost per unit	**K19.22**	**K1.96**	**K6.04**

Step 1: Determine Total Costs for Each Activity

	BASIS	Receiving supplies	Set ups	Quality	Dispatch	Total
		K'000	K'000	K'000	K'000	K'000
Machinery operation costs	20:60:20	50	150	-	50	250
Maintenance (mtce)	20:60:20	10	30	-	10	50
Technician salaries (mtce)	20:60:20	6.8	20.4	-	6.8	34
Technician salaries (Excluding mtce)	50%/30% x K170	-	85	51	-	136
Storemen salaries	Direct allocation	70	-	-	-	70
Dispatch staff salaries	Direct allocation	-	-	-	80	80
	Total	136.8	285.40	51	146.8	620

Step 2: Calculate Cost Driver Rates For Each Activity

- Receiving supplies = K136,800 ÷ 1,960 = K69.0/Consignment
- Set-ups = K285,400 ÷ 2,040 = K139.90/set-up
- Quality Inspection =K51,000 ÷ 1,280= K39.84/ inspection

- Dispatching goods = K146,800 ÷ 840 = K174.76/ dispatch

(c) **Appraisal of ABC.**

The reported claim that ABC gives better information as a guide to decision-making than tradition techniques is probably generally true, but it suffers from the weakness of all generalisations.

Advocates of the ABC claim that, as manufacturing overhead become an ever increasing proportion of total unit costs, the methods to measure and control them become more important and deserve increasing sophistication. ABC offers management a closer insight into behaviour of overhead costs as the operating strategy changes, and thus decisions made on pricing, make or buy, possible further processing, etc., which depends on accurate costing of units of production, should be more accurate if ABC is used rather than traditional techniques.

However, decisions-making should be carried out on the marginal costs and revenues involved in the decisions. ABC analysis produces an average cost per unit. It is therefore flawed logic to use ABC costs in situations where the average cost changes with the level of activity, for example, when bulk discounts become available at certain activity levels. This illustrates the main problem: although the theory of ABC sounds simple, it can be complicated and costly to implement it in practice and it may be that results obtained using ABC are in fact no more accurate and meaningful than the heavily-attacked 'traditional' approach.

(d)(i) **Characteristics of Modern Manufacturing Environment and JIT/TQM Introduction**

Just-in-time (JIT) is a system whose objective is to produce or procure products or components as they are required by a customer or for use, rather than for inventories. A just-in-time system is a 'pull' system, which responds to demand, in contrast a 'push' system, in which inventories act as buffers between the elements of the system, such as purchases, productions and sales.

The old traditional system was for companies to operate their production line for a while to build up inventories of a component and then to move on to another component. The inventories held of raw materials and finished productions protected the company against problems arising from late delivery from supplies and defective goods. The company could simply run down the inventories while waiting for the delayed delivery of non-defective units.

S Ltd's performance would be improved by a JIT system firstly because of a *reduction* in inventories holding costs. Large warehouses can be *sold* since they are *unnecessary* when inventories are kept to a *minimum*. S Ltd will also have to develop a *close relationship* with its supplies and customers so that all deliveries can be supplies of defect-free goods at the right time. Often in a JIT situation, long-term contracts are signed between supplier and customer so that *marketing costs* can be *saved* and the producer can concentrate on its production. *S Ltd will therefore benefit from having defect-free components delivered to it*; perhaps quality *inspections* of incoming goods can be *abolished* since the supplier guarantees the quality of these goods.

The pursuit of quality is the main characteristic of Total Quality Management (TQM). A TQM philosophy aims to ensure that improving quality is the concern of every employee at every stage of producing a good or service. Each employee is empowered to be responsible for quality. JIT and TQM together lead to a multi-skilled teamwork-based workforce in which the factory layout may need to be simplified so that units of product can be efficiently pulled through the system without bottlenecks building up.

S Ltd should *benefit* from TQM by having *fewer goods returned* (since they should all now be high quality) and by having a *happier* and *more productive workforce* (since they are genuinely empowered to be responsible for their outputs). S Ltd makes a range of products of varying levels of design complexity; to maintain customer satisfactions in such a complicated operation. S Ltd will find JIT and TQM to be advantageous.

(d)(ii) **Critical Success Factor to Achieve Future Success**

Critical success factors (CSF's) are the vital areas 'where things must go right' for the business to succeed. The achievement of CSF's should allow the organisation to cope better than rivals with any changes in the competitive environment. The achievement of CSF's can be measured by establishing Key Performance Indicators (KPI's) for each CSF.

S Ltd is in the manufacture of goods. Examples of CSF's include producing quality products, Innovation, Low cost production plants, adequate skilled labour.

These CSF's can help S Ltd achieve greater future success by allocating resources towards realising their goals more directly.

(e) **Evaluation of System Changeover Approaches**

Essentially, there are four approaches from which to choose**:**

Direct changeover

The existing system is abandoned for the new at a given point in time. This seems an economical approach, but this is balanced by the risk that the new system will not work perfectly. Furthermore, there will be no safety net, in terms of existing procedures and staff, with which to recover the situation. If the new system bears little or no similarity to the old, this may be the only route. In the context of the department store, it should be obvious that this is not a viable option; if the new system collapses then the store potentially loses all its sales until it is remounted.

Parallel running

This involves the running at the same time of both old and new systems, with results being compared. Until the new system is proven, the old system will be relied upon. This is a relatively safe approach, which also allows staff to consolidate training in the new system before live running commences. It is expensive, however, because of the extra resources required to run two systems side by side. Parallel running is necessary where it is vital the new system is proven before operation. In the case of the POS system, this would be the most suitable method of changeover.

Phased changeover

Here the new system is introduced by the department, or location by location. This is less drastic than direct changeover, and less costly than parallel running, although each department may still be parallel run. For the department store group it might well be a sensible approach to introduce the new POS system into just one store, initially, and parallel run at that store first, before switching to phased changeover, and subsequently to implementation at all other stores.

Pilot changeover

This is another compromise approach, involving the running of the new system, or functions/subsystems thereof, on a sample of users, transactions, files, etc. in parallel with the new system. This might be followed by full parallel running, or a switch to phased changeover. Care must be taken with the choice of sample. The nature of the new system here makes it unlikely that this approach could be adopted.

Whichever approach, or combination of approaches, is adopted, good management control, including thorough monitoring, will be essential if the new system is to be successful.

SOLUTION TWO

a) **Evaluation of Political Climate Change, Market Conditions** and **Funding** on **Performance of CS Ltd**.

Political climate:

The IT sector is receiving support from the government in the form of tax and other concessions. As a result, CS Ltd will save money on taxes. This will have a positive impact on the profitability of CS Ltd.

The political instability in the country will delay the reform of the country's economy and adversely affect the market for securities for all the companies in the country as well as the market for information technology companies.

Considering the requirement for talented and efficient IT professionals, government is providing support to increase the talent pool in the form of providing grants to educational institutes. As a result of this there is increase in the availability of talented and efficient IT professionals who are good for the company since this will make them available as manpower at lower costs.

The government of many countries has imposed tariffs/ duties on companies that import software from abroad so that among other things, jobs can be created locally. CS Ltd will become more expensive (because of import duties) for its clients and this will affect its performance.

Market conditions:

As a result of the increasing trend for globalisation, CS Ltd is facing competition from more and more foreign companies.

The IT services market is highly competitive. Competitors include large global consulting firms, sub-divisions of large multinational technology firms, IT outsourcing firms, software firms and in-house IT departments of large corporations. Some competitors have adopted divestiture and acquisition strategies resulting in consolidation within the industry. In addition, competitors are providing cutting-edge software. This affects the performance of CS Ltd.

There is opposition in the western countries to the outsourcing of jobs to the countries since this results in unemployment in those countries. Although no concrete action has been taken, the debate will have an **adverse** impact on the market for CS Ltd.

The appreciation in the domestic currency has reduced the profitability of CS Ltd. However, the adoption of hedging techniques could help CS Ltd to make profits.

The entry of new competitors providing cutting-edge software could mean that CS Ltd will lag behind and this could affect the position of the company in the market.

CS Ltd will have to consider the demands of the consumer; otherwise the company's performance will deteriorate and it may fail to survive in the competitive market.

In response to the demand for rising talent and macroeconomic trends, wage rates are increasing rapidly. This increase in the cost of production and will therefore affect profitability.

The expansion of the economy is leading to an increase in the rate of inflation. Due to this, the cost of production will increase and the performance of CS Ltd will be adversely affected.

Funding:

Due to foreign investment in the country, the economy of the country is developing fast. This will have a favourable impact on the securities market.

The banking sector of the country is doing well and has a wide geographical and functional range. Since CS Ltd is one of the leading IT companies in the country, the availability of credit in time and at a cheap rate is not an issue for the company.

b) (i) The main differences between a mission and an objective

- A mission is supposed to be a purpose of existence. Objectives set out the milestones to be achieved in the pursuit of that mission.
- The mission does not usually mention timescales, whereas objectives should state when they are to be achieved.
- Missions often refer to undefined terms such as 'quality', 'unparalleled' and 'best'. Objectives need to be more specific, referring to measureable quantities, so staff know what is expected of them and whether they have achieved their objectives.
- Mission statements do not normally mention commercial terms such as 'profit'. Objectives will include a full range of both financial and non-financial targets.

b) (ii) Translation of Missions to Objectives

The mission of UWBT Ltd could be translated into the following objectives by taking each aspect of the mission and making it 'SMART' – specific, measurable, achievable, relevant and time-bound. For example:

- **Mission 1**: 'to be market leader'
  Objective: Market leader could be translated as market share: 'UWBT Ltd aims to achieve a 20% share of the passenger transport by 2030.'

- **Mission 2:** '…providing unparalleled service'
  Objective: '…unparalleled' could be equated with industry awards:
  'UWBT Ltd aims to win the passenger carrier of the year award by 2025.'

- **Mission 3:** '… bus trip comfort'
  Objective: Comfort is harder to quantify but could be expressed as:

- ‘UWBT Ltd seeks to eliminate all incidence of fatigue on its routes by the introduction of 10 minutes stops at major stations and exercise programmes led by staff by 2025.’

- **Mission 4:** ‘…reliability’
  Objective: Reliability is usually interpreted as the lack of delays:
- ‘UWBT Ltd aims to have 95% of all bus trips each year arriving no more than 12 minutes late.’

- **Mission 5:** ‘customer…central’
  Objective: Customers could be made central by objectives such as:
- ‘UWBT Ltd aims to introduce the use of customer focus groups by 2024.’

- **Mission 6:** ‘values its staff’
  Objective: Valuing staff is difficult to quantify but could encompass:

  ‘UWBT Ltd aims to fill 75% of management vacancies from internal means by 2026.

SOLUTION THREE

(a) Information systems (IS) Strategy-is a long-term plan for systems to exploit information in order to support business strategies or create new strategic options such as transmission of results and client information electronically instead of manual documentation.

Information Technology (IT) Strategy -is concerned with selecting, operating and managing the technological elements of the IT strategy. Having up to date equipment that is managed by an expert.

Information Management (IM) Strategy - deal with the roles of the people involved in the use of IT assets, the relationships between them and design of the management processes needed to exploit IT. Human Resource like IT Manager, IT Technicians, Accounts team being well equipped with knowledge on how to use the system.

(b) The key points from the Chief Executive's analysis of potential implementation problems are discussed below.

No project manager in place-There was a project manager in place who was responsible for the implementation of the new financial system, but that person has left and not yet been replaced.

The Chief Executive recognizes the need to appoint a new project manager as soon as possible. Appointing from within USH would ensure the new project manager was familiar with the organization and the processes surrounding the existing IT and finance system.

However, project management requires specific skill-there may not be a suitable individual within USH for the role. A specialist project manager appointed from outside USH should have the required skills and experience of similar implementations and may also bring a fresh perspective to the situation.

The proposed software does not fit existing business processes and does not resolve all problems as expected

The Chief Executive recognizes that the new software does not fit existing business processes exactly and does not resolve all issues as expected, but he still believes it to be 'a good choice; This belief is based on the fact that competitors use the software and that it is recognized as 'an industry best practice system;

However, the software system should facilitate efficient working practices and business processes. Changing processes to fit a particular type of software could actually introduce inefficiencies. This requires further investigation. On the other hand, it could be that due to its rapid growth USH operates in an inconsistent and inefficient way as they still scan documents manually, so a change in processes could be beneficial.

A possible complication in any review of the choice of software is that USH may already be committed contractually to take the proposed software.

The implementation approach to adopt

The Chief Executive states that the previous project manager recommended a phased approach to implementation and drew up a timetable for implementation under this approach. The Chief Executive agrees that a phased approach is the best option as it would be the 'least problematic 'for USH.

A phased or modular changeover Involves changing part of the system first, for example the receivables ledger, then changing other parts of the system over in stages. A phased approach could also take the form of implementing the whole new finance system in a particular location. The phased approach is less risky than a direct approach as the area of change or upheaval is restricted. It allows for problems to be identified and collected in a relatively restricted environment, before the system is introduced organization-wide.

(c) The main individuals and groups USH, Human Resources Department should target initially for training are;

The new project manager
Assuming the new project manager comes from within USH, he or she will require training in project management skills.

USH senior management
Successful implantation of IT projects requires support from the top of the organization. USH senior management must understand the new system and be seen to support the project.

Head office finance staff
Head office finance staff will use the new system to consolidate results into organization-wide financial statements. Depending upon how operation are structured, they may also provide a centralized accounts function (e.g. payables and receivables).

Operational staff
Staff operating in at the hospital will need training to ensure they can process transactions efficiently, maintaining standards of customer service and confidentiality. Training should cover operating procedures, data entry requirements of personal data, results transmission, payment processing, system commands and security aspects (e.g. passwords).

SOLUTION FOUR

(a)

The strategic management accountant nowadays looks beyond the numbers with a more eternal focus on the organisation to support the overall corporate and business strategies. Therefore some of the roles include:

Providing strategic information that supports strategic decision making for the company in a timely and accurate manner.

Lobbying the government through professional bodies to diversify the economic activities and support the internal drive for economic development.

(b)

Michael Porter concluded that firms or SBUs compete with their customers and suppliers because they exert bargaining power over one another. The relative competitive advantage depends on the degree of bargaining power of each of the parties. As Porter views competition as activity that affects margins, he sees customers and suppliers as being involved in activity to "steal" margin from one another.

The most obvious competitive force between customer and supplier is to affect prices and quality. A powerful customer will exert force by trying to persuade the supplier to improve quality, either of the product or service being provided, or of the service package supporting the product. Alternatively, a powerful customer might be willing to accept the standard product, but demands a discount, thus increasing its own margin at the expense of the supplier.

Bargaining power can also be determined by the relative size of the parties, or the extent to which they rely on one another. A large supplier or customer, for whom the other party represents a small or unimportant part of their business, will be more likely to exert power to get a "good deal". It is obvious that a small customer, for example, is in a much worse position to ask for a discount than one placing a very large order. Similarly, if a customer represents a significant proportion of turnover, a supplier will work hard to keep such a customer happy, thus increasing the service package and incurring cost.

A customer or supplier also has greater bargaining power if the other party would incur switching costs in doing business elsewhere. This cost would, if incurred, reduce margins. This will lead to the party being less likely to break off the relationship.

Some element of bargaining power also depends on the availability of alternative suppliers or customers. A large supplier will give no concessions to a very small customer if it is confident that another customer will be available to replace it. Similarly, a customer looking for a very specialized supply may find that it has no alternative than to take the terms offered by a single supplier.

Thus, according to Porter, firms and SBUs "compete" with their customers and suppliers.

Whether you believe this depends on how broad is your definition of "competition". Porter starts from the premise of a very broad definition, so is able to prove his hypothesis.

(c)

In a complex organisation SBUs may have been acquired or developed along a supply chain.

This means that, within the organisation, there will be SBUs that are customer and supplier. The logic for this structure is that it cuts out supplier margins, reduces transaction costs and secures reliable supply of raw materials or components. In this situation, the organisation runs the risk of sacrificing any saving in transaction costs if these are replaced by management time spent negotiating transfer prices.

The SBUs concerned will, in effect, be competing with one another as customer and supplier during the negotiation, in the same way as described in part (b). The transfer price agreed will determine, to some extent, the profitability of each of the SBUs. If bonuses are paid to managers in line with SBU performance, the level of bonus paid will also depend on the transfer price. Thus, managers may have a vested interest in protracted negotiations that destroy value in the organisation.

The parent company must decide whether the transfer is in the best interests of the organisation. If it is, some authors suggest that the transfer price should simply be imposed.

This eliminates "competition" but may demotivate managers, particularly if divisional bonuses are paid. In most organisations, some degree of negotiation is permitted, but this may be unrealistic if there is a corporate strategy decision that the transfer is desirable. In this case, the bargaining power of the supplier SBU is vastly increased, thus distorting the balance of the negotiation.

The opposite is the case if the supplier SBU is not permitted to make external sales, or if there is no external market (for example, for a specialist component). In this situation, the bargaining power apparently lies with the customer SBU, as the supplier has no option but to make the transfer. However, if the specialist component or supply is not available from elsewhere, the bargaining power may shift to the supplier SBU as its product is differentiated.

The end result of any transfer price negotiation must be to result in a transfer at a "fair" price. In this case, fair means that the price must be perceived as fair by the SBUs concerned. Any other outcome will result in a loss of motivation in one or both of the SBUs. A fair price is easier to determine if there is a free market in the product, component or service being transferred (in other words, it can be both sold and bought outside the organisation). If this is not the case, the range of transfer prices to be considered can be anywhere between marginal unit cost and full cost plus "normal" margin.

The most important issue in transfer pricing is that, in corporate terms, the transfer price "disappears" on consolidation of the accounts. When the supplier and customer SBU accounts are consolidated, the revenue from the transfer price cancels out the cost of purchase, so the net result is that the transfer "disappears". Value is destroyed by the negotiation, as any management time and effort is wasted, and simply increases internal transaction costs.

Similarly, any "competition" between the SBUs is dysfunctional. If the management accountant understands this, and the relative bargaining power of the SBUs concerned, it should be possible to conclude negotiations quickly, thus destroying as little value as possible.

SOLUTION FIVE

(a) The Finance Director is taking the longer-term view of the company's future best interest. A long-term goal must be to improve efficiency and competitiveness, otherwise the company will be unable to survive market pressures, and will go into terminal decline. JIT will give the company that kind of efficiency as well as the ability to cut costs and selling prices to enable products to compete in an international market. However, this will not happen overnight and it will be expensive to the company. Much hard work must be put in over the coming years to effect the changes in training, procedures, and the mentality and outlook of both managers and workforce to enable the new system to function to its full capacity. It cannot be carried out halfheartedly and must be funded to the full from profits and other resources. Once in place, though, renewed profits will flow from the scheme and the company's future will be assured.

The obvious downside is the scheme's likely effect on current profits. Instead of being used to pay much-needed dividends, profits will be used to fund the new JIT scheme. While this is for the long-term benefit of the company, the money is needed now to boost the company's share price to make sure that the company survives to continue trading. Once the stock market perceives a fall in profit, the share price will fall, confidence in stock, the company and its products will also fall and customers may begin to go elsewhere. Therefore, profits made today need to be distributed today to continue existence tomorrow.

The **conflict** arises from profit alone being used as the measure of successful performance. High profits are often equated with good performance to the detriment of long-term objectives such as the introduction of a JIT system, research and development, or training. The market and investors will give credit for the introduction and successful operation of such a system but are unwilling to pay for it now through reduced dividends and share prices. While achievement of longer-term aims is desirable, the results are in the future; today's profits on the other hand should be for the benefit of today, particularly for those who rely on the company for their income. This poses a particularly difficult decision for management between short-term gains and long-term interests. Profits have to be made to survive, and the sacrifice of profit today for possible profit tomorrow is a difficult decision to make.

(b) The following methods can be used to account for environmental costs.

(i) Input/Output Analysis.

Input/output analysis records material flows and balances them with outflows on the basis that what comes in must go out, or be stored. This approach is similar to process costing where all materials in a process are accounted for, either as good output or scrap/was. This forces the business to look at how it uses its resources and focuses it on environmental cost.

(ii) Environmental Activity-Based Costing

Environmental activity-based costing uses cost drivers (e.g. volume of emissions or waste) to identify environmentally driven costs and then tracks these cost drivers back to the products being produced.

(iii) Life Cycle Costing(LCC)

Life Cycle costing can be applied to taking into account the environmental consequences across the whole lite of the product. Organisations need to have the recording systems to capture all costs, especially those incurred prior to production (which is when traditional cost recording commences), and after production ceases (for example, the costs of cleaning and decontaminating industrial sites when they are decommissioned at the end of a project).

These costs can often be large sums, and so can have a significant impact on the shareholder value generated by a project. Yet there is a danger that costs which occur after production ceases will be overlooked or given a low priority by managers driven by short-term financial measures. However, it is important that a project appraisal captures all the costs generated over the whole life cycle of the project. LCC will help ensure the full extent of this cost information is included.

Moreover, it is important that potential decommissioning costs and other post-production costs are identified at the start of a project, so that they can be included in the investment appraisal (or similar cost/benefit analysis) to determine whether or not to undertake the project.

(iv) Flow Cost Accounting

It makes material flows transparent by looking at the physical quantities involved, their costs and their value. The method divides the material flows into three categories: material, system and delivery and disposal. The values and costs of each of these flows are then calculated.

(c) Business process re-engineering(BPR) involves examining business processes and making substantial changes to the way in which an organization operates. It requires the redesign of how work is done through activities. A business process is a series of activities that are linked together in order to achieve the desired objective. For example, material handling might be used as a business process which involves the separate activities of production scheduling, strong materials, processing purchase orders, inspecting materials and paying suppliers.

The aim of BPR is to enhance organizational performance by achieving improvements in the key business processes by focusing on simplification, improved quality, enhanced customer satisfaction and cost reduction. Business process re-engineering can be applied not only to manufacturing processes but also an extensive range of administrative activities. In case of material handling, WOG Ltd might re-engineer the activity of processing purchase orders by collaboration with suppliers of components of their products by integration of their production planning system with that of their suppliers. This would enable purchase orders to be sent directly to their suppliers thereby obviating the need for any intermediate administrative activity. By the same token scheduled orders might be agreed with the supplier which would reduce the need to hold inventories. In circumstances where the suppliers are working in close collaboration with WOG Ltd, it may be possible to roll the quality back down the supply chain and agree quality control procedures with the suppliers which would reduce the need to inspect incoming deliveries of components. Thus savings in material handling costs could be achieved via reduced storage, processing and inspection costs. Such costs do not add value to the final product and thus are of no benefit to the customer. The focus of elimination of non-value added costs and cost reduction links BPR to TQM and JIT philosophies.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 21 MARCH 2025

TOTAL MARKS – 100: TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.

2. This paper is divided into TWO (2) sections:

   Section A: ONE (1) **Compulsory** scenario question.
   Section B: FOUR (4) Optional scenario questions. Attempt any THREE (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.

4. Do **NOT** write in pencil (except for graphs and diagrams).

5. **Cell Phones** are **NOT** allowed in the Examination Room.

6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.

7. All workings must be done in the answer booklet.

8. Present legible and tidy work.

9. Graph paper (if required) is provided at the end of the answer booklet.

10. Formulae, Present Value, Annuity and normal distribution tables are attached at the end of the question paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY

THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

Zamchop Plc began as a small butcher shop in the capital, Lusaka in 1991 with minimum capitalisation. In 2003, the Company was quoted on the Lusaka stock Exchange and subsequently moved to the listed tier in 2005. Zamchop Plc issued its new shares when the share price was record high. The company has adopted a strategy of diversification into many different industries, in order to reduce risk for the company's shareholders. This has resulted in frequent changes in the company's gearing level and widely fluctuating risks of individual investments.

Zamchop Plc has subsidiary companies in the agriculture sector, telecommunication sector, education, oil and petroleum sectors. The company is currently considering an investment in the textile industry where it has no related investments. Zamchop Plc expects to generate pre-tax operating cash flows of K500 million in the first year, rising by 8.5% per year for the five (5) year expected life of the project.

The investment project will require a purchase of equipment and machinery. The machinery has advanced technology such that after five years it is expected to have a net realisable value of K1,550 million (after any tax effects), the same as its original cost. However, for operations to continue after five (5) years, it would still require significant new investment in machinery at that time. The total initial cost of investment in the project (net of issue costs) is K2,550 million. The equipment attracts a 25% per year capital allowance on a reducing balance basis. The project will require working capital amounting to K150 million.

The textile project will be located in the rural part of the country that is expected to create employment for the local community. The project has attracted the attention of a local government development agency which will provide debt financing of K950 million at a subsidised interest rate of 7.5% per year, 2.5% less than Zamchop Plc could borrow in the financial market. The other part of the financing would be done through an underwritten rights issue at a 6% discount on current market price with total underwriting and issue costs of 5% of gross proceeds. The investment is believed to add K1,200 million to the company's debt capacity. The textile industry has an average equity and debt beta of 1.4 and 0.25 respectively. In addition, the average industry gearing ratio as measured by market values of debt to equity are 1 to 1. Zamchop Plc pays corporate tax one (1) year in arrears which is currently at 30% per annum. Government bonds are currently yielding 5% per year after tax, and the market expected return by investors is 12.5% per year.

Required:

Write a report to the Management of Zamchop Plc addressing the following:

(a) Evaluation of the financial viability of the proposed investment using the Adjusted Present Value method. (29 marks)

(b) Discuss the reasons new equity issues in general will be more common when share prices are high than when share prices are low. (7 marks)

Note: there are four (4) professional marks available for report format and coherence.

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

Trokat Inc. has followed a policy of successfully reinvesting its earnings to create a dominant market position. The company has aimed to keep its financial gearing significantly low at 8% as measured by debt to equity. One of the reason is that the fixed cost base is very high for the company. Trokat Inc. manufactures a range of electric cables for sale to wholesale hardware as well as retail customers. Recently, there has been growing demands for its cables by the mining companies in the country and the region. Therefore, the Directors have decided to expand production. The cost of acquiring new plant and machinery and the increase in working capital requirements are planned to be financed by a mixture of long-term and short-term borrowing. Trokat Inc. plans to approach its banker for a long term loan. The company management is confident that the company will achieve its primary objective of profit maximisation with ease.

Required:

(a) Discuss the major factors that should be taken into account when deciding on the appropriate mix of long-term and short-term borrowing necessary to finance the expansion programme. (7 marks)

(b) Discuss the major factors that a lender should take into account when deciding whether to grant a long-term loan to the business. (4 marks)

(c) Identify three (3) conditions that might be included in a long-term loan agreement, and state the purpose of each. (3 marks)

(d) Discuss the reasons profit maximisation as a primary objective would be insufficient for investors. (6 marks)

[Total: 20 Marks]

QUESTION THREE

The Managers of JB Plc are investigating a potential K25 million investment. The investment would be a diversification away from existing mainstream activities and into the printing industry. 24% of the investment would be financed by internal funds, 40% by a rights issue and 36% by long term loans. The investment is expected to generate pre-tax net cash flows of approximately K5 million per year, for a period of ten (10) years. The residual value at the end of year ten is forecast to be K5 million after taxes. As the investment is in an area that the Government wishes to develop, a subsidized loan of K4 million out of the total K9 million is available. This will cost 2% below the company's normal cost of long-term debt finance, which is 8%.

JB'equity beta is 0.85, and its financial gearing is 60% equity, 40% debt by value. The average equity beta in the printing industry is 1.2, and average gearing 50% equity, 50% debt by market values.

The risk-free rate is 5.5% per annum and the market return 12% per annum.
Issue costs are estimated to be 1% for debt financing (excluding the subsidized loan), and 4% for equity financing. These costs are not tax allowable.
The corporate tax rate is 30%.

Required:

(a) Evaluate the project using adjusted Present value (APV). (16 marks)

(b) Comment upon the circumstances under which APV might be a better method of evaluating a capital investment than Net present value (NPV).

(4 marks)

[Total: 20 Marks]

QUESTION FOUR

Savers Checkers (SC) is a Zambian large retail company that imports goods from the United States (US) for sale in the Zambian market. Over the years, SC has grown significantly in its operations in Zambia, however, recently the US currency (US$) has appreciated extremely fast against the local currency (ZMW). The directors of SC are aware that the company is subject to significant economic exposure to movements on the US$ because any appreciation of the US$ will increase the cost of goods for resale. The company has attempted to create a partial hedge against this by opening a forex account with its local bank and placing all of its cash reserves in this US$ bank account. That way the losses associated with any increase in cost prices will be partially offset by a gain on the bank account. The Directors are concerned that the translation gains and losses on the US$ bank balance are visible to shareholders, whereas the offsetting of economic exposure is not and so their hedging policy may be misunderstood. The US bank account has a balance of US$3m. The exchange rate is presently K30 to US$1. The daily standard deviation of the balance when it is translated to K is K450,000.

Required:

(a) Advise the directors on the matters that they would have to consider in determining the extent of SC's economic exposure. (5 marks)

(b) Evaluate the validity of the Directors' concern that "the translation gains and losses on the US$ bank balance are visible to shareholders, whereas the offsetting of economic exposure is not and so their hedging policy may be misunderstood". (6 marks)

(c) (i) Calculate the 95% daily value at risk (VaR) of SC's US$ bank balance. (3 marks)

(ii) Use your answer to (c)(i) to calculate the 95% 30 day VaR of SC's US$ bank balance. (2 marks)

(iii) Advise the Directors on the relevance of the VaR statistic to their consideration of the risks associated with retaining this US$ bank balance. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

FAWK International is a conglomerate company that owns and controls the production of electric car batteries and other electrical appliances in different countries across the globe. FAWK International was founded in 1886 as a family business. During the 19th century, the company expanded its business beyond its national borders. Over 85% of its revenue is generated from the foreign subsidiaries. About half of its foreign business operations is located in Africa where it sources most of the raw materials.

FAWK International has always been looking for new ways to increase its revenue and extend market influence beyond the national borders. However, some financial analysts have raised concerns regarding the increasing level of risk exposure of the company. Therefore, this has raised debate among the directors as to whether to use derivatives to hedge the risk exposure or not.

Required:

(a) Assess the different categories of risks that FAWK International may be exposed to as a result of its foreign business operations. (14 marks)

(b) Discuss the main arguments for hedging risks using derivatives by FAWK International. (6 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 x \frac{(1 + i_c)}{(1 + i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1+r_e\right)-1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2)e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r+0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

SOLUTION ONE

(a)

$$\beta \text{ asset} = \beta_e \frac{E}{E + D(1-t)} + \beta_d \frac{D(1-t)}{E + D(1-t)}$$

$$\beta \text{ asset} = 1.4 \times \frac{1}{1 + 1(1-0.3)} + 0.25 \times \frac{1(1-0.3)}{1 + 1(1-0.3)}$$

$$= 0.823 + 0.103 = \underline{0.926}$$

Using CAPM

$$K_e \text{ ungeared} = r_F + (Er_M - r_F)\ \beta \text{ asset}$$

$$= 5\% + (12.5\% - 5\%)\ 0.926 = \underline{11.945\%}$$

= Round off to 12%

Financial Evaluation

Year	**0**	**1**	**2**	**3**	**4**	**5**	**6**
	K'm	**K'm**	**K'm**	**K'm**	**K'm**	**K'm**	**K'm**
Operating cash flows -		**500**	**542.5**	**588.61**	**638.64**	**692.93**	
Taxation@30%	**-**	**-**	**(150)**	**(162.75)**	**(176.58)**	**(191.59)**	**(207.88)**
Tax saved by Capital allowances*	**-**	**-**	**75**	**56.25**	**42.2**	**31.6**	**94.9**
Initial outlay	**(2,550)**	**-**	**-**	**-**	**-**	**-**	**-**
Working capital	**(150)**	**-**	**-**	**-**	**-**	**150**	**-**
Realisable value						**1,550**	
Net flows	**(2,700)**	**500**	**467.5**	**482.11**	**504.26**	**2,232.94**	**(112.98)**
Discount Factors @12%	**1.000**	**0.893**	**0.797**	**0.712**	**0.636**	**0.567**	**0.507**

Present values	**(2,700)**	**446.5**	**372.60**	**343.26**	**320.71**	**1,266.08**	**(57.28)**
Base case NPV = (K8.13m)							

*Capital allowances

Year	Written-down value	Allowance @25%	Tax saving @30%	Available year
	K'm	K'm	K'm	
1	1000	250	75	2
2	750	187.5	56.25	3
3	562.5	140.6	42.2	4
4	421.9	105.5	31.6	5
5 (Balancing)	316.4	316.4	94.9	6

(It might be argued that the tax saving is a relatively safe cash flow and should be discounted at a rate lower than the ungeared cost of equity. If so the resultant Base case NPV would be slightly larger).

Financing side effects

(i) Tax relief on interest payments (assumed available years 2 – 6)

The benefit from the investment in terms of increased debt capacity is K1,200million. Although only K950 million is being borrowed, the APV should be based upon theoretical benefits of the debt capacity as these are available to the company and may be used through debt issues for other investments (these too must be evaluated on their own impact on debt capacity).

The tax shield benefit is therefore based upon K1,200 million of debt, K950million at 8% and the remaining K250 million at the normal market rate of 10%.

Tax relief on annual interest K'm

K950 million x 7.5% = K71.25m x 0.3 = 21.375

K250 million x 10% = K25m x 0.3 = 7.500

28.875

The discount rate used will be a rate reflecting the risk of the debt, in this case the pre-tax cost of debt, 10%

PV annuity 10% for five years 3.791 x K28.875m x $\frac{1}{1.1}$ = K99.50 million

The PV of tax relief, commencing year 2, is K99.50 million

(ii) Subsidised loan

Zamchop Plc is receiving K950 million at 2.5% less than normal market rates because of its financing choice. This produces an after-tax saving (with a one-year lag in tax) of:

Years 1 to 5 K950 million x (0.10 – 0.075) per year = K23.75m

Years 2 to 6 tax of K23.75m x 0.3 = (K7.125m)

The PV of this saving, discounted at 10% representing the market risk of debt is:

	K'm
3.791 x K23.75m =	90.04
$\frac{3.791 \times (K7.125m)}{1.1}$ =	(24.55)
	65.49

(iii) Issue costs

The cost of the investment after issue costs (it is assumed that none exist on the loan) is K2,550 million.

Net proceeds of the rights issue are K2,550m – K950m = K1,600m.

With issue costs of 6%, the gross proceeds of the rights issue:

$$= \frac{K1{,}600m}{0.94} = K1{,}702.13m.$$

Issue costs are (K1,702.13 – K1,600) = K102.13m

The expected APV of the investment is:

		K'm
Base case NPV		(8.13)
Tax relief on interest	99.50	

Benefit from subsidised loan	65.49	
Issue costs		(102.13)
APV		**54.73**

(b) New equity issues in general will be more common when share prices are high than when share prices are low.

i) When share price are high, investors' confidence will probably be high, and investors will be more willing to put money into companies with the potential for growth.

ii) By issuing shares at a high price, a company will reduce the number of shares it must issue to raise the amount of capital it wants. This will reduce the dilution of earnings for existing shareholders.

iii) Following on from above, the company's total dividend commitment on the new shares, to meet shareholders' expectations, will be lower.

iv) If share prices are low, business confidence is likely to be low too. Companies may not want to raise capital for new investments until expectations begin to improve.

SOLUTION TWO

(a) The main factors to take into account are:

(i) Risk. If a business borrows, there is a risk that, at the maturity date of the loan, the business will not have the funds to repay the amount owing and will be unable to find a suitable form of replacement borrowing. With short-term loans, the maturity dates will arrive more quickly, and the type of risk outlined will occur at more frequent intervals.

(ii) Matching. A business may wish to match the life of an asset with the maturity date of the borrowing. In other words, long-term assets will be purchased with long-term loan funds. A certain level of current assets, which form part of the long-term asset base of the business, may also be funded by long-term borrowing. Short-term borrowing will fund those current assets that fluctuate owing to seasonality and so on. This approach to funding assets will help reduce risks for the business.

(iii) Cost. Interest rates for long-term loans may be higher than for short-term loans as investors may seek extra compensation for having their funds locked up for a long period. However, issue costs may be higher for short-term loans as there will be a need to refund at more frequent intervals.

(iv) Flexibility. Short-term loans may be more flexible. It may be difficult to repay long-term loans before the maturity period.

(b) When deciding to grant a loan, a lender should consider the following factors:

(i) security;
(ii) purpose of the loan;
(iii) ability of the borrower to repay;
(iv) loan period;
(v) availability of funds;
(vi) character and integrity of the senior managers.

(c) Loan conditions may include:

(i) The need to obtain permission before borrowing more money from any source;
(ii) The need to maintain a certain level of liquidity during the loan period;
(iii) A restriction on the level of dividends and directors' pay.

d) There are several reasons why profit maximisation is not a sufficient objective for investors.

(i) Risk and uncertainty. This objective fails to recognise the risk and uncertainty associated with certain projects. Shareholders tend to be very interested in the level of risk and maximising profits may be achieved by raising risk to unacceptable levels.

(ii) Dividend policy. Shareholders are interested in how much they will receive as dividends. Retained profits can be increased by reducing the dividend payout ratio or by not paying a dividend at all. This is not necessarily in the best interests of the shareholders who might prefer a certain monetary return on their investment.

(iii) Future profits. Which profits should management be maximising? Shareholders may not want current profits to be maximised at the expense of future profits.

(iv) Manipulation of profits. Unlike cash, profits can be easily manipulated – for example, by changing depreciation policy or provision for doubtful debts percentage. It is therefore not difficult to appear to be maximising profits when in reality the company is no better off.

You should remember however that, whilst the principal objective is the maximisation of shareholders' wealth, managers should not be pursuing this at any cost. They should not be taking unacceptable business and financial risks with shareholders' funds and must act within the law. Managers are aware that any actions that undermine their company's reputation are likely to be very expensive in terms of adverse effects on share price and public trust.

SOLUTION THREE

(a) Adjusted present value (APV)

Assuming the risk of companies in the printing industry is similar to that of JB's new investment, the beta of the printing industry will be used to estimate the discount rate for the base case NPV. Ungearing the beta of the printing industry:

Asset beta = 1.2 x [50/ (50 + 50 (1 – 0.30) = 0.706

Using the capital asset pricing model:

Ke ungeared = 5.5% + (12% - 5.5%) 0.706

= 10.09% or approximately **10%**

Annual after-tax cash flows = K5 million (1 – 0.30) = K3,500,000

From annuity tables with a 10% discount rate:

	K
Present value of annual cash flows 3,500,000 x 6.145	= 21,507,500
Present value of the residual value 5,00,000 x 0.386	= 1,930,000
	23,437,500
Less initial investment	(25,000,000)
Base case NPV	**(1,562,500)**

Financing side effects relate to the tax shield on interest payments, the subsidized loan, and issue costs associated with external financing.

Tax relief:

K5 million 8% loan. Interest payable is K400,000 per year, tax relief is K400,000 X 0.3 = K120,000 per year.

K4 million subsidized loan. Interest is K240,000 per year, tax relief K72,000 per year.

Total annual tax relief of K192,000 per year.

The present value of this tax relief, discounted at the risk-free rate of 5.5% per year is: K192,000 X 7.538 = K1,447,296

Subsidy:

The company saves 2% per year on K4,000,000 or K80,000, or K80,000 X (1 -0.30) =K56,000 after tax.

As this is a government subsidy it is assumed to be risk free and will be discounted at 5.5% per year. K56,000 X 7.538 = K422,296

Issue costs:

	K
Debt K5 million x 1%	= 50,000
Equity K10 million x 4%	=400,000
	450,000

The adjusted present value is estimated to be:

= (K1,562,500) + K1,447,296 + K422,128 – K450,000 = **(K143,076)**

Decision:

Based upon these estimates the project is not financially viable.

(b) APV may be a better technique to use than NPV when:

(i) There is a significant change in capital structure as a result of the investment.
(ii) The investment involves complex tax payments and tax allowances and or has period when taxation is not paid.
(iii) Subsidized loans, grants or issue costs exist.
(iv) Financing side effects exist when require discounting at a different rate than that applied to the mainstream profit.

SOLUTION FOUR

(a) Advise the directors on the matters that they would have to consider in order to determe the extent of SC's economic exposure.

Economic exposure is generally difficult to measure, but an understanding can be obtained by identifying the factors that will lead to economic exposure. Generally, these boil down to identifying the effects of changes to cost prices and selling prices, both for the entity itself and for its competitors.
SC's purchase prices may be affected by movements in the US$. The actual effects may not be linear because SC's US suppliers may not pass on the full effects of the currency movement. The suppliers may believe that the market for these products is sensitive to price rises and so the suppliers may choose to absorb some of the increased cost themselves. The likelihood of that happening will be determined in part by the availability of similar goods from economies that are not bound by the US$.
Currency movements may force SC to raise its selling prices to customers. That makes the elasticity of demand for SC's products important. It may be that prices are inelastic and that consumers are willing to buy just as much even if the price rises slightly.
SC's competitors may also buy products priced in $US and that will reduce SC's problem to an extent because all competing products will be affected in the same manner.

(b) Evaluate the validity of the directors' concern that "the translation gains and losses on the US$ bank balance are visible to shareholders, whereas the offsetting of economic exposure is not and so their hedging policy may be misunderstood".

The financial statements will show the gains and losses arising on SC's currency holdings. The shareholders may be concerned that the company's assets are exposed in this way and that they are risking a serious loss if the US$ declines against the ZMW.

The economic exposure that is being hedged will be apparent from the fact that the company will generate less revenue and make less profit when the US$ is high. This will not appear anywhere as a single, visible item or disclosure in the financial statements. The shareholders could be forgiven for believing that the only exposure is with respect to the US$ balance.
There is nothing to prevent the directors from explaining their strategy to the shareholders. It does not matter that there is a lack of symmetry in accounting for the different currency exposures provided the shareholders accept this explanation. This is, however, a complicated area and it would be legitimate for the directors to worry that the shareholders will be misunderstand. If the shareholders believe that the directors" policy is misguided then it could undermine their confidence in the board.
Technically, the directors are supposed to pursue the maximisation of shareholder wealth and so they should always act in accordance with the shareholders" best interests. It would be dishonest to leave the company exposed to a manageable risk for no good reason simply because the shareholders may misinterpret the directors" behaviour.

(c)

(i) Calculate the 95% daily value at risk (VaR) of SC's US$ bank balance.

(i) The daily volatility is ZMW450,000

The one-tail 95% confidence level is 1.645
(note: this is arrived at by interpolation. It would be acceptable to use 1.64 or 1.65 as an alternative)
95% daily VaR = ZMW450,000 x 1.645 = ZMW740,250

(ii) Use your answer to (c)(i) to calculate the 95% 30 day VaR of SC's US$ bank balance.

The 30 day VaR = daily VaR x $\sqrt{30}$ = ZMW740,250 x $\sqrt{30}$ = ZMW4,054,516

(iii) Advise the directors on the relevance of the VaR statistic to their consideration of the risks associated with retaining this US$ bank balance.

The directors can now claim that there is a 95% chance that the loss on any given day will be less than ZMW740,250. That statistic may be useful in defending the decision to hold those funds in US$, particularly in the event that the company suffers a much larger and more sudden loss.
The VaR statistic is based on historical variability. There is no guarantee that the volatility of the US$ versus the ZMW will remain at that level. If there is a major shift in either economy or in the global economy as a whole then the past returns may turn out to be a very poor indicator of future variances.
Having said that, VaR is a widely used measure of risk, particularly in financial circles. It is perfectly reasonable to use the measure in this type of investment decision.

SOLUTION FIVE

(a) Categories of Risks

(i) Currency risk – sometimes referred to as "exchange rate risk". It involves the possibility of financial gains or losses arising out of unpredictable changes in exchange rates. It can be classified into:
   - Translation risk – the gains or losses to be reported when overseas operations are consolidated into group accounts in accordance with.
   - Economic risk – the possibility that the value of the overseas entity (based upon the PV of all future cash flows) will change due to unexpected exchange rate movements arising at some time in the future.
   - Transaction risk – the gains or losses that are made when ultimate settlement occurs at a date when the exchange rate differs from the rate prevailing at the date of the original transaction. This is seen as the short-term manifestation of economic risk. It is this category of foreign currency risk, which is particularly relevant to this syllabus.

(ii) Political risk – the possibility of the financial success of a venture being affected by the actions of an overseas government or population. Government agencies can advise on potential risks.

(iii) Physical risk – the likelihood of damage or theft arising from the physical distances involved and the length of time between dispatch and receipt of the goods by the customer. Normal commercial insurance is, of course, available.

(iv) Credit risk – this is the risk of non-payment for the goods/services involved in an export transaction. This could require Insurance cover.

(v) Trade risk – the overseas customer may refuse to accept the goods and be uncooperative in returning them, thus taking advantage of the long physical distances involved.

(vi) Liquidity risk – this is caused by the duration of the delivery period and the lengthy periods of credit expected by some overseas customers.

(vii) Cultural risk – there may be misunderstandings caused by differences in trade practice, religious and moral attitudes, legal systems and language barriers.

(b) Hedging Using Derivatives

The main arguments for hedging using derivative are:

(i) Hedging reduces the risk imposed on the firm's managers, employees, suppliers and customers.

(ii) The use of derivatives can increase the value of a firm as:

(1) Hedging lowers, the probability of the firm encountering financial distress as losses are avoided which in turn lowers the expected costs of financial distress and the cost of capital.
(2) Hedging encourages investment by the firm as it reduces the incentive to underinvest since it reduces uncertainty and the risk of loss. This means firms with more valuable growth opportunities are more likely to hedge as uncertainty is less of a problem.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATION

CA ADVISORY PROFESSONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 21 MARCH 2025

TOTAL MARKS – 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This paper is divided into TWO (2) sections:
   Section A: One (1) compulsory scenario question.
   Section B: Four (4) Optional questions. Attempt any three (3) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

The Office of the Auditor General (OAG) is organized into directorates based on the type of audits conducted. Following a recent reorganization within the office, many staff members, including you, a Principal Auditor, have been transferred to new directorates. You are now assigned to the Public Department and Investment Audits Directorate, which focuses on auditing public entities and their associated investments. This reorganization comes at a time when the OAG has been receiving increased government funding, enabling the recruitment of a substantial number of auditors. Many of the new recruits come from government ministries, and it is anticipated that they will be assigned to audit the ministries they previously worked for, capitalizing on their expertise and institutional knowledge.

The OAG conducts annual audits based on a comprehensive audit plan. This plan includes high-risk areas identified in consultation with government ministries and other relevant stakeholders. The proposed audit areas are reviewed by a committee of controlling officers, which helps ensure that the most critical areas are prioritized. Once finalized, the audit findings are presented to the relevant parties, with final reports being issued after thorough evaluation. The OAG also conducts regular staff appraisals to identify training needs and improve the skills and knowledge of its auditors.

You have been assigned to lead the audit of Mwala Cement Ltd, a wholly owned subsidiary of the Industrial Development Agency (IDA), focusing on its financial statements for the year ended 30 June 2024. These financial statements are prepared in accordance with International Financial Reporting Standards (IFRS), and the draft financial statements report K560 million in sales to related parties, including government ministries and other subsidiaries of the IDA. While your team has limited experience with investment companies, one team member, Tembo, who previously served as Chief Financial Officer at Mwala Cement Ltd, brings valuable expertise. To address these challenges, you plan to thoroughly brief your team on effective risk assessment techniques to enhance their efficiency during the audit.

You are planning the audit of Mwala Cement Ltd's financial statements for the year ended 30 June 2024. During a pre-audit meeting with the company’s management, the CEO requested a detailed report on the adequacy and effectiveness of the internal control systems, which you agreed to include while emphasizing that the primary focus would remain on the financial statement audit. In discussions with your audit team, you highlighted the importance of conducting a thorough risk assessment and gaining a comprehensive understanding of Mwala Cement Ltd’s operations to ensure an effective and well-structured audit process.

Mwala Cement Ltd has been in operation for thirty (30) years and is currently operating at only 30% capacity due to frequent equipment breakdowns. The company maintains significant cement inventories at provincial outlets, which you plan to review during the inventory count scheduled for 30 June 2024. You applied for allowances to facilitate travel for this inventory count, but the necessary funds would only be available in early July. In the meantime, the Chief

Financial Officer of Mwala Cement Ltd has offered to cover the team's financial needs, including allowances, which you are considering accepting given the importance of the audit work.

During the audit planning phase, it was revealed that a significant incident occurred at Mwala Cement Ltd: a kiln explosion caused by inadequate maintenance procedures and outdated equipment. The explosion released hazardous dust and chemicals, severely impacting the health of workers and nearby communities. The incident caused extensive damage to the production facilities, resulting in a prolonged operational shutdown and the temporary evacuation of 100 households due to health concerns, with many residents reporting respiratory issues. While the company announced plans to modernize its equipment, enhance health and safety protocols, and adopt more rigorous maintenance schedules, its immediate response to the explosion was widely criticized for delays and insufficient remediation efforts. The company also failed to provide adequate support to affected employees and residents, and its communication with stakeholders lacked transparency.

Beyond the operational and environmental fallout, the company's efforts to remediate the environmental damage and compensate affected residents have been poorly executed, failing to meet both regulatory requirements and ethical standards. These shortcomings have raised serious concerns about the company's corporate responsibility and the effectiveness of its internal controls. This incident underscores the urgent need for Mwala Cement Ltd to not only address the immediate consequences of the explosion but also rebuild trust with stakeholders by implementing more transparent, ethical, and effective remediation measures.

The audit team has access to last year's audited financial statements and industry benchmarking data from the cement manufacturers' association, which provides average industry performance metrics. Mwala Cement Ltd's significant related-party transactions with IDA subsidiaries and government ministries are a key area of focus to ensure compliance with relevant standards and proper disclosure.

Given the challenges, including operational issues, the kiln explosion, and compliance concerns, the audit will require a thorough evaluation of the company's financial statements, internal controls, and adherence to environmental, health, and safety regulations.

Required:

(a) Explain five (5) ethical matters in the audit of Mwala Cement Ltd and for each matter suggest a suitable safeguard that should be taken. (8 marks)

(b) (i) Explain four (4) matters that should be included in the engagement letter in the audit by the SAI of Mwala Cement Ltd. (4 marks)

(ii) Discuss the action that should be taken by the audit team if the preconditions in the audit of the financial statements of Mwala Cement Ltd did not exist. (4 marks)

(c) (i) Using information in the scenario, explain four (4) ways the audit team on the audit of Mwala Cement Ltd can use to obtain information as part of the risk assessment. (8 marks)

(ii) Explain related parties and the audit risk with regards related parties in the audit of Mwala Cement Ltd. (4 marks)

(d) Discuss the audit procedures to assess Mwaka Cement Ltd's compliance with environmental, health and safety regulations. (6 marks)

(e) Using the concept of materiality in compliance audit, analyze how you would assess the materiality of these issues, considering both quantitative and qualitative factors.

(6 marks)

[Total: 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt any three (3) questions.

QUESTION TWO

(a) You are a Principal Auditor in the Office of the Auditor General (OAG). You are in charge of auditing District Councils under your jurisdiction.

You have been provided with the following information relating to two (2) recently audited District Councils for your review and determination of the audit opinion.

District Council one:
The audit team obtained sufficient appropriate audit evidence. There is a matter of concern relating to a misapplication of funds meant for the improvement of the water reticulation system. A total of K25 million funded by the Ministry of Local Government meant for this activity was spent on staff salaries for two (2) months and the expenditure was allocated to water reticulation improvement costs. This is contrary to the conditions of the grant for the improvement of the water reticulation system. Further funding is subject to meeting the conditions on the use of the money.

The District Council management declined a request by the audit team to have the amount charged to salaries and that it would be reported as a misapplication of funds in the audit report. The argument against reallocating the funds is that no further funding will be made by the Ministry of Local Government until the funds are reimbursed by the council from local sources.

The amount involved is significant to the revenue of the council and the misapplication of funds is a matter of concern by the Ministry of Local Government and is considered in determining further funding to the council.

District Council two:
The audit team was unable to obtain evidence regarding the revenue of the council. The council uses a manual accounting system and the only evidence of revenue are the manual receipts raised for all revenue.

During the period under audit, there was a fire that destroyed accounting records kept by the council. An evaluation of the impact of the fire showed that all receipts for the last quarter of the year were destroyed in the fire and management estimated the revenue figure for this period. Analytical reviews conducted revealed that the estimated revenue figure was much lower than that for the previous three (3) years and the audit team is concerned that this may be a deliberate move to understate revenue to conceal fraud that may have taken place.

In the exit audit meeting with management of the council it was agreed that there is no method of determining the revenue figure covering the last quarter. The quarterly revenue is significant compared to the annual revenue figure.

Required:

Suggest, with justification, a suitable opinion for each District Council in the scenario. (4 marks)

(b) You work for the Office of the Auditor General as Senior Auditor at one (1) of the provincial audit offices. The provincial audit offices have been instructed to conduct audits on the use of the Constituency Development Funds under their jurisdictions. You plan to conduct an audit of the Constituency Development Fund given to Kisumu Constituency in Kisumu District.

Funding is done by the Ministry of Local Government and the funds are required to be spent in accordance with the approved guidelines failure to which further funding would be withheld and displinary action taken for any violations of regulations. The CDF guidelines require that there should be approved budgets for all activities intended to be carried out and expenditure should be within the approved budget. Variations of the budget require to be authorized by the Ministry's Permanent Secretary.

All procurement for goods and services require to be in accordance with the Public Procurement guidelines that apply to all government procurement. These include a requirement that all procurement above K1.5 million should be subjected to competitive bids from at least three (3) contractors/suppliers on the list of approved suppliers by the Ministry of Local Government. In the case of construction jobs, it is a requirement that the contractor appointed should have a minimum of five (5) years' experience in the relevant field before they can be awarded contracts.

During the first meeting of the Constituent Development Committee that was chaired by the District Commissioner, members were reminded of the need to bring development to each recipient constituency. He informed the attendees to ensure that preference for contracts should be given to local contractors and where they did not meet the requirements he would authorize variation of the conditions. In view of the fact that a majority of the local contractors were new, the District Commissioner advised that the committee should not consider the required five (5) years otherwise all local contractors will not qualify and this would bring dissatisfaction in the constituency and has political implications.

The projects to be considered are the construction of ten (10) kilometers of township roads to bituminous standard and the construction of five (5) classroom blocks within the constituency. Contractors were awarded contracts in accordance with the guidance given by the District Commissioner.

All the projects are still in progress and are in their second year. You have been assigned to lead a team of auditors to conduct a public sector audit on the use of the Constituency Development Fund.

Required:

(i) Explain, with justification, the type of audit that should be conducted by the Supreme Audit Institution (SAI) in accordance with the provisions of ISSAI 100: Principles of public sector auditing. (2 marks)

(ii) Describe regularity and propriety in compliance auditing using information in the scenario. (4 marks)

(iii) Explain four (4) criteria that may be used in the audit to be conducted by the Supreme Audit Institution. (4 marks)

(iv) Describe six (6) substantive audit procedures that should be performed during the audit. (6 marks)

[Total: 20 Marks]

QUESTION THREE

You work for the Office of the Auditor General (OAG) as Principal Auditor. You have been assigned to lead a team of auditors to conduct an end of project audit of a two (2) year road construction project under the Kisumu Constituency financed by the Constituency Development Fund. Kisumu Constituency in an urban constituency and before this project, it experienced a high incidence of accidents involving pedestrians and cyclists some of which resulted in fatalities. It was hoped that these accidents would reduce with the expansion of the roads and the provisions for pedestrians and cyclists.

All the projects have ended in the current year and the following information relates to the road construction project.

(1) Bitumen, a major raw material, was bought at an average price of K39,000 per ton. The same quality of bitumen is available on the market at a price of K32,000 per metric ton.

(2) The total length of road constructed is seven (7) kilometers against a target and budgeted for ten (10) kilometers.

(3) The average cost of construction considering total expenditure over the contract period is K48,000 per kilometer equivalent to US$1,500. The cost of constructing a kilometer of road in the region is US$950.

(4) The total amount disbursed for the project during the project period is K9 million per year totaling K45 million over the project period. At the end of the project, there are significant quantities of gravel and crushed stone that were not used. An inspection at

the site revealed that the public is free to take and make use of the remaining materials at no cost.

(5) The township roads were required to meet the standard that is approved by the country's standards board. The standard requires that the thickness should be a minimum of seven (7) centimeters and should have a passage for pedestrians and cyclists on either side of the road.

You are leading a team to conduct an audit of the road construction project considering the value for money principles.

The audit team will require to:

(1) Plan the audit
(2) Conduct the audit and
(3) Report on the outcome of the audit.

Required:

(a) Explain three (3) matters that should be considered by the audit team when planning the value-for-money audit of the operations of the road construction project. (6 marks)

(b) (i) Describe two (2) tasks that should be performed by the audit team during the planning stage of the performance audit. (4 marks)

(ii) Suggest four (4) suitable criteria to be used in the planned performance audit of the Kisumu road construction project. (4 marks)

(iii) Describe two (2) substantive audit procedures for each of the three (3) elements of value for money in the audit of the road construction project. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

You have been assigned by the International Organization for Supreme Audit Institution to be part of a three (3) man team to evaluate the operations of the Supreme Audit Institution (SAI) of Trinidad.

Among the objectives of the evaluation is to establish the extent to which the SAI of Trinidad conforms to the principles of Transparency and Accountability according to ISSAI 20: Principles of Transparency and Accountability.

The SAI of Trinidad was established ten (10) years ago and the establishment and mandate are contained in that country's constitution. The SAI is headed by the Auditor General who is appointed by the President on recommendation of a committee of cabinet. The SAI prepares annual financial statements that comply with generally accepted accounting principles. The SAIs financial statements for the past three (3) years have been audited by independent auditors who issued unmodified opinions thereon. Funding for the SAI's operations is given directly from annual budget allocations. The SAI submits budget proposals like all other government institutions and based on the estimated country revenue, funds are appropriated accordingly. In the last three (3) years the operations of the SAI were evaluated by the SAI of Tobago on an exchange basis in order for each country's SAI to learn from the other.

Like in many countries around the world, Trinidad has faced an increase in fraud in the use of public funds. This prompted the government to establish a special unit tasked with the responsibility of investing financial crime in the public sector. If during routine audits, the SAI comes across fraud or suspected fraud, this is required to be reported to the special unit that decides on the nature of investigation and carry out the investigation.

On an annual basis the SAI prepares an audit plan including the topics and subjects to be audited and this is reviewed and approved by a committee An examination of the performance of audit assignments by the SAI, it was observed that audit team members have remained the same for a number of audits that have been performed annually. Audit findings are discussed with the audited entities before being included in the audit report. The final audit report requires to be approved by the Committee of cabinet before publication.

Public awareness of the existence and mandate of the SAI in Trinidad is high. Random interviews with members of the public and government workers revealed that most of them knew the role that the SAI plays in the use of public funds by the custodians. The SAI has a website which is regularly updated and evidence shows that the site is visited by a large and significant number of people annually.

Required:

(a) Explain the objective and purpose of the financial audits of the Supreme Audit Institution of Trinidad. (4 marks)

(b) Evaluate the performance of the Supreme Audit Institution of Trinidad against the provisions of ISSAI 20: Principles of Transparency and Accountability. (4 marks)

(c) Evaluate the performance of the SAI of Trinidad against the provisions of the INTOSAI Lima declaration. (4 marks)

(d) Explain four (4) possible uses of Computer Assisted Audit Techniques in the audit of the financial statements of the Trinidad Supreme Audit Institution by private auditors.

(8 marks)

[Total: 20 Marks]

QUESTION FIVE

Kirkstan is a landlocked central African country bordering with five (5) different countries. The country is extensively used as a transit by neighboring countries through international trade. The government earns significant amounts of money through charging road tolls to all foreign trucks entering and transiting through Kirkstan. Up to 2020 toll collection was done at points of entry by the customs and exercise department. Toll fees are paid in United States dollars and the amount payable depends on the size and load of the truck. Despite a noted increase in the number of trucks entering at all the borders, there has not been a noted increase in toll collections.

The procedure in use was that each border point was allocated toll receipt books by the Ministry of Finance and receipts were required to be issued for every payment. Once a truck enters the country they were assumed to have paid the necessary tolls and are allowed to exit if transiting without showing proof of payment of toll fees. Funds received were banked in a local border dollar account and on a monthly basis transfers were made to the bank account held by the Ministry of Finance. Transfers were required to be supported by toll receipts showing the make-up of the amount transferred.

In 2021, the government made a decision to transfer the collection of toll fees to a separate government wing that is also responsible for the weighbridges at each entry and exit points. In order to enhance transparency and accountability, an Information Technology system was purchased with the objective of managing the money received from tolls and any penalties for overloading. The system cost $1.5 million and connects all the five (5) entry and exit point operations to a central system at the Ministry of Finance where operations are monitored and controlled. In the event that there is a systems failure, each site reverts to the use of manual receipts until the system is up and running in which case all manual entries require to be keyed into the system.

There was a noted significant increase in toll receipts at two (2) of the entry points. The increase was over 100% and yet the traffic flow has remained constant over the last one (1) year. This increase prompted an investigation to be conducted by the Ministry of Finance security wing. A whistle blower informed the investigating team that at these entry points staff responsible had duplicate receipt books bearing the same serial numbers as those issued by the Ministry of Finance. All money receipted using the duplicate receipt books was pocketed by the responsible staff and that some of it was shared with the supervisors.

The Audit Committee of the Ministry of Finance recommended that a forensic investigation should be conducted regarding the accountability for toll receipt funds for a period of five (5) years to 2020. The Minister of Finance has since written to the Auditor General to conduct the investigation.

You work for the Office of the Auditor General of Kirkstan and you have been assigned to lead a team to investigate the alleged fraudulent activities at the two (2) border points.

Required:

(a) (i) Describe the objective of the value for money audit of the newly installed Information Technology system. (4 marks)

(ii) Describe three (3) cyber security threats that Kirkstan faces on account of the newly installed IT system. (6 marks)

(b) (i) Explain the objective of the intended forensic investigation on the misappropriation of public funds. (4 marks)

(ii) Describe the work that should be performed in the forensic investigation by the audit team in accordance with the key stages for forensic investigations. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.7 PUBLIC SECTOR AUDITS AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Ethical matters in the audit of Mwala Cement Ltd:

	Ethical matter	Suitable safeguard
1	Assignment of newly recruited staff from government ministries and assigning them to conduct audits of ministries they previously worked for will result in a self-review and familiarity threats. This will impact on the objectivity of the auditors.	Assign newly recruited staff to audit ministries or government departments where they have no prior association. This prevents potential bias and reduces the familiarity threat. Before assigning staff to any audit, perform a formal independence and conflict of interest assessment. This assessment will identify potential threats and inform decisions to reassign auditors where necessary.
2	Tembo who previously worked for Mwala Cement Ltd has been assigned to this audit a client he worked for as Chief Finance Officer. This will give rise to a self-review and familiarity threat.	Reassign Tembo to a different task within the audit team that does not involve areas directly related to his previous responsibilities. Ensure additional supervisory reviews are conducted by an independent senior auditor to validate Tembo's work. This mitigates risks associated with over-reliance on his knowledge or potential bias.
3	The fact that a majority of the audit team members assigned to the audit of Mwala Cement Ltd do not have experience in the audit of investment companies give rise to a threat to the ethical principle of professional competence and due care. This lack of the necessary skills and competences could give rise to an issue of an inappropriate audit opinion at the end of the audit.	Assign team members with relevant experience in auditing investment companies to the audit of Mwala Cement Ltd. This ensures the team has the necessary skills and knowledge to handle the complexities of the audit. There should be close supervision of the work performed and consideration of peer reviews should be made by staff not involved in the audit.
4	The offer by management of Mwala Cement Ltd to meet the cost of transport and accommodation for the audit team members that will travel to the provincial outlets to witness the inventory count will impact on the objectivity of the auditors. Accepting the offer will be an act that brings into question the integrity of the audit team.	Decline the offer from the CFO to cover allowances as it poses a self-interest threat to auditor independence. Instead, escalate the matter to the OAG's senior management to ensure alternative arrangements are made for funding. Emphasize that the financial independence of the audit team is crucial to maintaining objectivity and integrity.
5	The requirement that the audit plan of the OAG should be subject of approval by a committee of cabinet and also that the audit findings should be presented to a committee of controlling officers	The OAG should decide on its own audit plan and this involvement of controlling offers should be discussed at the highest level so that this is reviewed and no longer the case. The AG should consider bringing this to the

	borders on the ethical requirements of independence and objectivity of the Office of the Auditor General.	attention of the Public Accounts Committee and the fact that it borders on ethical values that must be complied by the OAG and its staff.
6	Confidentiality of Information Accessed from the Industry Association Website	Train the audit team on confidentiality requirements, emphasizing that any information obtained from the industry association must not be disclosed or used inappropriately. Establish clear documentation practices to ensure the use of such information aligns strictly with audit purposes.
7	Pressure to Provide a Detailed Report on Internal Control Systems Beyond the Scope of the Audit	Clarify to the CEO that the scope of the audit is limited to the financial statements, and while internal controls will be evaluated as part of the audit, the team cannot take on management's responsibility for designing or implementing controls. Document this clarification in the engagement letter to establish boundaries and avoid conflicts.
8	Objectivity Concerns Regarding Delayed Remediation and Poor Stakeholder Communication	Ensure the audit team objectively evaluates the company's response to the kiln explosion without bias or undue influence. Provide training to the team on identifying ethical lapses and their impact on financial and operational risks. Emphasize the need for clear documentation of findings and evidence to support conclusions in the audit report.

(b)(i) Matters that should be included in engagement letter:

1. The objective and scope of the financial audit to be undertaken in this case being able to obtain sufficient appropriate audit evidence in order for the auditor to form an opinion. The fact that the financial statements to be audited are for the two years.
2. The responsibility of management of Mwala Cement Ltd for the preparation of the financial statements and putting in place suitable internal controls.
3. The responsibilities of the SAI auditors in the conduct of the audit.
4. Identification of the applicable financial reporting framework used by management in preparing the financial statements.
5. The form and content of the reports to be issued. In this case that there will be two separate audit reports one for each of the two years.

(ii) Action if preconditions for an audit not present:

1. Discuss with the management of Mwala Cement Ltd on the issues of concern so that the preconditions are met to ensure that there will be a common understanding on the premise upon which the audit will be undertaken.
2. Unlike in the audit of private sector entities where the auditor will decline or resign from the engagement in view of the lack of the preconditions for an audit, in the public sector the mandate of the public sector auditor is contained in legislation and the SAI will require to go ahead and conduct the audit despite the lack of the preconditions for an audit. The concerns of the auditors will be reported in the audit report.

(c) **(i) Ways of obtaining information in risk assessment:**

1. **Inquiry** of management and others within the organization – To find out on the accounting system that exists and the internal controls that have been put in place by management.
2. **Analytical procedures** – To gain an insight of the operations of Mwala Cement Ltd and to establish any unusual relationships that may exist in the figures and in comparison with industry information made available. This will enable the audit team determine the risk areas where special attention may be required to perform audit procedures.
3. **Observation and inspection** – Of the operations and activities of Mwala Cement Ltd. Through such observations, the audit team will be able to assess on whether the tangible non-current assets are impaired or not and also confirm that the internal control systems are operating as expected.
4. **Discussion within the audit team** – The audit team members will most likely have different levels of understanding the operations of Mwala Cement Ltd and the cement industry. The discussions by the audit team may highlight the risky areas and a review of the draft financial statements may bring to light areas that are susceptible to material misstatements and that will require special attention during the audit.
5. Review of **previous audit working paper files** which will contain valuable information on the entity being audited.

(ii) Related parties in the audit of Mwala Cement Ltd:

Related parties are those that are controlled by the same entity and conduct business with each other. Mwala Cement Ltd is a related party to other companies that are owned by the Industrial Development Agency and with whom it conducts business.

Audit risk with regards related parties:

The audit risk that arises with regards related parties and related party transactions is with regards accounting for these in accordance with the relevant accounting standards.

It a requirement of accounting standards that related party relationships and the transactions with related parties should be disclosed in the financial statements. There is an audit risk that such relationships and dealings may not have been disclosed as required in the financial statements.

(d) Audit Procedures for Compliance with Environmental, Health, and Safety Regulations

1. **Review Policies and Procedures**: Examine the organization's environmental, health, and safety policies to ensure alignment with legal requirements and best practices.
2. **Inspect Permits and Licenses**: Verify the validity and compliance of operating permits, such as emissions and waste disposal permits, with regulatory standards.
3. **Review Incident Reports and Investigations**: Assess reports related to the kiln explosion and other incidents to confirm compliance with reporting obligations and the adequacy of corrective measures.
4. **Examine Records of Training Programs**: Ensure that employees have received adequate training on safety protocols and environmental policies, as required by regulations.
5. **Inspect Records of Environmental Monitoring**: Review data on emissions, waste management, and energy consumption to verify adherence to environmental standards.
6. **Conduct Interviews with Employees and Community Members**: Gather evidence on compliance practices, grievances, or observations indicating non-compliance or negligence.
7. **Inspect Site Conditions**: Conduct physical inspections of the site to check adherence to safety and environmental standards, such as proper waste disposal and fire safety measures.
8. **Verify Compliance with Corrective Actions**: Confirm that prior regulatory violations or incidents have been adequately addressed through corrective measures.
9. **Review Third-Party Inspections or Regulatory Reports**: Evaluate findings from regulatory bodies or third-party audits to determine compliance with applicable laws.

(e) Materiality Assessment Using Quantitative and Qualitative Factors
Quantitative Factors:

1. **Cost of Repairs**: Evaluate the cost to repair the kiln and associated damages as a percentage of total assets or revenue. If the cost exceeds 5-10% of these metrics, it is quantitatively material.
2. **Lost Revenue**: Assess the financial impact of halted production on the company's revenue and profitability. Significant revenue loss is a key quantitative materiality factor.
3. **Penalties or Fines**: Consider potential fines for regulatory non-compliance. If these fines significantly affect profitability or cash flow, they are material.

Qualitative Factors:

1. **Reputation Damage**: Assess the explosion's impact on the company's reputation with stakeholders and investors. Materiality arises if this leads to loss of trust or heightened scrutiny.
2. **Legal and Regulatory Compliance**: Consider non-compliance risks related to environmental and safety regulations. Materiality is evident if legal actions or operational restrictions result.
3. **Stakeholder Impact**: Evaluate the incident's effect on workers and the community. Even if financial impacts are minimal, the ethical and societal implications can be material.
4. **Long-term Operational Risks**: Analyze how the explosion highlights deficiencies in risk management or maintenance. If these issues threaten future stability, they are material.

Conclusion: The kiln explosion is material both quantitatively, due to repair costs, lost revenue, and fines, and qualitatively, due to reputational damage, compliance risks, and stakeholder impact. Disclosure in financial statements and the audit report is necessary.

SOLUTION TWO

(a) Suggested audit opinions:

District council one

The audit team obtained sufficient and appropriate audit evidence but there is a matter of concern regarding misapplication of funds meant for water reticulation which was spent on staff salaries but concealed and included in water reticulation expenditure. This is fraudulent financial reporting aiming at concealing this in view of the fact that further funding is dependent on correct use of grant funds.

The misallocation of funds is material by nature and is a matter that is considered in giving further funding to the council. In view of management's refusal to correct the accounts, the financial statements will be misstated and this will lead to the modification of the opinion.

Recommendation of opinion:

Considering that the amount involved is material and pervasive the audit opinion that should be issued is an adverse opinion concluding that the financial statements do not show a true and fair view.

District council two

The audit team in the audit of district council two did not obtain sufficient appropriate evidence on account of the fact that the only available evidence was destroyed in a fire. Further, analytical procedures conducted suggest that the revenue estimated is grossly understated.

This amounts to a limitation of score resulting in the auditors having to modify the audit opinion.

Recommendation of opinion:

There are two possible forms of modification that could be made as follows:

Assuming that the matter of concern is material but not considered pervasive, the appropriate audit opinion is a qualified opinion.

(b) (i) Audit that should be conducted:

Based on the information in the scenario, the appropriate public sector audit that can be done is a **compliance audit**.

The objective of the compliance audit will be to obtain evidence on whether the use of the Constituency Development fund is in line with the authorities that given the use of the funds.

(ii) Regularity and propriety audits:

Regularity audits – these are audits that are concerned with compliance with given authorities. For example in the given scenario the use of constituency development funds should be in accordance with the guidelines given in this case the guidelines by the ministry of local government.

Propriety audits – these are audits which are concerned with the observance of sound financial management and proper conduct by public officials. Using the information in the scenario a propriety audit may be conducted to consider the conduct of the District Commissioner who clearly appears to have conducted himself contrary to the authority that goes with that office.

(iii) Criteria in the compliance audit:

1. The approved budget against which actual expenditure will be compared.
2. All procurements above K1.5 million should be subject to competitive bids.
3. For all competitive bids at least three quotations should be considered.
4. Only contractors/suppliers on the list of approved contractors/suppliers should be considered.
5. Five (5) years' experience required for all contractual jobs.
6. Budget variations only allowed on authority of the permanent secretary.

(iv) Substantive audit procedures in the compliance audit:

1. For a sample of construction jobs, confirm that they were subjected to tender procedures by inspecting the tender invitations.
2. For a sample of procurement for goods and services, confirm that only suppliers/contractors on the approved list were invited and awarded contracts by comparing with the approved list.
3. Review tender documents and confirm that three quotations were obtained for competitive bids.
4. Review the expenditure against the budget and confirm that any over expenditure was approved by the permanent secretary by reviewing the authorization.
5. Review the expenditure analysis for identification of any over expenditure.
6. For road construction jobs review necessary documents and agreement to ensure awarded contractors have the required five years' experience in road construction.

SOLUTION THREE

(a) Matters that should be considered in planning the value for money audit:

1. The **cost of resources** should be considered to enable the audit team assess on whether the best prices would have been spent but without disregarding quality. The aim of considering cost will be to evaluate on whether a lower cost could have been spent to achieve the desired results.
2. The **use of inputs** require to be considered with a view to establish whether the output could have been achieved using lesser resources. Considering inputs will enable the audit team establish the efficiency in the use of resources in the activity.
3. The **output from the activity** should be considered with a view to establish whether the desired objectives have been achieved. In this case it is the construction of a total of ten (10) kilometers of the specified quality.

(b) (i) Tasks at planning level of the performance audit:

1. The audit team will require to conduct a pre-study of the project that is being undertaken and will be subject to the performance audit. This involves gaining an understanding of road construction and the industry. It is unlikely that the audit team will be able to conduct an effective audit unless they understand the operations of what will be subject to the audit. The understanding will enable the audit team to design suitable audit procedures that will be performed at the stage of conducting the audit.
2. Following from the pre-study that will have been conducted, the audit team will have to design the audit procedures that will be used in gathering sufficient and appropriate audit evidence which will enable it arrive at an appropriate conclusion.

(ii) Criteria to be used in the performance audit:

1. The average costs of bitumen from other suppliers within the country and region.
2. The agreed length of road that should be constructed per agreement.
3. The average cost per kilometer of road constructed by other constituencies and within the region.
4. The road specification that should be met as determined by the standards board.

(iii) Substantive audit procedures in the performance audit:

Economy:

1. Obtain samples of procurement of bitumen made for the project and compare the price paid with any available information on prices in the country and the region.

2. For a sample of the procurement of bitumen review the documentation and confirm that the procurement was done in accordance with the laid down procedures.
3. Compare the cost of bitumen with the average prices and the industry information and inquire from management on significant differences.

Efficiency:

1. Determine the quantities of inputs used in the road construction and using an expert establish the input that should have been used for the works done.
2. Confirm that all materials bought were used for the project by randomly confirming that materials bought are used for the project and that there is no wastage of inputs.
3. Using experts confirm the actual length or road constructed and evaluate whether this could have been done at a lower cost and less inputs.

Effectiveness:

1. Confirm, using experts, that the quality of road constructed meets the quality standard including that it should be 7 cm thick
2. By inspection confirm that passages for pedestrians and cyclists have been
   constructed per specification.
3. During the post project period obtain information in the level of pedestrians and cyclists accidents compared to the period prior to the current project

SOLUTION FOUR

(a) Objective and Purpose of Financial Audits of the Supreme Audit Institution of Trinidad

The primary objectives and purposes of the financial audits of the SAI of Trinidad are:

1. **Accountability**: To ensure the SAI's financial activities are accurately reported and comply with applicable laws, regulations, and accounting standards.
2. **Transparency**: To enhance public confidence by demonstrating the SAI’s commitment to openness in its financial management practices.
3. **Resource Stewardship**: To verify that funds allocated to the SAI are used appropriately and efficiently to fulfill its constitutional mandate.
4. **Independent Assurance**: To provide an independent opinion on the accuracy, completeness, and fairness of the SAI’s financial statements.

(b) Evaluation of the operations of the Trinidad SAI against the provisions of ISSAI 20:

	Matter	**Explanation**
1	The fact that the establishment and mandate of the SAI is contained in the constitution of Trinidad	This is in compliance with the provisions of ISSAI 20 which among other matters requires that the framework within which the SAI operates contains the authorities and responsibilities of the SAI including the conditions relating to the appointment and dismissal of the head of the SAI.
2	The preparation by the SAI of annual financial statements subject to independent audit. The reporting on the website on the performance of the SAI annually showing how funds appropriated have been spent compared to budget and also the operations of the SAI compared to annual targets set at the beginning of the year.	This is in compliance with the provisions of ISSAI 20 which requires that the SAI should use public funds appropriated to it within the provisions of the value for money principles. By disclosing its operations on its website the SAI of Trinidad is disclosing how it has complied with these principles.
3	The use of the website to explain its operations and the fact that a majority of the population of Trinidad is aware of the existence and role of the SAI.	The use of the website is in compliance with the provisions of the provisions of ISSAI 20 which requires that the SAI should communicate its activities on its website and other means and this is evidenced here by the high number of members of the public that is aware of the existence

		and purpose of the SAI.
4	The evaluation of the operations of the SAI by the SAI of Tobago to assess its operations.	This is in accordance with the provisions of ISSAI 20 which require that there should be independent evaluations of SAI operations. Each of Trinidad and Tobago SAIs will learn from each other and improve their own operations based on lessons learnt from the peer reviews.

(c) Evaluation of the performance of the Trinidad SAI against the Lima declaration:

	Matter	**Explanation**
1	Appointment of the head of the SAI on recommendation of a committee of cabinet.	The provisions of the Lima deceleration require that the head of the SAI should be independent. The requirement that the head of the SAI of Trinidad is appointed on recommendation of a committee of cabinet undermines this provision. The cabinet ministers are responsible for ministries that are subject to audit by the SAI. An independent commission should instead recommend to the president a nominee for the office of head of the SAI.
2	Appropriation of funds for operations by central government based on requirements.	The fact that the SAI determined its annual budget and is appropriated funds directly to it is in line the Lima declaration which requires that the SAI should be financially independent in order to maintain its objectivity.
3	The exchange of experiences with the SAI of Tobago	The exchange of experiences between the SAI of Trinidad and Tobago is in line with the provisions of the Lima declaration which requires international exchanges of experiences
4	Special unit established to conduct investigations of financial impropriety	One of the concepts of the Lima declaration requires that the SAI should have powers of investigating any financial impropriety. The establishing of a separate unit outside

		the SAI to do this is contrary to the provisions of the Lima declaration.
5	The requirement for the approval of a committee of cabinet of the audits plan for each year.	The Lima declaration requires that the SAI should conduct audits in accordance with a self-determined program. It should decide on the audit subjects based on a criteria set by itself considering risks.

(d) Uses of CAATs in the financial audit of the SAI:

1. **Data Analysis and Verification**:
    - CAATs can be employed to analyze extensive datasets from the SAI's financial systems, identifying trends, anomalies, or discrepancies. For example, auditors can detect inconsistencies in expenditures, revenue patterns, or account balances that deviate from expectations, improving the overall accuracy of the audit.
2. **Sampling and Selection**:
    - CAATs can automate the process of selecting representative samples for audit testing. These tools ensure randomness, stratification, or risk-based selection of transactions, which enhances the reliability and efficiency of audit procedures.
3. **Fraud Detection**:
    - Advanced features in CAATs allow auditors to identify suspicious patterns indicative of fraud, such as duplicate payments, unauthorized transactions, or unusual timing of financial activities. This capability strengthens the detection of irregularities within financial records.
4. **Recalculation and Verification of Financial Data**:
    - CAATs can be used to automatically recalculate financial figures, such as totals, subtotals, or tax computations, to verify the accuracy of the reported data. This reduces human error and ensures compliance with accounting standards.

SOLUTION FIVE

(a) (i) Objectives of value for money audit of IT System:

1. **Economy** - To establish whether the acquisition and establishment of the IT system was at an economic cost and that the best price was paid without disregarding quality.
2. **Efficiency** – To establish the efficiency in the use of the IT system and confirming maximum utilization of the resources.
3. **Effectiveness** – The auditors will be concerned with establishing whether or not the IT system meets the organization's objectives.

(ii) Cyber Security Threats of newly installed IT System:

1. **Direct theft:**
   This could involve direct of theft of funds meant for toll fees by hackers going into the system and transferring funds to personal accounts of the fraudsters.
2. **Malicious damage:**
   This could involve damaging the electronic payment system for the sole purpose of damaging and corrupting data in the system. The aim could be for personal gains for example so that manual system could be used during the time that the electronic system is down and have it easier to commit fraud.
3. **Data theft:**
   This involves theft of customer data for purposes of criminal activities. For example the theft of customer data relating to the transporters who transit through the country and could be bank account details used in making toll fee payments.

(b) (i) Objective of the intended forensic investigation:

1. **Identify Fraud**:
   - To determine the extent and nature of fraudulent activities involving duplicate receipt books and misappropriation of toll fees.
2. **Quantify Losses**:
   - To calculate the financial losses sustained by the government over the five-year period due to fraudulent activities.
3. **Establish Accountability**:
   - To identify individuals involved in or benefiting from the fraudulent activities, including staff and supervisors.
4. **Provide Recommendations**:
   - To suggest measures to prevent future misappropriation and enhance financial controls.

(ii) Work that will be done in the forensic investigation:

Defining the scope and objectives of the investigation:
The investigating team will require to determine the scope of the work in terms of what aspects will be subject of the investigation and the period that will be covered in the investigation. Further, the objective of the investigation should be clearly defined in this case to determine whether or not a fraud

Understanding the fraud:
This is stage in which the forensic investigators require to understand what the fraud is all about and how it has gone undetected until this stage. This will be the stage where more information will require to obtain from the whistle blower. The investigators will also require at this stage to understand what the procedure was during the time of the alleged fraud.

Securing and safeguarding the financial and other information:
During this stage, the forensic investigators will require to safeguard the financial and other information that will be required for the investigation. There is a risk that information may be destroyed if not safeguarded at an early stage in which case evidence will be difficult to get. This includes electronic information as well as hard copies such as the toll invoices and receipts that were issued during the period under investigation. This could necessitate sending the suspects on leave to prevent them from having access to vital information.

Inspecting the information and documents:
The forensic investigators will at this stage inspect all available information and documentation to establish the existence of fraud. In this case the investigators will look out for any evidence of duplicate receipts having been used in the fraud.

Interviewing staff:
At this stage the forensic investigators will interview staff to gather more information and also interview those suspected to have been involved in the fraud. The objective of the interviews will be to gather information and also seek admission of wrong doing by those involved.

Drawing conclusions and reporting:
At this stage of the forensic investigation and based on work done during the earlier stages, the investigators will draw conclusions on the outcome of the investigation after which the report will be written giving the outcome of the investigations and also any recommendations that may be necessary.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 21 MARCH 2025

TOTAL MARKS: 100; TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:
   Section A: One (1) compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. Present Value and Annuity tables are attached at the end of this paper.

DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

Section A

This question is compulsory and must be attempted.

QUESTION ONE - (COMPULSORY)

SCENARIO ONE

The Government has become aware that the current railway network is insufficient to meet the increasing demand for transportation of cargo. There is currently only one railway network in the country and this is insufficient to meet the rising demand for commercial transportation of goods. The government through the Ministry of Transport and Communication has been holding consultations with various stakeholders to consider various financing options for this project.

After extensive consultations the Government has decided to enter into partnerships with the private sector in the delivery of a more advanced railway system using electric locomotives. The mode of delivery for this project is the full private provision model. The main disadvantage for electrification is the high cost of infrastructure.

Assume you are a consultant for the Ministry of Transport and Communications. You have been asked to make a presentation to the permanent secretary on the delivery method for the electric locomotive.

Required:

Prepare some notes to use for the presentation. Your notes should cover the following:

(a) An explanation of the features of the full private provision delivery method for this project. (6 marks)

(b) An explanation of the seven (7) benefits and seven (7) drawbacks of the full private provision delivery method. (14 marks)

SCENARIO TWO

Malango Local Authority was established thirty years ago. The Local Authority has performed relatively well in terms of service provision. Most customers have exhibited willingness to support the Local Authority through the consistent payment of rates, levies and rentals to the Local Authority.

Due to the rising population in the district Malango local authority has forecast an increased demand for services such as garbage collection, fire services and road maintenance works next year. The commercial manager has made a proposal to Management for the local authority to invest in a fruit processing machine costing K800,000. It is hoped that this will increase revenue next year to meet the increasing demand for the council’s services.

In a recent management meeting held in the Town Clerk's Office to discuss the proposed investment opportunity available, it was agreed to use a social opportunity cost of capital of 5% for this investment.

The machine is expected to generate monthly cash inflows of K50,000. The machine has a life span of five years. However, cash inflows from the machine will only begin in one (1) years' time from now when the contract with the foreign supplier of some of the inputs is finalized. At the end of the five-year period the machine's scrap value will be immaterial. Material costs are expected to be K18,000 per month. Direct labor costs are estimated to be K14,000 per month. Cash inflows will arise from selling 5,000 units at K10 per unit every month. During the meeting some directors expressed concerns that the council has not taken into account the risk that the project may not yield the projected cash inflows.

The Town Clerk was of the view that the matter should be forwarded to a council meeting for approval. It was also unanimously agreed by Management that the Finance Director should gather more information on these issues in order to guide management. The next meeting to discuss the proposed investment further was scheduled for next month.

Required:

(c) Measure the sensitivity of the proposed project to changes in the following variables:

(i) Initial investment. (1 mark)

(ii) Sales volume. (3 marks)

(iii) Selling price. (3 marks)

(iv) Variable costs. (3 marks)

(v) Cost of capital. (5 marks)

(d) Interpret the results of your computations obtained in (a) above. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.
Attempt any THREE (3) questions.

QUESTION TWO

The PEFA framework focuses on financial processes focused on the budget cycle and operational performance of certain key elements. It provides a very important building block from which to measure the effectiveness of the Public Financial Management (PFM) system. The PEFA framework identifies seven pillars of performance that are essential to achieving these objectives. The seven pillars are:

(1) Budget Reliability
(2) Transparency of Public Finances
(3) Management of Assets and Liabilities
(4) Policy based fiscal strategy
(5) Predictability and control of budget execution
(6) Accounting and Reporting
(7) External Scrutiny and Audit

Required:

(a) Discuss the information covered by each of the seven (7) pillars. (14 marks)

(b) Discuss with examples and justification of the following charging methods that a central or local government department can use in pricing its services or goods:

(i) Penalty pricing, (2 marks)

(ii) Subsidized pricing, (2 marks)

(iii) Going rate charges (2 marks)

[Total: 20 Marks]

QUESTION THREE

There are various reasons Governments undertake public expenditure. Some reasons include those that relate to the achievement of protecting nationals from extreme poverty and the reduction of inequalities between different regions in a particular nation. Further, the other reasons include those that relate to the addressing of inefficiencies in the operation of markets and or institutions to achieve the various economic aims and objectives.

Required:

(a) Explain in detail the meaning of market failure and give four (4) examples of market failure. (10 marks)

(b) Discuss six (6) key areas of local government public expenditure in Zambia in line with the Local Government Act 1991. (6 marks)

(c) Explain the functions of the two (2) main divisions at the Ministry of Finance. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

There are circumstances when public sector organizations have surplus funds which are available to them. The surplus funds must be prudently administered and accounted for. There must be an effective strategy in their management, which currently doesn't exist in Zambia. However, there are governing legislations such as the Public Finance Management Act 2018, and the Local Government Act 1991 to address the matter. In the absence of a well-defined Government Strategy in the investment of surplus public funds, the Secretary to the Cabinet has the mandate to do so.

Required:

(a) Explain the key factors which the Secretary to the Cabinet considers before the authorization to invest in public funds is granted. (8 marks)

(b) Discuss the financial instruments according to the Public Finance Management Act 2018, which the Secretary to the Treasury is authorized to invest in. (4 marks)

(c) State the various temporary cash surplus investment portfolios and strategies for State Owned Enterprises (SOEs). (8 marks)

[Total: 20 Marks]

QUESTION FIVE

It is crucial for Governments to appreciate the extent to which fiscal risks impact on the economy of a country. This is because Government must ensure that the public goods and services are delivered to its citizen's efficiently, equitably and effectively. Fiscal risks management ensures a comprehensive knowledge and appreciation of the wider public financial risk.

Fiscal risks can be very significant, in some instances biased towards the downside, and highly correlated and as well as their influence are essentially nonlinear. Therefore, the International Monetary Fund (IMF) recommended some element of their categorization.

Required:

(a) Explain in detail the reasons it is essential to understand the impact of fiscal risks on the wider public sector financial risk. (8 marks)

(b) Explain the categories of fiscal risk according the International Monetary Fund categorization. (4 marks)

(c) Explain the regular summary reports that Governments should publish as per IMF Fiscal Transparency Code. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 x \frac{(1 + i_c)}{(1 + i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}} \left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA 3.8 PUBLIC SECTOR FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

SCENARIO ONE

Features of full private provision model

(a) (i) Financing – the costs for building and maintaining assets are met by the private sector and are repaid by customers over the length of the licence,
(ii) Construction – the private sector holds the financial risks related to construction delays and overruns.
(iii) Ownership – the asset is the property of the private sector.
(iv) Demand risk – the financial risk related to demand for the asset and the services it provides rests with the private sector.
(v) Availability Risk – the private sector bears the financial risk related to the availability of the asset and the services it provides.

(vi)Maintenance – the private sector is responsible for the long term maintenance of the asset, with payments from customers financing maintenance.

(b) Benefits of public private partnership full private provision model.

(1) Provides external finance for the construction of an asset that the public sector may not be able to provide.
(2) Can improve efficiency and effectiveness by achieving an allocation of risks to whichever party in the public or private sector is best able to manage them.
(3) Encourages innovation in approach by focusing on performance indicators and outputs.
(4) Tying of payments to when construction of assets is completed ensures that private sector incentivized to deliver on time.
(5) Whole life costs of assets including ongoing maintenance are explicitly considered in contracts and design thus improving efficiency.
(6) Tying payments to output against performance indicators incentivizes private sector to meet service levels.
(7) Financial due diligence procedures conducted by those providing finance reduces risk of problems emerging following signing of contracts.

Drawbacks of public private partnership full private provision model.

(1) External financing may be more expensive in the long term when compared to the cost of government borrowing.
(2) Public sector is paying for the transfer of risk to the private sector but ultimate risk always rests with the public sector if the services provided by the asset are essential.

(3) Off balance sheet nature of financing may encourage public sector to use PPP or private provision model when not value for money.
(4) Long term nature of financing requires long term service contracts that are inflexible when circumstances change.
(5) Public sector faces significant costs if it is required to change or terminate contracts. For example it is usually necessary to re-imburse private sector for financing costs and future profits lost.
(6) More complicated than conventional procurement which can increase costs and timescales to deliver.
(7) Requires a range of commercial procurement legal and financial skills that may not be available within the public sector.

SOLUTION ONE

SCENARIO TWO

(c) Sensitivity Analysis

Year	cash flow	cash flows	DF 5%	PV	10%	PV
0	initial investment	-800000	1	(800,000)	1	(800,000)
2-6	cash inflows	600000	4.124	2,474,400	3.446	2,067,600
2-6	direct materials	-216000	4.124	(890,784)	3.446	(744,336)
2-6	direct labour	-168000	4.124	(692,832)	3.446	(578,928)
Net	cash flow			90,784		(55,664)
	5% ANNUITY FACTOR					
Yr 6	5.076					
yr 1	0.952					
annuity F	4.124					
yr 2-6						
	10% ANNUITY FACTOR					
YR 6	4.355					
YR 1	0.909					
YR 2-6	3.446					

(i) Initial investment
NPV/ Investment = 90784/800000 =11.34%

(ii) Sales volume

2474400-890784-692832=890784
=90784/890784 =10.1%

(iii) Selling price

90784/2474400
=3.7%

(iv) Variable costs

90784/1583616
=5.7%

(v) IRR
=5% + 90784/(90784+55664)x (10-5)%
= 8%

(d) INTERPRETATION

(i) The initial investment cost must rise by 11.34% before the NPV becomes negative.
(ii) The sales volume must fall by 10.1% before the NPV becomes negative.
(iii) The selling price must fall by 3.7% before the NPV becomes negative.
(iv) The variable costs must rise by 5.7% before the before the NPV becomes negative.
(v) The cost of capital must rise by 8% before the NPV becomes negative.

The conclusion is that the NPV is more sensitive to movements in the selling price than to any other variable. Management should therefore pay more attention to the selling price as it is the one more likely to affect the NPV than the other variables.

SOLUTION TWO

Q2	(a) Explain what each of the pillars covers	(i) **Budget Reliability** The government budget is realistic and is implemented as intended. This is measured by comparing actual revenues and expenditures (the immediate results of PFM system) with the original approved budget. (ii) **Transparency of Public Finances** Information on PFM comprehensive, consistent and accessible to users. This is achieved through comprehensive budget classification, transparency of all government revenue and expenditure including inter - governmental transfers, published information on service delivery performance and ready access to fiscal and budget documentation. (iii) **Management of Assets and Liabilities** Effective management of assets and liabilities ensures that public investments provide value for money, assets are recorded and managed, fiscal risks are identified, and debts and guarantees are prudently planned, approved and monitored. (iv) **Policy based fiscal strategy** The fiscal strategy and the budget are prepared with due regard to government fiscal policies, strategic plans, and adequate macro and fiscal projections. (v) **Predictability and control of budget execution** The budget is implemented within a system of effective standards, processes and external controls, ensuring that resources are obtained

		and used as intended (vi) **Accounting and Reporting** Accurate and reliable records are maintained and information is produced and disseminated at an appropriate time to meet decision making, management and reporting needs (vii) **External Scrutiny and Audit** Public finances are independently reviewed and there is external follow up on the implementation of recommendations for improvements by executive.
	(b)	**Penalty pricing** Higher prices may be set in order to reduce the number of people using a facility. For instance congestion charge illustrates this idea and are set to discourage driving of polluting vehicles. The opposite behaviour is encouraged, whereby electric vehicles do not pay the congestion charge.
		Subsidised pricing This could be used where the public sector body wishes to promote a service and encourage users of the service. An example of this may be the charges set for recreational facilities in a bid to promote good health.
		Going rate charges This rate would reflect that set by other public sector service providers in other localities. It ignores any differences in service and the specific cost structures of the different localities. The logic behind this mode is that the public should be able to receive the same service as is available in other similar locations, at the same charge. Things like charges for leisure facilities, may vary across localities, driving users to cross boundaries to access cheaper services.

SOLUTION THREE

Q3	**Required:** (a) Explain in detail the meaning of Market Failure and give FOUR (4) examples of market failure. (8 marks)	(a) Market Failure and examples of Market Failure: • It is desirable for maximum efficiency to be achieved in the delivery of public goods. However, this is not always possible due to market failure which is the non-perfection of the market. Examples of Market failure: • Public Goods. Due to free riding concept when some consumers do not pay for the provision of the public goods but continue enjoying the benefits. • Externalities: When an activity results into costs and benefits that are not directly priced into the market, as a consequence, the pricing mechanism does not function efficiently. • Merit Goods: e.g. education and health care. These goods are provided due to their merit. • Market power: These are as a result of inadequate competition to make certain that there is an efficient market. Entry barriers to markets for example, high start-up costs, and the existence of natural monopolies.
	(b) Explain the key areas of local government public expenditure in Zambia as per the Local Government Act 1991	(b) • Street lighting • Public transport • Drains and sewers, Storage • Marketing & Preservation of agriculture produce • Establishing & maintenance of nurseries • Social & recreational facilities

	(c) Explain the TWO (2) main functions of the Ministry of Finance (12 marks)	(c) Two main functions of the Ministry of Finance (MOF): • Economic Management and Finance. The MOF oversees economic management, financial management and internal controls • Budgets and Economic Affairs This includes the facilitation of the national budget and its implementation. It is responsible for making sure that the Government investments are properly managed and that the debt strategies are also properly managed. There are other functions like the controlling of Statutory bodies like, the Bank of Zambia, Pensions and Insurance Authority, Zambia Procurement Authority and Zambia Revenue Authority.

SOLUTION FOUR

Q4	(a) Explain the key factors which the Secretary to the Cabinet considers when authorization to invest public funds decision is to be made. (b) State the financial instruments according to the Act permits the Secretary of the Treasury is authorized to invest in. (c) State the various temporary cash surplus investment portfolios and strategies for the private sector	(a) Key factors: • Liquidity • Safety • Returns • Wider policy objectives (b) Public Finance Act 2004 permits the Secretary to the treasury to invest surplus funds: • Bank at call or subject to notice not exceeding twelve months • Any of the investments authorized by law for the investment of trustee funds. (c) Private Sector Surplus investment strategies • Interest bearing deposits in commercial banks or other financial institutions • Short-term instruments e.g. Treasury bills and Certificate of deposits • Longer term instruments e.g. government bonds • Shares of listed companies • If surplus funds are available and not immediate expenditure on investment on short term, companies may increase dividend payout or share buy-backs.

SOLUTION FIVE

Q5	(a) Explain in detail as to why it is essential to understand the fiscal risks impact on the wider public sector financial risk. (8 marks) (b) State clearly International Monetary Fund categorization of fiscal risk. (4 marks) (c) Explain clearly the regular summary reports that Governments should publish as per IMF Fiscal Transparency Code. (8 marks)	**(a) Importance of Fiscal Risk** • Can result in large increases in Government deficits and increased debt burden. • These risks are skewed towards a downward trend. • They are significantly correlated and result into negative domino effects • Their impact can be significantly nonlinear. **(b) IMF Risk Categorization:** • Endogenous Risks e.g. Over expenditure • Exogenous Risks: e.g. Global price volatility. • Continuous Risks: • Discrete risks. **(c) Reports: IMF Fiscal Transparency Code:** The IMF Transparency code requires Governments publication of regular summary reports • Macroeconomic risks • Specific fiscal risks • Long-term fiscal sustainable analysis

END OF SUGGESTED SOLUTIONS