CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 10 JUNE 2024

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: One (1) compulsory scenario question plus Four (4) 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 – (COMPULSORY)

Attempt all ten (10) multiple choice questions

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.

QUESTION ONE

1.1 Which of the following sections are not included in the IASB's Conceptual Framework?

A. Users of financial statements.
B. Reporting entity.
C. Qualitative characteristics.
D. Concept of capital maintenance.

(2 marks)

1.2 Which of the following arguments is not in favour of accounting standards, but is in favour of accounting choice?

A. They reduce variations in the methods used to produce accounts.
B. They oblige companies to disclose their accounting policies.
C. They are less rigid alternative to legislation.
D. They may tend towards rigidity in applying the rules.

(2 marks)

1.3 A business has net assets of K140,000 at the beginning of the year and K160,000 at the end of the year. Drawings were K50,000 and a lottery win of K10,000 was paid into the business during the year. What is the profit for the year?

A. K20,000 loss
B. K60,000 loss
C. K20,000 profit
D. K60,000 profit

(2 marks)

1.4 When valuing inventory at historical cost, the following methods are available.

(1) FIFO
(2) AVCO
(3) LIFO
(4) Standard cost

Which methods are allowed under IAS 2 Inventories?

A. (1), (2), (3).
B. (1), (2), (3), (4).
C. (1) only.
D. (1), (2).

(2 marks)

1.5 X, Y and Z are in partnership. X receives a salary of K28,000. If the profits for the year are K160,000 and the partners share profits equally, what is Y's share of profits?

A. K28,000
B. K44,000
C. K52,000
D. K53,334

(2 marks)

1.6 A company issues 100,000 K1 shares at a price of K1.25 per share. How many much should be posted to the Ordinary share capital account?

A. K100,000.
B. K25,000.
C. K125,000.
D. K120,000.

(2 marks)

1.7 The cost of putting goods into a saleable condition should be charged to?

A. The statement of cash flows.
B. The statement of profit or loss.
C. The statement of financial position.
D. None of the above.

(2 marks)

1.8 A firm bought a machine for K16,000. It is expected to be used for 5 years then sold for K1,000. What is the annual amount of depreciation using the straight-line method?

A. K3,200
B. K3,000
C. K3,750
D. K3,100

(2 marks)

1.9 Which of these errors would not be disclosed by the trial balance?

A. A cheque of K9,500 from C. Smith entered in Smith's account as K5,900.
B. Selling expenses had been debited to sales Account.
C. Credit sales of K3,000 entered in both double entry accounts as K300.
D. A purchase of K2,500 was omitted entirely from the books.

(2 marks)

1.10 The opening accounts receivable balance is K11,500, Sales K48,000 and receipts from debtors K45,000, the closing accounts receivables total should be?

A. K8,500
B. K83,500
C. K14,500
D. K18,500.

(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)

(a) Explain two (2) reasons why it is important to prepare a bank reconciliation.

(3 marks)

(b) Explain the difference between:

(i) Direct debit and bank charges (2 marks)

(ii) Standing order and outstanding deposits (2 marks)

(iii) Cash and Cash equivalents (2 marks)

(c) Paulos received the Bank Statement from his bank for the month of December 2023 and it showed a credit balance K8,975; whereas the cash book prepared to that date showed a debit balance of K5,705. Upon comparing the Bank Statement with the cash book, you established the following:

1. A cheque for K350, from a customer, Bob, was credited in the cash book.
2. An amount of K4,000 had been transferred by the bank into the business bank account from a fixed deposit account upon its maturity.
3. A cheque deposit of K2,850 made on the last day of the month was credited by the bank on the 5 January 2024.
4. Two cheques issued to suppliers had not been presented for payment: the first one was to Mwiza for K640, and the second one to Joas, for K725.
5. Interest earned of K285, on the bank balance, had not been entered in the cash book.
6. Bank charges appearing on the Bank Statement amounted to K180.
7. The bank had paid a standing order of K500 to Capra Hustle Keep Fit Club.
8. A customer had directly deposited K840 into the bank account.
9. The Bank Statement showed that a cheque from a customer, Mwitwa, for K390, had been dishonored. The cash book only reflected receipt of the returned cheque in January 2024.

Required:

(i) Prepare Paulos' Updated Cash Book as at 31 December 2023. (6 marks)

(ii) Draw up a Bank Reconciliation Statement for December 2023, starting with the balance per Bank Statement. (5 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Benjamin and Joshua are brothers who run a partnership, their profit sharing ratios being 3:2 respectively. Under the terms of the partnership agreement, partners are entitled to interest on capital of 5% per annum and interest is charged on drawings at 2% per annum. Further, each partner is entitled to a salary as follows: Benjamin, K13,500 and Joshua K9,000.

The Partnership's trial balance as at 31 March 2024, was as follows:

		Dr.	Cr.
		K	K
Carriage inwards		8,350	
Returns inwards		7,600	
Wages and salaries		22,500	
Carriage outwards		1,600	
Rent and rates		1,900	
Postage and stationery		1,325	
Irrecoverable debts		2,250	
Allowance for irrecoverable debts at 1 April 2023			390
Discounts received			125
Purchases /Sales		187,500	275,000
Trade receivables /Trade payables		34,250	29,200
Inventory at 1 April 2023		32,700	
Returns Outwards			5,000
Motor Vehicles at cost		10,000	
Office equipment at cost		9,000	
Allowance for depreciation at 1 April 2023:			
Motor vehicles		2,000	
Office equipment		1,800	
Cash at bank		8,450	
Drawings:	Benjamin	17,500	
	Joshua	7,750	
Current accounts	Benjamin		3,120
	Joshua	1,460	
Capital accounts:	Benjamin		22,500
	Joshua		15,000
		354,135	**354,135**

Additional information

(i) The cost and net realizable value of Inventory at 31 March 2024 was valued at K41,400 and K52,100 respectively.

(ii) Rent and rates paid in advance were K495.

(iii) The allowance for irrecoverable debts is to be reduced to K250.

(iv) Motor vehicles are to be depreciated at 20% per annum on a reducing balance basis, and Office equipment at 10% on a straight line basis.

(v) Arrears for postage and stationery were K180.

(vi) The business was initially started by Benjamin as a sole trader.

Required:

Prepare the Statement of profit or loss and appropriation account for Benjamin and Joshua for the year ended 31 March 2024. (15 marks)

(b) When two (2) or more individuals come together to form a Partnership, it is advisable to have a correctly drafted Partnership Agreement carefully detailing the terms of the business relationship. A partnership agreement is a contract between partners in a partnership which sets out the terms and conditions of the relationship between the partners. Where no partnership agreement exists, express or implied, Section 24 of the Partnership Act 1890 governs the situation.

Required:

State three (3) salient provisions of Section 24 of the Partnership Act 1890; regarding administration of Partnerships. (3 marks)

(c) Explain the meaning of the following financial ratios:

(i) Current ratio (1 mark)

(ii) Gross profit margin (1 mark)

[Total: 20 Marks]

QUESTION FOUR

Extracts from Bonimuzo's Statement of profit or loss and other comprehensive income for the year ended 31 December 2023.

	K
Operating profit	80,000
Investment income	12,000
Finance costs	(10,000)
Profit before tax	82,000
Tax	(32,000)

	K
Profit for the year	50,000
Other comprehensive income	
Revaluation gain	40,000
Total comprehensive income	90,000

Extracts from Bonimuzo's Statements of financial position as at 31 December were:

	2023	**2022**
	K	**K**
Current assets		
Inventory	30,000	25,000
Receivables	20,000	26,000
Current liabilities		
Trade payables	14,000	11,000

Additional information

1) Interest paid is K12,000 and taxation paid is K13,000.
2) During the year depreciation of K90,000 was charged to profit.
3) Receipts from customers, combined with cash sales, were K800,000, payments to suppliers of raw materials K400,000, other operating cash payments were K100,000 and cash paid on behalf of and to employees was K126,000.

Required:

(a) Differentiate between *Direct and Indirect Method* of reporting cash flow from operating activities. (2 marks)

(b) Explain two (2) disadvantages of Statement of cash flow. (2 marks)

(c) Using the direct method prepare the operating activities section of the Statement of cash flows. (3 marks)

(d) Using the indirect method determine the operating activities section of the Statement of cash flows. (5 marks)

(e) State four (4) benefits that financial statements provide to its users. (4 marks)

(f) Give two (2**)** advantages and two (2) disadvantages of operating as a limited liability company. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

The Treasurer of Nkhwazi Recreation Club prepared the receipts and payments account of the club for the year ended 31 December 2023 as follows:

	RECEIPTS K'000		PAYMENTS K'000
Cash in hand 31 December 2022	10	Bar Purchases	1,885
Balances of Bank at 31 December 2022		Wages	306
- Current Account	263	Rent and Rates	184
- Deposit Account	585	Lighting and heating	143
Entrance fees	54	New Lawn mower (Less allowance for old one K40,000)	120
Subscriptions:		General expenses	132
to 31 December 2022	30	Catering Purchase	80
to 31 December 2023	574	Additional furniture	460
to 31 December 2024	44	Cash in hand	8
Bar takings	2,285	Balances at bank (31 December 2023):	
Catering receipts	120	Current Account	176
Deposit account interest	26	Deposit Account	497
	3,991		**3,991**

Additional information:

(1) Book values of Non-current assets as at 31 December 2022 were:
- Furniture, fixtures and fittings K396,000 (Cost K440,000)
- Lawn mower K20,000 (Cost K120,000)

(2) Other Current assets and liabilities at 31 December were as follows:

	2022 K'000	2023 K'000
Bar inventory at cost	209	178
Amounts owed to Brewery for bar purchases	186	248
Arrears for rent and rates	12	26
Arrears in lighting and heating	9	11
Subscription in arrears	30	50

(3) A provision of 40% bonus on gross profit arising from the catering sales is to be made for the caretaker in the annual account.

(4) Depreciation on furniture, fixtures and fittings is to be provided for at the rate of 10% on cost. No depreciation is to be provided on the new Lawn mower, but a full year on the new furniture and fittings.

Required to prepare:

(a) A statement showing the Accumulated fund as at 31 December 2022 (5 marks)

(b) An Income and expenditure account for the year ended 31 December 2023; showing separately a Trading account for bar sales and Catering. (9 marks)

(c) A Statement of financial position as at 31 December 2023. (6 marks)

[Total: 20 Marks]

QUESTION SIX

The following is a trial balance for Tuse, a sole trader, as at 31 March 2024:

	Dr (K)	Cr (K)
Inventory 1 April 2023	143,403	
Trade payables		126,450
Capital 1 April 2023		293,953
Drawings	57,500	
Cash	8,125	
Trade receivables	168,593	
Allowance for receivables 1 April 2023		12,500
Revenue		1,688,650
Purchases	875,460	
Insurance	39,340	
Motor expenses	48,451	
Wages and salaries	286,420	
Electricity costs	69,540	
Bank overdraft interest	775	
Discounts allowed	672	
Plant and machinery at cost	712,500	
Plant and machinery accumulated depreciation		289,226
	2,410,779	**2,410,779**

The following information is relevant to the preparation of the financial statements:

(i) At 31 March 2024, inventory held had a cost of K130,350.

(ii) Irrecoverable debts of K2,000 are to be written off and an allowance for receivables to be reduced to K9,300 from the amount on 1 April 2023.

(iii) Plant and machinery is depreciated on a straight-line basis at a rate of 15% per annum.

(iv) At 31 March 2024, an invoice for fuel for motor vehicles amounting to K5,750 had not been settled yet.

(v) A pre-payment of K3,125 for insurance expenses should be accounted for.

(vi) Sometime during the year, Tuse’s liquidity worsened and the firm had to rely on a working capital facility form its local bank to finance its operations.

Required:

(a) Prepare the statement of profit or loss for Tuse for the year ended 31 March 2024. (10 marks)

(b) Prepare the statement of financial position for Tuse as at 31 March 2024. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.1 FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 A

1.2 D

1.3 D

1.4 D

1.5 B

1.6 A

1.7 B

1.8 B

1.9 A

1.10 C

SOLUTION TWO

(a) A bank reconciliation statement is prepared to confirm the amount that is in safe custody at the bank as well as the amount to report on the statement of financial position.

The exercise also helps identify possible errors which may have been made either by the bank or by the entity.

The exercise may also assist in detecting possible fraud that may have occurred.

(b) The differences between

(i) direct debit and bank charges: Both are effected onto the business or entity account by the bank. Bank charges are payments to the bank itself, whereas direct debits are payments to outside entities that made directly from the business' bank following a duly authorized transfer mandate.
(ii) A standing order is a written authorization by a client to its banker to effect fixed payment to a named supplier on a known date, whereas outstanding deposits are those cash and cheque receipts which were taken to the bank, but they have not yet been processed in the banking system.
(iii) Cash represents notes and coins handled in the office of the business. Cash equivalents are account balances that are convertible into cash within a short period of time. Some cash equivalents include treasury bills which mature in periods of 3, or 6, or 9 months, and so they can be converted into cash within 12 months.

(c) The following is the Updated Cash Book

(i) **PAULOS' UPDATED CASH BOOK**

Balance b/d	5,705	Bank Charges	180
Suspense 350x2	700	Capra Hustle	500
Fixed Deposit	4,000	Dishonoured chq	390
Interest Received	285		
Trade Receivable	840		
		Balance c/d	10,460
	11,530		11,530
Balance b/d	10,460		

(ii) **Paulos' Bank Reconciliation Statement as at 31 December 2022:**

Balance per Bank Statement		8,975
Add: Uncredited deposits		2,850
		11,825
Less: Unpresented cheques:		
Mwiza	640	
Joas	725	
		1,365
Balance per cash book		10,460

SOLUTION THREE

(a) **Benjamin and Joshua**

Statement of Profit or loss and appropriation account for Benjamin and Joshua for the year ended 31 March 2023

	K	K	K
Sales		275,000	
Sales returns		(7,600)	
Net sales			267,400
Inventory at start		32,700	
Purchases	187,500		
Less Returns outwards	(5,000)		
Carriage inwards	8,350		
Net purchases		190,850	
Total inventory available		223,550	
Inventory at end		(41,400)	
Cost of sales			(182,150)
Gross Profit			**85,250**
Other income			
Decrease in Receivables All. (390-250)		140	
Discount received		125	
			265
Total income			**85,515**
Less: Operating expenses			
Irrecoverable debts		2,250	
Wages and Salaries		22,500	
Carriage outwards		1,600	
Rent and rates (1,900 - 495)		1,405	
Postage and stationery (1,325 + 180)		1,505	

Depreciation			
- Motor vehicle 0.2 (10,000 – 2,000)	1,600		
- Office equipment (0.10 x 9,000)	900		
		(31,760)	
Net profit for the year		**53,755**	

PARTNERSHIP PROFIT OR LOSS APPROPRIATION ACCOUNT

	K	K
Net profit for the year		53,755
Add: 20% Interest on drawings		
- Benjamin (0.02 x 17,500)	350	
- Joshua (0.02 x 7,750)	155	
		505
less**:** 5% Interest on capital		
- Benjamin (0.05 x 22,500)	1,125	
- Joshua (0.05 x 15,000)	750	
		(1,875)
Less: Salaries		
- Benjamin	13,500	
- Joshua	9,000	
		(22,500)
Residue profit		29,885
Less: Share of profits		
- Benjamin (3/5 x 29,885)	17,931	
- Joshua (2/5 x 29,885)	11,954	
		(29,885)

(b) **<u>Contents of a partnership Act 1890</u>**

- Profits and losses are to be shared equally.
- There is to be no interest allowed on capital.
- No interest is to be charged on drawings.
- Salaries are not allowed.
- Partners who put a sum of money into business in excess of the capital they have agreed to subscribe are entitled to interest at the rate of 5% per annum on such an advance.

(c) (i) The **current ratio** is used to give an idea of the company's ability to meet its short-term obligations (debts due within one year) with its short-term assets measured as 2:1. The higher the ratio the more liquid a company is and the greater its capability of paying its short-term obligations.

(ii) The **gross profit margin** is the ratio of gross profit (gross sales less cost of sales) to sales revenue. It is the percentage by which gross profits exceed production costs. Gross profit margins reveal how much a company earns taking into consideration the cost of sales for those products or services.

SOLUTION FOUR

(a) Differences in reporting cash flows from operating activities: direct and indirect methods

- Direct method discloses major classes of gross cash receipts and gross cash payments through the cash book rather than Statement of profit or loss. It also discloses information not available elsewhere on the financial statements.
- Indirect method on the other hand presents net profit or loss adjusted for the effect of transaction of non-cash nature, deferrals as well as items of income or expenditure.
- It is also simple to use and is widely used.

(b) Disadvantages of Statement of cash flows

- It is subject to manipulation through profit smoothing and creative accounting whereby profits of a firm may be window dressed to show a better picture than what it is.
- It depends on other financial statements such as the Statement of profit or loss and the Statement of financial position.
- It ignores the accruals concept of accounting for transactions as it only considers actual cash flows thereby setting aside effects of accruals on prepaid and outstanding transactions.

(c) **Direct method**

Cash flows from Operating activities	**K**	**K**
Cash received from customers	800,000	
Cash paid to suppliers	(400,000)	
Other operating payments	(100,000)	
Cash paid to staff	(126,000)	
Cash generated	174,000	
Interest paid	(12,000)	
Taxation paid	(13, 000)	
		149,000

(d) **Indirect method**

Cash flows from Operating activities	**K**	**K**
Operating activities		
Profit before tax	82,000	
Investment income	(12,000)	
Finance cost	10,000	
Depreciation	90,000	
Increase in inventory (30,000-25,000)	(5,000)	
Decrease in receivables (20,000-26,000)	6,000	
Increase in payables (14,000-11,000)	3,000	
Cash generated	174,000	
Interest paid	(12,000)	
Tax paid	(13, 000)	
		149,000

(e) **Possible benefits of financial statements to diverse users**

- To allow decisions to be made for the good of the company on the value of shareholder's investments and the income they derive from their shareholding.
- To enable employees assess stability of tenure in the company or to look for alternative work in a different company.
- Basis by employees to press for pay increases and promotions where the financial health of the company is deemed to support such.
- To enable trade payables and banks assess whether the company can meet its financial obligations and commitments to them.
- To allow accountants audit or prepare tax returns on behalf of the company.
- To help government plan effectively.

(f) **Advantages of a limited liability company**

i. **Limited liability** of owners – once they contribute capital in full, shareholders are not personally liable for the debts of the company.

ii. **Easy to raise finance** because of limited liability status of which a company generally can issue shares to many shareholders as source of capital.

iii. **Separate legal entity** – company continues to exist regardless of the identity of its owners.

iv. **Tax advantage** – A company is taxed as separate entity from its owners.

v. **Transferability of shares** – easy to transfer shares from one owner to another.

Disadvantages of a limited liability company

i. Have to **publish** annual financial statements, therefore, anyone including competitors can have access to the performance of company, be it good or bad.

ii. Have to **comply with rigorous** legal and accounting requirements.

iii. Financial statements of larger companies have to be **audited;** which may be both time consuming and expensive.

iv. Share **issues** are **regulated by law** and hence it may not be easy to alter the company's share structure outside of the law and memorandum of association.

SOLUTION FIVE

(a) **Nkhwazi Recreation Club**
Statement of the Accumulated Fund as at December 2021

	K'000	**K'000**
Furniture, Fixtures and fitting at cost	440	
Less: Depreciation	(44)	396
Lawn mower at cost	120	
Less: Depreciation	(100)	20
Bar inventory		209
Subscription in arrears		30
Cash in Hand		10
Bank Balances:		
- Current Account		263
- Deposit Account		585
		1,513
Less:		
Payables – Bar	186	
Rent and Rates	12	
Lightings and heating	9	(207)
Accumulated fund as at 31st December 2021		**1,306**

(b) **Nkhwazi Recreation Club**
Income and Expenditure Account for the Year Ended 31st December 2022

	K'000	**K'000**
Incomes:		
Entrance fee	54	
Subscriptions (w4)	624	
Gross profit from Bar trading a/c bal. b/d	307	
Gross profit on catering services (w2)	40	
Profit on sale of Lawn mower	20	
Interest on Deposit Account	26	1,071
Less Expenditure		
Wages	306	
Rent & Rates (184 + 26 – 12)	198	
Light and Heating (143 + 11 – 9)	145	
General Expenses	132	
Steward bonus (w3)	16	
Depreciation on furniture & fittings (10% x (440+460))	90	(887)
Excess of income over expenditure		**184**

Nkhwazi Recreation Club
Bar Sales Account (Appendage) for the Year Ended 31st December 2022

	K'000	**K'000**
Sales		2,285

Opening inventory	209	
Purchases (w1)	1,947	
	2,156	
Less; closing inventory	178	
Cost of Sales		1,978
Gross profit (Carried to income and expenditure a/c)		307

Workings	**K'000**	**K'000**
1. Purchases: (1885 + 248 – 186)		**1,947**
2. Catering sales		
Receipts	120	
Purchases	(80)	**40**
3. Commission (40% of 40,000)		**16,000**

4. Subs for year: Received (648) + Owing (50) – prepaid in 2021 & 2022 (30+44) = **624**

(c) **Nkhwazi Recreation Club**
Statement of Financial Position as at 31st December 2022

		K'000	**K'000**
Non-Current Assets:			
Furniture, fittings & fixtures – cost (460 + 440)		900	
Less Depreciation (90+44)		134	766
Lawn mower at cost (120 + 40)			160
			926
Current Assets;			
Bar Inventory		178	
Subscription due		50	
Cash in Hand		8	
Bank Balances:			
- Current Account	176		
- Deposit Account	497	673	909
Total assets			**1,835**
Accumulated fund			
As at 31st December 2021			1,306
Excess of income over expenditure for the year			184
			1,490
Current Liabilities;			
Payables – Bar		248	
General expenses (260 + 11)		37	
Standard Bonus		16	
Subscription in advance		44	345
			1,835

SOLUTION SIX

(a) **Tuse's Statement of profit or loss for the year ended 31 March 2023**

	K	K
Revenue		1,688,650
Less cost of sales:		
Operating Inventory	143,403	
Purchases	875,460	
Closing Inventory	(130,350)	(888,513)
Gross profit		800,137
Less Expenses:		
Insurance (39,340-3,125)	36,215	
Irrecoverable debts (2,000-3,200)	(1,200)	
Motor expenses (48,451+5,750)	54,201	
Wages and salaries	286,420	
Electricity	69,540	
Bank overdraft interest	775	
Discount allowed	672	
Depreciation expense (15% x 712,500)	106,875	553,498
Net profit for the year		246,639

(b) **Tuse's statement of financial position as at 31 March 2023.**

	K	**K**	**K**
Non-current assets :	Cost	Accumulated depreciation	Carrying amount
Plant and machinery	712,500	396,101	316,399
Current assets:			
Inventory		130,350	
Trade receivables (168,593-2,000-9,300)		157,293	
Cash		8,125	
Insurance prepaid		3,125	298,893
			615,292
Capital and liabilities:			
Capital at start			293,953
Add net profit for the year			246,639
Less drawings			(57,500)
Closing capital			483,092

Current liabilities:

Trade payables	126,450	
Motor expenses owing	5,750	
		132,200
		615,292

Workings:

(1) Allowance for receivables

	K
Balance brought forward	12,500
Decrease in allowance	(3,200)
Balance carried forward	9,300

As the allowance decreased by K3,200 in the period, this reduces the irrecoverable debt to an extent that the net effect is a credit to the profit or loss of K1,200.

(2) Accrued motor expenses of K5,750 are to be added to the trial balance figure to adhere to the unpaid invoices to be recognized as they have been incurred.

Prepaid insurance needs to be subtracted from the amount paid as it does not relate to the current accounting period. Then the statement of financial position to record an asset for the prepaid amount.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2 BUSINESS STATISTICS

WEDNESDAY 12 JUNE 2024

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: One (1) compulsory scenario question.
   Plus Four (4) 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 mathematical standard formulae book must be provided to you – request 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 The variables whose measurement is done in terms such as weight, height and length are classified as;

A. Continuous variables.
B. Measuring variables.
C. Nominal variables.
D. Discrete variables.

(2 marks)

1.2 For the mid – values given 26, 35, 44, 53, 62, 71, the first class of the distribution is:

A. 26, 35.
B. 24.5, 34.5.
C. 20, 30.
D. 21.5, 30.5.

(2 marks)

1.3 If Z is a standard Normal variable and $P(-1.43 < Z < k) = 0.732$. Calculate the value of k.

A. 0.0764.

B. 0.8660.

C. 0.8084.

D. 0.9236.

(2 marks)

1.4 The Regression model on two (2) variables.

x $(independent\ variable)$, and y $(dependent\ variable)$
gave a value of the coefficient of correlation to be $r = 0.5$. Which of the following statements is correct?

A. The x-variable explains 25% of the variability in the y-variable.
B. The x-variable explains −25% of the variability in the y-variable.
C. The x-variable explains 50% of the variability in the y-variable.
D. The x-variable explains −50% of the variability in the y-variable.

(2 marks)

1.5 The table below represents assorted number of goods and their prices in a shop.

Price range of goods	**Number of goods**

5 and less 10	52
10 and less 15	64
15 and less 20	66
20 and less 25	32
25 and less 30	14

Determine the median class of the data above.

A. 10 and less 15.
B. 15 and less 20.
C. 20 and less 25.
D. 25 and less 30.

(2 marks)

1.6 A machine produces 0, 1 or 2 defective pieces in a day with associated probability of 0.12, 0.62, and 0.45 respectively. The mean value of the number of defective pieces produced by the machine in a day is:

A. 0.40.
B. 0.45.
C. 1.
D. 1.52.

(2 marks)

1.7 Regression analysis was applied between K sales (y) and K advertising (x) across all the branches of a major international corporation. The following regression function was obtained.

$$y = 5000 + 7.25x$$

If the advertising budgets of two (2) branches of the corporation differ by K30,000, then what will be the predicted difference in their sales?

A. K217,500.
B. K222,500.
C. K5000.
D. K7.25.

(2 marks)

1.8 A car manufacturer obtains data concerning the sales of six of its deals in the last week of 2020. The results indicate the standard deviation of their sales equal to 7 cars. If this is so, the variance of their sales equal;

A. $\sqrt{7}$
B. 7

C. $\frac{1}{\sqrt{7}}$
D. 49

(2 marks)

1.9 Regression modeling is a statistical framework for developing a mathematical equation that describes how.

A. One explanatory and one or more response variables are related.
B. Several explanatory and several response variables response are related.
C. One response and one or more explanatory variables are related.
D. All of these are correct.

(2 marks)

1.10 Find the median of the following grouped data

Result	**Frequency**
0 to 20	5
20 to 40	10
40 to 60	30
60 to 80	15

A. 52
B. 50
C. 34
D. 45

(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 questions (4).

<u>QUESTION TWO</u> - (COMPULSORY)

(a) An agricultural expert is assessing the impact of foliar fertilizers on maize crop yield over a period of three (3) years. Three (3) sets of crops variety were considered and the output in tonnes for a 20-hector field are shown in the table below;

Variety	**Yield (tonnes) per year**		
	2015	**2016**	**2017**
Late maturing	250	290	350
Medium maturing	280	160	310
Early maturing	100	240	150

Required:

(i) Construct a multiple bar chart to represent this data. (8 marks)

(ii) Calculate the percentage of output for the medium maturing variety in the combined output for the years, 2015, 2016 and 2017. (3 marks)

(iii) What was the ratio of early maturing yields obtained in 2015 compared to yield in 2017? (2 marks)

(b) Two (2) members of an auditing firm are competing for the positions on the Board of Directors of a company. The two members are Mr. Solochi and Mr. Banda. The probabilities that Mr. Solochi and Mr. Banda will win are 0.6 and 0.4 respectively. If Mr. Solochi wins, the probability of introducing a new product is 0.8 and the corresponding probability if Mr. Banda wins is 0.3.

Required:

(i) What is the probability that the new product will be introduced? (4 marks)

(ii) What is the probability that the product will be introduced by Mr. Banda? (3 marks)

[Total: 20 Marks]

QUESTION THREE

(a) A financial expert is analyzing the length of time taken by customers in bank before they are serviced by bank employees. Time (in minutes) is recorded for 200 customers.

The table below shows the price classifications of the items.

Price range of goods	Number of goods
0 and less 5	30
5 and less 10	50
10 and less 15	60
15 and less 20	40
20 and less 25	20

Required:

Using the given information, calculate and interpret the following;

(i) The average price of materials purchased. (5 marks)

(ii) The standard deviation of the purchased goods. (3 marks)

(iii) The modal price of the purchased goods. (4 marks)

(iv) The median price. (4 marks)

(b) The accountant at a very small supermarket wishes to obtain some information about all the invoices sent out to its account customers. In order to obtain an estimate of this information, a sample of twenty invoices is randomly selected from the whole population of invoices.

Values of Invoices (K)

114	99	131	124	117	102	106	127	119	115
98	104	144	151	132	106	125	122	118	118

Required:

Construct a stem –and – leaf display for the data. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

The following information shows the paired relationship between weekly units of production (y) and man – days lost through absenteeism(x):

(y)	49	42	24	40	19	28	31	36
(x)	6	9	18	10	20	15	14	12

Required:

(i) Draw the scatter plot of the above data. (3 marks)

(ii) Fit the regression model $y = a + bx$. (11 marks)

(iii) Determine the weekly units of production if the man-hours lost through absenteeism was 5. (2 marks)

(iv) Calculate the Pearson coefficient of correlation and interpret the result appropriately. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) The following data give the total expenditure incurred by a certain University.

Year	1996	1997	1998	1999	2000	2001	2002
Expenditure K'000	1.5	1.8	2.0	2.3	2.4	2.6	3.0

Required:

(i) Find the trend values for all the years from 1996 to 2002. (12 marks)

(ii) Estimate the expenditure likely to be incurred by the university during 2003. (2 marks)

(b) If the first quartile is 104 and the quartile deviation is 18, find the value of the third quartile? (3 marks)

(c) The mean daily wages of ten (10) workers in factory X is K30 and the mean daily wages of twenty (20) workers in factory Y is K15. Find the mean daily wages of all the workers of both the factories. (3 marks)

[Total: 20 Marks]

QUESTION SIX

(a) The accompanying table shows, for 1000 forecasts of earnings per share made by financial analyst, the numbers of forecasts and outcomes in particular categories (compared with previous year)

Outcome	**Forecast**		
	Improvement	**About the same**	**Worse**
Improvement	205	77	61
About the same	111	158	80
Worse	60	89	159

(i) Find the probability that if the forecast is for a worse performance in earnings, the worst outcome will result. (3 marks)

(ii) If the forecast is for an improvement in earnings, find the probability that the outcome in an improvement will result. (3 marks)

(iii) Find the probability that if the forecast is an improvement, the outcome in earnings of an improvement will result. (3 marks)

(iv) Find the probability that if the forecast is for an improvement in earnings, that the worse outcome will result. (3 marks)

(b) A lecturer records the shoe size, X, of the female students in her class. The results are as follows.

Shoe size, X	**Number of students,** f
15	3
15.5	17
16	29
16.5	34
17	12

Required:

From these data, calculate

(i) The mode (2 marks)

(ii) The median (3 marks)

(iii) The mean (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.2 BUSINESS STATISTICS SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 A

1.2 D

1.3 B

1.4 A

1.5 A

1.6 D

1.7 B

1.8 D

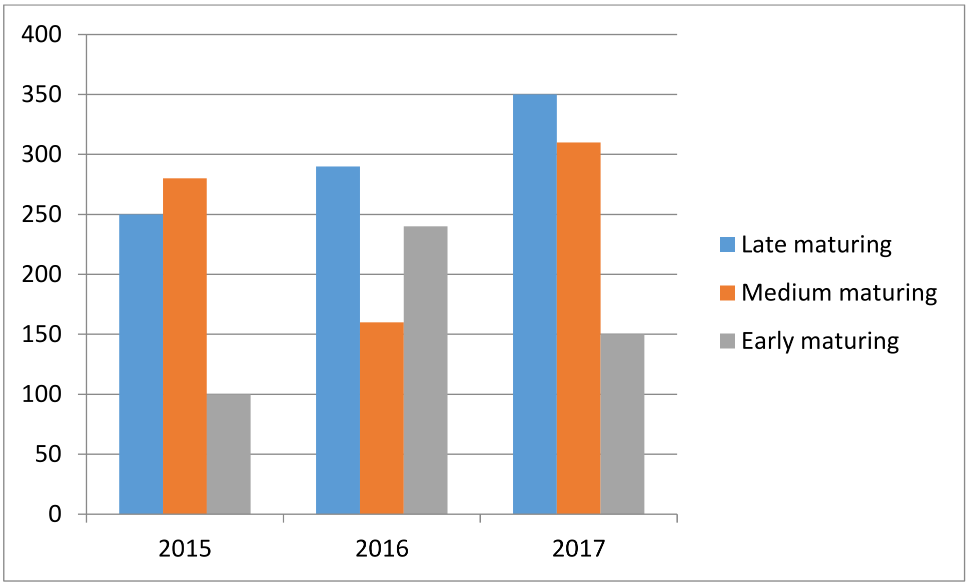
1.9 C

1.10 B

SOLUTION TWO

(a)

(i)



(ii)

Variety	**Yield tonnes per year**			
	2015	**2016**	**2017**	**TOTAL**
Late maturing	250	290	350	890
Medium maturing	280	160	310	750
Early maturing	100	240	150	490
TOTAL	630	690	810	2130

Output for medium variety $= \frac{280+160+310}{2130} = \frac{750}{2130} \times 100 = 35.2\%$

(iii) ratio is 100:150 or 100/150 or 2:3

(b)

(i) Let $\mathrm{A} =$ an event that Mr. Solochi wins

$\mathrm{B} =$ an event that Mr. Banda wins

$C =$ an event that the new product will be introduced

We are given,

$\mathrm{P}(\mathrm{A}) = 0.6,\quad \mathrm{P}(\mathrm{B}) = 0.4,\quad \mathrm{P}(C/\mathrm{A}) = 0.8$ and $\mathrm{P}(C/\mathrm{B}) = 0.3$.

We use total probability theorem, and we have

$$\begin{aligned}\mathrm{P}(C) &= \mathrm{P}(\mathrm{A})\mathrm{P}(C/\mathrm{A}) + \mathrm{P}(\mathrm{B})\mathrm{P}(C/\mathrm{B})\\ &= (0.6)(0.8) + (0.4)(0.3)\\ &= 0.48 + 0.12\\ &= 0.60\end{aligned}$$

(ii) $$\begin{aligned}\mathrm{P}(\mathrm{B}/C) &= \frac{\mathrm{P}(\mathrm{B}\cap C)}{\mathrm{P}(C)}\\ &= \frac{\mathrm{P}(\mathrm{B})\mathrm{P}(C/\mathrm{B})}{\mathrm{P}(C)}\\ &= \frac{0.4\times 0.3}{0.60}\\ &= 0.20\end{aligned}$$

SOLUTION THREE

(a)

Class Limit	Xi	ni	niXi	ni(Xi-MEAN)^2	Commulative frequency
0 - 5	2.5	30	75	2566.875	30
5 - 10	7.5	50	375	903.125	80
10 - 15	12.5	60	750	33.75	140
15 - 20	17.5	40	700	1322.5	180
20 - 25	22.5	20	450	2311.25	200
Totals		**200**	**2350**	**7137.5**	

(i) Mean:

$$\bar{X} = \frac{1}{\sum f}\sum f_i x_i = \frac{2350}{200} = 11.75$$

(ii) Standard deviation:

$$\boldsymbol{s = \sqrt{\frac{\sum f_i (x_i - \bar{x})^2}{\sum f - 1}}}$$

$$\boldsymbol{s = \sqrt{\frac{7137.5}{200 - 1}} = \sqrt{35.867} = 5.98}$$

(iii) Mode

$$Mo = L_k + w\left(\frac{d_1}{d_1 + d_2}\right)$$

$$k = class\ with\ highest\ frequency = 3$$

$$d_1 = 60 - 50 = 10$$

$$d_2 = 60 - 40 = 20$$

$$Mo = 10 + 5\left(\frac{10}{10 + 40}\right) = 11.67$$

(iv) Median

$$Md = L_k + \frac{w}{n_k}\left(\frac{n}{2} - CFk - 1\right)$$

$$= 10 + \frac{5}{60}\left(\frac{200}{2} - 80\right)$$

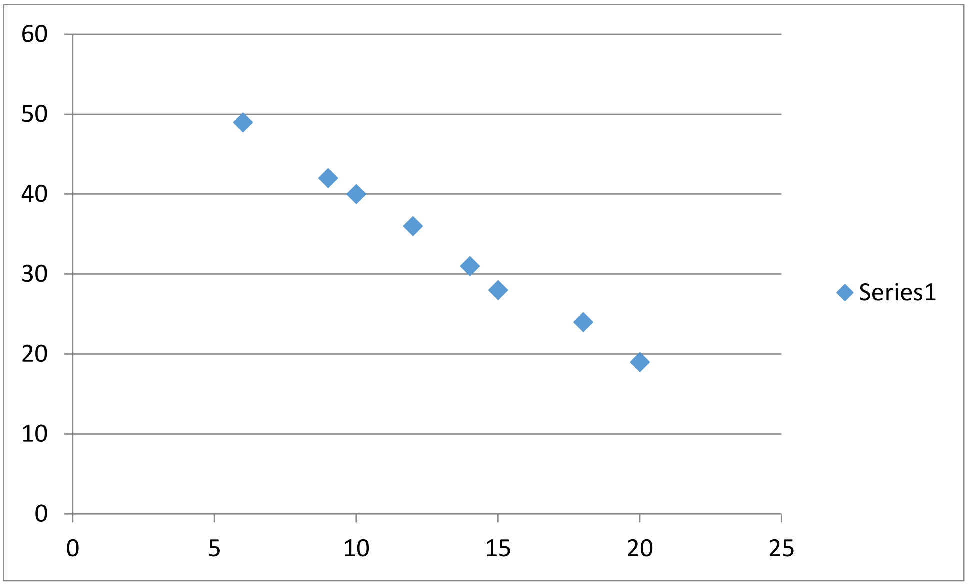
$$= 11.67$$

(b)

Stem	**Leaf**					
9	8	9				
10	2	4	6	6		
11	4	5	7	8	8	9
12	2	4	5	7		
13	1	2				
14	4					
15	1					

SOLUTION FOUR

(i)



(ii)

x	y	x^2	y^2	xy
49	6	2401	36	294
42	9	1764	81	378
24	18	576	324	432
40	10	1600	100	400
19	20	361	400	380
□8	15	784	225	420
31	14	961	196	434
36	12	1296	144	432
$\sum x = 269$	$\sum y = 104$	$\sum x^2 = 9743$	$\sum y^2 = 1506$	$\sum xy = 3170$

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}}$$

$$= \frac{3170 - \frac{(104)(269)}{8}}{1506 - \frac{(104)^2}{8}}$$

$$= \frac{-327}{154}$$

$$\approx -2.12$$

$$a = \bar{y} - b\bar{x}$$

$$= \frac{269}{8} - (-2.2123376623)\left(\frac{104}{8}\right)$$

≈ 61.2288961

Therefore the required answer is $\hat{y} = 61.23 - 2.12x$

(iii) $\hat{y} = 61.23 - 2.12(5) = 50.63$

(iv)

$$r = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sqrt{\left(\sum x^2 - \frac{(\sum x)^2}{n}\right)\left(\sum y^2 - \frac{(\sum y)^2}{n}\right)}}$$

$$\frac{3170 - \frac{269 \times 104}{8}}{\sqrt{\left(9743 - \frac{269^2}{8}\right)\left(1506 - \frac{(104)^2}{8}\right)}}$$

$$= \frac{-327}{\sqrt{(697.875)(154)}} = \frac{-327}{\sqrt{107472}} = 0.9974$$

SOLUTION FIVE

(a)

(i) Trend line: $Y_c = a + bx$

Since, $\sum x = 0,$ $\quad a = \dfrac{\sum y}{N} = \dfrac{15.6}{7} = 2.23$

and $\quad b = \dfrac{\sum xy}{\sum x^2} = \dfrac{6.5}{28} = 0.23$

Trend line: $Y_c = 2.23 + 0.23x$

Trend values $\quad Y_{1996} = 2.23 + (0.23)(-3) = 2.23 - 0.69 = 1.54$

Similarly, the other values can be obtained by putting $x = -2, -1, 0, 1, 2$ and 3 as shown in the table below:

Year	**Expenditure** Y	**Deviation from** $1999 = x$	x^2	xy	**Trend values:** $Y_c = a + bx$
1996	1.5	-3	9	-4.5	1.54
1997	1.8	-2	4	-3.6	1.77
1998	2.0	-1	1	-2.0	2.00
1999	2.3	0	0	0	2.23
2000	2.4	1	1	2.4	2.46
2001	2.6	2	4	5.2	2.69
2002	3.0	3	9	9.0	2.92
$N = 7$	$\sum y = 15.6$	$\sum x = 0$	$\sum x^2 = 28$	$\sum xy = 6.5$	

(ii) $\quad Y_{2003} = 2.23 + (0.23 \times 4) = 2.23 + 0.92 = 3.15$

(b)

Quartile Deviation $= \dfrac{Q_3 - Q_1}{2}$

$$\frac{Q_3 - Q_1}{2} = 18$$

$$\frac{Q_3 - 104}{2} = 18$$

$$Q_3 - 104 = 36$$

$Q_3 = 36 + 104$

$Q_3 = 140$

$\therefore$ Third quartile $= 140$

(c)

We are given,

$n_1 = 10, \quad \bar{x}_1 = 30, \quad n_2 = 20$ and $\bar{x}_2 = 15$

$$\mu = \frac{n_1\bar{x}_1 + n_2x_2}{n_1 + n_2} = \frac{(10)(30)+(20)(15)}{10+20} = \frac{600}{30} = 20$$

SOLUTION SIX

(a) Construct the following table:

Outcome	forecast			
	Improvement	About the same	Worse	Total
Improvement	205	77	61	343
About the same	111	158	80	349
Worse	60	89	159	308
Total	376	342	300	1 000

(i) We look for the conditional probability of

$$P(outcome\ is\ worse|forecast\ is\ worse) = \frac{P(outcome\ \cap forecast\ worse)}{P(forecast\ worse)} = \frac{159}{300} = 0.53$$

(ii) We look for the conditional probability of

$$P(outcome\ improvement|improvement\ in\ forecast) = \frac{P(outcome\ \cap forecast)}{P(improvement\ forecast)} = \frac{205}{376}$$
$$= 0.5452$$

(iii) We look for the conditional probability of

$$P(forecast\ improvement|improvement\ outcome) = \frac{P(outcome\ \cap forecast\ )}{P(improvement\ outcome)} = \frac{205}{373}$$
$$= 0.5977$$

(iv) We look for the conditional probability of

$$P(outcome\ is\ worse|improvement\ in\ forecast)$$
$$= \frac{P(outcome\ worse\ \cap improvement\ forecst)}{P(improvement\ forecast)} = \frac{60}{376} = 0.1596$$

(b)

(i) Mode $=16.5$

16.5 is the shoe size with the highest frequency.

(ii)

x	**Number of students**	**Cumulative frequency**
15	3	3
15.5	17	20
16	29	49
16.5	34	83
17	12	95

Here, $n = 95$, so $\frac{n}{2} = \frac{95}{2} = 47.5 = 48$. So the median value is the 48th term

$\therefore Median = 16$

(iii) $\bar{x} = \frac{\sum fx}{f}$

$= \frac{15 \times 3 + 15.5 \times 17 + 16 \times 29 + 16.5 \times 34 + 17 \times 12}{95}$

$= \frac{45 + 263.5 + 464 + 561 + 204}{95}$

$= \frac{1,537.5}{95}$

$= 16.2$

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.3: BUSINESS ECONOMICS

TUESDAY 11 JUNE 2024

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: One (1) compulsory scenario question.
   Plus Four (4) 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.

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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.

<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 A production possibility frontier illustrates the ________ facing an economy that ________ only two goods.

A. Prices; sells
B. Trade-offs; produces
C. trade-offs; consumes
D. Shortages; produces

(2 marks)

1.2 When the actual price of a good is above its equilibrium market price, competition among……..

A. Buyers will force the actual price upward.
B. Sellers will force the actual price upward.
C. Sellers will force the actual price downward.
D. Buyers will force the actual price downward.

(2 marks)

1.3 The production output of Coca-Cola's company in Zambia is part of ………. The profits of the company which are repatriated to the US on the other hand are part of US …………. but not USA's …………………………

A. Zambia's GDP; GNP; GDP
B. Zambia's GDP; GDP; GNP
C. US GDP; GNP; GDP
D. US GNP; GNP; GDP

(2 marks)

1.4 If Aggregate Demand exceeds Aggregate Supply at a full employment level of output, there will be……………………………….

A. Unemployment.
B. Inflation.
C. Full employment
D. Stagflation.

(2 marks)

1.5 With international trade, a country

A. Cannot consume at a point on its PPF.
B. Can consume at a point outside its PPF.
C. Cannot consume at a point outside of its PPF.

D. None of the above answers are correct

(2 marks)

1.6 Which of the following is a leakage from the Circular Flow model of oncome?

A. An increase in consumption.
B. Transfer payments made by the government.
C. An increase in imports.
D. An increase in investment spending.

(2 marks)

1.7 Inflation imposes especially large burdens on people who…….

A. Receive social security benefits.
B. Owe huge fixed interest rate mortgages on their houses.
C. Work under union contracts with cost of living adjustments built in.
D. Rely on fixed income for their retirement.

(2 marks)

1.8 Which of the following best illustrates an improvement in a country's standard of living?

A. An increase in real per capita GDP.
B. An increase in nominal per capita GDP.
C. Price stability.
D. A balanced budget.

(2 marks)

1.9 The precautionary demand for money…………………………………………

A. Varies inversely with the price level.
B. Is positively and strongly related to the interest rate.
C. Is a result of the unavailability of adequate insurance.
D. Arises from the possibilities of uncertain expenditures.

(2 marks)

1.10 Identify which of the following is NOT an example of 'invisible item' under Current Account of the Balance of Payments transactions:

A. Air and sea transport.
B. Postal and courier services.
C. Education-related travel.
D. Merchandise linked transactions.

(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

Equilibrium occurs at the intersection of the market supply and market demand curves. At this intersection, quantity demanded equals quantity supplied, i.e., the quantity that individuals are willing to purchase exactly equals the quantity producers are willing to supply. A surplus exists at prices higher than the equilibrium price since the quantity demanded falls short of the quantity supplied. At prices lower than the equilibrium price, there is a shortage of output since quantity demanded exceeds quantity supplied. Once achieved, the equilibrium price and quantity persist until there is a change in demand and/or supply. Equilibrium price and/or equilibrium quantity change when the market demand and/or market supply curves shift.

Required:

(a) Distinguish between "Change in quantity demanded" and "change in demand" giving an example of each factor that can bring about that change (4 marks)

(b) Using graphs, explain what happens to equilibrium price and equilibrium quantity when:

(i) There is an increase in market demand with no change in the market supply curve. (4 marks)

(ii) There is an increase in market supply with demand unchanged. (4 marks)

(c) Using a well-labelled graph, show the positions of surplus and shortage. (4 marks)

(d) Explain the impact of a government intervention that fixes the selling price below the equilibrium price. (2 marks)

(e) Outline any two (2) reasons why the Government may intervene in the market. (2 marks)

[Total: 20 Marks]

QUESTION THREE

Assume that you are interested in determining the profit-maximizing activity level for the Hair Stylist Ltd., a hairstyling salon at East Park Mall, Lusaka. Given the large number of competitors, the fact that stylists routinely tailor services to meet customer needs, and the lack of entry barriers, it is reasonable to assume that the market is perfectly competitive and that the average K200 price equals marginal revenue (P = MR = K200). Furthermore, assume that the firm's operating expenses are typical of the 100 firms in the local market and can be expressed by the following total and marginal cost functions:

$TC = K256{,}250 + K50Q + K0.01Q^2$

$MC = K50 + K0.02Q$

Where TC is total cost per year including capital costs, MC is marginal cost, and Q is the number of hair stylings provided.

Required:

(a) Calculate the profit-maximising quantity of hairstyles. (4 marks)

(b) Determine the economic profit. (4 marks)

(c) Determine the total quantity produced by the 100 firms. (3 marks)

(d) Using demand and supply analysis, explain the effect on equilibrium price and quantity for hair style X of an increase in the price of a close substitute hair style Y. (5 marks)

(e) If the price elasticity of demand for good X is -0.8. Advise the business on the appropriate pricing strategy. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

A kwacha today doesn't buy as much as it did twenty (20) years ago. The cost of almost everything has gone up. This increase in the overall level of prices is called inflation, and it is one of the primary concerns of economists and policymakers. "Inflation has edged upwards to 12% in September 2023 from 9.9% in December 2022. This has largely been driven by increases in the prices of maize and meat products as well as the depreciation of the kwacha against the United States Dollar (US$). The kwacha depreciated by 10.9% against the United States Dollar to K20.05 per US$ between January and August 2023. The depreciation of the kwacha was mainly on account of strong demand while inflows, especially from the mining sector, reduced.

In response to the recent rise in inflation, the Bank of Zambia has raised the Policy Rate by 100 basis points to 10.0%. In addition, to address the volatility in the exchange rate as well as safeguard the stability of the foreign exchange market the statutory reserve ratio was increased by 250 basis points to 11.5% in February 2023" (2024 Budget Speech).

Required:

(a) Explain why a kwacha does not buy the same quantity of goods today than it did twenty (20) years ago. (2 marks)

(b) The statutory reserve ratio was increased by 250 basis points. What was the rate before this increase? (2 marks)

(c) Explain how the increase in the statutory reserve ratio would affect money supply. (5 marks)

(d) Outline any four (4) functions of the Bank of Zambia. (8 marks)

(e) Explain the concept of 'demand pull' inflation. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

Government encourages people especially young people to set up businesses. It has even provided credit lines with Constituency Development Fund (CDF), Economic Empowerment Commission, Ministry of Community Development and Social services and the Ministry of Sports. However, before starting entrepreneurship, a person must understand whether or not his/her enterprise will generate economic profits.

Mr. Banda is a young lawyer working for National Prosecution Authority (NPA). His annual income is K450,000. He plans to set up a private Law Firm. The estimated Total Revenue (TR) is K625,000 annually. The breakdown of the estimated annual costs is as follows:

Office rentals	K70,000
Salary for the secretary	K60,000
Renting office equipment	K45,000
Operational costs	K40,000

Required:

(a) (i) State one (1) major difference between the explicit costs and implicit costs. (1 mark)

(ii) Calculate Mr. Banda's explicit costs of running a private law firm. (3 marks)

(iii) Calculate the implicit costs of this Private Law Firm. (3 marks)

(b) (i) State one difference between economic costs and accounting cost. (1 mark)

(ii) Calculate the economic cost that would accrue to this private Law Firm. (3 marks)

(c) (i) Calculate both the economic profit and accounting profits for this Firm. (6 marks)

(ii) Explain the difference between the economic profit and accounting profit. (3 marks)

[Total: 20 Marks]

QUESTION SIX

The balance of payments (BoP) shows a country's financial transactions with other countries in the world. It records the inflows and outflows of money into and out of the economy usually over a period of one year. The balance of payments has three (3) main accounts, namely; the current account, the capital account and the financial account. If a country uses a flexible exchange rate regime, a current account deficit must be matched by a surplus on the financial account in order for the balance of payments to remain in balance. This shows that the value of a country's currency has implications on its Bop. A currency depreciation or appreciation will have an effect on the value and volume of transactions recorded on its Bop. For nearly three (3) years, between 2009 and 2012, Zambia's current account recorded surpluses averaging 5.1% of GDP. However, since 2013, a current account deficit was observed, which is projected to have reached 3.8% of GDP by end of 2015, (ZIPAR, 2017). A current account deficit is not a favoured scenario, especially if it goes on for a number of years. There are a number of measures the central bank can put in place to correct a current account deficit.

Required:

(a) Describe the three (3) accounts of the Bop. (6 marks)

(b) Describe any three (3) measures the central bank can use to correct a current account deficit. (9 marks)

(c) Define the term flexible exchange rate (2 marks)

(d) Explain any three (3) causes of currency depreciation (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.3: BUSINESS ECONOMICS SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 B

1.2 C

1.3 A

1.4 D

1.5 B

1.6 C

1.7 D

1.8 A

1.9 D

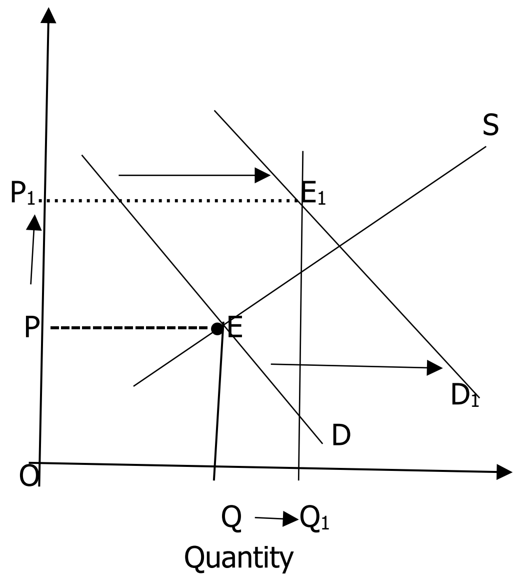
1.10 D

SOLUTION TWO

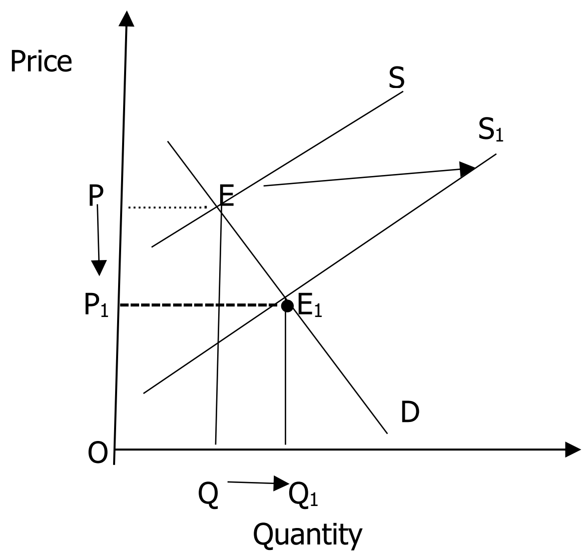
(a) Change in quantity demanded is movement along a demand curve and is caused by changes in price. In contrast, change in demand is a shift in a demand curve caused by changes in any factor affecting demand other than own price. Examples of demand shifters are income, taste, prices of related goods

(b) The following are the equilibrium price and quantity changes:

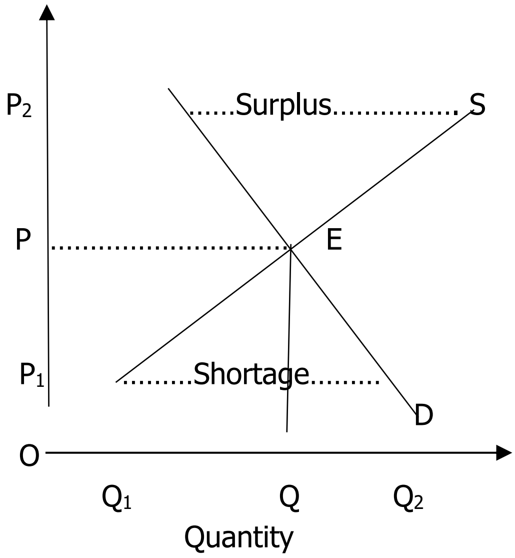
(i) Market equilibrium occurs at the point where the market demand curve intersects the market supply curve at point E(Q,P). An increase in demand shifts the demand curve rightwards from D to D1. The new equilibrium is $E_1(Q_1,P_1)$. At this point the equilibrium price has increased from P to P_1 while the equilibrium quantity has also increased from Q to Q_1 as shown below:



(ii) Market equilibrium occurs at the point where the market demand curve intersects the market supply curve at point E(Q,P). An increase in market supply implies a rightward shift of the supply curve while the demand curve remains unchanged. The new equilibrium is $E_1(Q_1,P_1)$. At this point the equilibrium price has decreased from P to P_1 while the equilibrium quantity has increased from Q to Q_1 as shown below:



(c) The surplus and shortage



(d) Any price set below the equilibrium price leads to a shortage as quantity demanded exceeds quantity supplied.

(e) The reasons for government's intervention include:

- To protect buyers of the goods from being charged very high prices by sellers
- To protect sellers of the good from being exploited by the buyers.
- To promote fair competition or prevent monopoly.

SOLUTION THREE

(a) The optimal price/output combination can be determined by setting marginal revenue equal to marginal cost and solving for Q:

$MR = MC$

$K200 = K50 + K0.02Q$

$K150 = K0.02Q$

$Q = 7,500$ hair stylings per year

(b) At this output level, maximum economic profits are:

$\pi = TR – TC$

$TR = 200Q$

$TC = K56,250 + K50Q + 0.01Q^2$

$\pi = TR – TC$

$= K200Q – (256,250 + K5Q + K0.01Q^2)$

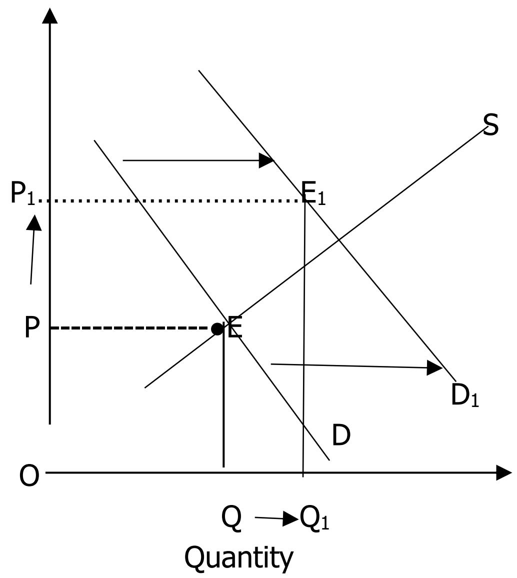
$= K200(7,500) – K256,250 – K50(7,500) – K0.01(7,500)^2$

$= K1,500,000 – 1,193,750 = K306,250$

The Q = 7,500 output level is also the point of profit maximisation because MC = MR

(c) Finally, with 100 identical firms in the industry, industry output totals 75,000 hair stylings per month (K7500 X100 units)

(d) An increase in the price of a close substitute hair style Y will lead to an increase in demand for hair style X as it becomes relatively cheaper. Market equilibrium occurs at the point where the market demand curve intersects the market supply curve at point E(Q,P). An increase in demand shifts the demand curve for good X rightwards from D to D1. The new equilibrium is $E_1(Q_1,P_1)$. At this point the equilibrium price has increased from P to P_1 while the equilibrium quantity has also increased from Q to Q_1 as shown below:



(e) If the price elasticity of demand for hair style X is -0.8, it means that its demand is inelastic ($|PED| < 1$). This implies that a given percentage increase in in price leads to a smaller percentage decrease in quantity demanded, and that a given percentage decrease is in price leads to a lower percentage increase in quantity demanded. An increase in price will therefore lead to an increase in revenue. The appropriate pricing strategy for hair style X, would be to increase the selling price.

SOLUTION FOUR

(a) A kwacha today does not buy the same quantity of goods today than it did twenty years ago because of inflation. Inflation is defined as a sustained increase in the average price levels over time

(b) 250 percentage points indicate an increase of 2.5% i.e. 250/100. Therefore, the previous rate must have been 9% i.e. 11.5% - 2.5%

(c) The statutory reserve ratio is the percentage of deposits that every deposit accepting institution must make to the Bank of Zambia to meet its legal requirements. An increase in the stator reserve ratio leads to a reduction in money supply. This is so because an increase in the statutory reserve ratio reduces the capacity of the commercial banks to lend.

(d) The following are the functions of the Bank of Zambia:
- It acts as the banker to the commercial banks > All commercial banks keep a bank account with the bank of Zambia which facilitates cheque clearing system
- It is a banker to the Central government and holds the public deposits
- It acts as an advisor to the government on monetary policy
- It is responsible for issuing currency in Zambia
- It is the manager of the National Debt
- It is responsible for maintaining monetary stability in Zambia through monetary policy
- It is the lender of last resort. To maintain financial system stability, the Bank of Zambia may lend to commercial banks in need of money

(e) Demand pull inflation is inflation caused by increases in the prices of goods pulling the prices upwards.

SOLUTION FIVE

(a)

(i) Explicit costs are out-of-pocket expenses that a business incurs in the course of doing business

(ii) Explicit costs + Rent + salary + cost of equipment + operational costs

K70,000 + K60,000 + K45,000 + K40,000 = K215,000

(iii) Implicit costs are indirect costs or opportunity costs incurred as a consequence of making a decision to run a Private Law Firm. It is the foregone revenue of being employed (K450,000).

(b)

(i) Accounting costs include only explicit costs while economic costs incorporate both explicit and implicit costs.

(ii) Economic cost = Explicit costs + Implicit costs

= K215,000 + K450,000 = K665,000

(c)

(i) Economic profit = Total revenue – economic costs

= K625,000 – K665,000 = (K40,000)

Accounting profit = Total revenue – Explicit costs

= K625,000 – K215,000 = K410,000

(ii) Accounting profit is higher and positive (K410,000) while economic profit is lower and negative(K40,000). This is because accounting profit excludes implicit costs.

SOLUTION SIX

(a) **BoP accounts**

- The **current account** records a nation's transactions with the rest of the world—specifically its net trade in goods and services, its net earnings on cross-border investments, and its net transfer payments—over a defined period, such as a year or a quarter.
- The **capital account** is where all international capital transfers are recorded. This refers to the acquisition or disposal of nonfinancial assets (for example, a physical asset such as land) and non-produced assets, which are needed for production but have not been produced, such as a mine used for the extraction of diamonds
- The **financial account** is a component of a country's balance of payments that covers claims on or liabilities to non-residents, specifically concerning financial assets. Financial account components include direct investment, portfolio investment, and reserve assets broken down by sector

(b) **Measures to correct current account deficit**

- **Devaluation:** This involves reducing the value of the currency against others. If there is a devaluation of the currency, the price of imported goods increases and therefore the quantity demanded of imports falls. Exports will become cheaper, and there will be an increase in the quantity of exports. Therefore, assuming demand is relatively price elastic, we would expect a devaluation to lead to an improvement in (X-M) and therefore the current account on the balance of payments.
- **Tight monetary policy** involves increasing interest rates. Higher interest rates will increase the cost of debt and mortgage repayments and leave people with less money to spend. Therefore, this will reduce their consumption of imports, improving the current account. Also, higher interest rates will cause a fall in AD and therefore reduce economic growth. This will reduce inflation and help to make exports more competitive.
- **Tight fiscal policy**: the government could increase income tax. This would reduce consumer disposable income and reduce spending on imports.
  The advantage of fiscal policy is that it would not have an adverse effect on the exchange rate. Higher income tax would also improve government finances.
- **Protectionism**: the government could increase tariffs on imports or even impose quotas on certain goods. This would decrease the amount consumers could import/foreigners want to export to the country. By reducing imports we reduce X-M and help to improve the current account deficit.

(c) In a flexible exchange rate system, the value of the currency is allowed to fluctuate freely as per the changes in the demand and supply of the foreign exchange.

(d) **Possible causes of a currency depreciation**

- A reduction in Interest rates – lower interest rates discourages foreign investment (money flows) and demand for currency. This causes a depreciation
- Slow economic growth – low levels of economic growth will tend to cause a depreciation in the currency, this is because markets expect lower interest rates – resulting in lower demand for the
- Inflation – higher inflation makes exports less competitive and reduces demand for currency. This causes a depreciation
- Speculation – falling confidence in the economy/currency

- A large trade deficit on the current account is more likely to cause a depreciation in the value of the currency because money is leaving the economy to buy imports

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4 : COMMERCIAL AND CORPORATE LAW

FRIDAY 14 JUNE 2024

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: One (1) compulsory scenario question.
   Plus Four (4) 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 – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

<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 Which of the following statements correctly lists the stages of legislation in order?

A. First reading; second reading, third reading, fourth reading, fifth reading.
B. First reading; second reading; committee stage; report stage; third reading; presidential assent.
C. First reading, second reading, third reading, report stage, presidential assent
D. Green paper, white paper, committee stage, first reading, second reading

(2 marks)

1.2 Which three (3) of the following must be included on a statement of written particulars of employment?

A. Names of employer and employee
B. Date on which employment began.
C. Pay rate and intervals at which it is paid
D. Set holiday dates in the first year of employment
E. Details of disciplinary methods

A. (a), (b), (c)
B. (a), (b), (c), (d)
C. (a), (b), (d)
D. (a), (c), (d)

(2 marks)

1.3 Which of the following remedies is **not** available for a breach of a contract of employment?

A. Damages
B. Reinstatement
C. Re-engagement
D. An action for the price

(2 marks)

1.4 In which of the following is there a presumption that legal relations are intended?

A. A promise by a father to make a gift to his son
B. A commercial transaction
C. A domestic arrangement
D. A social arrangement

(2 marks)

1.5 ABC Ltd has contracted with DEF Ltd. If ABC Ltd acts in breach of a warranty, which of the following is/are correct?

(i) DEF Ltd may terminate the contract and sue for damages
(ii) DEF Ltd may sue for damages but may not terminate the contract
(iii) DEF Ltd may ignore the breach and continue with the contract

A. (i) only
B. (i) and (iii) only
C. (ii) and (iii) only
D. All of the above

(2 marks)

1.6 Which of the following statements is/are incorrect?

(i) Legal title cannot pass on a contract induced by misrepresentation
(ii) Misrepresentation renders a contract voidable
(iii) A victim of negligent misrepresentation may seek rescission and damages
A. (i) only
B. (ii) only
C. (i) and (iii)
D. (ii) and (iii)

(2 marks)

1.7 Which of the following types of law is made by the legislature?

A. Administrative regulations.
B. Executive orders.
C. Statutes.
D. Two of the above.

(2 marks)

1.8 Which of the following essentially is a "defence" to the negligence defence called contributory negligence, that is, something that will knock out an otherwise-good contributory negligence defence?

A. Last Clear Chance

B. *Res Ipsa Loquitur*

C. Proximate Cause

D. The "Substantial Factor" Doctrine

(2 marks)

1.9 The rule that a statute should be construed to avoid a manifest absurdity or contradiction within itself is known as................

A. The Literal rule

B. Mischief rule

C. Contextual rule

D. Golden rule

(2 marks)

1.10 Which one of the following statements about traditional (unlimited) partnerships is incorrect?

A. In Zambia a partnership has no existence distinct from the partners.

B. A partnership must have a written partnership agreement.

C. A partnership is subject to the Partnership Act.

D. Each partner is an agent of the firm.

(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).

<u>QUESTION TWO</u> - (COMPULSORY)

(a) Mr. Mwansa and Mrs. Banda entered into a partnership agreement for the business of providing accounting and auditing services. The accounting firm of Mwansa, Banda and Associates operates from its registered office at Woodlands Lusaka. Unknown to Mr. Mwansa, the partner, Mrs Banda, was diverting some of the firm's clients and providing accounting business to them secretly from her residence in the Chalala area of Lusaka. She did not disclose this fact and also the fact that she uses the partnership name in transacting with these secret clients. Mr. Mwansa has just found out that his partner has made over K3,000,000.00 from this secret or competing accounting business in the past two (2) years. Mr. Mwansa has approached you for advice. What advice would you give him? (10 marks)

(b) Explain the ways an agency relationship may be terminated. (10 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

On 22 January, 2024, Abigail, a young girl aged eighteen went into Shoprite at Lewanika Mall. She had with her a list of groceries which her mother instructed her to purchase. While in Shoprite, Abigail saw a packet of Black Chocolates priced at K150, picked one packet up and placed it in her shopping basket and continued picking other groceries indicated on the list. On realising that she could not manage to pay for all the items on the list, she decided to return the chocolates to the shelf but was stopped by a shop attendant by the name of Mabvuto saying, "I am sorry but you cannot return them as you have bought them already".

Required:

(a) After thoroughly reflecting on the relevant principles of contract law, advise Abigail and Mabvuto on the legal issues at hand. (10 marks)

(b) By its nature, law is complex and encompasses a wide range of branches. Briefly distinguish Public law from Private law. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Busy Company was incorporated twenty (20) years ago in Lusaka, Zambia. At incorporation, it was registered as a public company. The company was dealing in emeralds and opened up a factory in Kalumbila. The factory has in the past years encountered challenges in the cost of production. Most recently it has been hit by the depreciation of the Kwacha and generally the deterioration of the Zambian economy, which has left it with few investors in interest in partnering with the firm. The company is considering embarking on business rescue mechanisms. Wana, the Managing Director, is contemplating converting this company from a public company to a private company. He is aware that there is a way through which this can be done. He approaches you for some advice on the following issues;

Required:

(a) Advise him how "**Busy Company"** can achieve its objectives in this light when dealing with:

(i) Reduction of share capital (5 marks)

(ii) Purchase of own shares (5 marks)

(b) In pursuance of the conversion of Busy Company from a Public to a Private Company; Mr Wana has been advised to instruct his directors to prepare a Directors' Report to be presented at a meeting with shareholders to discuss the conversion of the company from a public to a private company. In view of the above, outline the contents of a Directors' Report to Mr. Wana. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Bluey was contracted by Lusaka Fresh Supplies Limited to transport Monic's fruit consignment from Kapiri Mposhi to Lusaka. Due to heavy down pours experienced in the country in January, Bluey's truck transporting the fruit consignment broke down. Bluey sold the fruits to nearby traders at John Chinena Market. Monic is not happy with the decision arrived at by Bluey, as she feels that she has lost a very good contract with Cheers Supermarket to supply fresh fruits for six (6) months.

Required:

Using the above scenario and your knowledge on the Law of Agency, advise the parties on their legal obligations. (8 marks)

(b) Explain Sale by Sample as an implied condition under a Contract of Sale of Goods.

(5 marks)

(c) Kekenice (Pty) Ltd manufactures clothes and used to sell them through its own retail shop. Bwalya, who is 40 years old, was employed by Kekenice (Pty) Ltd for three (3) years as the Manager of the shop. Bwalya at one point had a disagreement with her employer, soon after that Bwalya had been told that her services are no longer required as Kekenice (Pty) Ltd has decided to close its store and concentrate solely on manufacturing. Bwalya has also been told that she will not receive any compensation for her job loss.

Required:

Advise Bwalya on the likelihood of her successfully claiming for unfair dismissal. (7 marks)

[Total: 20 Marks]

QUESTION SIX

Explain what is meant by the following:

(a) Contract for services (4 marks)

(b) Contract of service (4 marks)

(c) Vicarious liability (4 marks)

(d) Agency by estoppel (4 marks)

(e) Agency by ratification (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.4: COMMERCIAL AND CORPORATE LAW SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 B

1.2 A

1.3 D

1.4 B

1.5 C

1.6 C

1.7 C

1.8 A

1.9 D

1.10 C

SOLUTION TWO

(a) Mr Mwansa would be that he is entitled to share in the profits made by Mrs Banda in her other or private business. Ordinary partnerships are presumed by law to be based on mutual trust and confidence of each partner in the integrity of every other partner, and as a result partners owe each other a duty of good faith. If a partner, without the consent of the other partners, carries on any business of the same nature as and competing with that of the firm, he must account for and pay over to the firm all profits made by him in that business ***(Section 30 of the Partnership Act 1890).*** **I**n the instant case, **Mrs Banda** is carrying on business of providing accounting and auditing services privately and in competition with the business of the firm. She is therefore bound to account for, and pay over to the firm all the profits made by her in the private business. **Mrs Banda** may also be bound to account to the firm as it is clear that she has used her position in order to get private agreements with customers of the firm in relation to the provision of accounting and auditing services which are provided by the firm, beneficial only to herself.

Mr Banda can give Notice for dissolution of the Partnership under **Section 35 (c) of the Partnership Act. Mr Banda** can also apply to the High Court to have the firm dissolved pursuant to Section 35 (c) or **Section 35 (d) of the Partnership Act.**

(b) The agency will, usually, be terminated by:

- ✓ completion of the task for which the agent was appointed or the expiry of the period of
- ✓ time for which the agent was appointed
- ✓ agreement
- ✓ revocation by the principal, unless the agency is irrevocable
- ✓ death, or insanity of the principal or agent
- ✓ winding-up or dissolution, where the principal or agent is a company
- ✓ insolvency of the principal or, possibly, the agent.

SOLUTION THREE

(a) A contract is an agreement which is legally binding on the parties. It gives rise to obligations for the parties involved. The law of contract determines which agreements are enforceable and regulates those agreements, providing remedies if contractual obligations, that is, undertakings or promises are broken. Care must be taken in distinguishing between an offer and an invitation to treat. An invitation to treat is simply an expression of willingness to enter into negotiations which, it is hoped, will lead to the conclusion of a contract at a later date. The distinction between the two is said to be primarily one of intention, that is, did the maker of the statement intend to be bound by an acceptance of his terms without further negotiations or did he only intend his statement to be part of the continuing negotiation process? Although the dichotomy is easy to state at the level of theory, it is not so easy to apply at the level of practice , as can be seen from the case of **Gibson V. Manchester city council [1978] I WLR 520 (CA)**

The House of Lords held that the letter written by the treasurer, which started that the council may be prepared to sell, was not an offer as it did not finally commit the council to selling the house. It was simply an expression of their willingness to enter into negotiations for the sale of the house and was not an offer which was capable of being accepted. This was further evidenced by the fact that Mr. Gibson was invited to make a formal application to purchase the house and not to satisfy his agreement to the stated terms. **DISPLAY OF GOODS FOR SALE**. As a matter of principle there are at least three different approaches which could be adopted to the display of goods for sale in a shop or supermarket. The first is to hold that the display of goods is an offer which is accepted when the goods are picked up by the prospective purchaser and put into his shopping basket. **Partridge V. Crittenden** [1968] I WLR 1204.

However, this was an invitation to treat thus she can return them, further, there is no agreement.

(b) **Public vs. Private Law: Public Law:** Governs the relationship between the state and individuals/entities. It focuses on the structure and operation of the government, regulating its powers and the rights of citizens towards the state. Examples include constitutional law, administrative law, and criminal law. **Private Law:** Governs relationships between individuals or private entities, like businesses. It establishes frameworks for contracts, property ownership, torts (wrongful acts), and personal relationships. Examples include contract law, property law, and tort law.

Key differences: Parties involved: Public law involves the state, while private law doesn't. **Subject matter:** Public law deals with government structure and power, while private law deals with individual interactions and rights. **Enforcement:** Public law enforcement often involves public authorities, while private law enforcement relies on courts and individual remedies.

International vs. Domestic Law: International Law: Governs relations between states and other entities in the international community. It encompasses treaties, customary international law, and international organizations' rules. Examples include human rights law, environmental law, and trade law. **Domestic Law:** Applies within a single country, regulating its citizens and entities. It includes statutes, regulations, and case law developed by the national legal system. Examples include contract law, criminal law, and family law.

Key differences. Scope: International law applies between states, while domestic law applies within a state. **Sources:** International law relies on treaties and customary practices, while domestic law has its own codified and judge-made sources. **Enforcement:** International law relies on diplomacy and international institutions, while domestic law is enforced by national courts and authorities.

SOLUTION FOUR

(a) One of the activities that Busy Company may consider to undertake is the reduction of share capital in its bid to convert the company from a public company to a private company. Mr Wana must consider using one of the following ways to reduce the capital of the capital.

(i) **Reduction of share capital**

Any reduction in capital is a **threat to creditors who view it as a guarantee fund**, and reduction in capital must therefore be lawful. While members are entitled to a dividend**, it is not paid out of capital but distributable profits.** If a company does not make profit in a year, it means that shareholders may not get a dividend. A company cannot return capital to its members **until a company is liquidated and there is surplus capital left after paying** creditors and employees of the liquidated company. The law therefore while it does not prohibit, restricts the **reduction of capital and makes it difficult for this goal to be** achieved. A company may reduce its capital by a special resolution (2/3 majority) if authorised by the Articles of Association, but this decision must be confirmed by the Courts after consulting creditors.

(ii) **Purchase of its own shares**

A company is not allowed to purchase its own shares except as provided for by law. For instance, redeemable shares that a company may buy back must be authorised by the articles.

- **Such shares must be fully paid for at redemption**
- **Such shares are redeemed or paid for out of distributable profits**
- **Any premium on redeemable shares must be paid out of profits of the company or from the share premium account**
- **When a company has bought its shares, it must cancel them and compensate for loss of capital by issuing or transfer profits from the capital redemption reserve.**

(b) The following are the contents of the director's report:

- The amount paid as dividends and the amount proposed to be taken to reserves
- The nature of the business of the company or its subsidiaries
- the classes of business in which the company has interest
- The principal business of the company and its subsidiaries
- Any changes in activities during the year
- Particulars of important events that have occurred during the year
- Indications of likely future developments
- Indications of research and development activities

SOLUTION FIVE

(a) They would be advised that their relationship was agency of necessity arising out of the breakdown of the refrigerated truck. For the agency of necessity to arise, the following conditions must exist:

- **A genuine emergency-**there must be an emergence that will compel the agent to act on behalf of the principal
- **It must be practically impossible to get fresh instructions from the principal-**the agent should try to communicate with the principal to get new instructions but this should be impossible
- **The act must be done in good faith-**the agent must act for the sole interest of the principal and must be in good faith
- **What is done must benefit the principal**-the end result of the act done by the agent must be seen to benefit the principal as a whole

In the above scenario, Bluey was able to get instructions from Monic when the truck broke down because there was a phone network in the area. Selling the fresh fruits before it went bad and recover the capital was done following the principles of agency of necessity. Thus, if Monic may sues Bluey, Bluey will be liable as no agency of necessity arose in this case.

(b) A sample is a simple specimen, a model or pattern or likeness. Sale by sample is an implied condition under the Sale of Goods Act of 1893, breach of which entitles the innocent party to repudiation and a claim for damages. Section 15 deals with sale by sample. It provides that there is an implied Condition that the bulk shall correspond with the sample in quality. Additionally, there is an implied condition that the buyer shall have a Reasonable opportunity of comparing the bulk with the sample and there is an Implied condition that the goods shall be free from any defect.

(c) In order to claim compensation for unfair dismissal, an employee is required, as a precondition of a successful claim, to show that he or she has been dismissed. The situation in which Bwalya finds herself is governed by the provisions of various pieces of employment legislation. The grounds on which dismissal is capable of being fair are as follows:

i. Lack of capability or qualifications
ii. Misconduct
iii. Redundancy

   This is, *prima facie*, a fair reason for dismissal as long as the employer has acted out of a genuine commercial motive.
iv. In situations where continued employment would constitute a breach of a statutory provision If the continued employment of the person dismissed would be a breach of some

statutory provision then the dismissal of the employee is again, *prima facie*, fair. For example, if a person is employed as a driver and is banned from driving then they may be fairly dismissed.

v. Some other substantial reason (operational reasons)

Bwalya's position as indicated above, employees have a right not to be unfairly dismissed and it would appear that Bwalya would have an action for unfair dismissal if Kekenice (Pty) Ltd were to dismiss her as a result of their disagreement. All that the employee has to show is that she was dismissed and then the onus is placed on the employer to show that they acted reasonably in dismissing her for a potentially fair reason. Failure to which Bwalya will succeed in action for unfair dismissal.

SOLUTION SIX

(a) *Contract for services* - is a contract of employment where the employee is self-employed and is only engaged to provide his services, he is independent and pays his own tax from the gross income he receives from the employer. He is not under the employer's control, not an integral part of the employer's business, etc.

(b) *Contract of service* - is one where an employee is under the employer's control, telling him how to do his job, employer has a right to suspend or dismiss him, is paid a fixed pay by the employer, is an integral part of the business, taxes deducted and paid by employer, etc.

(c) *Vicarious liability* – is the liability of an employer for the torts (civil wrongs) of his employee. The wrong must have been done during the employee's course of employment, whilst doing work for the employer. The cases applicable here are *Britt v Galmoye and Nevill (1928); Rayner v Mitchell (1877)*; *Century Insurance Company v Northern Ireland Road Transport Board (1942)*. The employer would only be vicariously liable if the wrong was committed in the course of his employment, if not, then he would not be vicariously liable.

(d) *An agency estoppel* – This is agency by estoppel or holding out. This occurs where the principal by words or conduct gives to a third party the impression that the agent's authority is greater than it really is and the third party, as a result, acts upon this and the principal will be estopped from denying that by his conduct he made him believe that the agent had such power and thus will be bound.

(e) *An agency by ratification* – This is a type of agency where an agent acts beyond his powers and the principal adopts those actions as their own. The agent must inform the principal of his actions within reasonable time, principal must have been in existence at the time of the contract and must adopt the whole contract, etc.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 10 JUNE 2024

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: One (1) compulsory scenario question, plus Four (4) 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 – (COMPULSORY)

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 Fredrick Herzberg developed a two factor theory of motivation. Which factors causes dissatisfaction

A. Changing work factors.

B. Hygiene factors.

C. Motivator factors.

D. Status factors. (2 marks)

1.2 The term value chain means we include the supply chain in our analysis and Management with:

A. End consumer.

B. The downstream portion of the chain and distribution, such as marketing.

C. Channels of distribution.

D. Financial impact studies. (2 marks)

1.3 A firm invested K100 in Inventories. It has a Current Ratio of 1.2 and a Quick Ratio of 1.1. What is its Net Working Capital?

A. 200

B. 1200

C. 100

D. 1000 (2 marks)

1.4 Which one of the following is **NOT** an advantage of functional departmentalization?

A. It is based on work specialization and is therefore logical.

B. The firm can benefit from economies of scale.

C. It shows the Head of Department.

D. It offers a career structure. (2 marks)

1.5 What is a Cash Budget?

A. A detailed budget estimating the cash inflows and outflows incorporating both revenue and capital items.
B. A statement of debt and cash at the bank.
C. A detailed statement from the audit report on how cash was spent.
D. A budget for cash the company needs to borrow for growth. (2 marks)

1.6 The Organization for Economic Cooperation and Development (OECD) suggested that small investors in firms must
A. Form cooperatives.
B. Be ignored.
C. Buy more shared and become big.
D. Be treated equally. (2 marks)

1.7 What are the three components of an organizational configuration?
A. Shareholders, Managers and employees.
B. Structure, process and relationships.
C. Revenue, Profit and costs.
D. Internal environment, Micro-environment and macro-environment. (2 marks)

1.8 Virtual Teams___________________.
A. Collaborate using IT infrastructure and the internet despite geographic locations.
B. Work on computer networks to do business around the world.
C. Develop IT systems for Virtual technology.
D. Connect the websites of various companies. (2 marks)

1.9 A Pure Risk is_________________.
A. Caused purely by mistake.
B. That which whose only possible outcome is harmful.
C. A risk whose outcome is certain.
D. Related to contamination. (2 marks)

1.10 Which of the following is NOT a consideration in the composition of the Board.
A. Size
B. Inside/outside Mix
C. Marital status
D. Diversity (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)

(a) In 2023, Government increased the allocation of Community Development Funds (CDF) to allow more money to reach local communities in all the ten provinces of Zambia, for the purpose of socio-economic development. Youths and women have since been encouraged to form cooperatives through which they can access these funds.

Required:

(i) Explain what is meant by the term 'cooperative.' (2 marks)

(ii) There are several advantages/benefits in creating a cooperative. Discuss five (5) such advantages/benefits. (10 marks)

(b) (i) List four (4) key stakeholders of an generic company. (4 marks)

(ii) Describe four (4) benefits of a sole trader business. (4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) PESTEL Analysis is a structured approach to analyzing the macro-environment of an organization, and the threats and opportunities that exist, or may arise in the future. The environmental factors are analyzed in six categories, which provide a useful framework for analysis.

Required:

Analyze any five (5) categories of environmental factors in the PESTEL Model. (10 marks)

(b) (i) Define 'Mission Statement.' (4 marks)

(ii) Define the three (3) levels/layers of strategy in a large organization. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Effective delegation should lead to optimum use of human resources and improved organizational performance.

Required:

Discuss five (5) benefits of delegation. (10 marks)

(b) (i) What is meant by the term 'Transformational Leader'? (2 marks)

(ii) Outline four (4) characteristics associated with transformational leaders. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Frederick Herzberg developed a two-factor theory of motivation, which he set out in his book "The Motivation to Work" (1959). He identified two groups or categories of factors at work: those causing dissatisfaction with work (hygiene factors) and those causing satisfaction (motivator factors).

Required:

Given the above statement,

(i) List five (5) factors at work that would cause dissatisfaction (hygiene factors) (5 marks)

(ii) List five (5) factors at work that would cause satisfaction (motivator factors) (5 marks)

(b) (i) Define 'Job Design.' (4 marks)

(ii) Discuss Three (3) ways (as suggested by Frederick Herzberg) of improving job design to make jobs more interesting to the employee, and hopefully to improve performance. (6 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Change happens continually within organizations and their markets. Change may be planned or unplanned.

Required:

(i) Explain the terms 'Planned Change' and 'Unplanned Change.' (4 marks)

(ii) Discuss Three (3) internal triggers for change in an organization. (6 marks)

(b) (i) Discuss Kurt Lewin's three (3) Stage Change Process (6 marks)

(iii) Outline four (4) measures that managers can put in place to overcome resistance to change. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5: MANAGEMENT THEORY AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 B

1.2 B

1.3 A

1.4 C

1.5 A

1.6 D

1.7 D

1.8 A

1.9 B

1.10 C

SOLUTION TWO

(a)

(i) A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity, and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others.

(ii)

- **EQUAL STATUS**

  One of the major strengths of a cooperative business is that each member holds equal power. When a member joins, they get the same amount of control over the decisions of the company, no matter how much capital they contribute. Each member gets one vote, and whenever there is a surplus, each member receives some of their investment back.

- **OPEN MEMBERSHIP**

  Generally, the only criteria you have to meet to join a cooperative is that you benefit from the service or product the cooperative provides. Anyone can join a cooperative, regardless of class, economic status, race or gender. As long as they can contribute to the cooperative whether it be in the form of capital or labor, they are eligible to join.

- **PRODUCT AND SERVICE ACCESS**

  Cooperative business focuses on access, rather than profit. One way they accomplish this is by providing access to goods or services in communities that wouldn't otherwise have access. They also ensure that the profit created by the cooperative gets invested back into the community and its members, rather than ending up in the pockets of a few shareholders.

- **SOCIAL BENEFIT**

  The primary purpose of a cooperative is to serve the community in which it exists. In addition to providing goods and services, cooperatives also serve as a beacon of good business. When a community invests, participates and supports a cooperative business, the rest of the community becomes stronger and equitably wealthier. Cooperatives also often provide education and instruction for their members, employees and representatives so they can successfully contribute to the cooperative and encourage them to spread information about cooperatives beyond their communities.

- **EASY FORMATION**

  It is much easier to form a cooperative business than it is to develop a traditional company. To start one, you only need to gather ten members to form a steering committee, make sure your cooperative incorporates under the correct government statute, create a business plan, recruit some members, secure financing and open the doors.

- **LIMITED LIABILITY**

  In a cooperative enterprise, members are liable only for the money they have invested in the cooperative. They are not responsible for any debts or other liabilities of the cooperative unless in the case of fraud or negligence. Even if the cooperative were to fail, its members would only lose what they have already put into the cooperative. They would not be responsible for paying any of the cooperative's' debts.

- **GOVERNMENT ASSISTANCE**

  Cooperatives are crucial to the socio-economic development of the communities they serve, so government often offers them a range of loans, grants and financial assistance. There are also several foundations that help to fund, support and educate new and growing cooperative enterprises. Since the mission of many cooperatives is to help communities and other cooperatives stay afloat, there is no shortage of organizations that can help grow the cooperative movement.

(b)

(i)

- Government
- Customers
- Suppliers
- Lenders
- Employees
- Shareholders

(ii)

- **Full control and greater flexibility**

  You have sole ownership and full control over all aspects of your business—from how day-to-day operations are carried out to the long-term goals and strategic direction of your company. Unlike with other business structures, you won't have to consult shareholders, directors or partners. You're able to make decisions on your own, act on them swiftly and remain adaptable and responsive to the needs of your customers and changes in the business landscape.

- **Ease of setting up**

  Setting up as a sole trader is easy. All you need to do is to notify the relevant authorities such as Patents and Companies Registration Agency (PACRA) to choose a business name, and Zambia Revenue Authority (ZRA) for a tax identification number, for tax purposes. You'll be able to start trading right away, unless you're running a type of business that requires a license to operate legally.

- **Low set up costs**

  There's little need to engage the services of a company formation agent or lawyer while setting up either, so there are minimal fees involved.

- **Lower accounting fees**

Sole traders have fewer reporting requirements and deadlines. There's less accounting work involved, which translates into lower accounting fees.

- **Ownership of profit**
  As a sole trader, you don't have partners or shareholders to pay or share profits with, and as such enjoy sole control of the business profits.

- **Fewer statutory requirements**
  As a limited company director, you're required to file a confirmation statement, corporation tax return, annual accounts and other event-based filings. You'll be able to do away with these when you operate as a sole trader—which means there's considerably less paperwork and administrative tasks to deal with.

- **It's easier to change your business structure down the road**
  It's much easier to start out as a sole trader, than to form a limited company from day one.

- The process of converting your sole trader business to a limited company is comparatively simpler.

SOLUTION THREE

(a)

- **Political Factors**:
  These factors are all about how and to what degree a government intervenes in the economy or a certain industry. Basically all the influences that a government has on your business could be classified here. This can include government policy, political stability or instability, corruption, foreign trade policy, tax policy, labour law, environmental law and trade restrictions. Furthermore, the government may have a profound impact on a nation's education system, infrastructure and health regulations. These are all factors that need to be taken into account when assessing the attractiveness of a potential market.

- **Economic Factors**:
  Economic factors are determinants of a certain economy's performance. Factors include economic growth, exchange rates, inflation rates, interest rates, disposable income of consumers and unemployment rates. These factors may have a direct or indirect long term impact on a company, since it affects the purchasing power of consumers and could possibly change demand/supply models in the economy. Consequently it also affects the way companies price their products and services.

- **Social Factors**:
  This dimension of the general environment represents the demographic characteristics, norms, customs and values of the population within which the organization operates. This includes population trends such as the population growth rate, age distribution, income distribution, career attitudes, safety emphasis, health consciousness, lifestyle attitudes and cultural barriers. These factors are especially important for marketers when targeting certain customers. In addition, it also says something about the local workforce and its willingness to work under certain conditions.

- **Technological Factors**:
  These factors pertain to innovations in technology that may affect the operations of the industry and the market favorably or unfavorably. This refers to technology incentives, the level of innovation, automation, research and development (R&D) activity, technological change and the amount of technological awareness that a market possesses. These factors may influence decisions to enter or not enter certain industries, to launch or not launch certain products or to outsource production activities abroad. By knowing what is going on technology-wise, you may be able to prevent your company from spending a lot of money on developing a technology that would become obsolete very soon due to disruptive technological changes elsewhere.

- **Environmental Factors:**
  Sometimes referred to as 'ecological' factors, these factors involve physical changes. Both consumers and governments penalize firms for having an adverse effect on the environment. Governments levy huge fines upon companies for polluting. Companies are also rewarded for having a positive impact on the environment. Consumers are willing to switch brands if they find a business is ignoring its environmental duties.

The impact on the environment is a rising concern. Note that the environment benefits the company too. Running water for a hydro-power plant is an example. A few common environmental factors of the PESTEL framework are: waste disposal laws; environmental protection laws; energy consumption regulation; popular attitude towards the environment.

- **Legal Factors:**

  Legal factors are external factors which refer to how the law affects the way businesses operate and customers behave. Product transportation, profit margins, and viability of certain markets are all examples of things which may be influenced by legal factors. Legal factors can decide whether or not there is a business behind selling a certain product (perhaps drugs, or sharp objects), and can also affect the mechanisms through which a company stocks their inventory or interacts with the customer.

  General examples of Legal Factors affecting business include:

  - Consumer law
  - Discrimination law
  - Copyright law
  - Health and Safety law
  - Employment law
  - Fraud law
  - Pyramid scheme legality
  - Import/Export law

(b)

(i) A mission statement defines what line of business a company is in, and why it exists or what purpose it serves. Every company should have a precise statement of purpose that gets people excited about what the company does and motivates them to become part of the organization. A mission statement should also define the company's corporate strategy and is generally a couple of sentences in length.

(ii)

- **Corporate strategy**

  Corporate strategy is concerned with the overall purpose and scope of the organization and how value will be added to the different parts (business units) of the organization. A corporate strategy is a long-term plan that outlines clear goals for a company. While the objective of each goal may differ, the ultimate purpose of a corporate strategy is to improve the company. A company's corporate strategy may be to focus on sales, growth or leadership. Another purpose of corporate strategy is to create company value and to motivate employees to work toward that value or set of goals.

- **Business-level strategy**

  Refers to the combined set of moves and actions taken with an aim of offering value to the customers and developing a competitive advantage, by using the firm's core competencies, in the individual product or service market. It determines the market position of the enterprise, in relation to its rivals.

  Business level strategies deal with the following issues:

  1. Satisfying the needs of the customers.
  2. Achieving an edge over its rivals.

3. Avoiding a competitive disadvantage.

Strategies at this level are concerned with meeting competition, defending market share while making a profit. A firm is said to have a competitive advantage if it can attract the target customers, as well as survive the competitive forces better, as compared to the rivals.**Michael Porter** propounded three business-level strategies in the year **1998**, which are: Cost Leadership, Differentiation, and Focus.

- **Operational strategy**
  Operations or operational strategy refers to a system of decisions that shapes all long-term operational capabilities and their offering to the overall achievement of a strategy. Quite simply, it's a series of decisions that can help an organization implement competitive and sustainable business strategies. It supports linking long and short-term operational-level decisions with corporate strategy. From a strategic viewpoint, this allows organizations to make key operations decisions and maintain consistency with its overall objectives. Effective strategies enable operations management professionals to optimize the use of people, processes, technology and resources.

SOLUTION FOUR

(a) **Effective delegation should lead to optimum use of human resources and improved organizational performance. The benefits of delegation are similar to the benefits of decentralization.**

- **Reduced workload –** When managers can trust their team members, they can enjoy more time off knowing that the projects are in good hands.
- **Reduced stress –** Looming deadlines can bring on anxiety. With skilled team members, managers can breathe easier as project milestones approach.
- **More time for higher job priorities –** As a manager your ultimate job is sourcing your projects to keep everything moving. Also as a manager, there are administrative and other tasks that only you can handle. Set more time for these things by delegating project work.
- **More skilled and versatile team –** A manager is only as strong as their team. Meeting the needs of your staff provides skill building and personal performance goals that benefit everyone.
- **Greater productivity from team –** A team with various skills can add tasks seamlessly without a lot of instruction. The more you invest in your team, the more they will produce for you and the company.
- **Talent pool for promotion –** No one is trying to take your job, but everyone wants to move forward in their career. Here is the proving ground for cultivating new leaders.
- **Higher employee morale –** Employees who feel respected and trusted work harder and more efficiently.
- **Higher employee retention –** It is an investment in the workforce to train and mentor your team members. The last thing you want is for them to take your instruction and leave. Value them and they will feel vested in the company and look for opportunities in house instead of elsewhere.

(b)

(i) Transformational leadership is a leadership style that can inspire positive changes in those who follow. Transformational leaders are generally energetic, enthusiastic, and passionate. Not only are these leaders concerned and involved in the process, but they are also focused on helping every member of the group succeed. The primary goals of transformational leadership are to inspire growth, promote loyalty, and instill confidence in group members.

(ii)

- Able to encourage others to communicate and participate
- Active listening skills
- Adaptability
- Authenticity and genuineness
- Creativity
- Emotionally intelligent
- Inspirational
- Open-mindedness
- Proactive problem-solvers

- Self-awareness
- Supportive
- Willingness to take responsibility
- Willingness to take well-informed risks

SOLUTION FIVE

(a)

(i)

- Salary
- Work conditions
- Fringe benefits
- Job security
- The quality of supervision
- Interpersonal relations
- Company policies and administration

(ii)

- Opportunity to do something meaningful
- A sense of recognition in an organization by colleagues and management
- Challenging work
- Advancement (or opportunities for it)
- A sense of achievement
- Growth in the job
- Responsibility

(b)

(i) Job design is the process of organizing job duties, tasks, and responsibilities to maintain job satisfaction and employee engagement. Job design is a constant, ongoing process because the global environment of roles, responsibilities, employee needs and the market is constantly changing.

(ii)

Job Enrichment

Job enrichment is focused on adding employee satisfaction to existing roles. More commonly though, job enrichment refers to creating opportunities for an employee to find greater satisfaction in their current role. This could be done by grouping related tasks to create role clarity, helping the employee build relationships and role significance by introducing new partners and stakeholders, or finding opportunities to provide developmental feedback and career planning.

Finally, a company should look at several different items when working toward job enrichment, such as skill variety, task identity (responsibility for the outcome of completed tasks), task significance (perceived importance of the task), autonomy, and feedback.

Job Enlargement

Job enlargement refers to adding responsibilities to an existing role. This enables the employee to learn new skills and work on new tasks related to their current area of work. For example, if you have an appliance technician who routinely works only on refrigerators, you may expand their role to include washing machines. It can apply to white-collar work as well, such as an accountant that only does expense reporting enlarging the position to include assisting with general ledgers. This breaks up the monotony, allows the employee to build new skills, and adds variety to keep them engaged.

Job Rotation

In job rotation, you move employees to different jobs in the organization enabling them to develop new skills, gain experience and learn about new roles. Employees doing job rotation are uniquely positioned to cover absences for employees in other departments and develop an understanding of the full operation of the organization. This could prove useful in succession planning, minimizing skill gaps, and keeping employees engaged and adaptable to ever-changing roles.

SOLUTION SIX

(a)

(i) **Planned change** (or proactive change) is deliberate and intended. Management identify the benefits that change will bring and plan how it should be introduced. Planned changes may be changes to exploit a new opportunity that has been identified.

Unplanned change (or reactive change) happens in response to developments or events that have occurred. These changes are not devised as part of the planning process. Unplanned changes are often a response to new threats that have emerged in the environment.

(ii) **Change in senior management -** when there is a change in the senior management of an organization; the new managers may have their own ideas about strategy and will introduce big changes.

Acquisition-when an organization takes over another in an acquisition, and management try to merge their systems and operations, there will be major changes.

Reorganization or downsizing- change might be necessary because management decides on the need to close down a loss-making organization or re-locate its operations to a different part of the country.

Other internal triggers for change that are less transformational include:

- A general sense that the organization can do better
- Fractious relationships between management and employees
- Concerns about ineffective communications or poor performance indicators
- When there is a sense that employee skills and abilities are underutilized or concerns about a lack of commitment from employees.

(b)

(i) **Stage 1: Unfreeze**

This first stage of change involves preparing the organization to accept that change is necessary, which involves breaking down the existing status quo before you can build up a new way of operating.

Key to this is developing a compelling message showing why the existing way of doing things cannot continue. This is easiest to frame when you can point to tangible factors such as declining sales figures, poor financial results, worrying customer satisfaction surveys, for example.

This first part of the change process is usually the most difficult and stressful. When you start cutting down the "way things are done," you put everyone and everything off balance. You may evoke strong reactions in people, and that's exactly what needs to be done to build a strong motivation to seek out a new equilibrium. Without this motivation, you won't get the buy-in and participation necessary to effect any meaningful change.

Stage 2: Change

After the uncertainty created in the unfreeze stage, the change stage is where people begin to resolve their uncertainty and look for new ways to do things. People start to believe and act in ways that support the new direction.

The transition from unfreeze to change does not happen overnight: people take time to embrace the new direction and participate proactively in the change. In order to accept the change and contribute to making it successful, people need to understand how it will benefit them. Not everyone will fall in line just because the change is necessary and will benefit the company. This is a common assumption and a pitfall that should be avoided.

Stage 3: Refreeze
When the changes are taking shape and people have embraced the new ways of working, the organization is ready to refreeze. The outward signs of the refreeze are a stable organization chart, consistent job descriptions, and so on.

The refreeze stage also needs to help people and the organization to internalize or institutionalize the changes. This means making sure that the changes are used all the time, and that they are incorporated into everyday business. With a new sense of stability, employees feel confident and comfortable with the new ways of working.

(ii) **Communicate early and often:** Let employees know about changes to the status quo as soon as possible. Get buy-in from them and help them lead the changes you are hoping for. This helps to build a bridge between employees and management. When there is a lack of communication, people tend to fill the void with speculation. The more open and honest in your communication with them, the less likely this is to happen.

Listen to employees: Listen to employees' concerns, as there is a good chance that they are more in tune with a plan's potential blind spots given their day-to-day work. This also lets them know their opinions are valued by the company. While you do not have to incorporate all their ideas, listening will help you identify what sources of resistance are coming up and address the root causes.

Educate employees on the value of the change: Organizations are generally trying to make things better, not worse, for their employees. Perhaps the old way of doing things presented a potential safety issue, was ineffective or inefficient. Building a case for why change is necessary can help employees adapt to it more readily, even in cases where they may not like it.

Timing is everything: Things are always constantly changing and evolving with the passing of time. That said, within an organization, the timing of change can be important. It isn't always possible, but sometimes it is best for organizations to methodically introduce change and wait until that has stabilized before introducing further change.

Provide ongoing support: Once a change has been made, make sure to follow up with employees as those changes roll out. Let them know that they continue to be important partners in making effective changes that will stand the test of time. Provide training for any new skills needed to make the change successful.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 12 JUNE 2024

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

INSTRUCTIONS TO CANDIDATES

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   Section A: Ten (10) compulsory multiple choice questions.
   Section B: One (1) compulsory scenario question.
   Plus Four (4) 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 – (Compulsory)

Attempt all ten (10) multiple choice questions

<u>QUESTION ONE</u>

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 Which of the following is an example of application software?

A. Android
B. Linux
C. Microsoft Windows
D. Microsoft Word

(2 marks)

1.2 Which term is used to refer to the initial process of establishing the identity of a user?

A. Authorization
B. Repudiation
C. Authentication
D. Identification

(2 marks)

1.3 What do the letters DBMS stand for in database technologies?

A. Database Manipulation System
B. Database Management System
C. Data and Business Management System
D. Data and Business Manipulation System

(2 marks)

1.4 Which of the following is an example of spreadsheet packages:

A. Windows XP and Excel
B. Access and Publisher
C. Excel and Google sheets
D. Excel and Balance sheets

(2 marks)

1.5 One of the key benefits of using computerized Accounting Information System (AIS) is:

A. Catching up with technology.
B. Significant reduction in head count.
C. Increased revenue.

D. Increased redundant volumes of data and information.

(2 marks)

1.6 Which of the following is **NOT** a characteristic of written communication?

A. There is no immediate interaction.
B. It requires preparation time
C. It creates a record for future reference
D. Every recipient gets exactly the same information

(2 marks)

1.7 What would be the appropriate salutation for a letter addressed to the Director?

A. Dear Madam.
B. Dear Sir
C. Dear Director
D. Dear Sir / Madam

(2 marks)

1.8 In which order should educational qualifications be presented in Curriculum Vitae?

A. In the order of excellence.
B. In reverse chronological order.
C. Chronologically.
D. In any order.

(2 marks)

1.9 Which section in a report comes after the interpretation of data?

A. Recommendations
B. Suggestions
C. Conclusions
D. Findings

(2 marks)

1.10 If an Accounts Officer decides to communicate to the CEO instead of engaging his immediate supervisor, what channel of communication has this employee used?

A. Grapevine
B. Vertical communication
C. Information override
D. Bypass

(2 marks)

[Total: 10 Marks]

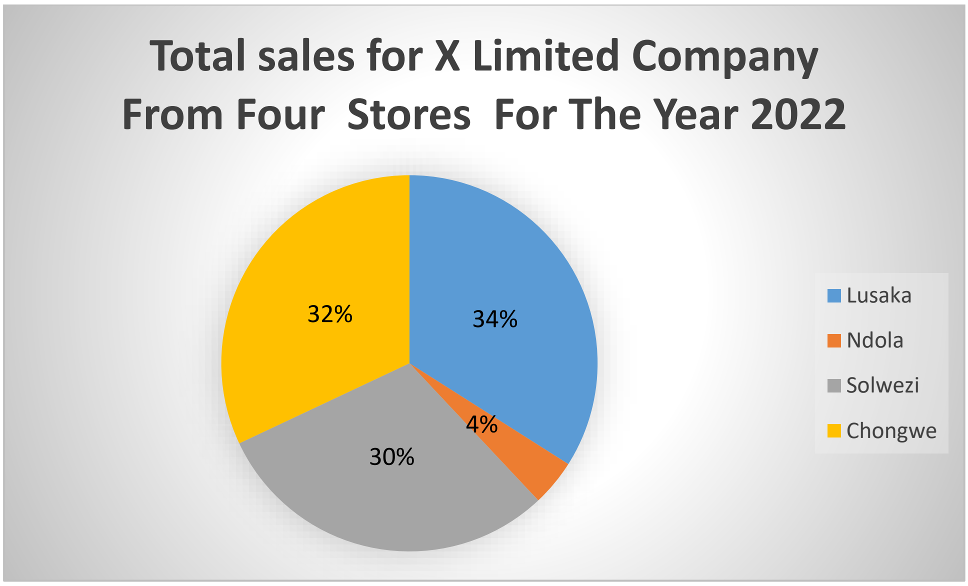
SECTION B

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

Attempt any three (3) questions from the remaining four (4)

<u>QUESTION TWO</u>- (COMPULSORY)

A newly established organisation operating under a business name X Limited Company, offer different products to members of the public. It has been running four (4) stores across the country. Out of the K226,500.00 total sales recorded for the year 2022, the Lusaka store accounted for 34%, Chongwe 32%, Solwezi 30% and Ndola 4%. Management is very much interested in the performance of each store and has requested an accounts staff to present this information recorded for the year 2022 as shown in the pie chart below.



Required:

(a) Calculate the total sales for each store in 2022. (8 marks)

(b) Draw a table that presents the total number of sales in Kwacha for each store in 2022. (8 marks)

(c) State any four (4) key features of effective graphic communication. (4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Modern organizations have at least a computer-based information system supporting a certain aspect of their business operations.

Describe four (4) main elements of an organizations information system. (8 marks)

(a) Briefly explain what each of the following general Information Technology controls are and state their important in an organization.

(i) Software controls. (3 marks)

(ii) Computer operation controls. (3 marks)

(iii) Implementation controls. (3 marks)

(b) Mention three (3) types of computer malware. (3 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) MTN Zambia has in recent times introduced a mobile application that is meant to facilitate mobile money transactions amongst its clients using android devices. This application is part of an entire type of information system referred to as a transaction processing system (TPS).

(i) Mention the four (4) main categories of functions performed by a TPS. (4 marks)

(ii) Briefly explain each of the functions mentioned (i) above using your understanding or experience of mobile application. (8 marks)

(b) Application controls are the measures organizations can implement within their applications to keep them private and secure. Though applications are an inevitable and vital part of the daily operations of modern organizations, they also put organizations at an unprecedented risk of breach.

Briefly explain the differences between general controls and application controls.

(4 marks)

(c) Briefly explain the meaning of email client and give two (2) examples of email clients that can be used within the organization. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

You are the Finance Manager at Mobile Financial Solutions Limited. In the recent past, you have noticed that most of the meetings you have convened have been unsuccessful and that the secretary does not produce a full record of the proceedings.

Required:

(a) As secretary of the meeting, explain what should be included in the following parts of minutes.

(i) New business. (2 marks)

(ii) Matters arising. (2 marks)

(iii) Apologies. (2 marks)

(iv) Heading. (2 marks)

(v) Any other business. (2 marks)

(b) Justify any three (3) reasons why a meeting would be unsuccessful. (6 marks)

(c) Assess any two (2) factors which can cause a secretary to produce incomplete minutes. (4 marks)

[Total: 20 Marks]

QUESTION SIX

You are the chairperson of the Sports Committee of your college. The college was supposed to host last year's inter-college sports tournament, but could not due to the Covid-19 Pandemic. Your committee would like to host the tournament in the next three (3) months and is expected to plan logistics such as accommodation, meals and ablution facilities for the smooth running of the event. Hosting the tournament would assist the college to gain recognition at national level. Therefore, you need permission from the college principal to hold this event.

Required:

(a) Write a memo to the principal requesting to use the college facilities during the inter-college sports tournament. Your memo should indicate at least two (2) benefits that hosting the tournament would bring to your institution. (16 marks)

(b) Explain the use of **PASS** concept when drafting memos. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.6: BUSINESS COMMUNICATION SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 D

1.2 C

1.3 B

1.4 C

1.5 B

1.6 C

1.7 D

1.8 B

1.9 A

1.10 D

QUESTION TWO

(a) Total sales per district (e.g. 34÷100×226 500)

- Lusaka: K77,010
- Chongwe: K72,480
- Solwezi: K67,950
- Ndola: K9,060

(b) **Total Sales for X Limited Company From Four Stores for the Year 2022**

Store	**Total Sales (ZMK)**
Lusaka	K77,010
Chongwe	K72,480
Solwezi	K67,950
Ndola	K9,060

(c) Principles of Graphic Communication

- Each diagram or chart to have a title
- Cite source of data
- Diagram should be clearly labelled
- Keep the presentation simple and neat.
- Do not overcrowd the diagrams
- Make the diagram large enough to be read

SOLUTION THREE

(a)

- **Hardware** is the most obvious part of a computer-based information system. Hardware refers to the computers themselves, along with any and all peripherals, including servers, routers, monitors, printers and storage devices.

- **Software**, the second element of a CBIS, is what tells the hardware how to function. It gathers, organizes and manipulates data and carries out instructions. Everything you do using a computer is done by the software.

- **People** are the most often overlooked and most important part of a computer-based information system. It is people who design and operate the software, input the data, build the hardware and keep it running, write the procedures and it is ultimately people who determine the success or failure of a CBIS.

- **Data, or information**, is the third element of a CBIS. Just as hardware cannot function without software, software cannot function without data. This is the information part of an information system, and whether that is statistical data, sets of instructions, lists of names or even graphics and animations, it is all key to a CBIS.

- **Procedures** are the rules, descriptions and instructions for how things are done. In computer-based information systems, procedures are frequently covered in instruction or user manuals that describe how to use the hardware, software and data

- **Communication** is left out of some lists of CBIS elements, but for a CBIS that involves more than one piece of hardware to function, communication or connectivity is a necessity. This is, in part, because parts of it are covered under hardware. The components that allow one computer to communicate with another are hardware and are controlled by software. If communication between people is included in this element, though, it is an important element.

(b)

(i) **Software controls** - Monitor the use of system software and prevent unauthorized access of software programs, system software, and computer programs.

Software is an important control area because it performs overall control functions for the programs that directly process data and data files.

(ii) **Computer operations controls**- Oversee the work of the computer department to ensure that programmed procedures are consistently and correctly applied to the storage and processing of data.

Important because they make the operations, backup and recovery procedures for processing smooth

(iii) **Implementation controls** - Audit the systems development process at various points to ensure that the process is properly controlled and managed.

Helps to assure quality during development of the system thereby facilitation of development of a system that meets the requirements.

(c) Worms, Viruses, Trojan horses, Ransom ware

SOLUTION FOUR

(a) (i) & (ii)

i. Transaction processing systems perform **input**, **output**, **storage**, and **processing** functions.

ii. **Input functions include capturing data** on a source document, entering the input data into the system, and checking input data for errors, a process called data validation

iii. **Output functions include producing screen or paper reports**, such as detail reports, summary reports, and exception reports.

iv. **Storage functions include storing data** in files and databases, accessing stored data, sorting stored data, and updating stored data.

v. **Processing functions involve the manipulation of data**, including computation and decision making

(b) **General Controls**

These controls apply to all computerized systems. But they aren't just digital. Software, hardware and manual controls all fall under the umbrella of general controls.

Application Controls

These controls are more specific, focusing on a narrower portion of the organization's information systems. IT application controls are highly specific to the organization's system, like checking that data is entered in the required format before allowing it into the system.

(c) An email client is a software program that you download and install on your computer (or mobile device) to send and receive emails directly on your desktop.

Examples include Gmail, Microsoft Outlook, Mozilla Thunderbird, macOS Mail, IncrediMail, Mailbox and iOS Mail

SOLUTION FIVE

(a)

(i) New business- the reason(s) why the meeting was convened, Indicate the resolutions and decisions that were passed on during the meeting

(ii) Matters arising- matters which were not concluded at the last meeting

(iii) Apologies- Names of members who give formal notification that they will not attend the meeting are announced

(iv) Heading- Name of organization, type, day, date, time and venue of meeting. (Meeting documents such as minutes to be include a title).

(v) Any other business- at this stage, additional matters are raised and discussed other than the main business. (Pressing issues that are not part of the agenda are discussed)

(b)

i. Not reaching a consensus
ii. Disorder in the meeting (allowing sub-meetings)
iii. Allowing conflicts to get out of control
iv. Lack of active participation by members
v. No advance communication
vi. Quorum not made
vii. Lack of clear agenda or objectives for the meeting.

(c)

i. Lack of attention
ii. Not asking the chairperson or member to clarify a point
iii. Taking too long after the meeting to write the minutes. Therefore, not having the events fresh in your mind
iv. Misinterpretation of deliberations

SOLUTION SIX

(a)

KMJ College

Memorandum

Date: Any date during the exam time

To: The Principal

From: The sports committee chairperson

Ref: KMJ /011

Subject: Request to host intercollege tournament

This serves to request for authorization to host the intercollege sports tournament.

The college was supposed to host last year's tournament, but couldn't due to the Covid 19 pandemic. The committee through your office is seeking for permission to host the tournament from……….to………. The committee also wishes to seek for support on rehabilitation of college facilities such as the dining hall, ablution block, accommodation and the sports hall where indoor games would be held.

Hosting the inter- college tournament would help to market the college at national level and also it would serve as a huge opportunity to promote other sports activities other than football.

Your consideration to this matter will be highly appreciated.

Senders signature

Name of the sender.

(b) **PASS**

- P = It is important to understand why you are writing
- A = The target audience determines the language used and level of formality
- S = There is need to be aware of the structure/format of a memo. The structure would allow logical presentations of ideas in the document
- S = Style of writing should be professional, the language should be courteous (friendly and polite.)

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.1: FINANCIAL REPORTING

MONDAY 10 JUNE 2024

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.

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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

Munaka Plc acquired 80% of Ituba Plc's 100 million K1 equity shares on 1 April 2022 for an immediate exchange of two Munaka Plc K1 shares for every three shares acquired in Ituba Plc. Each Munaka Plc and Ituba Plc equity share was trading at K4.50 and K2.50 respectively on 1 April 2022. In addition, Munaka Plc will pay K1.2 cash per share acquired in Ituba Plc on 31 March 2023. Munaka has a cost of capital of 10%. None of the forms of consideration has been recorded by Munaka Plc in its draft financial statements.

Munaka Plc acquired a 30% holding in Mungwalala Plc for an immediate payment of cash consideration amounting to K50 million on 1 July 2022. The holding gives Munaka significant influence in Mungwalala.

Ituba Plc's retained earnings and the revaluation reserves were K75m and K65 million respectively on 1 January 2022.

The statements of profit or loss and other comprehensive income for the year ended 31 December 2022 for the companies are as follows:

	Munaka	Ituba
	K'm	K'm
Revenue	450	300
Cost of Sales	(240)	(160)
Gross Profit	210	140
Distribution Costs	(45)	(30)
Administrative Expenses	(60)	(40)
Operating Profit	105	70
Investment Income	15	4
Finance Costs	(8)	(5)
Profit Before Tax	112	69
Income Tax Expense	(18)	(12)
Profit for the year	94	57
Other Comprehensive Income		
Gains on Properties	6	8
Losses on Financial assets	(4)	(4)
Other Comprehensive Income for the Year	2	4
Total Comprehensive Income for the Year	96	61

The draft statements of financial position as at 31 December 2022 for the companies are as follows:

		Munaka		Ituba
	K'm	K'm	K'm	K'm
Assets:				
Non current:				
Property plant and Equipment		300		210
Investment in Mungwalala		50		-
Current:				
Inventory	48		32	
Trade and other receivables	22		18	
Cash and cash equivalents	15		10	
		85		60
Total Assets		435		270
Equity and liabilities:				
Equity:				
Share capital (K1 shares)		100		100
Retained earnings		250		120
Other reserves		44		69
Total equity		394		289
Non current liabilities:				
10% loan notes	8		5	
Deferred tax	3	11	2	7
Current liabilities:				
Trade payables	15		8	
Current tax	5		2	
		20		10
Total and equity and liabilities		425		306

Additional information:

1. On 1 April 2022, Ituba Plc had an item of plant whose remaining economic life on that date was four (4) years which had its fair value exceeding its carrying amount by K18m. Ituba Plc has not incorporated fair value adjustments in its separate financial statements. Straight line depreciation on plant is charged to cost of sales.

2. Munaka Plc has chosen to initially measure non-controlling interests on acquisition of Ituba Plc at the fair value of their shareholding.

3. Ituba Plc made and recorded sales of trading inventory to Munaka Plc during the nine months to 31 December 2022 amounting to K45m. Munaka Plc has only recorded purchases from Ituba Plc amounting to K30m as some goods have not yet been received by 31 December 2022. A third of the purchases recorded by

Munaka Plc are still owned by Munaka Plc at 31 December 2022. Ituba uses a margin of 25% on sales to Munaka.

Mungwalala made sales of trading inventory to Munaka Plc amounting to K12 million in the last six (6) months of the year to 31 December 2022 at a profit mark up of 20%. All the goods bought from Mungwalala are still owned by Munaka as at 31 December 2022.

4. Mungwalala Plc made a profit of K9 million during the year to 31 December 2022. During December 2022, the company paid total dividends to its shareholders amounting to K5 million. Retained earnings are the only reserves in Mungwalala's financial statements.

5. Assume that all items of income or gains and expenditure or losses accrued evenly during the year to 31 December unless indicated otherwise.

6. Investment income of Munaka Plc includes dividends received from Ituba Plc and Mungwalala Plc. During December 2022, Ituba Plc made a total dividend payment to its equity shareholders amounting to K12 million.

7. Ituba's trade receivables includes K20 million as receivable from Munaka Plc. The corresponding trade payable reported in the draft statement of financial position of Munaka is different solely due to the in transit inventory from Ituba not yet received by Munaka.

Required:

(a) Prepare the Munaka Plc Group Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2022. (22 marks)

(b) Prepare the Munaka Plc Group Statement of Financial Position as at 31 December 2022. (18 marks)

[Total:40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

The trial balance of Sabina as at 30 September 2022 is given below:

	K 000	K 000
Leasehold property – valuation on 1 October 2021	240,000	
Plant and machinery at cost	180,000	
Accumulated depreciation plant & machinery -1/10/2021		95,000
Financial Assets -Valuation 30 September 2022	42,000	
Investment income -from properties		2,500
Deferred tax		10,000
Grant		25,000
Trade Receivables	38,500	
Inventories 30 September 2022	32,600	
Distribution expenses	14,600	
Administration expenses	45,400	
Sales		280,500
Cost of sales	120,280	
Trade Payables		20,000
Ordinary share capital of K2.00 each		150,000
Suspense		46,600
Revaluation		50,000
Office furniture at cost	80,000	
Accumulated depreciation office furniture -1/10/2021		60,000
Retained earnings on 1 October 2021		22,400
Bank		2,180
2 % Loan Note		40,000
lease rental of vehicles paid	10,000	
Loan note interest paid	800	
	804 180	804 180

Additional notes:

(ii) The lease rental paid for vehicles is in respect of a lease contract entered into on 1 October 2021 for the use of vehicles. Under this lease, Sabina paid an initial deposit of K 5.5 million on 1 October 2021 and is also required to pay an annual amounts of K4.5 million in arrears for each of the three (3) years on 30 September. The interest rate implicit in this lease is

10%. So far, Sabina has only recorded the initial deposit and the rent paid on 30 September 2022.

(iii) On 1 July 2022, Sabina made a rights issue of shares of one share for every four existing shares at a price of K 3.00 per share. Issue costs on the rights issue were K0.2 million. Three (3) months earlier, the company had paid an interim dividend amounting to a dividend yield of 3% on the company's market price of K4.20. The suspense account contains amounts arising from these share transactions which were correctly entered in the bank account.

(iv) The 2% loan note was issued on 1 October 2021. It carries a low coupon rate as it is redeemable at a large premium on 30 September 2031. The effective rate of interest is 6% per annum.

(v) Plant and machinery, other than the leased vehicles in (a) is depreciated at the rate of 15% per annum on a reducing balance basis. All depreciation is charged to cost of sales.

(vi) On 1 October 2021 Office furniture was sold for K15 million. It was being depreciated on a straight-line basis with no residual value. A Government grant had been received in respect of the acquisition and has been amortised over the four year period. The carrying amount of the grant in the trial balance above is the remainder of the total grant after the accumulated amortization to 30 September 2021. Sabina repaid K20 million of the grant on the disposal of the equipment, and this amount is included in administration expenses. Proceeds of disposal have not been accounted for yet.

(vii) At 1 October, 2021, the leasehold property had a remaining useful economic life of 30 years, just after it was revalued at 30 September 2021 to K240 million. Directors decided that the property be revalued to a fair value of K210 million at 30 September 2022 and wish to incorporate this revaluation in the accounts.

(viii) The Directors estimate of income tax on current year's profit is K 38 million. On 30 September 2022, there were taxable temporary timing differences of K60 million. The rate of income tax is 25%.

(ix) Financial assets are short term investments in government bond.

Required:

You are required to prepare:

(i) The statement of profit or loss and other comprehensive income for the year ended 30 September 2022. (8 marks)

(ii) The statement of changes in equity for the year ended 30 September 2022 (4 marks)

(iii) The statement of financial position as at 30 September 2022. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Mwiza is a publicly listed company and is required to submit a full set of financial statements. A statement of cashflow has, however, not been prepared. The following are the financial statements for the year to 31 December 2022, together with comparatives:

Statement of profit or loss and other comprehensive income for the year ended 31 December 2022.

	K 000
Revenue	18,107
Cost of sales	(8,030)
Gross profit	10,077
Administrative expenses	(2,130)
Distribution costs	(1,165)
Other operating expenses	(1,252)
Operating profit	5,530
Finance costs	(750)
Investment income	425
Profit before tax	5,205
Income tax expense	(2,105)
Profit after tax	3,100
Other comprehensive income	
Revaluation surplus	1,400
Total Comprehensive Income	4,500

Statement of financial position as at 31 December:

	31 Dec 2022	**31 Dec 2021**
	K000	K000
Non Current Assets:		
Property, Plant and Equipment	6,795	3,725
Current Assets:		
Inventories	1,160	2,320
Trade Receivables	2,285	1,760
Cash and Cash equivalents	1,545	1,065
	4,990	5,145

	11,785	8,870

Equity:

K2.00 Ordinary shares	3,000	1,000
Revaluation reserve	1,600	1,200
Retained Earnings	2,895	1,420
	7,495	3,620

Non Current Liabilities:

12% Loan Notes	1,700	2,500
Deferred Tax	120	165
	1,820	2,665

Current Liabilities:

Trade and other Payables	2,150	1,940
Current Tax	320	645
	2,470	2,585
	11,785	8,870

NOTES

Additional information:

1. During the year to 31 December 2022, plant that had a cost of K400,000 with a carrying amount of K175,000 was sold at a loss of K25,000 (See also schedule of Non-current assets below).
2. Land kept for future development was revalued in the year. The company also paid an interim dividend.
3. The opening balance of trade and other payables include amounts owing for interest at start of K120,000 and the corresponding closing balance at the end of K150,000 for the years 2021 and 2022 respectively.

4. **Schedule of property, plant and equipment:**

	31 Dec 2022	31 Dec 2021
	K000	**K000**
Land & Buildings:		
Cost or Revaluation	8,000	3,400
Accumulated Depreciation	3,775	1,325
	4,225	2,075
Plant & Machinery:		

Cost or Revaluation	6,000	3,000
Accumulated Depreciation	3,430	1,350
	2 570	1,650

Required:

Prepare Mwiza Plc's statement of cashflow for the year ended 31 December 2022, in accordance with the requirements of IAS 7 *Statements of Cash Flows*. (Workings must be clearly shown)

[Total: 20 Marks]

QUESTION FOUR

Machine Works is a company that provides welding services to a platinum mine located in the lower Zambezi. The company bought an item of equipment for K280 million on 1 January 2018. The details of the asset on that date were:

Purchase price	K280 million
Residual value at the end	K15 million
Total Economic Useful Life	12 years

The Directors of Machine Works reviewed the position of the asset on 31 December 2020 and determined that the fair value of the asset is K200 million, with other estimates remaining the same.

Machine Works is subject to income tax at the rate of 30% p.a. Tax depreciation charge is allowed at the rate of 25% on cost per annum, with full wear and tear allowed for in the year of acquisition.

Required:

(i) Explain how deferred tax arises and state the purpose of accounting for deferred tax. (6 marks)

(ii) Briefly outline the requirements of IAS 12 *Income taxes* relating to deferred tax. (2 marks)

(iii) Explain how Machine Works will account for the item of equipment above, including the deferred tax effects, in the financial statements for the year ended 31 December 2020. (12 marks)

[Total: 20 Marks]

QUESTION FIVE

Mlolo Ltd operates in the textile industry and the company is based in Chinsali. You work as Finance Manager for Mlolo Ltd. The accounts assistant was given some tasks by the chief finance officer (CFO) and you have been requested to evaluate the accounts assistant's output before it is submitted to the chief finance officer. The reporting period for Mlolo Co. runs up to 31 March.

Transaction one (1)

Mlolo Ltd purchased an item of plant for a list price of K500 million on 1 October 2021 on which it received trade discount of 10% of the list price from the supplier. The asset was estimated to have a useful economic life of ten (10) years at the time of purchase.
At 31 March 2023, the asset was revalued for the first time to K365 million.

The accounts assistant has recognized a revaluation loss under other comprehensive income section of the statement of profit or loss and other comprehensive income and recognized the item of plant at its depreciated cost of K382.5 million in the statement of financial position as at 31 March 2023. (7 marks)

Transaction two (2)
Mlolo Ltd had put one of its properties on rent and was accounting for it using Fair Value Model of IAS 40 *Investment Properties.* On 1 January 2023, Mlolo Ltd changed the machine's use to owner occupied. At that date, the properties had a fair value of K18 million and a remaining life of 2.25 years. At 1 April 2022, the properties' fair value was K21 million.

After change of use of the properties, Mlolo Ltd opted to account for the machine using the cost model with no change to its useful economic life.

The Accounts Assistant has recognized the properties at 31 March 2023 at its previous fair value of K18 million with no other amounts recognized. (6 marks)

Transaction three (3)
Mlolo Ltd had retained earnings of K370 million at 31 March 2023, number of shares in issue of 150 million as well as K130 million 10% convertible loan stock during the year to 31 March 2023. The loan stock is convertible in two (2) years' time at a rate of two (2) ordinary shares for every K10 of loan stock. The tax rate for Mlolo Ltd is 30%.

The accounts assistant has calculated the DEPS for Mlolo Ltd using retained earnings of K370 million and weighted average number of shares of 150 million shares.

Required:

Discuss the extent to which the accounting treatment effected by the accounts assistant for the above three (3) transactions is correct and recommend the appropriate accounting treatment for the transactions for the year ended 31 March 2023 where appropriate. (7 marks)

[Total:20 Marks]

END OF PAPER

CA 2.1: FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Munaka Plc Group Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2022.

		K'm	K'm
Revenue	(450+9/12X300-45)		630
Cost of sales	(W1)		(324.7)
Gross profit			305.3
Distribution Costs	(45+9/12X30)	(67.5)	
Administrative Expenses	(60+9/12X40)	(90)	(157.5)
Operating Profit			147.8
Investment Income	(15+9/12X4-12X80%-5X30%)		6.9
Finance Costs	(8+9/12X5+9/12X10%X87.3(W2))		(18.3)
Share of associate's profit	(9X6/12-20/120X12)X30%		0.8
Profit Before Tax			137.2
Income Tax Expense	(18+12X9/12)		(27)
Profit for the year			110.2
Other Comprehensive Income			
Gains on Properties	(6+9/12X8)		12
Losses on Financial assets	(4+9/12X4)		(7)
Other Comprehensive Income for the Year			5
Total Comprehensive Income for the Year			115.2
Profit for the year attributable to:			
NCI (W)			6.6
Owners of the parent	(balance)		103.6
			110.2
Total CI for the year attributable to:			
NCI (W)			7.2
Owners of the parent	(balance)		108
			115.2

Workings to the CSPLOCI

1. Cost of sales:

		K'm
Given amounts:	Munaka	240
	Ituba 9/12X 160	120
Adjustments:		
Intra group Purchases	(30+[45-30])	(45)
Purchases in transit	(45-30)	15
Closing inventory in transit	(45-30)	(15)
Unrealised profit in closing inventory 25/100X(1/3X30+15)		6.3
Depreciation charge on FV gain of plant 18/4X9/12		3.4
		324.7

2. Initial carrying amount of deferred cash consideration on acquisition of Ituba:

K1.2/shareX80%X100X1.1^-1 = K 87.3 million

3. Profit and total CI for the year attributable to NCI

		K'm
NCI's share of Ituba's:		
Given PAT for last 9 months	20%X9/12X57	8.6
Unrealised profit made by Ituba	20%X6.3	(1.3)
FV depreciation on plant	20%X3.4	(0.7)
Profit for the year attributable to NCI		6.6
NCI's share of OCI	20%X9/12X4	0.6
Total CI attributable to NCI		7.2

(b) Munaka Plc Group Statement of Financial Position as at 31 December 2022.

		K'm	K'm
Assets			
Non current			
Property plant and Equipment	(300+210+18-3.4)		524.6
Goodwill	(W1)		104
Investment in associate	(w2)		49.3
			677.9
Current			
Inventory	(48+32+15-6.3)	88.7	
Trade and other receivables	(22+ 18-20)	20	
Cash and cash equivalents	(15+10)	25	
			133.7
Total assets			811.6

Equity and liabilities

Equity

Share capital (K1 shares)	(100+2/3X80%X100X1)		153.3
Share premium	(2/3X80%X100X[4.5-1])		186.7
Retained earnings	(W)		259.7
Other reserves	(W)		46.4
Equity attributable to owners of parent			646.1
Non controlling interests	(W)		54.7
Total equity			700.8
Non current liabilities			
10% loan notes	(8+5)	13	
Deferred tax	(3+2)	5	18
Current liabilities			
Deferred considerartion	(W)	93.8	
Trade payables	(15+8+15-20)	18	
Current tax	(5+2)	7	
			118.8
Total and equity and liabilities			837.6

Workings to the CSFP:

1. Goodwill on acquisition of Ituba			K'm
Cost of acquisition:			
- Issue of shares	2/3X80%X100X4.5		240
- Deferred cash	(W2 CSPLOCI)		87.3
			327.3
NCI at date of acquisition	20%X100X2.5		50
			377.3
Ituba's equity at acquisition:			
Share capital		100	
Retained earnings	(75+3/12X57)	89.3	
Other reserves	(65+3/12X4)	66	
Fair value gain on plant		18	(273.3)
Goodwill			104

2. Investment in associate:

		K'm
Cost of investment		50
Share of post acquisition reserves:		
Profit for the year (see CSPLOCI)	0.8	

Dividends from associate	5X30%	(1.5)	(0.7)
			49.3

3. Group retained earnings:

Munaka retained earnings at 13.12.2022		250
Share of post acquisition retained earnings of:		
Ituba	80%(120-89.3)	24.6
Mungwalala	(see investment in associate)	(0.7)
Adjustments:		
Share of FV depreciation	80%X3.4	(2.7)
Share of URP made by subsidiary	80%X6.3	(5)
Finance cost on deferred consideration liability (W6)		(6.5)
		259.7

4. Group Other reserves:

Munaka other reserves at 13.12.2022		44
Share of post acquisition other reserves of Ituba:		
	80%(69-66)	2.4
Adjustments:		-
		46.4

5. Non controlling interests in Ituba:

NCI at acquisition (see goodwill working)		50
Post acquisition changes:		
Share of post acquisition reserves of Ituba;		
Retained earnings	20%(120-89.3)	6.1
Other reserves	20%(69-66)	0.6
Share of adjustments:		
FV depreciation	20%X3.4	(0.7)
URP made by subsidiary	20%X6.3	(1.3)
		54.7

6. Deferred consideration liability; acquisition of Ituba

		K'm
Initial carrying amount (W2 for SPLOCI)		87.3
Accrual of finance cost to 31.12.2022		
	10%X87.3X9/12	6.5
Liability at 31.12.2022		93.8

SOLUTION TWO
(i)

SABINA:

Statement of profit or loss and other comprehensive income for the year ended 30 September, 2022.

		K 000	K 000
Sales			280 500
Cost of sales(W1)			133,030
Gross Profit			147,070
Distribution costs (W1)			(20,164)
Administration expenses(W1)			(38,400)
Operating profit			88,906
Investment Income			2 500
Finance costs	2 400+1 119		(3 519)
Profit before tax			87,887
Income Tax expense (W6)			(43 000)
Profit for the year			44,887
OTHER COMPREHENSIVE INCOME			
Revaluation surplus			-
Total comprehensive income			44,887

(ii)

Sabina's Statement of changes in equity

	Ordinary Shares	**Share Premium**	**Revaluat Reserve**	**Retain Earnings**
	K'000	K'000	K'000	K'000
Per Trial Balance	150 000	-	50,000	22 400
Profit for the year				44,887
Issue of Shares	37 500	18 750		
Dividend paid				(9 450)
Issue costs		(200)		
Revaluation loss			(22 000)	
Totals of expenses	187 500	18 550	28,000	57,837

(iii)

SABINA:

Statement of financial position as at 30 September 2022:

	K000
Non current assets:	
Property, plant and equipment (W3)	293,377
Current assets:	
Inventories	32 600
Trade Receivables	38 500
Financial Assets	42 000
Cash -Proceeds of Sale of NCA (W2)	15 000
Total current assets	128 100
Total assets	421,477
Equity:	
K2.00 Ordinary shares (W10)	187, 500
Share Premium (18,750-200) (W10)	18, 550
Revaluation reserve (50,000-22000 rev loss) (W3)	28,000
Retained Earnings (22,400+44,887-9,450) (W11)	57,837
Total equity	291,887
Non current liabilities:	
Lease Liability (W8)	4,091
2% Loan Note (W9)	41 600
Deferred Tax (W5)	15 000
Total non current liabilities	60 691
Current liabilities:	
Trade Payables	20 000
Lease liability (W8)	3 719
Income Tax liability (W5)	38 000
Repayable (25 000 - 20 000)	5 000
Bank overdraft	2 180
Total current liabilities	68,899
	421,477

W1: Operating Expenses Schedule

	COS	**Distribut**	**Admini**
	K'000	K'000	K'000

Per Trial Balance	120 280	14 600	45 400
Depreciation –leased Veh (W3)		5,564	
Deprec leasehold propty (W3)			8,000
Depreciation -Plant (W3)	12 750		
Loss on Disposal (W2)			5 000
Grant repayment			(20 000)
Totals of expenses	133,030	20,164	38 400

W2: Disposal of Office equipment

Proceeds		15 000
Cost -Non current assets	80 000	
Accumulated Depreciation	60 000	
Adjustment		20 000
Loss on disposal to SPL		5 000

W3: property. Plant and equipment:

	Leasehold property	Plant and machinery	Office furniture	Leased vehicles
	K'000	K'000	K'000	K'000
Cost/valuation b/f	240,000	180,000	80,000	16,691
Less accumulated dep'n b/f	-	95,000	60,000	-
Carrying amount/valuation b/f	240,000	85,000	20,000	16,691
Disposal of office furniture			(20,000)	
Depreciation expenses (W4)	(8,000)*	(12,750)**	-	(5,564)***
Carrying amount c/f	232,000	72,250	-	11,127
Revaluation loss	(22,000)	-	-	-
Carrying amount/valuation c/f	210,000	72,250	-	11,127

Total PPE **= 293,377** (210,000+72,250+11,127)

W4: Calculation of Depreciation

*Leasehold property (240,000/30 years = 8,000

**Plant and machinery (15%*85,000) = 12,750

***Leased vehicles (11 191+5 500)/3 years = 5,564

W5: Income Tax expense

Current year estimate	38 000
New provision for DT (25%*60,000)	15 000
Total tax c/f	53,000
Less deferred tax b/f	(10,000)
Charge to SPL for income tax expense	43 000

W6: Government grant payable:

25,000-20,000 = 5,000

W8: Amortisation Schedule: Leased vehicles

Amortisation schedule	Initial Amount	Effectiv Interest10%	Annual Repayment	Closing Amount
	K	K	K	K
2022	11 191	1 119	(4 500)	7 810
2023	7 810	781	(4 500)	4 091

W9: Amortisation Schedule: Loan Note

Amortisation schedule **Loan Note**	Initial Amount	Effectiv Interest6%	Annual Repayment	Closing Amount
	K	K	K	K
2022	40 000	2 400	(800)	41 600
2023	41 600	2 496	(800)	43 296

W10: Rights issue of shares

Existing No. issue of shares

K 150 000/ K2.00 75 000 shares

New issue of shares Right issue of shares

75 000/ 4 18 750 shares

Valuation:	K000	
K 3.0 x 18 750	56 250	
Split as follows:		K 000
Par value K 2.0006 x 18 750 shares		37 500
Share premium K1.00 x 18 750 shares		18 750
Dividend yield at 3%:		
0.03 x K 4.20 = K 0.0126		
Total dividend paid K 0.0126 x 75 000 shares		9 450

W11 Reconciliation of Suspense account:

Starting balance	46 600
Cash paid (credited) :	
Reversed dividend	9 450
Reversed Issues costs	200
Cash received -Transfer to Share capital	(37 500)
Cash received -Transfer to Share premium	(18 750)
Closing balance	(0)

SOLUTION THREE
Extract of The Statement of Cashflow for the year ended 31 December 2022:

Net Cashflow from Operating Activities:

	K 000
Profit before tax	5 205
Dividend received (Investment income)	(425)
Finance cost	750
	5 530
Non cash Items:	
Depreciation -Buildings	2 450
Depreciation -Plant	2 305
Loss on Disposal	25
	10 310
Changes in Working Capital:	
Decrease in inventories (2 320 -1 160)	1 160
Increase in Trade Receivables(2 285 -1 760)	(525)
Decrease in Trade Payables(2 030 -1 790)**	240
	11 185
Interest Paid 750 + 150 - 120	(880)
Income tax paid 2 105 + 325 + 45 *	(2 475)
Net cash flow from Operating Activities	7 830

Investing Activities:

Purchase of PPE	(7,600)
Sales proceeds of Plant	150
Investment income Dividend/interest received	425
	805

Financing Activities:

Issues of share capital (3 000 -1 000)	2 000
12% Loan Repayment (2 500 -1 700)	(800)
Dividend Paid (3 100 + 1 420 -2 895)	(1 625)
	380
Cash Opening Balance	1 065
Cash Closing Balance	1 445

* Differences in the closing and opening balances for DT and current tax accounts.

**The figures are after deducting balances for interest owing of K 120 000 and K 150 000 at the start and end of year.

(Workings in account form)

LAND AND BUILDINGS

	K		K
Balance b/d	3 400		
Revaluation	400		
Bank *	4 200	Balance c/d	8 000
	8 000		8 000

REVALUATION RESERVE

	K		K
		Balance b/c	1 200
		Land & Buildings -Reval	400
Balance c/d	1 600		
	1 600		1 600

ACCUMULATED DEPRECIATION -Land & Buildings

	K		K
		Balance b/c	1 325
		Depreciation P/L	2 450
Balance c/d	3 775		
	3 775		3 775

ACCUMULATED DEPRECIATION -Plant & Machinery

	K		K
Disposal	225	Balance b/c	1 350
		Depreciation P/L	2 305
Balance c/d	3 430		
	3 655		3 655

PLANT & MACHINERY

	K		K
Balance b/d	3 000	Disposal	400
Bank *	3 400		
		Balance c/d	6 000
	8 000		8 000

PLANT DISPOSAL

	K		K
		Accumulated Depreciation	225
Plant -cost	400	Depreciation P/L	150
		Profit & Loss -Loss	25
	400		400

Other accounts are presented in mathematical formats on the statement of cashflow.

SOLUTION FOUR

(a) (i) IAS 12 covers accounting principles for current tax and deferred tax. The following is how deferred tax arises:

In preparing the statement of profit or loss some deductions are at amounts different from those tax legislation allows. For example, due to the depreciation policy of the entity, the amount of depreciation charged as an expense in a particular year is different from the tax allowable amount for the asset which tax legislation would permit. This may give rise to a reduced tax liability in earlier years, and an increased tax liability in later years and vice versa.

The purpose of providing for deferred tax is to smooth out the burden of tax expense in all periods so that the expense in each of the years reflects what would have been incurred had there been no timing differences. In years where there is a smaller tax payment but a larger burden, a DT liability is created with a corresponding additional expense. Then in later years when there is a larger tax burden due to reversal of timing differences, a DT asset is develops. This reverses the DT liability from preceding years, thereby creating an income which cushions the profits of excess tax burden. Overall, the exercise of providing for DT achieves the objective of preventing huge fluctuations in reported profit and performance is realistically assessed.

(ii) IAS 12 recommends the Full Provision method when calculating deferred tax. The amount is the percentage of income tax on the difference between:

- The carrying amount of an asset and
- The tax base of the asset

Differences between the carrying amount and the tax base can be permanent or temporary. Permanent differences are those which when disallowed for tax purposes, they do not reverse in later periods, and so they do not give rise to deferred tax liabilities. Examples of these include fines, entertainment and donations to political parties.

On the other hand, temporary differences are those that are disallowed in one period and they reverse in a subsequent period, thereby giving rise to either deferred tax liabilities or deferred tax assets. Such temporary differences arise on depreciation and revaluation of non current assets and on fair value assessments of financial assets.

(iii) Calculation of depreciation $\frac{\text{K 280m – K 15m}}{\text{12 yrs}}$ = K 22

Tax writing Down Allowance 25% x K 280m = K 70

Year end
Deferred Tax DT

DT liability at 31 December 2020:

2020 Accounting base	K 200 m
Tax Base K 280 m – 25% x 280 x3 years	K 70 m
Taxable temporary difference	K 130 m

Therefore, DT liability in SFP AT 31/12/2020 30% x K 130m = K 39 m

DT expense would therefore be :

2020 DT liability at 31 December (as calculated above)		K 39 m
Less: Opening liability as at 31 December 2019		
Accounting base K 280 m – K (280 – 15)/12 x 2 =	235.8	
Tax Base K 280 m – 25% x 280 x 2) =	K 140 m	
Taxable temporary difference	K 95.8 m	
Therefore, DT liability in SFP AT 1/1/2020 30% x K 95.8m		= K 28.74 m
DT expense		K 10.26

Charge in Other Comprehensive Income would be:

SOLUTION FIVE

Transaction one (1)

The treatment of revaluation loss from a first time revaluation exercise, by the Accounts Assistant is inappropriate.
As the revaluation loss arose from first time revaluation, it needs to be recognized in profit or loss as an expense and not to be taken to other comprehensive income. Taking revaluation loss to other comprehensive income is only appropriate when the loss occurs in subsequent year after there was a revaluation surplus and only to the extent of the surplus. Any excess of loss over previous surplus will be accounted for as an expense in profit or loss. The K17.5 million (W1) should therefore be debited to profit and loss as impairment loss.
Further, the Accounts Assistant's recognizing of asset at its depreciated cost of K382.5 million is equally inappropriate. IAS 16 Property, Plant and Equipment (PPE) requires that items of PPE that are revalued on the reporting date are recognized at their revalued amount at the reporting date. This means that the asset should be shown at K365 million at FV following a revaluation.

W1.

	K'million
Asset cost at 1 October 2021	500
Less trade discount (10%*500)	(50)
Cost net of trade discount	450
Depreciation expense to 31 March 2023	
(450/10 * 1.5 yrs)	(67.5)
Carrying amount at 31 March 2023	382.5
Revaluation deficit	(17.5)
Revalued at 31 March 2023	365

Transaction two (2)

The accounting treatment of the properties by the Accounts Assistant is incorrect. As there was change of use from investment property to owner occupied asset, recognizing the asset using fair value model of IAS 40 is incorrect as the accounting treatment should be per IAS 16 PPE.

The properties was an Investment property that was being accounted for using fair value model of IAS 40 Investment Properties. At the date of change of use, the method of accounting for the asset need to change to cost model per IAS 16 as follows:

At 1 April 2022, the properties was estimated to have a fair value of K21 million. At 1 January 2023, the date of change of use, the fair value was K18 million, giving rise to revaluation loss of K3 million. The K3 million would have to be accounted for per IAS 40 (the previous accounting basis for the asset) hence to be debited to profit or loss besides the three months depreciation of the machine amounting to K2 million (K18 million/2.25 years *3/12) for the year ending 31 March 2023. At the same reporting date, the machine would be recognized in the books at the depreciated cost of K16 million (K18 million – K2 million).

Transaction three (3)

The method of calculating Diluted Earnings Per Share (DEPS) by the Accounts Assistant is incorrect. Where there is convertible loan in issue, retained earnings would be expected to increase by saving in finance cost net of tax and so using unadjusted retained earnings is

incorrect action. Additionally, use by Accounts Assistant of existing number of shares for a transaction with convertible loan note is incorrect as potential shares will have to be added to current existing number of shares. IAS 33 Earnings Per Share requires DEPS to be calculated based on all potential ordinary shares to be assumed to convert and any associated change in retained earnings to be assumed to have materialized.
Therefore, the correct calculation requires the calculation of convertible loan to ascertain number of potential shares to arise from it. This gives 26 million shares [(K130,000,000/K10) * 2 shares]

Further, retained earnings will then be increased by the saving of finance cost on the loan of K9.1 million (10% x K130 million) * 70%.

Therefore, the correct DEPS would be calculated as follows:
DEPS = K370m+K9.1m/150 m shares + 26 m shares
= K379.1 m/176 m
=K2.15 per share

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 11 JUNE 2024

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)

Lukas Batteries Ltd (LBL), a car battery company was recently established after so many government pronouncements on the introduction of electrical vehicles. A government official was quoted as saying that all public service departments will be required to procure electrical vehicles starting next year. LBL intends to supply the local and foreign markets. It has adopted an absorption costing system. During the last management meeting, the Finance Director took time to explain the budget process including budgetary control.

The following data was collected during the last quarter of 2023:

Budget data

		K per unit	K per Unit
Selling price			900
Materials	4kg @ K54	216	
Labour	5hrs @ K60	300	
Variable overheads	5hrs @ K24	120	
Fixed overheads	5hrs @ K36	180	
			816
Profit			84

The budgeted production and sales volume is 2,125 units. The fixed overheads are based on budgeted production.

Actual data

Production and sales volume		2,225 units
Selling price per unit		K876
Materials	(purchased and used 8,732 Kgs)	K454,064
Labour hours	(11,350 hours paid and worked)	K692,350

Variable overheads	K262,044
Fixed overheads	K402,500

Required:

(a) State any four (4) roles of a budget committee. (4 marks)

(b) Explain the following budgeting processes.

(i) Communicating details of the budget policy and budget guidelines (2 marks)

(ii) Negotiation of budgets (2 marks)

(iii) Co-ordination of budgets (2 marks)

(iv) Budget review (2 marks)

(c) Prepare the flexed budget for the period under review. Assume that material and labour costs are variable in behaviour. (8 marks)

(d) Calculate the actual profit for the period. (4 marks)

(e) Prepare an operating statement using an absorption costing system that reconciles budgeted profit to actual profit. Clearly show the variances. (16 marks)

[Total: 40 Marks]

SECTION B

There are four (4) Questions in this section. Attempt any THREE (3) questions.

QUESTION TWO

Haulage and Tracking (HT) is a Zambian small and medium enterprise (SME) that successfully applied and received some business empowerment funds from the Government. The company procured six 56 tonnes gross weight trucks with net weight of 16 tonnes. HT started operating its logistics business in three (3) routes with two (2) trucks per route. Details of the operations in each route are given below:

Route 1

This route is 400Km away from HT to the final destination point for the cargo transported. Each truck that uses this route carries a full load and 70% of full load as backlog on return.

Route 2

This route is 250Km away from HT to the final destination for the cargo transported. The trucks on this route carry full load on each round trip.

Route 3

This route is 900Km away from HT to the final destination point for the cargo transported. The trucks on this route carry full load and 40% of full load as backlog on return.

In order to standardise operations, the company has installed trackers in all its trucks and has set guidelines. For example, the maximum speed when the truck is carrying a load is 80Km per hour, drivers are allowed up to 30 minutes breaks for every 200Km travelled, no unauthorised passengers are allowed on the trucks and full load is set at 87.5% of the truck's load capacity to minimise wear and tear. The company charges a standard cost of K155 per Km plus a 20% margin.

During a recent workshop that the Management Accountant for HT attended, the trainers talked about the appropriate use of composite cost units particularly in the service related businesses. The Management Accountant further consulted on the use of such cost units and a proposed composite cost unit based on HT's current operations which was determined as K0.0055 per Km /Kg (distance weight).

Required:

(a) Explain two (2) advantages for Haulage and Tracking Limited using composite cost units. (4 marks)

(b) Calculate the generated revenue from each route for Haulage and Tracking Limited using the current method. (6 marks)

(c) Calculate the revenue to be generated from each route for Haulage and Tracking Limited using the proposed method and comment on your findings. (10 marks)

[Total: 20 Marks]

QUESTION THREE

Best Traders and Manufacturing (BTM) Limited is a Zambian Company that manufactures and sales biscuits. The company has four (4) production sites located in the main capital city. During budgeting for BTM each production site is required to submit cost estimates to head office for analysis and consolidation into the overall company budget. The Management Accountant based at head office is responsible for the consolidation of the budget and usually sends out guidelines to each production site to prepare their cost budgets. During the current 2024 budget preparation, the Management Accountant instructed the production sites that head office recovery rates will be 20% of variable costs and 50% of fixed costs which will be charged to each production site accordingly when determining profitability. The following cost estimates and production levels were submitted:

	Kamwala	**Matero**	**Chilenje**	**Town Centre**
Production units	16,500	8,200	7,100	12,500
	K	**K**	**K**	**K**
Material costs	135,300	67,240	58,220	-
Labour costs	153,700	88,960	80,380	-
Production overheads	94,800	53,300	47,800	-
Other costs	78,375	38,950	33,725	-
Total production site cost	**462,175**	**248,450**	**220,125**	

Each production site has a Finance officer who is an accountant in training, unfortunately the finance officer for the Town production site has been off sick and therefore, only the production units were submitted by the production officer.

Required:

(a) Explain the importance of classifying costs as either fixed, variable or mixed in estimating future costs for BTM. (6 marks)

(b) Calculate the total cost estimate for the Town production site and the total Company budget for 2024. (10 marks)

(c) Explain two (2) disadvantages of the Company's current method of cost recovery by the head office. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Fast Forward Plc (FF Plc) is a manufacturing company involved in the manufacture of agricultural chemicals. The newly recruited Chief Executive Officer (CEO) of Fast Forward Plc is aware that Management accounting systems provide appropriate information for planning, decision making and control of costs and revenue. The CEO is also alive to the fact that the interest of the various stakeholders of the company may have conflicting interests or objectives. As the CEO of the company he is expected to have a thorough understanding of these stakeholder interests in order to ensure none overrides the achievement of the company objectives. He therefore, wants you as the Management Accountant to provide explanatory notes on how management accounting information supports each of the management functions and how the objectives of the various stakeholder may conflict each other.

For the year 2023, Fast Forward Plc recorded the following results at two budget levels:

Activity	**Budget**	**Budget**
Sales in units	**K'000**	**K'000**
Sales in units	10,000	12,000
Sales revenue	250,000	300,000
Cost of sales:		
Direct materials	80,000	96,000
Direct labour	60,000	72,000
Variable production overheads	40,000	48,000
Gross profit	70,000	84,000
Less: Expenses		
Administration overheads	20,000	20,000
Selling and distribution expenses	15,000	17,000
Finance cost	8,000	8,000
Net profit	27,000	39,000

Required:

(a) Explain how the interest or objectives of the following stakeholders may conflict:
   (i) Ordinary Shareholders and Management (2 marks)
   (ii) Long term creditors and Ordinary Shareholders (2 marks)
   (iii) Government and Employees (2 marks)

(b) Explain how management accounting information supports the management functions of planning, control and decision making. (6 marks)

(c) Explain the concept of cost behaviour, giving an example using the budget levels of Fast Forward Plc for 2023. (2 marks)

(d) Using the concept of cost behaviour and two (2) budget levels of Fast Forward Plc for the year 2023, calculate the budgeted net profit amount for production and sales of 11, 000 units. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Covitex Ltd manufactures two products S and T. The budgeted sales and production details of the products on the basis of marginal costing are as shown in the table below:

Product	S	T
	K/unit	**K/unit**
Selling price	117.50	88
Direct material	50	40
Direct labour	45	30

The production/ sales units for both products are 600 and 500 respectively. Products S and T use the same type of direct material and same grade of direct labour but in different quantities. The direct material is K10 per Kg and the direct labour rate is K15 per hour. During the preparation meeting for the 2024 budget, the sales department advised that there was need to have unsold units of products S and T in the quantities of 200 and 100 respectively by the end of the year 2024. These quantities will be needed in order to meet the expected high demand for the two (2) products in January 2025. The production department has also provided that in 2024, direct materials will be restricted to 6, 800 kg, while direct labour will be restricted to K46,125.

Required:

(a) Explain why marginal costing, instead of absorption costing, is used for decision making purposes. (2 marks)

(b) Explain how a company would maximise profits when there is a limiting factor which limits the organisation's activities. (1 mark)

(c) Calculate the budgeted production plan that maximises profits for Covitex Ltd for the year 2024. (17 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.2: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Budget Committee

- Coordination of the preparation of budgets, which includes the issue of the budget manual.
- Issuing of timetables for the preparation of functional budgets.
- Allocation of responsibilities for the preparation of functional budgets.
- Provision of information to assist in the preparation of budgets.
- Communication of final budgets to the appropriate managers.
- Comparison of actual results with budget and the investigation of variances.
- Continuous assessment of the budgeting and planning process, to improve the planning and control function.

(b) Budget process steps

(i) Communicating details of the budget policy and budget guidelines

The long-term plan is the starting point for the preparation of the annual budget. Managers responsible for preparing the budget must be aware of the way it is affected by the long-term plan so that it becomes part of the process of meeting the organisation's objectives. For example, if the long-term plan calls for a more aggressive pricing policy, the budget must take this into account. Managers should also be provided with important guidelines for wage rate increases, changes in productivity and so on, as well as information about industry demand and output.

(ii) Negotiation of budgets

When a junior manager prepares a draft budget, it should be submitted to his or her superior for approval. The superior should then incorporate this budget with the others for which he or she is responsible. This process continues until the final budget is presented to the budget committee for approval.

At each stage of the process, the budget should be negotiated between the manager who prepared the budget and his/her superior until agreed by both parties.

(iii) Co-ordination of budgets

The budgets must be reviewed by one another. Such a review may indicate that some budgets are out of balance with others and need modifying. The budget officer must identify such inconsistencies and bring them to the attention of the manager concerned. The revision of one budget may lead to the revision of all budgets. During this process, the budgeted statement of profit or loss and budgeted statement of financial position (balance sheet) and cash budget should be prepared to ensure that all the individual parts of the budget combine into an acceptable master budget.

(iv) Budget review

The budgeting process does not stop once the budgets have been agreed. Actual results should be compared regularly with the budget.

The frequency with which such comparisons are made depends very much on the organisation's circumstances and the sophistication of its control systems, but it should occur at least monthly.

Management should receive a report detailing the differences and should investigate the reasons for the differences. If the differences are within the control of management, corrective action should be taken to bring the reasons for the difference under control and to ensure that such inefficiencies do not occur in the future.

(c) Flexed budget for the last quarter of 2023

Activity level		2,225 units
		K
Sales	(2,225 @ K900)	2,002,500
Materials	(2,225 @ K216)	480,600
Labour	(2,225 @ K300)	667,500
Variable Overheads	(2,225 @ K24)	267,000
Fixed Overheads	(remains the same)	382,500
Budgeted Profit		204,900

(d) Actual profit for the period

	K
Sales (2,225 @ K876)	1,949,100
Materials	454,064
Labour	692,350
Variable Overheads	262,044
Fixed Overheads	402,500
Actual Profit	138,142

(e) Operating statement using absorption costing.

			K
Budgeted Profit (84 x 2125)			178,500
Sales volume profit variance (W1)			8,400(F)
Flexed profit			186,900
Sales price variance (W2)			53,400(A)
			133,500
	K(F)	K(A)	
Cost variances:			
Materials price (W3)	17,464		

Materials usage (W4)	9,072		
Labour rate (W5)		11,350	
Labour efficiency (W6)		13,500	
Variable overheads expenditure (W7)	10,356		
Variable overheads efficiency (W8)		5,400	
Fixed overheads expenditure (W9)		20,000	
Fixed overheads volume (W10)	18,000		
	54,892	50,250	4,642
Actual profit			138,142

Workings:

W1. Sales volume profit variance

Budgeted sales volume	2,125 units
Actual sales volume	2,225 units
Difference in volume	100
@ standard profit per unit	K84
Variance	K8,400 (F)

W2. Sales price variance

Budgeted sales price	K900
Actual sales price	K876
Difference in price	K24
@ actual sales units	2,225
Variance	K53,400(A)

W3. Materials price variance

Standard purchases	(K54 x 8,732kgs)	K471,528
Actual purchases		K454,064
Variance		K17,464(F)

W4. Materials usage variance

Standard usage (4kgs x 2,225 unit)	8,900 kgs
Actual usage	8,732 kgs
Difference in usage	168 kgs
@ standard price	K54
Variance	K9,072(F)

W5. Labour rate variance

Standard labour rate (K60 x 11,350 hrs)	K681,000
Actual labour cost incurred	K692,350
Variance	K11,350(A)

W6. Labour efficiency variance

Standard time (5hrs x 2,225 units)	11,125 hrs
Actual time	11,350 hrs
Difference in efficiency	225 hrs
@ Standard Rate	K60
Variance	K13,500 (A)

W7. Variable overhead expenditure variance

Standard variable overhead expenditure (K120 x 2,225 units)	K267,000
Actual variable overhead expenditure incurred	K262,044
Variance	K4,956(F)

W8. Variable overhead efficiency variance

Standard time (5hrs x 2,225 units)	11,125 hrs
Actual time	11,350 hrs
Difference in efficiency	225 hrs
@ Standard Rate	K24
Variance	K5,400 (A)

W9. Fixed overhead expenditure variance

Budgeted fixed overhead expenditure (K180 x 2,125 units)	K382,500
Actual fixed overhead expenditure incurred	K402,500
Variance	K20,000(A)

W10. Fixed overhead volume variance

Budgeted production volume	2,125 units
Actual volume produced	2,225 units
Difference in production volume	100 units
@ Standard Rate	K180
Variance	K18,000 (F)

SOLUTION TWO

(a)

A composite cost unit is one that is able to measure more than one performance indicator at the same time; therefore, HT Ltd is able to charge using a composite cost unit for both the distance travelled and the load carried by the trucks.

Composite cost units give a more accurate cost charge for HT Ltd considering the nature of the business.

The use of composite cost unit provides a better and motivational method of measuring key performance indicators for HT Ltd. For example, the revenue generated by HT Ltd is calculated by considering both distance travelled and load carried by a truck, unlike only measuring the distance. This has the potential to increase revenue and reflect positively on performance.

(b)

Route 1: 400km x 2 x 2 x K155 per km = K248,000

Margin 20/80 x K248,000 = K62,000

Total revenue: K310,000

Route 2: 250km x 2 x 2 x K155 per km = K155,000

Margin 20/80 x K155,000 = K38,750

Total revenue: K193,750

Route 3: 900km x 2 x 2 x K155 per km = K558,000

Margin 20/80 x K558,000 = K139,500

Total revenue: K697,500

(c)

Truck capacity 56 tonnes – 16 tonnes = 40 tonnes or 40,000kg

Practical capacity: 87.5% x 40,000kg = 35,000kg

Route 1: (400km x 35,000kg x K0.0055) + (400km x 35,000kg x 70% x K0.0055)

(K77,000 + K53,900) x 2 trucks = K261,800

Margin: 20/80 x K261,800 = K65,450

Revenue: K327,250

Route 2: (250km x 35,000kg x K0.0055 x 2 x 2) = K192,500

Margin: 20/80 x K192,500 = K48,125

Revenue: K240,625

Route 3: (900km x 35,000kg x K0.0055) + (900km x 35,000kg x 40% x K0.0055)

(K173,250 + K69,300) x 2 trucks = K485,100

Margin: 20/80 x K485,100 = K121,275

Revenue: K606,375

Comment

The revenue generated from routes 1 and 2 has increased with the use of the composite cost unit while that of route 3 has reduced. This is because the trucks using route 3 have low backlog load. HT Ltd could increase revenue on this route by ensuring that more backlog load is carried by the trucks on return.

SOLUTION THREE

(a) Fixed costs by their very nature do not change directly with production activity, while variable costs directly change with production activity. Mixed costs on the other hand consist of both fixed and variable costs, therefore would show characteristics of either fixed or variable following changes in production activity.
Classifying costs into fixed and variable is the ultimate goal to accurately estimate future costs. Therefore, any mixed costs should be broken down into their components of fixed and variable using appropriate methods such as linear equations, regression analysis or high low techniques. Once the costs are broken down into their components, cost determination can easily be undertaken using the behaviour of the costs. For example, variable costs are constant per unit of activity while fixed costs are constant in total. This would then be the basis of estimating future costs.

(b)

		Town
	K	
Material - variable cost (K8.2 per unit x 12,500unit)	102,500	
Labour – Mixed cost (K7.8 x 12,500) + K25,000	122,500	
Production OHs – Mixed (K5 x 12,500) + K12,300	74,800	
Other costs – Variable (K4.75 x 12,500)		59,375
Total		**359,175**

Company budget
Total production units – 44,300 units
Variable cost per unit (K8.2 + K7.8 + K5) = K25.75 x20% = K5.15
Total Fixed costs (K25,000 + K12,300) x 4 = K149,200 x 50% =K74,600

	K	**K**
Kamwala total cost	462,175	
Matero total cost	248,450	
Chilenje total cost	220,125	
Town total cost	359,175	
Sub – total		1,289,925
HQ variable cost share		228,145
HQ fixed cost share (K5.15 x 44,300 units)		74,600
Total Budget cost		**1,592,670**

(c) Disadvantages of the company's current method of cost recovery:

i. The overhead recovery method by head office is **arbitrary** and could lead to inefficiencies in assessing the performance of the production sites. For example 50% of fixed costs charged to each product site have no direct impact on productivity;

ii. Therefore this cost would **not be controllable** by the head of the production site. This kind of approach would consider unfair in the determination of profitability and subsequently performance of the production sites.

SOLUTION FOUR

(a) Stakeholder conflicts

(i) Ordinary (equity) shareholders and Management

Ordinary shareholders are the providers of the capital of a company and hence their goal will be to maximise the wealth which they have as a result of the ownership of the shares in the company, whereas Management has the objective of maximising its own rewards. Management to whom shareholder delegate responsibilities, must manage the company for the benefit of shareholders. The objective of reward maximisation might conflict with the exercise of managing the company on behalf of the shareholders.

(ii) Long term creditors and Ordinary shareholders

Long-term creditors have the objective of receiving payments of interest and capital on the loan by the due date for the repayments. Where the loan is secured on assets of the company, the lender will be able to appoint a receiver to dispose of the company's assets if the company defaults on the repayments. However, ordinary shareholders are the providers of the capital of a company and hence their goal will be to maximise the wealth which they have as a result of the ownership of the shares in the company. The objective of receiving payments of interest and capital on loan and securing of loan on company assets may conflict with the objective of ownership and profit maximization of the ordinary shareholder.

(iii) Government and Employees

Government has objectives which can impinge on the business's activities in different ways including through taxation of the business's profits, and on a number of regulations such as health and safety legislation, and so on. However, employees will usually want to maximise their salaries and benefits, according to their particular skills and the rewards available in alternative employment. Most employees will also want continuity of employment. The objective of taxation collection by Government and health regulations may conflict with the objective of maximizing salaries and benefits and continuity of employment by employees.

(b) Management accounting information helps management in performing their functions of planning, decision making and control as follows:

i. **Planning** – this function relates to annual budgeting and long-term processes. Management accounting information supports the formulation of future plans by providing detailed information of the composition of cost, the behaviour patterns of cost and identifying the source of each cost.

ii. **Controlling** – this function consists of the measurement, reporting and the subsequent correction of performance in an attempt to ensure that the firm’s objectives and plans are achieved. Management accounting supports the control process by providing performance reports that compare the actual outcome with the planned outcome for a responsibility centre. The reports highlight those activities that do not conform to the plans and what caused the diversion from the plans.

iii. **Decision making** – this function involves choosing between alternatives courses of actions. The selection of the best alternative course of action that suits the objectives of the organisation is supported by management accounting through the provision of detailed information in the plans and control reports and in relation to the behaviour patterns of costs. Costs are irrelevant by their nature while others are relevant for decision making.

(c) Cost behaviour refers to the way in which costs are affected by changes in the volume of output. Generally, as the level of activity rises, costs will usually rise. For example, the budgeted direct materials cost for 10 000 units was K80 000 000 but as units produced increased to 12 000 units and 13 000 units, the cost of direct material cost also rose proportionately to K96 000 000 and K104 000 000 respectively. Under this concept, some costs will rise proportionately to the level of activity (variable costs e.g., direct material), others will rise but not proportionately (semi-variable costs e.g. selling and distribution), and others remain unchanged despite the change in level of activity (fixed cost e.g. administration overheads).

(d) Calculation of Budget Net profit for production and sales of 11, 000 units

Note: Using the cost behaviour concept, Sales revenue, direct material, direct labour, variable production overheads vary proportionately with level of activity. Administration overheads and Finance cost remain unchanged and hence will remain the same at 11 000-unit level. selling and distribution expenses vary but not proportionate with activity level.

Production and sales in units	11, 000
	K'000
Sales revenue (11, 000 x K25, 000/unit)	275, 000
Cost of sales:	
Direct materials (11, 000 x K8, 000/unit)	88, 000
Direct labour (11, 000 x K6, 000/unit)	66, 000
Variable production overheads (11, 000 x K4, 000/unit)	44, 000
Gross profit	77, 000
Less: Expenses	
Administration overheads	20, 000
Selling and distribution expenses (w5)	16, 000
Finance cost	8, 000
Net profit	33, 000

Workings

1. Selling price per unit = K250, 000 000/10, 000 = K25, 000
2. Direct materials cost per unit = K80, 000 000/10, 000 = K8, 000
3. Direct labour cost per unit = K60 000 000/10, 000 = K6, 000
4. Variable production overhead cost per unit = K40, 000, 000/10 000 = K4, 000
5. Selling and Distribution expenses:
   Variable cost per unit
   Cost = K17, 000 ,000 – K15 ,000 000= K2 ,000, 000
   Units = 12, 000 – 10, 000 = 2, 000 units
   Variable cost per unit = 2, 000, 000/2, 000, units = K1, 000 per unit

   Fixed cost =Total cost – variable cost
   =17, 000 ,000 – (12, 000 x K1, 000)
   = 17, 000, 000 – 12, 000, 000

= K5, 000, 000

Therefore, total cost for 11 000 units = Fixed cost + variable cost

= 5, 000, 000 + (11, 000 X K1, 000 unit)

= 5, 000, 000 +11, 000, 000

= **K16, 000, 000**

SOLUTION FIVE

(a) Marginal costing is used for decision making purposes because, unlike absorption costing, it splits costs clearly into fixed and variable elements. This distinction is important as only the marginal costs are relevant while fixed costs are not relevant for short-term decision making.

(b) A company would maximise profits when there is a limiting factor by earning the biggest possible contribution per unit of limiting factor.

(c) **Budgeted Production Plan that would maximize profits for Covitex Ltd**

i. *Establish which of the resources, if any, is scarce.*

Products	**S**	**T**
Budgeted sales (units)	600	500
Closing inventory	200	100
Minimum production to meet demand and inventory	800	600

Product	Production (units)		Materials required (kg)		Labour at cost K
S	800	(800 x 5kg)	4, 000	(800 x K45)	36, 000
T	600	(600 x 4kg)	2 ,400	(600 x K30)	18, 000
Total required			6, 600		54, 000
Total available			6, 800		46, 125
Surplus/(shortfall			200		(7, 875)

Labour is a limiting factor, but Material is not.

ii. *Benefit/contribution per scarce resource (Labour)*

Product		S K		T K
Selling price		117.5		88
Variable cost:				
Material	50		40	
Labour	45		30	
		95		70
Contribution per unit		22.5		18
Contribution per cost of labour		$\frac{K22.5}{45}$ = K0.50		$\frac{K18}{30}$ = K0.60

	S	T
iii. *Rank Order of production*	2nd	1st

iv. *The production plan:*

Ranking	Product	Sales demand plus closing inventory (Units)	Production Quantity (units)	Labour cost	K
1st	T	600	600	(600 x 30)	18 ,000
2nd	S	800	625**	(625 x 45)	28 ,125*
Total					46, 125

Therefore, the production plan which maximises profit is:

Product T 600 units
Product S 625 units

Working
* Balancing figure = K46, 125 – K18, 000 = K28, 125.
**Production of product S = K28, 125 ÷ 45 per unit = 625 units.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 13 JUNE 2024

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

Your firm of chartered accountants is auditor of the financial statements of Sparkling Ltd.

You are planning the audit of the financial statements for the year ended 30 September 2022. The company runs three (3) car parks in Lusaka with the Head Office located at its car park at the International Airport. Sparking Ltd recruited a manager and support staff and bought new car cleaning equipment.

The following information relates to the car park and car cleaning businesses:

Car park business:

Each of the car parks is managed by a manager and a cashier. Security services are outsourced by Sparkling Ltd. The company allows for long term reservation of parking space to companies that pay six (6) months in advance. In accordance with the agreement, parking space that has been paid for in advance cannot be used by other motorists. There is usually paid-for parking space that is not used on a daily basis.

The airport car park is automated in that motorists collect a ticket at entry from an automated ticketing machine. At the exit gate, the ticket is given to the cashier who swipes it and the amount payable is automatically calculated and cash paid to the cashier. For corporate customers who pay for parking in advance they have tickets allowing them to enter and exit without paying.

In the event that the ticketing machines break down, the attendant at the entry point issues a hand written un-numbered ticket showing the time of entry. When exiting, the hand written ticket is given to the exit cashier who works out the amount payable by computing the time spent and applying the rate per hour or part thereof. Once payment has been made, the cashier opens the barrier and allows the vehicle to exit. At the end of the shift, the exit cashier summarizes all money received and reconciles with the cash on hand before handing it over to the manager. Manual receipts are issued on receipt of cash when the automated ticketing machines are out of use, unless requested for.

The company bears the risk of any damage or theft within the car park. Daily cash receipts are collected by a security company which deposits the money into the company the following day.

Car cleaning business:

The car cleaning business is the responsibility of a supervisor who has a complement of four (4) car cleaners.

On arrival, cars are ushered in and attended to by any one of the four (4) car cleaners who is free. There are fixed charges for car cleaning services depending on the size of the vehicle. Usually, car owners leave the cars being cleaned and go to a nearby café for refreshments whilst waiting for the vehicle to be cleaned. It is common practice for the car cleaners to drive client vehicles away from the wash bay to an area for interior cleaning. None of the car cleaners has a valid driving license and this does not concern the supervisor because the cleaners drive within the car cleaning premises.

Except for four (4) corporate customers who are given extended credit, all the customers pay by cash. The car cleaners collect money from the vehicle owners and pass it on to the supervisor who records the money under the name of the relevant car cleaner and keeps the money in a safe until the Operations Manager passes by to collect the money. Sometimes the cash is collected after two (2) or three (3) days of receipt and taken to the bank once in a week. The supervisor is responsible for buying the required cleaning materials. He issues-out cleaning materials to the car cleaners as requested. There is an increased demand of customers wishing to pay for services through mobile money services. The authority of the supervisor is required for such a request and when authority is granted, customers send money to the personal number of the supervisor. At the end of the day, the supervisor gets the money paid direct to him from mobile money agents and accounts for it together with the rest of the cash receipts for the day.

In assessing risks of the operations of Sparkling Ltd, you establish that the company does not have any insurance cover for its operations. You have a tight schedule at the period end because there is a large number of your firm's audit client whose year end is the same as that of Sparkling Ltd. The Engagement Partner suggested to you that in order to meet the tight deadlines for the audits due, you should perform an interim audit of the financial statements of Sparkling Ltd and he requested you to discuss with him the work you intend to carry out at the interim audit.

Required:

(a) Explain the work that could be performed at the interim audit of the financial statements of Sparkling Ltd. (4 marks)

(b) (i) Identify five (5) internal control weaknesses in the car park and car wash business of Sparkling Ltd. (5 marks)

(ii) For each control weakness identified in (i) above, suggest a suitable recommendation to mitigate the weakness. (5 marks)

(c) Identify and explain five (5) business risks in the operations of Sparkling Ltd. (10 marks)

(d) Explain the meaning of financial statement assertions in an audit and illustrate their use in designing audit procedures to be performed. (4 marks)

(e) Describe six (6) audit procedures that should be performed in the audit of each of the following:

(i) Accounts receivables (6 marks)

(ii) Car cleaning equipment (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

Your firm of chartered accountants is auditor of Mweru Plc. This company sells and services heavy duty road construction equipment from reputable manufacturers.

The shares of Mweru Plc. are listed on the Lusaka Securities Exchange (LuSE) and are owned by both institutional and individual shareholders. Management of Mweru Plc. comprises a management team none of whom own shares in the company. The annual financial statements prepared by management are audited by external auditors and are presented to shareholders at an Annual General Meeting.

The company has four (4) divisions namely finance, operations, sales and marketing. These divisions are under the supervision of Divisional Managers. The Divisional Managers are responsible for putting in place necessary internal controls meant to protect the assets of the company. The company engaged external consultants to assist it come up with policies and procedures manuals for all the divisions.

The company policy is that Mweru Plc. gives a warranty on the equipment supplied for a period of two (2) years or 100,000 hours of operation whichever is earlier. Annually, the Operations Manager estimates the amount that will be incurred to meet the warranty obligations and this amount is provided for in the annual financial statements. For the year ended 31 December 2022, a warranty provision of K2.5m was recognized (K1.2m for 2021).

Mweru Plc. has a wide range of spares needed as back up for the equipment that it supplies. In the past, there have been instances of theft of spares and investigations carried out did not yield any positive results to stop this. Due to increased competition and eroding margins, the company resolved to cut down on costs and that value for money should be considered at all times before spending money.

The company wishes to introduce a risk management system which will require that all risks facing the company are identified and action to mitigate against these risks put in place. At a recent board meeting, it was resolved that an internal audit department be established.

Required:

(a) Explain the principles of accountability and stewardship in the context of the operations of Mweru Plc. (4 marks)

(b) Suggest four (4) areas of work that the planned internal audit department of Mweru Plc. should undertake. (4 marks)

(c) Illustrate the use of the following audit methods in the audit of the financial statements of Mweru Plc.

(i) Inspection (1 mark)

(ii) Observation (1 mark)
(iii) Inquiry (1 mark)
(iv) Confirmation (1 mark)

(d) (i) Explain the audit risk for the figure of warranty provision in the financial statements of Mweru Plc. (2 marks)

(ii) Explain four (4) audit procedures that should be performed on the figure of warranty provision in the financial statements of Mweru Plc. (6 marks)

[Total: 20 Marks]

QUESTION THREE

You are an Audit Manager in your firm of chartered accountants. You have been assigned to undertake the audit of the financial statements of Impala Ltd. for the year ended 31 March 2023.

You called for a pre-audit meeting with the rest of the audit team. Among other matters discussed in this meeting was the need for assessing the audit risks at the planning stage of the audit. You emphasized to the audit team the need to apply professional skepticism throughout the conduct of the audit. It is important to identify audit risks so that suitable responses can be applied to reduce the audit risk to acceptable levels.

The need for detailed working papers was emphasized at this meeting and that it is important for the working papers to contain the information required enabling suitable conclusions to be reached. Further, the standard of the working papers should be such that someone who was not part of the audit team would reach at the same conclusions as those of the audit team.

In the year under review, there has been a noted increase in accounts payables in the financial statements of Impala Ltd. This is attributed to the company obtaining credit from its major suppliers who previously did not extend credit facilities to the company. The total accounts payables amount to K3.5m and you requested the Audit Senior to perform substantive procedures on the balance of accounts payables. The company provided the audit team with an age analysis of the accounts payables at the year-end.

The following audit risks were identified during the risk assessment at the planning stage of the audit of Impala Ltd.

1. Impala Ltd has a poor attitude over internal controls and there are no guidelines or procedures that should be followed for the major business cycles of purchases, sales, inventory and payroll.

2. The age analysis of receivables shows an increase in overdue debts with the bulk of the receivables balance being more than 90 days old. There is no evidence of reconciliations being performed to agree balances with customers.

3. Management is paid annual bonuses based on meeting performance targets on profitability. The nature of Impala Ltd.'s business is such that at the end of the financial year, there are accounting estimates made by management that are incorporated in the financial statements.

4. Impala Ltd is heavily indebted. The company obtained a bank loan secured on its tangible non-current assets two (2) years ago and the company is facing difficulties servicing this loan.

5. Impala Ltd. has in stock at the period end, inventory of slow-moving items which is unlikely to sell at more than the cost of the goods. This will impact on inventory valuation at the period end.

Required:

(a) Suggest suitable responses to the risks identified at the planning stage of the audit of the financial statements of Impala Ltd. (5 marks)

(b) State three (3) matters that you expect to be documented on risk assessment as part of planning the audit of Impala Ltd. (3 marks)

(c) State eight (8) pieces of information that should be contained in a typical audit working paper for the audit of the financial statements of Impala Ltd. (4 marks)

(d) Explain, stating the relevant financial statements assertions, four (4) audit procedures in the audit of accounts payables in the financial statements of Impala Ltd. (8 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

(a) Your firm has been offered an audit engagement by a prospective client as a result of lowballing' on your part. Further, you are aware of the requirement that audit engagements should only be accepted if the preconditions to audits are present.

Required:

(i) Explain the ethical guidance on 'lowballing' to auditors. (2 marks)

(ii) Explain the three (3) preconditions that should be met for an audit engagement to be accepted. (3 marks)

(b) You are a Senior Audit Supervisor in Zumba & Co and will supervise the audit of Mafuta Co (Mafuta). Mafuta manufactures oil products and its year-end is 31 March 2022.

Mafuta has ten (10) significant customers, who buy 70% of the oil products and many small customers, who buy the remaining 30% of oil products. During the year, seven (7) of the significant customers experienced financial distress, and consequently ceased purchasing oil products from Mafuta. As a result, Mafuta experienced cashflow problems and failed to pay its suppliers on time and 60% of suppliers have withdrawn credit terms and have taken legal action to recover the debts they are owed.

Mafuta has a bank overdraft and has failed to source funds for its operations. It has a loan of K15,000,000 which is due for repayment in full by 30 June 2022. Mafuta has produced a cash flow forecast to 31 March 2023, which shows positive cash flow position. Six (6) directors of Mafuta have resigned this year.

The Finance Director informed your Audit Manager that Mafuta's license to operate will expire on 31 December 2022, so it has applied for a new license and they believe that they will be granted a five (5) year license. Your Audit Manager requested you to obtain "sufficient audit evidence" during the audit.

Required:

(i) Identify and explain four (4) potential indicators that Mafuta Co may not be a going concern. (6 marks)

(ii) Explain five (5) audit procedures which should be performed in assessing whether or not Mafuta Co is a going concern. (5 marks)

(iii) Explain four (4) factors that influence the auditor's judgement regarding the sufficiency of the audit evidence obtained. (4 marks)

[Total 20 Marks]

QUESTION FIVE

Mulobezi Mining Company (MM Co Ltd) commenced its mining operations in the lower Zambezi two (2) years ago after a protracted legal challenge from the locals and environmental pressure groups.

During the year, the Finance Director of MM Co Ltd and his spouse operated a construction company called Beluga Ltd as a joint venture with a nephew of the Engagement Partner.

The Engagement Partner previously worked at MM Co Ltd for two (2) years and was in charge of financial reporting and tax computations before he started working for Bex Chartered Accountants an audit firm for MM Co Ltd. During the year, MM Co Ltd was sued by locals who complained about MM Co Ltd.'s discharging its waste from the mining activities into a river which is the only source of fresh water for domestic and irrigation purposes. The Engagement Partner was requested and agreed to help with defending the company in this court case. Management picked on Bex Chartered Accountants since they are the ones who audited the company recently. The Audit Senior is a nephew to the Chief Accountant. He was assigned to the audit of MM Co Ltd since he has vast experience in the audit of mining companies.

MM Co Ltd discovered new goldfields that require huge capital investment. The company applied for a loan from the Development Bank of Africa (DBA). However, the Finance Manager was doubtful that the loan would be granted since the bank requested for the most recent audited financial statements of MM Co Ltd. Since the previous audit report contained an adverse opinion. He requested the current auditors to issue a report with an unmodified opinion at the end of the current audit failure to which the company will consider replacing auditors. If a modified opinion is issued the loan application will not be approved. The Company's year end is 31 December.

The following dates are critical in evaluating events after the reporting period:

1. The financial statements under audit are for the year ended 31 December 2021.
2. The detailed audit work was completed on 31 March 2022.
3. The audit report was signed on 19 April 2022.
4. The financial statements were sent to shareholders on 5 June 2022.
5. The company's Annual General Meeting was held on 28 June 2022.

The following events were brought to your attention during the audit of MM Co Ltd.

Event 1

There was a court case involving locals who sued MM Co. Ltd. This case came-up in court on 10 December 2021 and the legal team was of the view that the company was going to lose the case and be ordered to pay damages.

Event 2

During the year ended, MM Co Ltd embarked on constructing a new smelter. On 15 April 2022, an electrical fault attributed to the incompetence of a newly recruited electrician caused extensive damage to the newly constructed smelter.

Event 3

On 10 July 2022, the Operations Manager was implicated in a scandal in which a truck loaded with copper was stolen in very strange circumstances under his watch. Following an investigation, it was established that this fraud was an inside job and the evidence gathered pointed to the involvement of the Operations Manager.

Required:

(a) Identify and explain four (4) threats to the objectivity of the auditor and suggest four (4) safeguards (8 marks)

(b) Consider the auditor's responsibility for:

(i) Event 1 (3 marks)

(i) Event 2 (3 marks)

(iii) Event 3 (3 marks)

(c) Explain the difference between "Modified Except For Opinion" and "Adverse Opinion". (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.3: AUDITING PRINCIPLES AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Work at the interim audit stage:**

1. Risk assessment and gaining an understanding of the operations of Sparkling Ltd.
2. Recording of the system of internal control of the company and evaluating the controls.
3. Tests of controls to the date of the interim audit.
4. Substantive tests of transactions to the date of the interim audit.
5. Limited substantive tests of additions and disposals of tangible non-current assets to the date of the interim audit. Closing balances can only be tested at the final audit.
6. Identifying matters that may have an impact on the work to be performed at the final audit.

(b) **(i)/(ii) Internal control weaknesses and recommendations:**

1. The use of un-numbered manual tickets when the automated ticketing machines were not working could result in money received being misappropriated and not accounted for.

   Recommendation:
   The manual tickets issued when the automated ticketing machine was not working should be pre-numbered. This will enable to reconcile all money received to money banked.

2. When the automated ticketing machine is not working, receipts for money collected are only issued on request by the car owners. This could lead to a loss of income as money not receipted may be misappropriated.

   Recommendation:
   Receipts should be issued for all money received and the total of the receipts for the day reconciled to the cash collected at the end of the day.

3. The receiving of money from clients by car cleaners is not good practice. The car cleansers may receive money and not pass on all the money received to the supervisor. Further, they may charge a wrong amount resulting in the company losing revenue.

   Recommendation:
   A different person should be designated to receive money from clients to cure the excuse of alleged traffic congestion as reason for not issuing manual tickets to all customers when the automated ticketing machines are not functional.

4. The banking of funds once in a week could result in loss of money to the company. Further, this is a fraud risk factor which can lead custodians of cash to use money for personal gain hoping to replace it before it is due for banking.

   Recommendation:
   All funds received should be banked intact the day following receipt thereof when banks are open or deposited in the company's lockable safe during weekends and holidays.

5. There is lack of segregation of duties involving the supervisor who responsible for collecting daily sales, buying and storage of cleaning materials and issuing the materials to the cleaners. The risk of fraud is high when one person is responsible for so many tasks.

   Recommendation:

The procurement of materials should be separately done at Head Office and issues should be made on the basis of requisitions. In this way, the usage of materials can be monitored and controlled.

6. Payment of company money by customers in the personal mobile number of the supervisor is a weakness which could result in loss of revenue to the company.

   Recommendation:
   Electronic payments using mobile money platforms should be made to a dedicated number for the company. The number should be conspicuously displayed for customers to know and use.

(c) **Business risks in Sparkling:**

1. The car park manager could hire out slots that have not been used by the contracted companies on a short term basis and take the money for personal use.
2. The issuing of unnumbered hand written tickets when the automated ticketing machine is not working could result in the misappropriation of company money because there is no way of reconciling the cash on hand with the records. This could result in loss of income for the company.
3. The issuance of manual receipts on request when the automated ticketing machine is not in use can result in theft of money for personal use by staff. This will result in loss of revenue to the company.
4. Allowing the car cleaners with no driving licenses to drive client vehicles within the premises poses a risk in the event of an accident. The company may be liable to costs of any repairs that may be necessary.
5. The receiving of money by car cleaner may result in misappropriation of company funds. They may decide to hand over cash at times. Customers should be required to pay to the Supervisor or any other designated person.
6. Delays in collecting and banking money could result in the loss of money either through theft or misappropriation by those in charge.
7. Allowing the car cleaning supervisor to receive company money in their personal mobile phone accounts poses a risk that company money may not be declared and paid back to the company.

(d) **Meaning of financial statement assertions:**

Financial statement assertions are claims or representations made by management in the figures contained in the financial statements. For example by reporting a plant and equipment figure in the financial statements, one assertion is that of existence. Management is making a claim that the plant and equipment represented by that figure at the period end.

The auditors design audit procedures with a view to testing the assertions contained in the figures. Using the same example of plant and equipment, the auditor will be required to design an audit procedure that will test the assertion by management. The appropriate audit procedure to test the assertion of existence is to physically inspect the plant and equipment.

(e) **Audit procedures:**

(i) **Accounts receivables:**

- Obtain the receivables age analysis from the client.
- Cast & cross cast the receivables age analysis for arithmetical accuracy.
- Agree the total of the receivables listing to the relevant control account in the general ledger.
- For the selected sample of accounts receivables, perform a receivables confirmation.

- Follow up all balance disagreements and non-replies to the receivables confirmation.
- Review the adequacy of the allowance for uncollectable accounts through discussions with management
- Agree balances from individual receivables sales ledger accounts to the receivables aged listing.
- For a sample of sales invoices around the year-end, inspect the dates and compare with the dates of dispatch and the dates recorded in the ledger for correct cut-off
- For a sample of sales invoices, examine the invoices for proper classification into revenue accounts.
- Read the disclosure note for receivables in the financial statements and confirm the information is accurate and properly presented at the appropriate amounts.

(ii) **Car cleaning equipment:**

- Examine the supporting documents for additions and confirm the purchases have been authorized.
- Check that the additions have been recorded in the non-current asset register by inspecting the register.
- For a sample of additions inspect the invoices for amounts and that they are in the name of Sparkling Ltd.
- Inspect the non-current asset accounts for a sample of purchases to ensure they have been properly allocated.
- For a sample of additions physically inspect the assets to confirm they exist at the period end.
- Confirm capitalization of the amounts for additions by examining the relevant non-current asset accounts and review relevant expense account of repairs to confirm that correct classification between revenue and capital expenditure has been made.

SOLUTION TWO

(a) **Principles of accountability and stewardship in operations of Mweru Plc.:**

The principle of accountability and transparency arises from the separation of ownership and management in an organization.

This principle can be applied to Mweru Plc. as follows:

- The company is owned by shareholders who do not take part in the management of the company.
- Management has been put in place to run the company on behalf of the shareholders and so the management are stewards who should run the company in the best interest of the shareholders.
- Management prepare financial statements to show how they have fulfilled their responsibility as stewards. Management is accountable to the shareholders on how it has fulfilled its responsibility.
- Statutory auditors perform audit procedures on the financial statements and give assurance to the shareholders on the financial statements.

(b) **Proposed internal audit work that could be performed:**

1. Internal audit department can perform financial audits of the company.
2. Internal audit department could perform operational, sales and marketing audits to confirm that they are operating according to company policies and procedures.
3. The internal audit department could be involved in evaluation of the company internal controls to ensure that they are effective.
4. Internal audit can be involved in the reviewing and updating of the company policies and manuals.
5. The internal audit department can be involved in carrying out investigations of any fraud that takes place in the company.
6. The internal auditors can be involved in the risk processes of Mweru Plc. to help identify business and other risks that face the company.

(c) **Use of audit methods in the audit of Mweru Plc.:**

(i) **Inspection of assets and documents:**

This method of obtaining evidence in the audit of the financial statement of Mweru Plc. could be used when verifying documents such as invoices or Goods Received Notes. The method could be used when verifying existence of tangible non-current assets by physically inspecting a sample of assets recorded in the financial statements.

(ii) **Observation:**

Observation can be used in confirming a procedure performed by the client such as observing the inventory count by the auditor to confirm that it is being done in accordance with the inventory count instructions.

(iii) **Inquiry:**

This method of obtaining evidence could be used when gaining an understanding of the entity at the planning stage. The auditors will inquire on any matters from management and others within the organization.

(iv) **Confirmation:**

This method can be used in the audit of the financial statements of Mweru Plc. when seeking third party confirmation from major contractors regarding spares that they hold and belong to Mweru Plc.

(d) (i) **Audit risk for warranty provision:**
Warranty provision is estimated at the end of each year depending on the amount that management considers will relate to sales in the year under review. This involves estimation on the part of management and there is a risk that there could be management bias and the amount misstated.

(ii) **Audit procedures – warranty provision:**

1. Obtain details of the provision made by management and confirm that the amounts included meet the conditions for provisions under IAS 37.
2. Recalculate the provisions made in the financial statements to confirm accuracy.
3. Compare the provisions made at the period end with any post year actual payments.
4. Review the financial statements and confirm disclosure of the amount of provision in line with provisions of IAS 37.
5. Consider previous provisions by management in comparison with the actual outcome to assess management's ability to make provisions.
6. Obtain written representations from management regarding adequacy of warranty provisions made.

SOLUTION THREE

(a) **Suitable responses to identified risks at planning stage:**

1. Emphasize the need for audit team members to apply professional skepticism throughout the audit and no reliance will be place on internal controls. Substantive procedures to be performed to obtain sufficient appropriate evidence that the financial statements are not materially misstated.
2. Perform a receivables confirmation for a sample of receivables at the period end.
3. Review the basis of determining accounting estimates for evidence of management bias.
4. Consider the impact of failure to repay the loan on the ability of the company as a going concern. Review management's assessment of the going concern ability of the company for reasonableness.
5. Review the inventory count instructions and ensure they are adequate to guide on identification of slow and obsolete inventory. Also attend the inventory count to confirm slow moving items are identified and valued correctly.

(b) **Matters that should be documented on risk assessment work:**

1. The matters that were discussed at the pre audit team meeting with the audit team.
2. The identified audit risks in the process of gaining an understanding of the operations of Impala Ltd
3. Details of the overall responses to the risks identified
4. The nature, extent and timing of further audit procedures linked to the assessed risks.
5. Key elements of the understanding of Impala Ltd and the internal controls.

(c) **Information contained in a typical audit working paper:**

1. The client name
2. Period end
3. Subject matter
4. Working paper reference
5. Prepared by
6. Reviewed by
7. Dates of preparation and review
8. Aim/objective
9. Summary of work done
10. Results
11. Conclusions

(d) **Audit procedures for accounts payables:**

1. **Completeness**:
   - Obtain the listing of accounts payables and agree total to the general ledger.
   - For a sample of payables agree the balances to the supplier statements.
   - Perform payables confirmations for a sample of payables.
2. **Existence**:
   - Vouch sample of payables balances and compare with supporting documentation of purchase orders and supplier invoices
   - Obtain supplier statements for selected suppliers and reconcile to balances on listing.
   - Perform confirmation of accounts payables for sample selected.

3. **Rights and obligations**:
    - Vouch a sample of supplier balances to supporting documentation i.e. purchase orders and invoices and confirm in name of client.
4. **Accuracy**:
    - Check the additions on the listing of suppliers for accuracy.
    - For selected samples from trade payables listing compare details with supporting documentation
    - Recalculate the mathematical accuracy of a sample of supplier's invoices to confirm amounts are correct.
5. **Cut-off**:
    - For a sample of purchase documentation around the period end check the dates and ensure they are recorded in the correct period.
6. **Occurrence**:
    - For a sample of vouchers, inspect the supporting documents such as authorized purchase orders.
7. **Classification**:
    - Review the payables listing for any debit balances which should be classified as receivables or deposits.
    - Review the draft financial statements for split between short term payables and long term payables.
    - Read through the disclosure note for accounts payables to ensure that the information is accurate and properly presented at appropriate amounts.

SOLUTION FOUR

(a)

(i) **Ethical guidance on lowballing:**

1. The practice of lowballing is not prohibited but the firm should ensure that audit quality is not compromised.
2. The firm should devote adequate time, and use skilled and experienced staff to perform the audit.
3. The audit should be conducted in accordance with auditing standards.

(ii) **Preconditions for an audit engagement:**

Management should acknowledge its responsibilities for:

1. The preparation of financial statements in accordance with the applicable financial reporting framework.
2. Putting in place suitable internal controls and monitoring that the controls remain relevant.
3. Providing the auditor with access to all information of which management is aware that is relevant to the preparation of financial statements and give unrestricted access to entity staff and records.

(b)

(i) **Going concern indicators**

Indicator	explanation
(1) Seven (7) significant customers have stopped buying products.	This has created cashflow problems for Mafuta and it is likely to affect its going concern, especially if the other three (3) also stop buying the products.
(2) Cash flow problems	The suppliers are not paid on time, this is likely to affect the production of products and the company's going concern as it needs to buy materials by cash since the credit terms have been terminated.
(3) Legal action by suppliers	There is a risk the company may be required to pay its suppliers with interest and legal costs and if it fails, it may be declared bankrupt and put into liquidation.
(4) No money (bank overdraft)	The company does not have the money and if the bank decides not to extend the bank overdraft facility, it will have serious cash flow problems, since the company cannot source funds elsewhere.
(5) Failure to source funds	The company has failed to source funds for productions and operations, clearly this poses, a very serious going concern problem, because the future of this company depends on its products.

(6) Loan of K15, 000, 000 due for repayment	If the company fails to repay the loan in full when due, it is likely to be sued by the bank, this is likely to affect its going concern since it has already been sued by suppliers.
(7) Six (6) directors of Mafuta have resigned	Resignation of senior management personnel may be an indicator that they have foreseen that the company is not a going concern. There resignations will affect the reputation of the company.
(8) License expiring	The license will expire within one year and if the company is not given a new license, it will have to close its production and operations.

(ii) **Going concern audit procedures**

1. Discuss with management the basis for their going concern review.
2. Obtain a written representation confirming that the company is a going concern.
3. Discuss with management how they intend to increase sales, since seven (7) significant customers have stopped buying products.
4. Enquire of the lawyers of Mafuta, their view on the legal case and possibilities of additional litigation.
5. Discuss with the Finance Director, how the company will pay its liabilities in light of bank overdraft and cash flow problems.
6. Enquire from the Finance Director, how they will finance production and operations, since they have failed to source funds.
7. Enquire from the Finance Director, how they intend to repay the loan in full, since the company does not have funds.
8. Discuss with management their plans regarding the directors who resigned as these are key management personnel.
9. Enquire from Mafuta lawyers, the legal status or progress regarding the new license.
10. Discuss with the Finance Director, the basis of positive cash flow in the light of all these cash flow problems.
11. Review documentations such as management accounts, budgets (future plans) and board minutes.

(iii) **Factors that influence sufficiency of audit evidence**

1. Risk of material misstatement. As risk increases then more evidence is required.
2. The materiality of the item. More evidence is needed on material items.
3. Internal control systems. If internal control systems are effective auditors will limit the amount of audit evidence required.
4. The auditor’s knowledge and experience of the business. Good past knowledge of the business and trusts the integrity of staff will limit the evidence required.
5. The findings of audit procedures. Satisfactory findings (e.g. tests of controls over receivables) will then reduce substantive evidence needed.
6. Reliability of source. Where evidence is obtained from reliable sources (e.g. written evidence) then less evidence is required.

SOLUTION FIVE

(a) **The flowing are the threats and safeguards to objectivity:**

Threat	**Safeguards**
This a threat since the spouse of MM Co. Ltd Director and his nephew are carrying on business. They both have interest in the business. There is a self-interest threat in this case.	They should dispose of the interest or resign from the position and concentrate on business.
The Engagement Partner had worked at MMC Co Ltd preparing financial statements. This will result in a self-review threat.	There is need for the Engagement Partner to be replaced by an independent auditor.
The Engagement Partner has been picked as a witness in a court case. This will impair his objectivity and result in an intimidation threat.	The auditor should refuse to represent the client as this will compromise their independence
The Audit Senior being nephew of the Chief Accountant in MM Co Ltd poses a threat of familiarity which could adversely affect the outcome of the audit.	The Audit Senior assigned to the audit of MM Co Ltd and is socially connected to the client's Chief Accountant should be changed from this engagement and an independent one should be assigned to the audit of MM Co Ltd.
The request by MM Co. Ltd's Finance Manager for issue of a favourable audit opinion different from the previous year's adverse opinion issued by the previous audit firm, failure to which, the Finance Manager would influence nomination of another firm for a favourable opinion amounts to an intimidation threat.	Bex Chartered Accountants should indicate to the Finance Manager that the auditors would stick to agreed terms of the current engagement and that they would perform the audit with utmost professionalism without compromise.

(b)

(i) **Event 1:**

The event involving a case against the company by the locals took place after the period end. This is when the matter has been brought to the attention of the auditors. Assuming that the matter did not relate to the financial year ended 31 December 2021, this matter is a non-adjusting event. It will not require the financial statements to be amended.

There will be need to discuss the matter with management and find out what its view on the matter is. Further, it will be necessary to review the financial statements to ensure that no provision was made regarding this matter. In the event that the legal case related to a matter that arose during the financial year to 31 December 2021, then management will require to amend the financial statements and create a provision for the likely liability

(ii) **Event 2**

The auditor has a responsibility to look out for subsequent events between the period end and the date of the audit report. Event 2 happened on 15 April 2022 before the audit report was signed. The event does not give evidence of conditions that existed at the period end as such is described as a non-adjusting event.

The auditors will require to enquire of management on how this has been dealt with in the financial statements. If the event has resulted in an adjustment in the financial statements, the auditors will need to request management to reverse the entries.

The matter appears to be significant and possibly material to the financial statements and management may wish to disclose it in the notes to the financial statements. The auditors may wish to emphasize and make reference to the matter in the audit report and this may be done in the emphasis of matter paragraph.

(iii) **Event 3**

This event took place on 10 July 2022 many months after the signing of the audit report and after the annual general meeting. The auditor's duty in relation to subsequent events ends when the audit report has been signed.

The auditors have no responsibility with regards this event and if it is brought to the attention of the auditors, they will advise management that it does not affect the financial statements for the year ended 31 December 2021 and any effect would be considered in the following financial period.

(c) **Distinction between qualified & adverse opinions:**

The distinction between these two forms of modification of the audit opinion is with regards the materiality and pervasiveness of the matter of concern for the auditor as explained below:

Qualified opinion (except for)

Opinion given by the auditor due to a disagreement on a matter that is material but not pervasive.

Adverse opinion

Opinion given by the auditor due to disagreement on a matter that is material and pervasive.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 13 JUNE 2024

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**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**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.

<u>QUESTION ONE</u> - (COMPULSORY)

Gideon Sipahu is a sole trader running a manufacturing business. His annual turnover has always exceeded K800,000. The following is the statement of profit or loss for the year ended 31 December 2024:

		K	K
Gross profit			3,160,000
Add:			
Other income	(Note 1)		418,000
			3,578,000
Less expenses			
Salaries and wages	(Note 2)	814,000	
Rent and rates	(Note 3)	201,000	
Depreciation		306,200	
Irrecoverable debts	(Note 4)	112,400	
Professional and legal fees	(Note 5)	218,800	
Other general expenses	(Note 6)	1,102,600	
			(2,755,000)
Net profit for the year			823,000

The following additional information is relevant:

(1) Other income is made up of royalties K125,800, dividends K69,020, management consultancy fees K160,310 and interest on treasury bills K62,870. These amounts are the actual cash received in each case. Withholding tax had been deducted at source where appropriate.

(2) Salaries and wages include K248,400 nominal salary for Sipahu and K162,100 salary for his wife, Mrs. Sipahu who assists in the running of the business as an Accountant. Other Accountants employed by Sipahu are paid an annual salary of K124,600 each. The balance of salaries was paid to other employees.

(3) Rent and rates include K98,400 rentals paid in respect of Sipahu's living accommodation. The balance of the rent and rates was paid in respect of business premises.

(4) Irrecoverable debts

	K		K
Trade debts written off	71,200	Balance b/f:	
Loans to former employees written off	62,400	General allowance	21,700
		Specific allowance	18,000
Balance c/f:		Loans to employees written off now recovered	20,800
General allowance	14,300	Trade debts recovered	8,600
Specific allowance	33,600	Profit or loss (expense)	112,400
	181,500		181,500

(5) Professional and legal fees are made up of accountancy and audit fees K104,500, legal fees incurred on purchase of prime land K51,000, fines for over speeding offence charged on Sipahu K2,680, filling tax returns for the year ended 31 December 2024 K5,200 and labour cost paid to the firm constructing his house K55,420.

(6) Other general expenses comprise the following:

	K
Donation to approved public benefit organisations	44,100
Donations to political parties	65,980
Penalties for late payment of tax	38,800
Marketing expenses	203,700
Entertaining customers & suppliers	74,900
Loss on disposal of delivery trucks	31,240
Profit on disposal of retail shop	(151,200)
Staff Christmas party	111,060
Staff canteen expenses	76,480
Other revenue allowable expenses	607,540
	1,102,600

(7) **Buildings**

Retail shop

The retail shop was acquired in 2015 at a cost of K230,000 including the cost of land amounting to K40,000. This shop was sold on 30 September 2024 at its market value of K380,000 including the market value attributable to land amounting to K60,000, giving rise to a profit on disposal of K151,200 shown above. The income tax value of the retail shop was K155,800 as at 1 January 2024.

Second hand building

Mr. Sipahu acquired a second-hand building at a cost of K1,430,000 on 1 August 2024. The cost of the building was made up of land K180,000, staff canteen K240,000, retail shop K200,000 and factory K810,000. The building was immediately brought into use.

(8) **Implements, plant and machinery**

At 1 January 2024, Mr. Sipahu held the following assets qualifying for capital allowances:

Asset	**Income tax value at 1 January 2024**	**Original cost**
	K	**K**
Fixtures & fittings	93,750	125,000
Delivery trucks	80,000	320,000

The following transactions took place during the year ended 31 December 2024:

Date	**Transaction**	**Cost/(proceeds)**
		K
10 February 2024	Bought a manufacturing equipment	812,000
15 April 2024	Bought a Toyota Vanguard Car	290,000
20 April 2024	Bought office equipment	110,000
5 May 2024	Bought Mitsubishi truck	400,000
28 May 2024	Sold delivery trucks	(145,000)
1 August 2024	Bought cash registers	90,000

Mr. Sipahu uses the Toyota Van Guard Car for both business and private purposes. It has been agreed with the Commissioner General that the business use in the car is 60%.

(9) **Provisional income tax**

Mr. Sipahu estimated the taxable business profit amounting to K1,090,000 for the year ended 31 December 2024. He calculated provisional income tax on this profit and paid the tax on the appropriate due dates.

Required:

(a) Calculate the amount of provisional income tax paid by Mr. Sipahu for the tax year 2024. Your answer should show the due dates and amount of tax paid on each due date.

(5 marks)

(b) Calculate the amount of capital allowances claimable by Mr. Sipahu for the tax year 2024 on:

(i) Implements, plant and machinery. (8 marks)

(ii) Buildings. (7 marks)

(c) Calculate the amount of tax adjusted business profit for the year ended 31 December 2024.

(12 marks)

(d) Calculate the amount of income tax payable by Mr. Sipahu for the tax year 2024. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section. Attempt any THREE (3) questions.

QUESTION TWO

You are employed in the Tax department of a firm of Chartered Accountants. Your firm is preparing a training workshop for newly recruited trainee accountants. The Tax Manager has asked you to develop notes explaining the functions of taxation in an economy and the qualities of a good tax system.

The Tax Manager has additionally asked you to prepare the VAT return for Martha Nyondo, a VAT registered sole trader who runs a chain of wholesale outlets making standard rated supplies. You have been given the following information relating to the transactions entered into by Martha during the month of March 2024:

(1) Gross sales for the month amounted K19,500,000. This comprised of cash sales of K8,500,000. This amount is before deducting a cash discount of 1.5%, which was given to all the cash customers for prompt payment. The remaining balance of the sales represent credit sales for the month and the amount will be settled in May 2024 less a trade discount of 2.5% which was given to all the credit customers. All sales are standard rated for VAT purposes.

(2) Standard rated purchases for the month totalled K13,920,000 (VAT inclusive). These included goods with a cost of K92,800 (VAT inclusive) which were withdrawn from the business by Martha for her personal and family use.

(3) Standard rated overheads incurred during the month totalled K532,440 (VAT inclusive) and comprised the following items:

	K
Entertainment expenses for customers	171,680
Entertainment expenses for employees	104,400
Utility expenses relating to Martha's accommodation	24,360
Miscellaneous business expenses	232,000
	532,440

(4) Martha purchased Ford Ranger Single cab delivery van at a cost of K1,480,000 to be used both in the business and for private purpose. It has been agreed with the Commissioner General that her business use of the delivery van is 75%.

(5) Standard rated motor vehicle running expenses for the van during the month were K35,600 and comprised the following:

	K
Spare parts	14,500
Lubricants	8,600
Diesel	12,500
	35,600

(6) Martha sold some computers which were in excess of the business need for K29,000 (VAT inclusive).

(7) Unless specifically stated, all the above persons are registered for Value Added Tax and the transactions are stated exclusive of Value Added Tax.

Required:

(a) Prepare notes to be used in the training workshop:

(i) Explaining four (4) functions of taxation in an economy. (4 marks)

(ii) Explaining four (4) qualities of a good tax system. (4 marks)

(b) Compute the value added tax payable by Martha for the month of March 2024. **You should clearly show whether VAT is chargeable or claimable on each of the above items.**

(12 marks)

[Total:20 Marks]

<u>QUESTION THREE</u>

Moze Daka and Jenipher Daka got married after they completed their University education in 1998 and had their first daughter by the name of Grace in the year 2000. They both graduated as medical doctors at the University of Zambia. They immediately left Zambia for employment in a country known as Konrovia. Mr and Mrs Daka had two other children Malumbo and Taizya who were both born in the Konrovia.

Using the savings from his employment earnings, Moze purchased a house in Konrovia that has now been let on a long term basis. In September 2023, the family came back to Zambia following the mass recruitment of Medical personnel in the country.

On 1 April 2024 Mr Daka was employed by the Government as a Doctor on a three (3) year contract period at the University Teaching Hospital (UTH). The following information relates to the period from 1 April 2024 after being employed by the government:

(1) Mr Daka was entitled to an annual salary of K486,000, together with the following allowances:

	K
Housing allowance per month	10,500
Medical allowance per annum	97,200
Domestic servant allowance per month	3,500

Income tax deducted under pay as you earn during the year ended 31 December 2024 amounted to K144,185.

(2) Mr. Daka was provided with a personal to holder car which was purchased at a cost of K390,000. The car has a cylinder capacity of 3,200 cc and it was agreed with the Commissioner General that 25% of the usage of the car was for private purposes.

(3) Mr Daka has been receiving rental income of K960,000 per annum from his house situated in the Konrovia. This amount is net of Konrovia withholding tax at the rate of 20% of the gross amount.

(4) In addition, he also received the following income during the tax year 2024 from Konrovia which was converted into the Zambian currency:

	K
Dividends from a company resident in the Konrovia	36,000
Interest from savings with a Konrovia bank	54,000

All of the amounts of foreign income are net of withholding tax charged by the tax authorities in the Konrovia at the rate of 10%.

(5) All of the three (3) children are not living with their parents. Each one of them is in full time employment with Zambian companies.

(6) Assume that there is no double taxation treaty between Zambia and Konrovia and that the double taxation relief is given in Zambia unilaterally.

Required:

(a) Explain the meaning of domicile and advise Mr. Moze Daka of his domicile status as well as the domicile status of each of the members of his family.
(3 marks)

(b) Explain why Moze Daka will be regarded as being resident and ordinarily resident in Zambia in the tax year 2024. (2 marks)

(d) Calculate the income tax payable by Moze Daka for the tax year 2024. (15 marks)

[Total: 20 Marks]

QUESTION FOUR

You are employed in a firm of Chartered Accountants. You have been provided with following information extracted from the files of three (3) clients of your firm:

(1) Mr Lupinda is a commercial farmer. His final taxable farming profits for the 2024 tax year, will be K458,500, from an annual turnover K897,600. He will also receive consultancy fees of K38,250 (net) in the tax year 2024, from consultancy services he will provide being a qualified agronomist.

(2) Mrs Nyawa will commence in business on 1 January 2024 running a retail business. The monthly turnover from the business will be K56,000, whilst purchases will average K29,500 per month. Operating expenses to be incurred wholly and exclusively for business purposes will average K11,400 per month, whilst depreciation charges will be K23,400 per year. Capital assets to be used in the business will be purchased on 1 January 2024 and these will include fixtures with a cost of K15,000, office equipment with a cost K12,000 and a delivery van with a cost of K90,000.

(3) Realz Realtors Ltd is a Zambian resident company engaged in real estate. The company owns the following properties which will be let out on 1 January 2024 for commercial purposes:

(i) Five (5) units of residential flats receiving gross monthly rentals of K6,500 from each flat per month. He will incur maintenance expenses of K1,150 per month on each flat.

(ii) Three (3) boarding houses in Lusaka. Each of the boarding houses has ten (10) student bed spaces, and he will charge K1,200 per bed space per month. Property maintenance expenses relating to each boarding house were K1,350 per month.

(iii) A block of six (6) office units at gross monthly rentals of K8,500 per office. He will incur maintenance costs K1,650 per month for the property.

Required:

(a) Explain, with reasons, whether each one of the above persons will be required to pay provisional income tax for the tax year 2024. (6 marks)

(c) Compute the amount of tax which will be paid in the tax year 2024 by:

(i) Mr Lupinda (5 marks)

(ii) Mrs Nyawa (4 marks)

(iii) Realz Realtors Ltd (5 marks)

[Total: 20 Marks]

QUESTION FIVE

You recently graduated as a Chartered Accountant student. You have been shortlisted to undergo a special assessment for a Senior Examining Customs Officer position vacancy at the Zambia Revenue Authority Headquarter. There have been rampant smuggling activities in various borders and some media houses claim that some of these activities are aided by ZRA Officers. The main objective of the assessment set by the panellists was to test your understanding of ethical issues in taxation and customs evaluation. You have, therefore, been given information relating to Sichizya.

Sichizya, a sole trader, imported a brand new 3400cc Toyota Fortuner (SUV) from Japan in February 2024. The cost price of the vehicle was $37,800. He paid insurance cost of $3,150 and freight charges of $4,500. Incidental costs incurred by Sichizya from the port of Dar-es-Salaam to Nakonde border post amounted to $2,775. Other costs incurred by Sichizya from Nakonde to Mpika, where his business is situated, including motor vehicle registration amounting to K3,600. The Commissioner General approved an exchange rate of K26.80 at the date when the vehicle arrived at Nakonde border post.

Required:

(a) Explain the importance of professional ethics for professional accountants. (3 marks)

(b) Explain how the fundamental principles of integrity, objectivity and professional behaviour apply in the provision of tax services. (6 marks)

(d) State any four (4) functions of the Customs Division of the Zambia Revenue Authority (ZRA). (4 marks)

(e) Calculate the total import taxes paid by Sichizya on the importation of the vehicle. (7 marks)

[Total: 20 marks]

END OF PAPER

CA 2.4 TAXATION: SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Provisional income tax paid for the year ended 31 December 2024

	K	K
Estimated taxable profit		1,090,000
Provisional Income Tax		
First K61,200 @0%		0
Next K24,000 @20%		4,800
Next K25,200 @30%		7,560
Excess (K1,090,000 – K110,400) @37%		362,452
Provisional tax paid		374,812

Quarterly instalment = K374,812/4 = K93,703

Instalment	Quarter ended	Amount	Payment not later than
1st	31 March 2024	K93,703	10 April 2024
2nd	30 June 2024	K93,703	10 July 2024
3rd	30 September 2024	K93,703	10 October 2024
4th	31 December 2024	K93,703	10 January 2025

(b) Capital allowances claimable by Mr. Sipahu for the tax year 2024

(i) Implements, plant and machinery

	K
Fixtures & fittings	
Wear & tear (K125,000 x 25%)	31,250
Delivery trucks	
Balancing charge (K80,000 – K145,000)	(65,000)
Manufacturing equipment	
Wear & tear (K812,000 x 50%)	406,000
Toyota Van Guard Car	
Wear & tear (K290,000 x 20% x 60%)	34,800
Office equipment	
Wear & tear (K110,000 x 25%)	27,500
Mitsubishi truck	
Wear & tear (K400,000 x 25%)	100,000
Cash registers	
Wear & tear (K90,000 x 25%)	22,500
Total capital allowances	557,050

(ii) Buildings

Retail shop	K
Income tax value b/f	155,800
Disposal proceeds (restricted to cost)	(190,000)
Balancing charge	(34,200)
Staff canteen	
Wear & tear (K240,000 x 5%)	12,000
Factory	
Wear & tear (K810,000 x 5%)	40,500
Retail shop	
Wear & tear (K200,000 x 2%)	4,000
Total capital allowances	22,300

Workings

Qualifying expenditure

Total cost	1,430,000
Less cost of land	(180,000)
Qualifying cost	1,250,000

K1,250,000 x 10% = K125,000

(c) Adjusted business profit for the year ended 31 December 2024

	K	K
Net profit as per accounts		823,000
Add:		
Wife's excess salary (K162,100 – K124,600)	37,500	
Mr. Sipahu's nominal salary	248,400	
Rent & rates	98,400	
Loans to former employees written off	62,400	
Depreciation	306,200	
Legal fees – purchase of prime land	51,000	
Fines for over speeding offence	2,680	
Labour cost – residential house	55,420	
Donations to political parties	65,980	
Penalties for late payment of tax	38,800	
Entertaining customers & suppliers	74,900	
Loss on disposal of trucks	31,240	
Staff canteen expenses	76,480	
		1,149,400
		1,972,400
Less:		
Royalties	125,800	

Dividends	69,020	
Management consultancy fees	160,310	
Interest on treasury bills	62,870	
Decrease in general allowance	7,400	
Loans previously written off now recovered	20,800	
Profit on disposal of retail shop	151,200	
Capital allowances (557,050 + 22,300)	579,350	
		(1,176,750)
Taxable business profits		795,650

(d) Income tax payable by Mr. Sipahu for the tax year 2024

	K	K
Taxable business profits		795,650
Add:		
Royalties (K125,800 x 100/85)	148,000	
Management fees (K160,310 x 100/85)	188,600	
		336,600
Taxable income		1,132,250
Income Tax		
First K61,200 @0%		0
Next K24,000 @20%		4,800
Next K25,200 @30%		7,560
Excess (K1,132,250 – K110,400) @37%		378,085
Income tax liability		390,445
Less:		
WHT – royalties (K148,000 x 15%)	22,200	
WHT – Management fees (K188,600 x 15%)	28,290	
Provisional income tax paid	374,812	
		(425,302)
Income tax refund		(34,857)

SOLUTION TWO

(a)

(i) Functions of taxation in an economy

(1) Source of Revenue for Central Government

Taxes are levied in order to raise revenue for the central government. This revenue is then used to meet public expenditure, on the provision of public goods and services, such as Education, Health, Road network and infrastructure, Defence etc.

(2) Influencing economic activity in the country

Government uses taxes to influence the level of economic activity in the country. This is done through giving tax incentives to individuals and institutions that engage in activities which contribute towards economic growth.

(3) Redistributing income and wealth

Taxation is used as mechanism for redistribution of wealth within a country. Social income redistribution among various groups of citizens: from wealthy to deprived ones, which ultimately provides for the assurance of the social stability of the population.

(4) Protecting local Industry:

Local industries are normally protected by the government through the use of heavy import tariffs. This makes the imported goods more expensive then the local goods and thereby encouraging the production of local goods.

(5) Maintaining the wellbeing of the environment and society

Taxes are also used to maintain the well-being of the environment. For example, in some countries, heavy taxes are imposed on income and gains arising from activities which are not friendly to the environment such activities contributing to global warming which are discouraged by using taxes levied on the income r on the acquisition of assets used in the conduct of those activities.

(ii) Qualities of good tax system

(1) Taxation should bear as lightly as possible on production. Taxes should not be so high that they make production very expensive. Taxes that bear heavily on production lead to lower production.

(2) Taxes should be easy and cheap to collect and fall directly on the ultimate payer. Resources devoted to tax collection are wasted if the amounts collected are low.

(3) Taxes should be certain. If tax rules are complex, they can be subverted and evaded. If tax rules can only be understood by specialists, then only taxpayers who can afford to pay the specialists are likely to comply with the rules. Therefore, tax rules should be easy to understand.

(4) Taxes should bear equally so as to give no individual an advantage. This simply means that taxes should be levied on the basis of ability to pay. If taxes are not based on

this principle, then persons in low income groups will find taxes to be more burdensome than those in high income groups.

(5) A tax must not hinder efficiency. Where it is not possible to achieve this, the tax should involve the least loss of efficiency.

(6) A tax should be compatible with the foreign tax systems. In the case of Zambia, the tax system should be compatible with the tax systems of the SADC and COMESA member states.

(b) COMPUTATION OF VAT FOR THE MONTH OF MARCH 2024

	K	K
Output Tax		
Standard rated sales		
-Cash sales (K8,500,000 x16%)		1,360,000
-Credit sales (K11m x 97.5% x16%)		1,716,000
Computers (K29,000 x 4/29)		4,000
		3,080,000
Input Tax		
Standard rated purchases		
(K13,920 - K92,800) x 4/29	1,907,200	
Drawings (VAT irrecoverable)	0	
Entertaining customers (irrecoverable)	0	
Entertaining employees (irrecoverable)	0	
Utility expenses for Martha's accommodation	0	
Miscellaneous business expenses (232,000 x4/29)	32,000	
Ford Ranger (K1,480,000 x 16%) x 75%	177,600	
Spare parts (irrecoverable)	0	
Lubricants (irrecoverable)	0	
Diesel (K12,500 x16%) x 90% x 75%	1,350	
		(2,118,150)
VAT payable		961,850

SOLUTION THREE

(a) Domicile refers to an individual's permanent home. Primarily, an individual is domiciled in the country of birth. The domicile acquired at birth is known as the domicile of origin.

Mr. Moze Daka, Mrs. Jenipher Daka and their first daughter Grace are all domiciled in Zambia by birth. Though not expressly stated in the question, most likely, Mr. and Mrs. Daka were born in Zambia.

The other children, Malumbo and Taizya are both domiciled in the Konrovia as that is the country of their birth. They may acquire the domicile of choice by renouncing their domicile of origin upon attaining the age of 16 years of birth, and choosing another country as their domicile.

(b) An individual is resident in Zambia if they are physically present in Zambia for a period of not less than 183 days in the charge year. Therefore Mr. Moze Daka will be regarded as being resident in Zambia because he has lived for more than 183 days from September 2023 when he came from the Konrovia.

Individuals who come to Zambia with the intention of remaining here for more than 12 months are deemed to be resident and ordinarily resident in Zambia from the date of arrival. As for Mr. Daka he was regarded as ordinarily resident in Zambia from the date of arrival because he seemed to have come with the intention of finding a job in Zambia following the mass recruitment of medical personnel.

(c) MOZE DAKA
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

Emoluments from employment	K	K
Salary (K486,000 x 9/12)		364,500
Housing allowance (K10,500 X 9)		94,500
Medical allowance (K97,200 9/12)		72,900
Domestic servant allowance (K3,500 X 9)		31,500
		563,400
Foreign income		
Dividends (K36,000 X 100/90)	40,000	
Interest (K54,000 X 100/90)	60,000	
		100,000
Taxable income		663,400
Computation		
First K61,200 x 0%		0
Next K24,000 x 20%		4,800
Next K25,200 x 30%		7,560
Excess (K663,400 – K110,400) x 37%		204,610
		216,970
Less:		

Income tax paid under pay as you earn	144,185	
Double taxation relief:		
Dividends	4,000	
Interest	6,000	
		(154,185)
Income tax payable		62,785

Workings

(1) Double taxation relief on dividends

Foreign tax: K40,000 x 10% = K4,000

Equivalent Zambian tax:

$\frac{\text{Gross foreign income}}{\text{Total assessable income}}$ x Zambian tax charge

$\frac{K40,000}{K663,400}$ x K216,970

= K13,082

The double taxation relief is K4,000 which is the lower.

(2) Double taxation relief on interest

Foreign tax: K60,000 x 10% = K6,000

Equivalent Zambian tax

$\frac{K60,000}{K663,400}$ x K216,970

= K19,623

The double taxation relief is K6,000 which is the lower.

SOLUTION FOUR

(a) The status of the various taxable persons is as follows:

(1) Mr Lupinda will be required to pay provisional income tax on his taxable profit from farming since this income for the year will exceed K61,200 and that income is not in the form of emoluments from employment that are taxable under the Pay As You Earn system.

However, he will not be required to pay provisional income tax on the consultancy fees as this will be subjected to withholding tax.

(2) Mrs. Nyawa will not be required to pay provisional income tax because the annual turnover from her business is below K800,000. Provisional income tax applies to businesses generating annual turnover over K800,000.

Mrs. Nyawa will be assessed to tax under turnover tax based on the gross turnover arising from his business.

(3) Realz Realtors Ltd will not be required to pay provisional income tax because all of its income is from letting out of real property. Income from letting of property is subjected to rental income tax.

(b) (i) MR LUPINDA'S

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	Total	Non farming income	Farming income
Non-farming income	K	K	K
Consultancy fees (K38,250 x100/85)	45,000	45,000	-
Farming profits	458,500	-	458,500
	503,500	45,000	458,500
Less tax-free income	(61,200)	(45,000)	(16,200)
	442,300	0	442,300
Income tax on farming income			
K442,300 x 10%			44,230
Less WHT on Consultancy fees			(6,750)
(K45,000 x 15%)			37,480
Income Tax payable			

(ii) MRS NYAWA

COMPUTATION OF TURNOVER TAX PAID IN THE TAX YEAR 2024

	K
Monthly Turnover	56,000
Turnover Tax	
On first K1,000 x 0%	0
On excess (K56,000 - K1,000) x 4%	2,200
	2,200
Total turnover tax for the year	
(K2,200 x 12)	26,400

(iii) REALZ REALTORS LTD

COMPUTATION OF RENTAL INCOME TAX PAYABLE FOR THE TAX YEAR 2024

Gross Rental income	K
Residential flats	
(K6,500 x 5 flats) x 12	390,000
Boarding houses	
(K1,200 x 10 spaces x 3) x 12	432,000
Office units	
(K8,500 x 6 office units) x 12	612,000
	1,434,000
Rental income Tax	
On first K12,000 x 0%	0
On next (K800,000 – K12,000) x 4%	31,520
On excess (K1,434,000 – K800,000) x 12.5%	79,250
Total Rental income tax	110,770

SOLUTION FIVE

(a) Importance of professional ethics

(1) Professional codes of ethics for the tax profession are designed to guide the individual behaviour of professional accountants.
(2) Professional Accountants require an ethical code because they hold positions of trust, and people rely on them and their expertise. Having such a codes of ethics helps in ensuring that tax practitioners behave ethically in the provision of tax services with the level of expertise expected of them without abusing the trust placed upon them
(3) A tax practitioners' responsibility goes beyond just exclusively satisfy the needs of their individual clients or employer to serving the public interest, which is the collective wellbeing of the community of people and institutions the professional accountant serves. Ethical guidance for tax practitioners is therefore needed to ensure they serve the public interest.

(b) Fundamental principles

Integrity

Members shall be straightforward and honest in all professional and business relationships. The principles of honesty and integrity impose an obligation on the practitioner to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.

This means that a member providing taxation services must not knowingly be associated with reports, returns, communications or other information where the member believes that the information contains a materially false or misleading statement or calculation or statements or information furnished recklessly.

Objectivity

Members shall not allow bias, conflict of interest or undue influence of others to override professional or business judgements. Members shall be impartial and not allow prejudice or bias, conflict of interest or the influence of others to override their objective judgement in relation to tax matters.

In situations where a member is required to act as an advocate for a client when representing or assisting them before tribunals or courts of law, the member shall ensure that the client is aware that the member has an obligation not to mislead the Court or Tribunal and to safeguard their professional objectivity.

Professional behaviour

Members shall comply with relevant laws and regulations to avoid any action that discredits the profession. Members shall act in a manner consistent with the good reputation of the Institute and the tax profession, refraining from any conducts that might bring the Institute and/or tax profession into disrepute.

Members should conduct themselves professionally with due consideration towards clients, third parties, other members of the tax profession, staff, employers and the general public.

All professionals who provide tax services shall do so in accordance with appropriate standards of professional and ethical conduct.

(c) Functions of the customs division

(1) The division collects revenue for the central Government through customs duty, excise duty, import VAT and other taxes.

(2) The division is responsible for protecting Zambian industries from unfair foreign competition through imposition of high taxes on imports.

(3) The division is responsible for preventing smuggling. I.e. Importation or exportation of goods without being cleared by customs so that trade taxes are not charged on them.

(4) The division provides trade data and statistics to the Government via certain agencies such as the Bank of Zambia, Central Statistics Office.

(5) The division is also responsible for protecting the public by seizing harmful/dangerous goods such as narcotic and psychotropic substances etc.

(d) Import taxes paid by Sichizya

	$
Cost	37,800
Insurance	3,150
Freight charges	4,500
Incidental costs	2,775
VDP in US$	48,225
Exchange rate	x K26.80
VDP in ZMW	1,292,430

	Value of the vehicle K	Import taxes K
Customs value	1,292,430	
Customs duty @30%	387,729	387,729
	1,680,159	
Excise duty @30%	504,048	504,048
	2,184,207	
Import VAT @16%	349,473	349,473
Total value of the vehicle	2,533,680	
Total import taxes		1,241,250

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA2.5: FINANCIAL MANAGEMENT

FRIDAY 14 JUNE 2024

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. Modified Internal Rates of Return, Formulae 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

You are a trainee Chartered Accountant working under the mentorship of a Chartered Accountant who is the Financial Manager of a renowned manufacturing company, MK Plc. The Financial Manager has presented you with three situations which require your financial advice.

SITUATION 1

There are four (4) projects competing for limited resources amounting to K1 million, and their respective cash flows are given below:

Year	Description	Project A	Project B	Project C	Project D
0	Cost (K)	(320)	(600)	(300)	(400)
1	Cash Flow (K)	220	211	199	182
2	Cash Flow (K)	225	212	205	184
3	Cash Flow (K)	226	214	–	189
4	Cash Flow (K)	–	213	–	–

The cash flows given above are before tax.

SITUATION 2

MK Plc has a machine that costs K72,000 with a maximum life of three (3) years. There is a concern as to how often the machine should be replaced. The following information relates to the machine:

Year	Annual Running Costs (K)	Estimated Disposal Values (K)
1	7,200	24,000
2	9,600	16,600
3	12,000	9,600

SITUATION 3

MK Plc is considering whether to buy a new machine at a cost of K350,000 or alternatively to lease it for K126,000 per year. The lease payments terms require that the annual instalment is payable at the start of each year. The Finance Manager has negotiated a loan facility at an interest rate of 9.33% per year if it were to involve outright procurement of the machine.

The machine has a life span of five (5) years, and a disposal value of K50,000 at the end of its life span if procured. Capital allowances are available at an annual rate of 25% (reducing balance).

Other information

MK Plc has an asset beta of 0.91 and equity premium of 10%. The interest rate on government bonds is 8%. MK Plc has 12% irredeemable bonds in issue with a nominal value of K100. The market price is K95 ex interest and the interest is paid semi-annually. The company gearing level is 45% based on debt to equity ratio. MK Plc uses the current cost of capital to evaluate all its proposed investments. The corporate tax is 25% per year and it is payable at the end of the year.

Required

(a) Compute the current cost of capital of MK Plc. (7 marks)

(b) Based on situation one (1) above, advise the Financial Manager what the company's investment decision should be if:

(i) There is no capital rationing.

(ii) Capital is restricted to K1 million at time 0 and the projects are infinitely divisible.

(iii) Capital is restricted to K1 million at time 0 and the projects are not infinitely divisible.

(13 marks)

(c) Evaluate how often the machine should be replaced based on situation two (2) above. (10 marks)

(d) Evaluate whether the machine should be leased or purchased based on situation three (3) above. (10 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

(a) As the Finance Manager for the Radisson Blue Hotel, you have been requested to make notes, and explain the following topics to its Management Trainees.

Required:

(i) Explain the two (2) basic types of leases available to the hotel, a two (2) benefits associated with each one of them. (6 marks)

(ii) Discuss two (2) consequences of overtrading and explain how the hotel can resolve them. (4 marks)

(iii) Explain any two (2) main features of and two (2) attractions of convertible bonds to an investor and to the hotel as a potential issuer. (4 marks)

(b) The hotel has annual credit sales of K24 million and cost of sales of K12 million. The company's current assets are comprised of inventory and accounts receivable. Its current liabilities consist of accounts payable and an overdraft with an annual average interest rate of 15%. The company allows a credit period of one month to its trade debtors and on average is given a credit period of two (2) months by its trade creditors. It has a current ratio of 1.4 and an operating cycle of four (4) months.

Required:

Determine the following:

(i) Size of its overdraft, (2 marks)

(ii) The annual cost of the overdraft and (2 marks)

(iii) Its net working capital. (2 marks)

[Total: 20 Marks]

QUESTION THREE

CEEC Plc a company listed on LuSE is looking at its cost of capital as it prepares to make a bid to buy a rival unlisted company, West Energy Ltd. Both companies are in the energy business sector. Financial information on CEEC Plc and West Energy Ltd is as follows:

	CEEC Plc		West Energy	
	K'm	K'm	K'm	K'm
Non-current assets		360		250
Current assets	70		70	
Current liabilities	30		40	
Net current assets		40		30
Total assets less current liabilities		400		280
Ordinary shares, par value 50 ngwee	150		50	
Retained earnings	100		30	
Total equity		250		80
7% bonds, redeemable at par in seven years' time		150		
9% bonds, redeemable at par in two years' time				200
Total equity and non-current liabilities		400		280

Other relevant financial information:

Risk - free rate of return	4.0%
Average return on the market	10.5%
Taxation rate	30%

West Energy Ltd has a cost of equity of 12% per year and has maintained a dividend payout ratio of 45% for several years. The current earnings per share of the company is 80 ngwee per share with growth in its earnings at an average rate of 4.5% per year in recent years.

The ex div share price of CEEC Plc is K4.20 per share and it has an equity beta of 1.2. The 7% bonds of the company are trading on an ex interest basis at K94.74 per K100 bond. The price/earnings ratio of CEEC Plc is eight times.

The directors of CEEC Plc believe a cash offer for the shares of West Energy Ltd would have the best chance of success. It has been suggested that a cash offer could be financed by debt.

Required:

(a) Calculate the weighted average cost of capital of CEEC Plc on a market value weighted basis. (10 marks)

(b) Calculate the total value of the target company, West Energy Ltd, using the following valuation methods:

  (i) Price/earnings ratio method, using the price/earnings ratio of CEEC Plc; and (4 marks)

  (ii) Dividend growth model. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

ZOE Plc is considering a business expansion project that has provided a positive net present value (NPV). The company is undecided on whether to finance the project using convertible loan notes or issue additional shares to the public. The management strongly believes this project will make the company to achieve the shareholder's primary objective. However, the Finance Manager is concerned that there are several stakeholders in a company and this presents a problem in deciding which stakeholder objectives are the more important and how to satisfy several different types of stakeholder at the same time. Besides, the Financial Manager is concerned that using convertible loan notes might increase the company gearing level and affect the dividend policy.

Required:

(a) Explain the conflicting relationship between ZOE Plc's long-term debt holders, the management and the shareholders in achieving the primary objective. (6 marks)

(b) Explain the advantages of ZOE Plc using convertible loan notes to finance the investment. (5 marks)

(c) Discuss the dangers of ZOE Plc having a high gearing level. (6 marks)

(d) Explain the reason the market value of convertible loan notes is likely to be affected by the dividend policy of the issuing company. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

MN Plc Financial Manager has been assigned by the Board of Directors to advise on its Financial Objectives. The following information about the company is available:

1) Sales and cost of sales are expected to increase by 10% and 12% respectively in the year 2024.
2) Operating expenses are expected to increase by 4% each year
3) The company's tax rate will remain constant at 30% per annum in the foreseeable future.
4) The ratios of receivables to revenue and payables to cost of sales will remain the same for the next three years.

5) The non-current assets include land which is not depreciated in the company's books. Depreciation on the buildings is 5% per annum on cost. The buildings had an original cost of K300,000. Capital allowances on the buildings are 2% per annum on cost. All other non- current assets used by the company are rented.
6) The receivables are estimated a 20% of sales revenue while the payables are estimated at 25% of cost of sales.
7) Dividends will grow at 15% per annum into the foreseeable future.
8) Additional inventory will be purchased for K40,000 at the beginning of 2024. The value of inventory is likely to remain at K390,000 for the foreseeable future.
9) The average price earnings ratio of listed companies in the same industry as MN plc is 12.

A Summary of the financial statements for the year ended 31 December 2023 is as follows:

MN Ltd

Summarized Statement of Profit and Loss for The Year Ended 31 December 2023.

	K'000
Revenue	2,000
Less: cost of sales	(1,200)
Gross Profit	800
Less: Operating expenses	(425)
Interest	(20)
Tax liability	(92)
Net profit	**263**

Dividend declared K87,000

Summarized Statement of Financial Position as at 31 December 2023.

ASSETS	**K'000**
Non -Current Assets	
Land	500
Buildings	320
Total non -current assets	820
Current Assets	
Inventory	350
Receivables	205

Cash and bank	85
Total current assets	640
Total Assets	1,460
EQUITY AND LIABILITIES	
Equity	
Ordinary share capital of K2 each	772
Retained profits	139
Total Shareholder's funds	911
Non-current Liabilities	
10% loan notes	200
Current Liabilities	
Trade payables	170
Tax	92
Dividend	87
Total Current Liabilities	349
Total Equity and Liabilities	1,460

The company's objective is to earn a before-tax return on the closing book value of shareholders' funds of 20%.

Required:

(a) Prepare the forecast statement of profit and loss for the year 2024. (9 marks)

(b) Based on your forecast statement in (a) state whether the company is likely to meet its financial objectives. (2 marks)

(c) Prepare a cash flow forecast for the year 2024 and interpret your results. (9 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 2.5: FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Current Cost of Capital
Cost of Equity:

0.91 = Be x 0.55/0.55+0.45(1-0.25)

Be = 1.47

Ke = 8% + 1.47(10%) = 22.7%

Cost of debt:

$$\text{Cost of loan capital} = \left(1 + \frac{6}{95}\right)^2 - 1 = 13.0\%$$

Kd = 13% (1-0.25) = 9.75%

Cost of Capital = (22.7% x 0.55) + (9.75% x 0.45) = 16.87% round off 17%

(b) Capital rationing
Project A

Year	0	1	2	3
Cash flow (K)	(320)	220	225	226
Tax@25%	-	55	56.25	56.5
Net Cash Flow (K)	**-**	**165**	**168.75**	**169.5**
Discount@17%	1.000	0.855	0.731	0.624
Present Values (K)	**(320)**	**141.08**	**123.36**	**105.77**
NPV= K50.21				

Project B

Year	0	1	2	3	4
Cash flow (K)	(600)	211	212	214	213
Tax@25%	-	52.75	53	53.5	53.25
Net Cash Flow (K)	**(380)**	**158.25**	**159**	**160.5**	**159.75**
Discount@17%	1.000	0.855	0.731	0.624	0.534
Present Values (K)	(600)	135.30	116.23	100.15	85.31
NPV= (K163.16)					

Project C

Year	0	1	2
Cash flow (K)	(300)	199	205
Tax@25%	-	49.75	51.25
Net Cash Flow (K)		149.25	153.75
Discount@17%	1.000	0.855	0.731

Present Values (K)	(300)	127.61	112.39
NPV=(K60)			

Project D

Year	0	1	2	3
Cash flow (K)	(400)	182	184	189
Tax@25%	-	45.5	46	47.25
Net Cash Flow (K)		136.5	138	141.75
Discount@17%	1.000	0.855	0.731	0.624
Present Values (K)	(400)	**116.71**	**100.88**	**88.45**
NPV= (K93.96)				

Project	Initial Investment (K)	NPV (K)	Decision
A	320	50.21	Accept
B	380	(163.16)	Reject
C	200	(60)	Reject
D	255	(93.96)	Reject

(i) With no capital rationing invest in all projects giving a positive N.P.V. In this regard invest in projects A only.

(ii) Invest in project A only since the other projects have negative NPV.

(iii) Select the highest combination of NPV: In this case, select project A only since it is the only project with a positive NPV.

(c) **REPLACEMENT**

1-year replacement cycle:

Period	**Cash flows (K)**	***D.F. @ 17%***	***P.V (K)***
0	72,000)	1.000	(72,000)
1	(7,200)	0.855	(6,156)
1	24,000	0.855	20,520
NPV			**57,636**

Equivalent Annual cost = K57,636/0.855 = K67,410.53 per year.

2-year replacement cycle

Period	**Cash flows (K)**	***D.F. @ 17%***	***P.V (K)***
0	72,000)	1.000	(72,000)
1	(7,200)	0.855	(6,156)
2	(9,600)	0.731	(7,017.6)
2	16,600	0.731	12,134.6
NPV			**73,039**

Equivalent Annual cost = K73,039/1.585 = K46,081.39 per year.

3-year replacement cycle:

Period	**Cash flows (K)**	***D.F. @ 17%***	***P.V (K)***
0	72,000)	1.000	(72,000)
1	(7,200)	0.855	(6,156)
2	(9,600)	0.731	(7,017.6)
3	(12,000)	0.624	(7,488)
3	9,600	0.624	5,990.4
NPV			**86,671.2**

Equivalent Annual cost = **K86,671.20**/2.210 = K39,217.74per year.

The machine should be replaced every 3 years because it would be cheaper.

(d) **LEASE OR BUY**

After tax cost of borrowing = 9.33% x (1-0.25) = 7%

BUY

Year	0	1	2	3	4	5
Cost (K)	(350,000)	-	-	-	-	-
Disposal (K)	-	-	-	-	-	50,000
Tax Relief on CA (K)	-	21,875	16,406.25	12,304.69	9,228.52	24,414.06
Net cash flows (K)	**(350,000)**	**21,875**	**16,406.25**	**12,304.69**	**9,228.52**	**74,414.06**
D.F @ 7%	1	0.935	0.873	0.816	0.763	0.713
Present Values (K)	**(350,000)**	**20,453.13**	**14,322.66**	**10,040.63**	**7,041.36**	**53,057.22**
NPV=(K245,085.53)						

Capital Allowances:

Year	WDV (K)	CA@25%	Tax@25%
1	350,000	87,500	21,875
2	262,500	65,625	16,406.25
3	196,875	49,218.75	12,304.69
4	147,656.25	36,914.06	9,228.52
Less: Disposal	50,000		
5	97,656.25	97,656.25	24,414.06

LEASE

Year	0	1	2	3	4	5

Lease Instalment (K)	(126,000)	(126,000)	(126,000)	(126,000)	(126,000)	-
Tax Saved@25%	-	31,500	31,500	31,500	31,500	31,500
Net cash flow (K)	**(126,000)**	**(94,500)**	**(94,500)**	**(94,500)**	**(94,500)**	**31,500**
D.F @ 7%	1	0.935	0.873	0.816	0.763	0.713
Present Value (K)	(126,000)	(88,357.5)	(82,498.5)	(77,112)	(72,103.5)	22,459.5
NPV= (K423,612)						

The decision should therefore be to buy the machine because it is cheaper compared to leasing.

SOLUTION TWO

(a)

(i) The two basic types of leases available to a business are operating leases and financial leases.
An operating lease is typically a contractual arrangement whereby the lessee agrees to make periodic payments to the lessor, often for five years or less, to obtain an asset's services. The lessee generally receives an option to cancel the lease by paying a cancellation fee.

A financial (or capital) lease is longer term than an operating lease. Financial leases are non-cancellable and therefore obligate the lessee to make payments over a pre-defined period, covering the asset's useful life.

The advantages of leasing are:

- An operating lease serves as off balance sheet finance, reducing a company's gearing,
- The use of sale-leaseback arrangements may permit the firm to increase its liquidity by converting an asset into cash, which can then be used as working capital,
- Large capital outlays are avoided, improving the lessee's cash flows,
- The lessee may avoid the risk of obsolescence if the lease covers only its useful life,
- The lessee avoids many of the restrictive covenants that are usually included as part of a long term loan, and
- In the case of low-cost assets leasing may provide the firm with needed financing flexibility.

(ii) **Overtrading** refers to a situation where turnover is increased without a matching increase in equity or other long-term sources of funds; as a result, a company which can be earning good profits can run into a liquidity crisis and default in meeting its current liabilities. The company is unable to finance the level of operations which it has achieved. Further business growth increases the pressure upon working capital.

A major cause of overtrading is where a company considerably increases its sales by offering generous credit terms without obtaining any equivalent credit terms from its own creditors. The company may try to obtain further short term finance by borrowing or non-payment of its own creditors which can quickly lead to considerable financial distress or even liquidation.

Companies experiencing overtrading might notice the following symptoms;

- The increased investment in current assets needed to support the increased sales are financed mainly from short-term sources like creditors and bank overdraft, resulting in a declining current ratio and quick ratio.
- Sales tend to increase very quickly in relation to equity, resulting in sharp increases in the ratio of sales to equity.
- The increase in debt would lead to higher gearing ratios
- The net working capital will tend to decline, and may even become negative. A

negative net working capital implies a current ratio less than unity (current assets less than current liabilities), and a business in such a position is likely to face considerable difficulty in meeting its current liabilities.

- Even where the current ratio is satisfactory, any erosion of net working capital would worsen the liquidity of the business and make it more vulnerable to cyclical risk.

Remedies for Overtrading

- The instant solution to overtrading is to take more trade credit and bank overdraft finance. However this is likely to be only a short-term fix that ultimately exacerbates the situation and worsens the liquidity crisis.
- Better short-term solutions would be to either restrict the growth in turnover to manageable proportions
- Or improve working capital management so that the investment in current assets required to support the level of sales is reduced (i.e. better inventory control, credit policy and debt collection).
- The long-term solution is to provide more long-term funds for working capital purposes - i.e. improve the Net Working Capital position of the firm.

(iii) Features of Convertible bonds

- Convertible bonds are fixed return securities that may be converted into ordinary shares of a company at pre-determined date(s) and at a pre-determined rate at the option of the holder. Often the terms of the conversion may seem to be less attractive at conversion dates further away. This reflects expected share price growth.
- At the conversion date or dates, the holder has the option to convert the stock into ordinary shares or continue to hold the stock and earn the fixed interest until the bond matures. However, if the investor decides to convert the bond into ordinary shares, they cannot convert the ordinary shares back into the original fixed security.
- The conversion premium is the difference between the nominal issue value of the bonds and the conversion value at the date of issue. From the issuers viewpoint the larger the conversion premium the better as less shares need be issued for a given amount of capital raised.
- However to be acceptable and valuable to investors the premium must reflect the growth prospects of the issuers ordinary share price.

Benefits of convertible bonds to the investor and issuer:

- The price of the convertible bond in effect includes an option to buy the ordinary shares.

- The potential value of the conversion rights.
- Interest income which would not be received if the investor simply bought a call option on the shares.
- The interest cost to the company is lower than for conventional, non-convertible stock.
- Most issuers expect the bonds to be converted and hence view them as delayed equity.
- Thus EPS is not immediately affected as it would with the issue of ordinary shares.
- If bond is converted into equity then this removes the necessity to raise funds to redeem the initial loan stock

(b)

Calculation of size of overdraft

Item	Computation	Answer
Inventory period	operating cycle + payables period – receivables period	4 + 2 – 1 = 5 months
Inventory	12 m x 5/12	K5million
Accounts receivable	24m x 1/12	K2million
Current assets	5 + 2	K7million
Current liabilities (current assets/current ratio	7million/1.4	K5million
Accounts payable	12m x 2/12	K2million
Overdraft	5 – 2	K3million
Net working capital	current assets – current liabilities	7 – 5 = K2million
Overdraft financing cost	3million x 0.15	K0.45million

SOLUTION THREE

(a) Weighted average cost of capital (WACC) calculation:
Cost of equity of CEEC Plc = 4.0 + (1.2 x (10.5 – 4.0)) = 4.0 + 7.8 = 11.8%

To calculate the after-tax cost of debt, linear interpolation is needed to determine the After-tax interest cost (IRR):

Year	Cash flow	K	10% discount	PV (K)	5% discount	PV (K)
0	Market value	(94.74)	1.000	(94.74)	1.000	(94.74)
1 to 7	Interest (after tax)	4.9	4.868	23.85	5.786	28.35
7	Redemption	100	0.513	51.30	0.711	71.10
				(19.59)		**4.71**

Item	Computation
After-tax cost of debt	5 + ((10 – 5) x 4.71)/(4.71 + 19.59)= 5 + 1.0 = 6.0%
Number of shares issued by CEEC Plc	K150m/0.5 = 300 million shares Market value of equity = 300m x 4.2 = K1,260 million
Market value of bonds issued by CEEC Plc	150m x 94.74/100 = K140.211 million
Total value of company	1,260 + 140.211 = K1,400.211 million
WACC	((11.8 x 1,260) + (6.0 x 140.211))/1,400.211 = **11.2%**

(b)

(i) Price/earnings ratio method:

Earnings per share of West Energy Ltd	80n per share
Price/earnings ratio of CEEC Plc	8
Share price of West Energy Ltd	80n x 8 = 640n or K6.40
Number of ordinary shares of West Energy Ltd	50/0.5 = 100 million
Value of West Energy Ltd	(80/100) x 8 x 100m = **K640 million**

However, it can be argued that a reduction in the applied price/earnings ratio is needed as West Energy Ltd is unlisted and therefore its shares are more difficult to buy and sell than those of a listed company such as CEEC Plc.

If we reduce the applied price/earnings ratio by 10% (other similar percentage reductions would be acceptable), it becomes 7.2 times and the value of West Energy Ltd would be (80/100) x 7.2 x 100m = **K570.6 million**

(ii) Dividend growth model

Dividend per share of West Energy Ltd = 80n x 0.45 = 36n per share

Since the payout ratio has been maintained for several years, recent earnings growth is the same as recent dividend growth, i.e. 4.5%. Assuming that this dividend growth continues in the future, the future dividend growth rate will be 4.5%.

Share price from dividend growth model = (36 x 1.045)/ (0.12 – 0.045) = 502ngwee or K5.02 Value of West Energy Ltd = 5.02 x 100m = **K500.2 million**

SOLUTION FOUR

(a) Relationship between Shareholders, managers and the company's long-term debt holders

i. Management may decide to raise finance for a company by taking out long-term or medium-term loans. They might well be taking risky investment decisions using outsiders' money to finance them.
ii. Investors who provide debt finance will rely on the company's management to generate enough net cash inflows to make interest payments on time, and eventually to repay loans.
iii. However, long-term creditors will often take security for their loan, perhaps in the form of a fixed charge over an asset (such as a mortgage on a building). Bonds are also often subject to certain restrictive covenants, which restrict the company's rights to borrow more money until the debentures have been repaid.
iv. If a company is unable to pay what it owes its creditors, the creditors may decide to exercise their security or to apply for the company to be wound up.
v. The money that is provided by long-term creditors will be invested to earn profits, and the profits (in excess of what is needed to pay interest on the borrowing) will provide extra dividends or retained profits for the shareholders of the company. In other words, shareholders will expect to increase their wealth using creditors' money.

(b) Advantages of issuing convertible loan notes

i. Convertibles should be cheaper than equity because they offer greater security to the
ii. investor. This may make them particularly attractive in fast growing but high-risk companies.
iii. Issue costs are lower for loan notes than for equity.
iv. Interest on the loan notes is tax deductible, unlike dividends on ordinary shares.
v. There is no immediate change in the existing structure of control, although this will change over time as conversion rights are exercised.
vi. There is no immediate dilution in earnings and dividends per share.

(c) Dangers of high gearing

A high gearing level only constitutes a danger when the level and volatility of earnings is such that the company is at risk of being unable to meet the interest payments as they fall due. If this situation arises the company could be forced to liquidate assets to meet the demands of its payables, and this in turn could jeopardise its operating viability. It follows that the absolute level of gearing cannot be used to assess the financial risk faced by the company. It is more helpful to assess the level of interest cover in the light of the degree of volatility in earnings.

A high level of debt creates financial risk. This is the risk of a company not being able to meet other obligations as a result of the need to make interest payments. The proportion of debt finance carried by a company is therefore as significant as the level business risk. Financial risk can be seen from different points of view.

i. The company as a whole. If a company builds up debts that it cannot pay when they fall due, it will be forced into liquidation.
ii. Payables. If a company cannot pay its debts, the company will go into liquidation owing payables money that they are unlikely to recover in full.
iii. Ordinary shareholders. A company will not make any distributable profits unless it is able to earn enough profit before interest and tax to pay all its interest charges, and then tax. The lower the profits or the higher the interest-bearing debts, the less there will be, if there is anything at all, for shareholders.

(d) Dividend policy

Dividend policy is one of the major factors which determine the share price. Under the dividend
Valuation model, the share price is held to be directly related both to the current dividend and to the expected future growth in dividends:

$$P0 = \frac{D_0 (l + g)}{(r - g)}$$

where:
P0 = market price of shares
D0 = current level of dividend
r = required rate of return
g = expected annual growth in dividend

Impact of dividend growth
Thus it can be seen that dividend growth is important in determining the likely market value of the shares. As has already been discussed above, the market value of the shares is very important in determining the price of convertibles, and therefore the dividend policy of the company will have an important effect on the value of convertible loan notes.

SOLUTION FIVE

(a) MN Plc Forecast income statement for the year ended 31st December 2024

	K000
Sales (10% increase)	2,200
Cost of sales (12% increase)	(1,344)
Gross Profit	856
Operating expenses (4% increase)	(442)
Depreciation (5% on cost)	(16)
Profit from operations	426
Interest 10% x 200000	(20)
Profit before tax	406
Taxation (see workings)	(126)
Net profit	280
Dividend 15% growth rate per annum 87*1.15	(100)
Retained profit	180
Reserves b/f	139
Reserves c/f	319
Share capital	772
Year- end reserves	319
Year- end shareholders funds	1091
Pre- tax return on shareholders funds	37.2%

(b) The company will earn a pretax return on shareholders funds of 37.2%. This is above the target 20%. Therefore the company will achieve this objective.

WORKINGS

Taxation

	K000
Profit before tax	406
Add back depreciation	20
Less capital allowances	(6)
Taxable profit	420
Taxation 30%	126

(c)

1) Changes in current assets

	Actual	Forecast
	2023	2024
	K000	K000
Inventory	350	390

Receivables	205	225.50
Trade payables	(170)	(190.4)
Tax and dividends payable	(179)	(226)
	206	199.1
(Increase)/ decrease in net current assets		6.9

CASH FLOW FORECCAST

	K000
Retained profit for the year	180
Add back depreciation	20
Release of working capital (working 2)	6.9
Surplus for the year	206.9
Cash surplus (deficit) b/f	85
Cash surplus (deficit) c/f	291.9

The company will have surplus funds of K291900 available for investment as at 31st December 2024.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.6 STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 12 JUNE 2024

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.

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)

Strategic Implementation: Toyota Case Study

The effective implementation of the defined strategy is based on the effective strategic management where such factors as the organizational structure, control systems, and organizational culture are important. The management of any company realizes its new strategies with references to these factors, and the level and type of development of the corporate structure, culture, and control systems can influence the strategic implementation significantly.

In 2011, Toyota Motor Corporation presented some perspectives and strategies to overcome the difficulties associated with the recall issues of 2010 and the customers' reaction to the recall. The presented strategies were oriented to winning back the customers' loyalty.

The report's task was to analyse the possible effectiveness of the developed strategies to overcome the issues with references to Toyota Motor Corporation's organizational structure, control systems, and organizational culture.

The type of the organizational structure depends on the environment within which the company operates. According to Burns and Stalker, there are two (2) types of the organizational structures which are the mechanistic and organic organizational structures (Burns & Stalker, 2009). Toyota Motor Corporation takes one of the leading positions within the car industry which is characterized by its stability. It is possible to note that Toyota Motor Corporation's management is based on the centralized decision-making and standardization as important features to preserve the corporate stability.

In spite of the fact that managers pay much attention to stimulating the individual's initiative and effective team work, the decision-making process is standardized and based on the strong hierarchy (Hill & Jones, 2009). Thus, the type of the organizational structure can be discussed as mechanistic.

The control system of Toyota Motor Corporation can be discussed as financial management in which managers are more focused on profits than on quality, and the problem is in the fact that the quality of the work as well as quality of production decreases in this situation (McNamara, n.d.). The extreme focus on profits was determined as one of the problems facing the company's management in 2010 (Shirouzu, 2010).

The strategies mentioned in Toyota's annual report of 2011 are oriented to restructuring the company's management and changing the approaches to the decision-making process. To overcome the issues associated with the customers' loyalty and brand image, it is necessary to focus on the safety problems with references to management aspects.

Thus, the orientation to making the decision-making process and control systems more flexible can be effective to renew the approach to management within the company, but the implementation of these strategies can face the problem of the employees' inability to adapt to the new goals priorities.

The organizational structure and culture of Toyota Motor Corporation are based on the rather conservative approaches to implementation, and this fact can be discussed as the difficulty to overcome the mentioned problems.

Required:

(a) Describe the three (3) stages of strategy implementation. (12 marks)

(b) Discuss five (5) common challenges in executing a strategy plan (10 marks)

(c) Identify the Organization culture in Toyotas case and explain how it affects the strategy implementation (4 marks)

(d) Use the Ansolf growth vector matrix to determine the direction of growth for Toyota Company. (14 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this Section.

Attempt any THREE (3) questions.

QUESTION TWO

Risk assessment and analysis require the risk manager to actively identify risks before they crystalize and consider methods that can be used to manage them.

Required:

(a) Discuss any five (5) events that could impact upon the implementation of strategy in organizations. (10 marks)

(b) Review any five (5) significant roles played by the audit committee in internal control. (10 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Discuss five (5) principles of Corporate Governance according to the Kings Report. (10 marks)

(b) Describe the following types of Risks:

- (i) Strategic Risks (2 marks)
- (ii) Operational Risks (2 marks)
- (iii) Financial Risks (2 marks)
- (iv) Business Risk (2 marks)

(c) Do insurance companies insure pure risks in Zambia? Explain your answer and give examples. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

The Economy of Zambia has recently been characterized by depreciation of the Kwacha against major foreign currencies and also global rise in fuel prices which has seen rise in most commodity prices.

Required:

Analyze how the following macro environmental factors affect the strategic positioning of a business.

(a) The Economic Environment (5 marks)

(b) The Social/Cultural Environment. (5 marks)

(c) Political Environment (5 marks)

(d) Technological Environment (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Umoyo corporation is a multinational corporation with diversified business units operating in technology, healthcare, and consumer goods. The company's corporate strategy emphasizes risk mitigation through diversification and the pursuit of growth opportunities across multiple sectors. Two (2) key business units within Umoyo are the Technology Solutions and the Healthcare Services. The business operates in a highly competitive environment.

Required:

(a) Analyze the interplay between corporate strategy, business unit strategy, and operational strategy in the context of Umoyo. (15 marks)

(b) Explain the significance of core competences in sustaining competitive advantage and suggest four (4) qualities of capabilities. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.6 STRATEGIC BUSINESS ANALYSIS SUGGESTED SOLUTIONS

SOLUTION ONE

(a) The strategic-management process consists of three stages:

1. strategy formulation,
2. strategy implementation,
3. strategy evaluation,

(b) Five (5) common challenges in executing a strategy plan:

1. Poor goal setting. …
2. Lack of alignment. …
3. Inability to track progress. …
4. People not connected to the strategy. …
5. No measurements or leading indicators. …

(c) The organizational culture of any company is complex, and it is based on the values, attitudes, and beliefs shared by the leaders, managers, and employees of the company in relation to the organization's mission, goals, and the ways to reach them. According to Tharp, the organizational culture can be 'control', 'create', 'collaborate', or 'compete' (Tharp, 2009).

The organizational culture of Toyota Motor Corporation can be analyzed as 'control' because it is based on the strong hierarchy, formal policies, strict following the company's principles, and strict coordination. Although the accents are based on the development of self-managing teams and more flexible decision-making process, the company's culture lacks the necessary flexibility.

(d) Ansoff's model is based on a matrix comprised of 'markets' on the vertical axis and 'products' on the horizontal axis. In turn, each axis is sub-divided into 'existing' and 'new'. Each cell of the matrix so formed represents a different strategic alternative for achieving growth. The matrix and each alternative is shown below:

		PRODUCT	
		EXISTING	NEW
MARKET	EXISTING	MARKET PENETRATION	PRODUCT DEVELOPMENT
	NEW	MARKET DEVELOPMENT	DIVERSIFICATION

Turning to each of the strategic alternatives in the matrix, we can now explain the characteristics of each alternative and the considerations in choosing between them.

i. Market penetration

This strategy is based on expanding sales from present products in present markets. Where the total market is still growing, this strategy may be achieved for example through 'natural market growth'. In markets which are static or declining, however, a market penetration strategy can only be achieved by either increasing the total market through, for example, increasing usage or purchasing rate with existing customers or by increasing market share at the expense of competitors. Clearly such a strategy will require aggressive marketing backed by, for example, heavy price discounts, promotional activity, etc. An example of an organization successfully using market penetration to grow is the Kellogg's company with their successful Cornflakes campaign.

ii. Market development

This strategy is based on expansion by entering new markets but with present products. For example the company might attempt to identify additional channels of distribution. Alternatively, the company might look for new locations, for example export markets. A classic way of achieving growth through market development is by reaching into new market segments. This strategy for growth is potentially high in synergy but the new markets must be carefully assessed with respect to, for example, the attractiveness of the market for the company; the extent to which the resources of the company match the new markets; and the potential effect on existing product markets. Many companies have found to their cost that it is not always straightforward to transfer skills and experience into a new market, particularly where that market is in another country. An example of an organization using this strategy to grow is Nestlé in the coffee-drinking market through their expansion into new geographical markets.

iii. Product development

Product development entails developing and launching new products for sale in present markets. In fact, these might be extensions to the existing product range such as, for example, products with additional features, different packaging, different quality levels etc. At the other extreme this strategy may be based on entirely new products for the market. Even where a company is familiar with the market through experience, this can be a risky strategy. Research indicates that more new products fail than succeed and therefore this growth strategy should be carefully evaluated. Where products are entirely new to the company, this can reduce the potential for synergy with existing products. An example of a company using product development as a strategy for growth is the Ford Motor Company with their expansion of the product range to include executive and luxury products.

iv. Diversification

This strategy is probably the highest risk of all the four strategic options inasmuch as it involves a company seeking to expand on the basis of new products and new markets. Diversification can take a number of forms; for example, a company might choose to diversify into new product markets that are similar in some way to existing products in that they have some relationship to existing technological and/or marketing know-how but which target new customer groups. The most radical, and therefore most risky, form of diversification growth is where the company diversifies into entirely new products and markets which are unrelated in any way to the existing business. This form of so-called 'conglomerate' form of diversification was very popular during the 1980s and early 1990s but its attendant risks have forced companies to be more wary of this method of strategic growth. An example of a company using diversification to grow is Scottish Power in the Chaptered Kingdom, which has diversified into financial services, telecoms and the water market.

A strategy of an organization forms a comprehensive master plan stating how the organization will achieve its mission and objectives. It maximizes competitive advantage and minimizes competitive disadvantage.

SOLUTION TWO

(a)

i. **External events**: Economic changes, political developments, technological advances simply all PESTEL factors.
ii. **Internal events**: Equipment problems, human errors, difficulties with products.
iii. **Leading event indicators**: Identifying conditions that could give rise to an event, customers having balances outstanding beyond a certain time being likely to default.
iv. **Trends and root causes**: May be better to tackle the causes rather than respond to events.
v. **Escalation Triggers**: Certain events happening or levels being reached that require immediate action.
vi. **Event interdependences**: Identifying how one event can trigger another and how events can occur concurrently i.e. failure to invest in new machinery may increase the number of production delays.

(b)

i. Committee members can use their own experience to monitor continually the adequacy of internal control systems.
ii. The audit committee's review should cover legal compliance and ethics, for example listing rules or environmental legislation.
iii. The audit committee must actively monitor the effectiveness of control over financial reporting and needs to demonstrate professional skeptism when doing so.
iv. The committee should also address the risk fraud, ensuring that employees are aware of risks and that there are mechanisms in place for staff to report fraud.
v. Each year the committee should be responsible for reviewing the company's statement on internal controls.
vi. The committee should consider the recommendations of the auditors in the management letter and management's response.
vii. The committee may play a more active supervisory role for example reviewing major transactions for reasonableness.

SOLUTION THREE

(a) Corporate governance refers to the structures and processes for the direction and control of companies. Corporate governance concerns the relation- ships among the management, Board of Directors, controlling shareholders, minority shareholders and other stakeholders.

Five concepts

i. **Fairness**: The board of directors must treat shareholders, employees, vendors, and communities fairly and with equal consideration.

ii. **Transparency**: The board should provide timely, accurate, and clear information about such things as financial performance, conflicts of interest, and risks to shareholders and other stakeholders.

iii. **Risk Management**: The board and management must determine risks of all kinds and how best to control them. They must act on those recommendations to manage risks and inform all relevant parties about the existence and status of risks.

iv. **Responsibility**: The board is responsible for the oversight of corporate matters and management activities. It must be aware of and support the successful, ongoing performance of the company. Part of its responsibility is to recruit and hire a chief executive officer (CEO). It must act in the best interests of a company and its investors.

v. **Accountability**: The board must explain the purpose of a company's activities and the results of its conduct. It and company leadership are accountable for the assessment of a company's capacity, potential, and performance. It must communicate issues of importance to shareholders.

vi. **Independence**- Independence means freedom from the influence of someone else. A principle of good corporate governance is that a substantial number of the directors of a company should be independent, which means that they are able to make judgements and give opinions that are in the best interests of the company, without bias or pre-conceived ideas. Similarly, professional advisers to a company such as external auditors and solicitors should be independent of the company, and should give honest and professional opinions and advice.

- The independence of a director is threatened by having a connection to a special interest group. Executive directors can never be independent, because their views will represent the opinions of the management team. Similarly, a retired former executive might still be influenced by the views of management, because he or she shares the 'management culture'. Directors who represent the interests of major shareholders are also incapable of being independent.

- The independence of external auditors can be threatened by over-reliance on fee income from a client company. When a firm of auditors, or a regional office of a national firm, earns most of its income from one corporate client there is a risk that the auditors might choose to accept what they are told by the company's management, rather than question them rigorously and risk an argument. It has been suggested that this occurred in the Houston office of Andersen's, the audit firm that collapsed in 2002 as a result of the Enron scandal.
- Familiarity can also remove an individual's independence, because when one person knows another well he is more likely to accept what that person tells him and support his point of view. Auditors are at risk of losing their independence if they work on the audit of the same corporate client for too many years.

vii. **Honesty and integrity (probity)**- It might seem obvious that honesty should be an essential quality for directors and their advisers. An individual who is honest, and who is known to be honest, is believed by others and is therefore more likely to be trusted. However, honesty is not as widespread as it might be. Business leaders, as well as political leaders, may prefer to 'put a spin' on the facts, and manipulate facts for the purpose of presenting a more favourable impression. Integrity is similar to honesty, but it also means behaving in accordance with high standards of behaviour and a strict moral or ethical code of conduct. Professional accountants, for example, are expected to act with integrity, by being honest and acting in accordance with their professional code of ethics. If shareholders in a company suspect that the directors are not acting honestly or with integrity, there can be no trust, and good corporate governance is impossible.

(b)

(i) Strategic Risks

Strategic risk relates to issues that could affect a company's ability to execute against its strategic objectives and reach its business goals. This type of risk also concerns an organization's competitive advantages in the market and internal or external factors that could diminish them.

(ii) Operational Risk

Operational Risk involves anything that could affect an organization's ability to run its business operations effectively and efficiently. Managing operational risk touches on the processes, procedures, policies, people and systems that a company has put in place and ensuring that they can weather adverse events.

(iii) Financial Risks

All companies face financial risk involving business factors that could affect cash flow, profitability, balance sheets and even an organization's solvency. Financial risk is of how well a company manages its financial risk and other types of business risk it faces.

(iv) Business Risk

These are risks that derive from the decisions that the board takes about the products or services that the organisation supplies. They include risks associated with developing and marketing those products or services, economic risks affecting product sales and costs, and risks arising from changes in the technological environment which impact on sales and production

(c) Most insurance providers only cover pure risks, or those risks that embody most or all of the main elements of insurable risk. These elements are "due to chance," definiteness and measurability, statistical predictability, lack of catastrophic exposure, random selection, and large loss exposure. Pure risk refers to risks that are beyond human control and result in a loss or no loss with no possibility of financial gain. Fires, floods and other natural disasters are categorized as pure risk, as are unforeseen incidents, such as acts of terrorism or untimely deaths. Risk managers deal with risk in four basic ways: They reduce risk, avid risk, accept it or transfer it. Many types of pure risk are dealt with by purchasing insurance coverage for the potential loss, which transfers the risk to an insurance company.

SOLUTION FOUR

(a) The Economic Environment

This segment refers to the nature and direction of the economy in which a firm competes or may compete. Firms generally seek to compete in relatively stable economies with strong growth potential. With globalization and the interconnectedness of nations, firms must scan, monitor, forecast, and assess the health of their host nation and the health of the economies outside their host nation.

Economic Segment

- Inflation rates; Exhange rates; Interest rates
- Trade deficits or surpluses
- Budget deficits or surpluses
- Government spending and debt; Government Policy and implementation
- Business cycles
- Personal and Business savings rates
- Gross domestic product

(b) The Social/Cultural Environment.

The **sociocultural segment** is concerned with a society's attitudes and cultural values. Because attitudes and values form the cornerstone of a society, they often drive demographic, economic, political/legal, and technological conditions and changes.

Sociocultural Segment

- Age, lifecycles and population growth
- Changing roles of Women- more women educated and in the workforce
- Changing homelife and family structures
- Geography (dispersion and concertrations)
- Ethinicity- miniorities and the majority
- Diversity attitudes about the quality of work life
- Shifts in work and career preferences
- Shifts in product and service preference characteristics

(c) **Political Environment**

This segment analysis how the Government public policy affects the whole economy. The Government policy is important in providing three things:

- Physical infrastructure
- Social infrastructure
- Market infrastructure

(d) **Technological Environment**

This segment affects the whole aspects of modern business. Three this are important

- Apparatus used in business
- Technique knowledge
- Nature of the business

SOLUTION FIVE

(a) **The interplay between corporate strategy, business unit strategy, and operational strategy:**

Corporate Strategy:

Corporate level strategy is concerned with the overall purpose and scope of the organisation and how value will be added to the different parts (business units) of the organisation. In the context of Umoyo Inc, a corporate strategy is a comprehensive master plan stating how Umoyo Inc will manage all its strategic business units in technology, healthcare, and consumer goods.

Business-level strategy:

This strategy is about how to compete successfully in particular markets. A business unit in the case of Umoyo Inc Technology products, Health care products of Consumer products. The emphasis of a business level strategy is to have a strong competitive position in the market place.

Operational Strategy:

Operational strategies are concerned with the component parts of an organisation deliver effectively the corporate and business-level strategies in terms of resources, processes and people.

(b) The significance of core competences is that if they are ***unique*** they are responsible for generating and sustaining competitive advantage.

Four qualities of capabilities are:

i. They must produce effects that are **valuable to buyers** (i.e. satisfy customer's needs).
ii. They must be **rare** (i.e. not easily accessible by competitors).
iii. They must be **robust** (i.e. difficult for competitors to imitate).
iv. They must be **non-substitutable** (i.e. could be in form of substitute product or substitute competence).

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1 ADVANCED FINANCIAL REPORTING

MONDAY 10 JUNE 2024

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.

QUESTION ONE – (COMPULSORY)

Kasama, a public limited company, operates in the Farming sector and has investments in other entities operating in the sector. The draft statements of financial position at 31 March 2025 are as follows:

	Kasama	Mpika	Isoka
Assets:	**Km**	**Km**	**Km**
Non-current assets			
Property, plant and equipment	216	41	38
Investment in Isoka	52		
Finance lease receivables	50	14	8
	318	55	46
Current assets	44	25	64
Total assets	362	80	110
Equity and liabilities:			
Share capital of K1 each	43	13	26
Retained earnings	41	24	15
Other components of equity	12	5	4
Total equity	96	42	45
Non-current liabilities	67	12	28
Current liabilities			
Trade and other payables	199	26	37
Total liabilities	266	38	65
Total equity and liabilities	362	80	110

The following information is relevant to the preparation of the group financial statements:

1. Kasama had purchased an 80% interest in Nakonde for K40 million on 1 April 2024 when the fair value of the identifiable net assets was K44 million. The partial goodwill method had been used to calculate goodwill and an impairment of K2 million had arisen in the year ended 31 March 2025. There were no other impairment charges or items requiring reclassification. The holding in Nakonde was sold for K50 million on 31 March 2025 and the gain on sale is currently recorded in other components of equity in Kasama's separate financial statements. The carrying value of Nakonde's identifiable net assets other than goodwill was K60 million at the date of sale. Kasama had carried the investment in Nakonde at cost.

2. Kasama has impairment tested its non-current assets. It was decided that a building located overseas (south Africa) was impaired because of major subsidence. The building was acquired on 1 April 2024 at a cost of 25 million South African Rand (SAR) when the exchange was 2 South African Rand (SAR) to the Kwacha. The building is carried at cost less accumulated depreciation. At 31 March 2025, the recoverable amount of the building was deemed to be 17.5 million South African Rand (SAR). The exchange rate at 31 March 2025 is 2.5 South African Rand (SAR) to the Kwacha. Buildings are depreciated over twenty five (25) years.

   The tax base and carrying amounts of the non-current assets before the impairment write down were identical. The impairment of the non-current assets is not allowable for tax purposes. Kasama has not made any impairment or deferred tax adjustment for the above. Kasama expects to make profits for the foreseeable future and assume the tax rate is 25%.

   No other deferred tax effects are required to be taken into account other than on the above non-current assets.

3. On 1 October 2024, Kasama acquired 9.1 million shares of Mpika, a public limited company. The purchase consideration comprised an issue of 20 million shares of K1 of Kasama at the acquisition date and a further 5 million shares on 31 March 2026 if Mpika's net profit after taxation was at least K10.5 million for the year ending on that date. The market price of Kasama's shares on 1 October 2024 was K2 per share and that of Mpika was K4.20 per share. It is felt that there is a 20% chance of the profit target being met.

   Kasama wishes to measure the non-controlling interest at fair value at the date of acquisition. At acquisition, the fair value of the non-controlling interest (NCI) in Mpika was based upon quoted market prices. On 1 October 2024, the fair value of the identifiable net assets acquired was K48 million and retained earnings of Mpika were K18 million and other components of equity were K3 million. The excess in fair value is due to non-depreciable land. No entries had been made in the financial statements of Kasama for the acquisition of Mpika.

4. On 1 April 2024, Kasama acquired 20.8 million shares of Isoka, a privately owned entity, for a consideration of K57 million. The consideration comprised cash of K52 million and the transfer of non-depreciable land with a fair value of K5 million. The carrying amount of the land at the acquisition date was K3 million and the land has only recently been transferred to the seller of the shares in Isoka and is still carried at K3 million in the financial records of Kasama at 31 March 2025. The only consideration shown in the financial records of Kasama is the cash paid for the shares of Isoka.

At the date of acquisition, the identifiable net assets of Isoka had a fair value of K55 million, retained earnings were K12 million and other components of equity were K4 million. The excess in fair value is due to non-depreciable land.

Kasama wishes to measure the non-controlling interest (NCI) at fair value at the date of acquisition. The NCI in Isoka was fair valued at K13.68 million.

5. Kasama has decided to restructure one of its business segments. The plan was agreed by the board of directors on 1 January 2025 and affects employees in two locations.

In the first location, half of the factory units have been closed by 31 March 2025 and the affected employees' pension benefits have been frozen. Any new employees will not be eligible to join the defined benefit plan. After the restructuring, the present value of the defined benefit obligation in this location is K8 million. The following table relates to location 1.

Value before restructuring	Km
Present value of defined benefit obligation	(10)
Fair value of plan assets	7
Net pension liability	(3)

In the second location, all activities have been discontinued. It has been agreed that employees will receive a payment of K4 million in exchange for the pension liability of K2.4 million in the unfunded pension scheme. Kasama estimates that the costs of the above restructuring excluding pension costs will be K6 million. Kasama has not accounted for the effects of the restructuring in its financial statements because it is planning a rights issue and does not wish to depress the share price. Therefore there has been no formal announcement of the restructuring. The pension liability is shown in non-current liabilities.

6. Kasama manufactures equipment for lease or sale. On 31 March 2025, Kasama leased out equipment under a 10-year finance lease. The selling price of the leased item was K50 million and the net present value of the minimum lease payments was K47 million. The carrying value of the leased asset was K40 million and the present value of the residual value of the product when it reverts back to Kasama at the end of the lease term is K2.8 million. Kasama has shown sales of K50 million and cost of sales of K40 million in its financial statements.

Required:

(a) Prepare the consolidated statement of financial position for the Kasama Group as at 31 March 2025. (34 marks)

(b) The Directors of Kasama are confused over several issues relating to IAS 7 Statement of Cash Flows. They wish to know the principles utilised 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. They have entered into the following transactions after the year end and wish to know how to deal with them in a cash flow statement, as they are unsure of the meaning of the definition of cash and cash equivalents. Kasama had decided after the year end to deposit the funds with the bank in two (2) term deposit accounts as follows:

(i) K3 million into a 12-month term account, earning 3·5% interest. The cash can be withdrawn by giving 14 days' notice but Kasama will incur a penalty, being the loss of all interest earned.

(ii) K7 million into a 12-month term account earning 3% interest. The cash can be withdrawn by giving 21 days' notice. Interest will be paid for the period of the deposit but if money is withdrawn, the interest will be at the rate of 2%, which is equivalent to the bank's stated rate for short-term deposits. Kasama is confident that it will not need to withdraw the cash from the higher-rate deposit within the term, but wants to keep easy access to the remaining K7 million to cover any working capital shortfalls which might arise.

Required:

Discuss the principles behind the classifications in the statements of cash flows whilst advising Kasama on how to treat the two (2) transactions above. (6 marks)

[Total: 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt ANY THREE (3) questions.

<u>QUESTION TWO</u>

Fast-Track is an entity based in Kabwe, that prepares financial statements to 31 March each year. During the year ended 31 March 2025 the following events occurred:

(a) On 1 April 2024, Fast-Track purchased some land for K10 million. Fast-Track purchased the land in order to extract minerals from it. During the six (6) months from 1 April 2024 to 30 September 2024, Fast-Track incurred costs totaling K3.5 million in preparing the land and erecting extraction equipment. This process caused some damage to the land. Fast-Track began extracting the minerals on 1 October 2024 and the directors estimate that there are sufficient minerals to enable the site to have a useful economic life of ten (10) years from that date. Further damage to the land is caused as the minerals are extracted.

Fast-Track is legally obliged to rectify the damage caused by the preparation and mineral extraction. The directors estimate that the costs of this rectification on 30 September 2034 will be as follows:

(i) K3 million to rectify the damage caused by the preparation of the land.

(ii) K200,000 for each year of the extraction process to rectify damage caused by the extraction process itself.

Following this rectification work the land could potentially be sold to a third party for no less than its original cost of K10 million. An annual discount rate appropriate for this project is 12%. The present value of K1 payable in ten (10) years' time with an annual discount rate of 12% is 32.2 ngwee. The present value of K1 payable in 9½ years' time with an annual discount rate of 12% is 34·1 ngwee. (10 marks)

(b) At 31 March 2025, Fast-Track was engaged in a legal dispute with a customer who alleged that Fast-Track had supplied faulty products that caused the customer actual financial loss. The Directors of Fast-Track consider that the customer has a 75% chance of succeeding in this action and that the likely outcome should the customer succeed is that the customer would be awarded damages of K1 million. The directors of Fast-Track further believe that the fault in the products was caused by the supply of defective components by one of Fast-Track's suppliers. Fast-Track has initiated legal action against the supplier and considers there is a 70% chance Fast-Track will receive damages of K800,000 from the supplier. Ignore discounting in this part of the question. (4 marks)

Required:

Explain and show how the two (2) events would be reported in the financial statements of Fast-Track for the year ended 31 March 2025.

(c) The Directors of Fast-Track have prepared forecasts for the next five (5) years and they are concerned that the company does not have sufficient liquid assets to fulfil its expansion plans. The directors propose to raise the required funds on 1 April 2025 in one of the following ways: (i) The issue of 5 million ordinary shares and (ii) The issue of 10 million convertible bonds in exchange for cash proceeds. Interest is payable annually in arrears. The bond holders will be able to redeem the bonds in the form of cash or a fixed number of Fast-Track's ordinary shares. The directors are unsure of the impact of the proposals on the financial statements.

Required:

Discuss the impact of the above proposals on the financial statements of Fast-Track. Your answer should consider the potential impact on basic and diluted earnings per share and on the primary users' perception of Fast-Track's financial performance and position.

(6 marks)

[Total: 20 Marks]

QUESTION THREE

Hade Plc (Hade) is a Copper mining company that sells its Copper on the spot and futures markets.

The following information relates to the issues for which the directors of Hade Plc require advice on accounting implications:

Transaction (a) - Copper Inventory

On the spot market, the Copper is traded for immediate delivery and, on the forward market, the Copper is traded for future delivery. The inventory is divided into different grades of Copper. One of the categories included in inventories at 31 December 2024 is Copper with a high sulphur content that is of a low quality. Hade will not process this low quality Copper until all of the other Copper has been extracted from the mine, which is likely to be in three (3) years' time. Based on market information, Hade has calculated that the
three-year forecast price of Copper will be 20% lower than the current spot price.

Transaction (b) - Costs of reconditioning mining equipment

At 31 December 2024, the directors of Hade estimate that a piece of mining equipment needs to be reconditioned every two years. They estimate that these costs will amount to K3 million for parts and K1.5 million for the labour cost of their own employees. The directors are proposing to create a provision for the next reconditioning which is due in two (2) years' time in 2026, along with essential maintenance costs. There is no legal obligation to maintain the mining equipment.
As explained in above, it is expected that there will be future reductions in the selling prices of Copper which will affect the forward contracts being signed over the next two years by Hade.

Transaction (c) - Sitwe mine

Hade also jointly controls Copper mines with other entities. The Sitwe mine is owned by four (4) participants. Hade owns 28%, and the other three (3) participants each own 24% of the mine.

The operating agreement requires any major decisions to be approved by parties representing 72% of the interest in the mine. Hade is considering purchasing one of the participant's interests of 24% to increase its holding to 52%.

Required:

(a) Explain to the directors of Hade Plc whether the Conceptual Framework affects the valuation of inventories in transaction (a) above and how to calculate the net realisable value of the Copper inventory, including the low quality Copper. (6 marks)

(b) Explain how to treat the reconditioning costs in transaction (b) and whether the decline in the price of Copper is an impairment indicator. (6 marks)

(c) Explain whether the Conceptual Framework will affect the decision as to whether Hade controls the Sitwe mine after acquiring an additional 24% and whether the acquisition of the interest would be considered a business combination under IFRS Accounting Standards. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Lambwe Plc is a manufacturing entity based in the Copperbelt region of Zambia.

The company's directors seek advice in respect accounting treatment for a number transactions including the following:

Pension Scheme for Senior Managers

During the year to 31 December, Lambwe Plc created a pension scheme for the benefit of its senior managers. All existing managers in service at 1 January 2024 were eligible for scheme membership in addition to those that joined later upon engagement in employment. According to the scheme rules, members are entitled to a lump sum payment upon retirement computed as a percentage of the final annual salary multiplied by the years of service with Lambwe Plc in addition to a monthly pension that is paid till death.

A separate pension fund administered through an independent board of trustees was created to which Lambwe will remit employer and employee contributions. The fund will be responsible for making pension payments upon retirement.

Lambwe made an initial one off lump sum contribution to the fund of K10 million on 1 January 2024 and a periodic contributions for the year to 31 December 2024 amounting to K2.2 million on 31 December 2024. The pension benefit formula was applied retrospectively in respect of members who were in employment at 1 January 2024. As a result, the fair value of accrued pension benefits as at 1 January 2024 attributable to employees services prior to that date was estimated at K8.3 million.

Employee pension benefits accruing during the year to 31 December 2024 on account of employees services rendered in the period amounted to K2.2 million. The pension scheme trustees paid Pension to retirees amounting to K1.3 million during the year to 31 December 2024. The fair value of the pension fund assets at 31 December 2024 amounted to K13.8 million whilst the accrued pension liabilities on the same date amounted to K9.2 million. The present value of future economic benefits accruing to Lambwe as a result of the surplus on the plan assets at 31 December 2024 is K3.9 million.

The average yield on high class corporate bonds with the same term to maturity as the pension liabilities on 1 January 2024 and 31 December 2024 was 9.5% and 8.2% respectively.

The Directors of Lambwe Plc seek advice on how to account for the pension scheme in its financial statements for the year to 31 December 2024. (10 marks)

Directors Share ownership or bonus scheme

On 1 October 2022, the Lambwe Board of Directors entered an arrangement with its 10 executive directors under which each Executive Director would choose between being given 100,000 K1 equity shares in Lambwe Plc or a cash bonus equal to the market value of the same number of shares upon remaining in employment over a three (3) year period commencing 1 January 2023.

One Director left the company during the year to 31 December 2023 and as at 31 December 2023, 2 more Directors were expected to leave over the next two (2) years. However, no Director left during the year to 31 December 2024. As at 31 December 2024, it has been estimated that 1 Director is likely to leave during the next year.

The market value of each Lambwe Plc share has moved as follows:

Date	**Market value (K)**
1 October 2022	4.60
31 December 2022/1 January 2023	4.40
31 December 2023	4.75
31 December 2024	4.70

In preparing financial statements for the year to 31 December 2023, the Directors of Lambwe did not report any amounts in respect of this share ownership or bonus scheme.

The Directors of Lambwe Plc seek advice on how to account for the share ownership or bonus scheme in its financial statements for the year to 31 December 2024. (10 marks)

Required:
Advise the Directors of Lambwe Plc on the accounting treatment of the above transactions in accordance with the IFRS framework.

[Total 20 Marks]

QUESTION FIVE

Mbuwa Plc pursues a strategy of qrowth through acquisitions. The company specialises in identifying appropriate acquisition targets which are thereafter acquired and turned around to unlock value for its shareholders.

The company's directors have identified JESSE Limited (JESSE) as a potential acquisition target.

JESSE has been trading for more than ten (10) years manufacturing and selling its own branded perfumes, lotions and candles to the public in its fifteen (15) retail stores and to other larger retailing entities. Revenues and profits have been steady over the last ten (10) years. However, eighteen (18) months ago, the newly appointed Sales Director saw an opportunity to sell the products online. Using long term funding, he therefore set up an online shop. The online shop has been operating successfully for the last fourteen (14) months. The Sales Director also used his prior contacts to secure a lucrative deal with a boutique hotel chain for JESSE to manufacture products for the hotel, carrying the hotel chain name and logo. The managing director of JESSE now believes that the business has further opportunities and does not wish to lose the momentum created by the sales director. The bank that currently provides both a long-term loan and an overdraft facility has rejected JESSE's request for additional funds on the basis that there are insufficient assets to offer for security (the existing funding is secured on JESSE's property, plant and equipment).

Extracts from the financial statements for JESSE are provided below:

Statement of profit or loss for the year ended 31 December:

	2024	**2023**
	K,000	**K'000**
Revenue	12,000	7,400
Cost of sales	(8,166)	(5,180)
Gross profit	3,834	2,220
Distribution costs	(928)	(712)
Administrative expenses	(1,740)	(826)
Operating profit	1,166	682
Finance costs	(86)	(68)
Profit before tax	1,080	614
Income tax expense	(270)	(160)
Profit for the year	810	454

Statement of financial position as at 31 December:

	2024	**2023**
ASSETS	**K'000**	**K'000**
Non current assets		
PPE	760	800
Intangible assets - development costs	40	20
	800	820
Current assets		
Inventory	2,520	2,360
Receivables	910	620
Cash and equivalent	-	84
	3,430	3,064

Total assets	4,230	3,884
EQUITY AND LIABILITIES		
Equity		
Share capital	1,100	1,100
Retained earnings	1,444	1,220
Total equity	2,544	2,320
Non current liabilities		
Long term borrowings	824	808
	824	808
Current liabilities		
Payables	726	756
Short term borrowings	136	-
	862	756
Total equity and liabilities	4,230	3,884

Operating segment results for the year to 31 December 2024:

	Retail operations K'000	**online store K'000**	**Hotel contract K'000**
Revenue	8,008	2,192	1,800
Gross profit	2,400	660	774
Profit before tax	640	276	164

As a member of the Mbuwa Plc investment Management team, you have been asked to analyse the financial performance and position of JESSE and make a recommendation as to whether the potential investment in JESSE should be considered further by Mbuwa Plc.

Required:

Prepare a report that analyses the financial performance of JESSE for the year ended 31 December 2024 and its financial position at that date, and makes a recommendation as to whether the investment should be considered further.

[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 3.1 ADVANCED FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Kasama Consolidated statement of financial position at 31 March 2025**

Assets:	
Non-current assets	
Property, plant and equipment (W6)	314·00
Goodwill (W2)	26·06
Finance lease receivable (W7)	71·80
	411·86
Current assets (44 + 25 + 64)	133
Total assets	544·86
Equity and liabilities:	
Share capital (43 + 20)	63
Retained earnings (W4)	50·05
Other components of equity (W4)	25·4
	138·45
Non controlling interest (W5)	33·06
Total equity	171·51
Non-current liabilities (W8)	101·35
Current liabilities (W9)	
Trade and other payables	272
Total current liabilities	272
Total liabilities	373·35
Total equity and liabilities	544·86

Working 1- Mpika

	Km	Km
Fair value of consideration for 70% interest	42	

Fair value of non-controlling interest	16·38	58·38
Fair value of identifiable net assets acquired		(48)
Goodwill		10·38

Contingent consideration should be valued at fair value and will have to take into account the various milestones set under the agreement. The expected value is (20% x 5 million shares) 1 million shares x K2, i.e. K2 million. There will be no remeasurement of the fair value in subsequent periods. If this were a liability, there would be remeasurement. The contingent consideration will be shown in OCE. The fair value of the consideration is therefore 20 million shares at K2 plus K2 million (above), i.e. K42 million.

The purchase should be accounted for as follows:

Dr Investment in Mpika	K42 million
Cr OrSouth African Rand (SAR)y share capital	K20 million
Cr Other components of equity	K22 million

The fair value of the NCI is 30% x 13 million x K4·20 = K16·38 million

The fair value adjustment for land is K(48 – Share capital 13 – Retained earnings 18 – OCE 3)m, i.e. K14 million.

Working 2-Isoka

	Km	Km
Fair value of consideration for 80% interest (K52m + K5m)	57	
Fair value of non-controlling interest	13·68	70·68
Fair value of identifiable net assets acquired		(55)
Goodwill		15·68

The land transferred as part of the purchase consideration should be valued at its acquisition date fair value of K5 million. Therefore the increase of K2 million over the carrying amount should be shown in retained earnings.

The fair value adjustment for land is K13m (55 – Share capital 26 – Retained earnings 12 – OCE 4), i.e. K13 million.
Total goodwill is therefore K(15·68 + 10·38) million, i.e. K26·06 million.

Working 3- Nakonde
Gain/(Loss) in group financial statements on sale of Nakonde

	Km
Sale proceeds	50

Less

Share of identifiable net assets at date of disposal (80% x K60 million)	(48)
Goodwill K(40m – (80% of K44m) – impairment K2m)	(2·8)
Loss on sale of Nakonde	(0·8)
Post-acquisition profits (K60m – K44m) x 80% – impairment K2m	10·8
Profit reported in OCE to be transferred to retained earnings	10

The net effect of the above is to transfer K10 million from OCE to retained earnings.

Working 4

Retained earnings

	Km
Kasama:	
Balance at 31 March 2025	41
Gain on land given as consideration for Isoka (W2)	2
Loss on sale of Nakonde (W3)	(0·8)
Post-acquisition profits – Nakonde (W3)	10·8
Pension payment – loss (W8)	(1·6)
Negative past service cost (W8)	2
Restructuring provision (W8)	(6)
Deferred tax asset (W10)	1·25
Impairment of building (W10)	(5)
Finance lease – revenue (W7)	(3)
Finance lease – cost of sales (W7)	2·8
Post-acquisition reserves: Mpika (70% x 24 – 18)	4·2
Isoka (80% x 15 – 12)	2·4
	50·05

Kasama: other components of equity	Km
Balance at 31 March 2025	12
Purchase of Mpika (W1)	22
Post-acquisition reserves – Mpika (70% x (5 – 3))	1·4
– Isoka (80% x 4 – 4))	–
Loss on sale of Nakonde to retained earnings (W3)	0·8
Post-acquisition profits to retained earnings (W3)	(10·8)
	25·4

Working 5 Non-controlling interest

	Km
Mpika – fair value at 1 October 2024 (W1)	16·38

Post-acquisition reserves	
Retained earnings (30% x (24 – 18))	1·8
OCE (30% x (5 – 3))	0·6
Isoka – fair value 1 April 2024 (W2)	13·68
Retained earnings (20% x (15 – 12))	0·6
OCE (20% x (4 – 4))	–
Total	33·06

Working 6- Property, plant and equipment

	Km	Km
Kasama	216	
Mpika	41	
Isoka	38	
		295
Increase in value of land – Mpika (W1)		14
Increase in value of land – Isoka (W2)		13
Sale of land as consideration for Isoka (W2)		(3)
Impairment of building (W8)		(5)
		314·00

Working 7-Finance lease

Kasama should have shown the lease receivable at the lower of the fair value of the asset and the present value of the minimum lease payments, i.e. K47 million. Therefore an adjustment of K3 million will have to be made to profit or loss and the lease receivable. Similarly, the cost of transaction should have been K(40 – 2·8) million, i.e. K37·2 million as the asset reverts back to Kasama at the end of the lease. Therefore an adjustment should be made to profit or loss and lease receivable of K2·8 million.

Dr Profit or loss	K3 million
Cr Lease receivable	K3 million
Dr Lease receivable	K2·8 million
Cr Profit or loss	K2·8 million

(The net amount of K0·2 million could be adjusted in this case.)

The finance lease receivable figure in the financial statements will be K(50 – 3 + 2·8 + 14 + 8)m, i.e. <u>K71·8 million</u>.

Working 8- Non-current liabilities

	Km	Km
Kasama	67	
Mpika	12	
Isoka	28	
		107
Reduction of pension obligation (2 + 2·4)		(4·4)
Deferred tax asset		(1·25)
	101·35	

Pensions

After restructuring, the present value of the pension liability in location 1 is reduced to K8 million. Thus there will be a negative past service cost in this location of K(10 – 8) million, i.e. K2 million. As regards location 2, there is a settlement and a curtailment as all liability will be extinguished by the payment of K4 million. Therefore there is a loss of K(2·4 – 4) million, i.e. K1·6 million. The changes to the pension scheme in locations 1 and 2 will both affect profit or loss as follows:

Location 1
Dr Pension obligation K2m
Cr Retained earnings K2m

Location 2
Dr Pension obligation
K2·4m
Dr Retained earnings
K1·6m
Cr Current liabilities K4m

Even though there has been no formal announcement of the restructuring, Kasama has started implementing it and therefore it must be accounted for under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

A provision of K6 million should also be made at the year end.

Working 9- Current liabilities

	Km	Km
Kasama	199	
Mpika	26	
Isoka	37	
		262
Pension liability		4
Restructuring provision		6

Working 10- Deferred taxation and impairment

Carrying amount of building at 31 March 2025 K(25 – 1 depreciation) million, i.e. 24 million South African Rand (SAR)/2 = K12 million.

Recoverable amount of building at 31 March 2025 17·5 million South African Rand (SAR)/2·5 = K7 million.

Impairment loss to profit or loss = K5 million.

The tax base and carrying amount of the non-current assets are the same before the impairment charge. After the impairment charge, there will be a difference of K5 million. This will create a deferred tax asset of K5 million x 25%, i.e. K1·25 million. As Kasama expects to make profits for the foreseeable future, this can be recognised in the financial statements.

(b)

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.

As regards the deposits, the following is the case:

(i) Although the principal (K3 million) will be recoverable with early withdrawal, the entity will lose all accumulated interest over the term, which seems to be a significant penalty. The cash is not needed to meet short-term cash commitments and so would not qualify as a cash equivalent.

(ii) Although the deposit is stated to have a 12-month maturity period, it can be withdrawn with 21 days' notice. Although this incurs a penalty, the reduction in the rate of interest from 3% to 2% is unlikely to be considered significant. The intention of management is to keep these funds available for short-term cash needs and so this deposit is likely to qualify as a cash equivalent.

SOLUTION TWO

(a)

Under the principles of IAS 16 – *Property, Plant and Equipment* – costs of K13·5 million

(K10 million + K3·5 million) will be debited to property, plant and equipment in respect of the cost of acquiring the extraction facility.

The costs of erecting the extraction facility (excluding the land) will be depreciated over a 10-year period, giving a charge in the current period of K175,000 (K3·5 million X 1/10 X 6/12).

From 1 October 2024, an obligation exists to rectify the damage caused by the erection of the

extraction facility and this obligation should be provided for. The amount provided is the present value of the expected future payment, which is K966,000 (K3 million X 0·322).

The amount provided is debited to property, plant and equipment and credited to provisions at

1 October 2024. The debit to property, plant and equipment creates additional depreciation of K48,300 in the current year (K966,000 X 1/10 X 6/12).

The closing balance in property, plant and equipment is K14,242,700 (K13·5 million – K175,000 + K966,000 – K48,300).

As the date of settlement of the liability draws closer the discount unwinds.

The unwinding of the discount in the current year is K57,960 (K966,000 X 12% X 6/12).

The extraction process itself creates an additional liability based on the damage caused by the reporting date. The additional amount provided is K34,100 (K200,000 X 6/12 X 0·341). 1

This additional provision causes an extra charge to the statement of comprehensive income.

The carrying amount of the provision at the year end is K1,058,060 (K966,000 + K57,960 + K34,100).

(b)

Under the principles of IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets* – a provision should be made for the probable damages payable to the customer. The amount provided should be the amount Fast-Track would rationally pay to settle the obligation at the reporting date. Ignoring discounting, this is K1 million. This amount should be credited to liabilities and debited to profit or loss. Under the principles of IAS 37 the potential amount receivable from the supplier is a contingent asset. Contingent assets should not be recognised but should be disclosed where there is a probable future receipt of economic benefits – this is the case for the K800,000 potentially receivable from the supplier.

(c)

Ordinary shares Ordinary shares do not create a contractual obligation to deliver cash or another financial asset. As such, they are classified as equity on the statement of financial position. If equity increases then the gearing ratio will improve, which may make Fast-Track's financing structure look less risky to its investors. Dividends paid on equity shares have no impact on profits because they are charged directly to retained earnings. Dividends are, in substance, the distribution of the entity's profits to its shareholders. Issuing equity shares will increase the number of ordinary shares in the basic earnings per share calculation. If the entity is not able to grow its profits then basic earnings per share may fall year-on-year. Investors might perceive this negatively because it is an indication that their future dividend returns will fall.

Convertible bonds A bond that is redeemed in the form of cash or a fixed number of the entity's own equity shares has characteristics of debt and equity. As such, it should be 'split' into a liability component and an equity component. The liability component is calculated by taking the cash repayments and discounting them to present value using the rate on a similar non-convertible bond. The difference between the cash proceeds and the liability component on the issue date is classified as equity. The liability component is normally much larger than the equity component. As such, the issue of the bond is likely to make the gearing ratio deteriorate, increasing investors' perception of risk. This is because liabilities necessitate mandatory repayments, whereas equity does not. If the convertible bond is issued then an annual Interest expense will be charged to profit or loss. This interest is calculated by applying the effective rate of interest to the liability component. Interest expenses are charged to the statement of profit or loss and so will reduce profits and basic earnings per share. However, whilst in issue, the convertible bonds have no impact on the number of shares used in the basic earnings per share calculation. Most convertible bonds are dilutive instruments. This is because the entity has a commitment to issue ordinary shares in the future. The maximum number of shares that Fast-Track may issue to redeem the convertible bonds should be included in the diluted earnings per share calculation. Moreover, the earnings figure used in the calculation should be increased by the current year interest on the bond because this will not be charged after redemption. The disclosure of diluted earnings per share warns current and potential investors that earnings per share will fall when the convertible bond is redeemed. If investors are concerned about the potential drop, and the impact this may have on their investment returns, then they may decide to invest in other companies.

SOLUTION THREE

(a)

Inventories should be valued at the lower of cost and net realisable value in accordance with IAS 2 Inventories.

The Conceptual Framework acknowledges a variety of measurement bases including historical cost, current cost, value-in-use and fair value. Historical cost is consistent with the cost valuation in IAS 2
Inventories, however value in use and fair value are not:

- Value-in-use requires the use of the present value of future cash flows.
- Fair value is a market-based measurement, not an entity-specific measurement. When determining fair value, the assumptions used are those that market participants would use when pricing the asset, this would not take into consideration entity-specific factors like the cost needed to complete an asset and sell it.

The Conceptual Framework is not a Standard and does not override the requirements of a Standard, therefore in order to determine NRV, the directors would need to refer to IAS 2.

IAS 2 defines NRV as the estimated selling price in the ordinary course of business less the costs of completion and costs of sale. NRV is an entity-specific measure which should be determined on the basis of conditions which existed at the date of the statement of financial position. To estimate NRV, Hade should take into consideration future price movements if they provide information about the conditions at the reporting date. However, normally these movements would reflect changes in the market conditions after that date and therefore would not affect the calculation of NRV. The NRV will be based upon the most reliable estimate of the amounts which will be realised for the Copper. Hade should calculate the NRV of the high sulphur Copper using the forecast market price based upon when the inventory is expected to be processed and realised. The forecast market price should be adjusted for the time value of money (where this is material) and for processing and selling costs to give a reasonable estimate of NRV. Future changes in the forecast market price or the processing and sale of the high sulphur Copper may result in adjustments to the NRV. As these adjustments are changes in estimates, IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors will apply with the result that such gains and losses will be recognised in the statement of profit or loss in the period in which they arise.

Tutorial note. The year-end spot price will provide good evidence of the realisable value of the inventories at the year end. The forward contract price may be appropriate if the company has an executory contract to sell Copper at a future date. However, if the company does not have an executory contract, but instead a financial instrument under IFRS 9 Financial Instruments or an onerous contract recognised as a provision under IAS 37 Provisions, Contingent Liabilities and Contingent Assets, the forward contract price is unlikely to be used to calculate NRV.

(b)

IAS 16 Property, Plant and Equipment (PPE) requires an entity to recognise in the carrying amount of PPE the cost of replacing part of such an item. When each major inspection is performed, its cost is recognised in the carrying amount of the item of PPE as a replacement if the recognition criteria are satisfied. Any remaining carrying amount of the cost of a previous inspection is derecognised. The costs of performing a major reconditioning are capitalised if it gives access to future economic benefits. Such costs will include the labour and materials costs (K4.5 million) of performing the reconditioning. However, costs which do not relate to the replacement of components or the installation of new assets, such as routine maintenance costs, should be expensed as incurred.

It is not acceptable to accrue the costs of reconditioning equipment as there is no legal or apparent constructive obligation to undertake the reconditioning. As set out above, the cost of the reconditioning should be identified as a separate component of the mine asset at initial recognition and depreciated over a period of two years. This will result in the same amount of expense being recognised as the proposal to create a provision.

IAS 36 Impairment of Assets says that at the end of each reporting period, an entity is required to assess whether there is any indication that an asset may be impaired. IAS 36 has a list of external and internal indicators of impairment. If there is an indication that an asset may be impaired, then the asset's recoverable amount must be calculated. Past and future reductions in selling prices may indicate that the future economic benefits which relate to the asset have been reduced. Mining assets should be tested for impairment whenever indicators of impairment exist. Impairments are recognised if a mine's carrying amount exceeds its recoverable amount.

However, the nature of mining assets is that they often have a long useful life. Commodity prices can be volatile but downward price movements are more significant if they are likely to persist for longer periods. In this case, there is evidence of a decline in forward prices. If the decline in prices is for a significant proportion of the remaining expected lifeof the mine, this is more likely to be an impairment indicator. It appears that forward contract prices for two years out of the three years of the mine's remaining life indicate a reduction in selling prices. Based on market information, Hade has also calculated that the three-year forecast price of Copper will be 20% lower than the current spot price (Part (a) of question).

Short-term market fluctuations may not be impairment indicators if prices are expected to return to higher levels. However, despite the difficulty in making such assessments, it would appear that the mining assets should be tested for impairment.

(c)

The Conceptual Framework states that an entity controls an economic resource if it has the present ability to direct the use of the economic resource and obtain the economic benefits that may flow from it. An entity has the ability to direct the use of an economic resource if it has the right to deploy that economic resource in its activities. Although control of an economic resource usually arises from legal rights, it can also arise if an entity has the present ability to prevent all other parties from directing the use of it and obtaining the benefits from the economic resource. For an entity to control a resource, the economic benefits from the resource must flow to the entity instead of another party.

Although the Conceptual Framework gives some guidance on the definition of control, existing IFRS Accounting Standards also provide help in determining whether Hade controls the mine and therefore should account for it as a business combination:

- IFRS 10 Consolidated Financial Statements states that an investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.
- IFRS 15 Revenue from Contracts with Customers lists indicators of the transfer of control of an asset to a customer. One of the indicators is that the customer has the significant risks and rewards of ownership of the asset which is basically exposure to significant variations in the amount of economic benefits.

A business combination is defined in IFRS 3 Business Combinations as a transaction or other event in which an acquirer obtains control of one or more businesses. A business is further defined as 'an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing goods or services to customers, generating investment income or generating other income from ordinary activities.'

Thus the producing mine represents a business and Hade now owns a majority of the interest in the business. However, this is not a business combination as Hade does not have the ability to affect decisions unless another participant agrees to vote with Hade. Although Hade will control 52% of the mine, it cannot direct the use of the economic resource unless one of the other participants agrees with an operating decision proposed by Hade and approval is given by 72% of participants. However, Hade can prevent the other parties from directing the use of the mine if the purchase goes ahead, because the other two parties cannot make an operating decision without Hade's consent. Prior to the purchase of the additional investment, the approval of decisions required agreement by 72% of the participating interests. A joint control situation existed between the entities. Following the additional purchase, there is still a joint control situation as Hade's interest does not meet the 72% threshold. Therefore, the transaction will be treated as an asset acquisition and no goodwill will arise on the acquisition.

SOLUTION FOUR

Pension Scheme for Senior Managers

The pension scheme is a defined benefit (DB) plan as benefits upon retirement are defined before retirement by way of a given benefit formula.

In the Statement of Financial position (SFP), Lambwe will report a net DB pension asset/liability based on the surplus/deficit on plan assets. However the net plan asset must be limited to the present value of future economic benefits the employer receives as result of the surplus (asset ceiling).

In this case, a net pension asset to be presented separately within non current assets will be reported amounting to K3.9 million based on the following:

Net plan asset/liability at 31.12.2024		**K'm**
Plan assets at 31.12.2024		13.8
Plan liabilities at 31.12.2024		-9.2
Surplus on plan assets		4.6
Impairment loss to report in OCI	(balance)	-0.7
Net plan asset to report in SFP at 31.12.2024		3.9

The pension cost to report in PL for the year to 31 December 2024 will be composed of the following elements:

Pension cost to report in PL for the y/e 312.12.2024		
		K'm
Past service cost		8.3
Current service cost		2.3
Net interest income	(10-8.3)*9.5%	-0.16
Pension cost charge in PL		**10.44**

In addition to the impairment loss arising from limiting the net pension asset to present value of futre economic benefits, Lambwe will also report a remeasurement component of the pension cost in OCI. The remeasurement component is computed as follows:

Remeasurement component of the pension cost		
Net pension asset b/d 1.1.2024		0
Changes before remeasurement:		
Contributions paid	(10+2.2)	12.2
Pension cost charged in PL		-10.44
Net pension asset at 31.12.2024 before remeasurement and impairment loss		1.76
Remeasurement gain to report in OCI	**(balance)**	**2.84**
Net pension asset at 31.12.2024 before impairment loss	(13.8-9.2)	4.6
Impairment loss to report in OCI	**(balance)**	**-0.70**

Net pension asset to report in SFP at 31.12.2024	**3.9**

Directors Share owner or bonus scheme

The transaction falls within the scope of IFRS 2 Share based payments. The transaction has both an equity settled component and cash settled component.

The total value of the equity component is measured as the residual of the total value of the SBP at the arrangement date assuming it is equity settled less the liability component at the same date. Lambwe will recognise SBP expenses from each component over the performance period.

Amounts to report in the SFP at 31.12.2024

		K'm
Equity component - SBP Reserve	1*(10-1-0-1)/10*2/3	0.53
Liability Component	80000*4.7*(10-1-0-1)*2/3/1000,000	2.01

The SBP expense to charge in PL for the y/e 31.12.2024 from each component is computed as follows;

SBP expense for the y/e 31.12.2024:

From Equity component:		**K'm**
SBP reserve at 31.12.2024		0.53
less SBP reserve at 31.12.2023	1*(10-1-2)/10*1/3	-0.23
SBP expense from equity component		0.30

From Liability component:		**K'm**
SBP liability at 31.12.2024		2.01
less SBP liabiliy at 31.12.2023	80000*4.75*(10-1-2)*1/3/1000000	-0.89
SBP expense from equity component		1.12

SOLUTION FIVE

The Report

To: Directors - Mbuwa Plc

From: Member of Investment Team

Date:

Subject: Analysis of the financial performance and position of JESSE Limited

1. Financial Performance

JESSE's revenue has grown by a considerable 62% from 2023 as a result of the new on-line store and the hotel contract. If these two new lines of business are stripped out revenues have actually increased in the core business by 8%, which is encouraging.

JESSE is generating a healthy gross profit margin of 32%, up from 30% in 2023. The segments generating this overall profit, however, are generating different margins. Both the retail operations and online store have generated the same gross margin, which you would expect as both are selling own-brand products. The online store however is benefiting from lower operating costs and generating a net profit margin (based on PBT) of 12.6% as opposed to the equivalent retail operations margin of 8%. Fewer sales staff and shop overheads are likely to be causing this difference. The hotel contract has achieved a 43% gross margin.

The net profit margin is 9.7%, which is again more lucrative than the retail operations but lower than you would perhaps expect with such a high Gross Profit margin. It may be reasonable to assume that expenses related to setting up the hotel contract have been incurred and charged to profit (such as new labelling etc) and these expenses are unlikely to recur in future years, resulting in a higher profit before tax margin from this segment in the future. It would, however be necessary to investigate how expenses have been allocated to the segments to ensure the margin fairly reflects the economic reality. There is also an opportunity for JESSE to capitalise on this development and approach other hotels about a similar deal.

JESSE has improved efficiency in the year, increasing turnover with very little investment in noncurrent assets. Asset turnover has increased from 2.37 to 3.56 in the year, which again reflects well on the management of the business.

2. Financial position

Finance costs have increased as a result of JESSE requiring short-term funding in the year, however the increased profitability has resulted in interest cover increasing in the year from 10 to 13.6 times. It appears that JESSE's profits provide adequate cover for additional finance costs on debt, and so this is unlikely to be the cause of the bank's refusal to extend borrowing facilities.

The lack of assets available for security appears to be the main issue. The working capital is as you would expect for a principally retail based business with high levels of inventory and low receivables. Receivables of approximately 30 days seems high for a retail based business, however it must be noted that a significant part of the retail operations revenue comes from selling to other larger retailers, who will have negotiated favourable credit terms. There is no breakdown between the segments but clearly the terms of the hotel contract have no negative impact on the receivables of JESSE as it hasn't changed. It is surprising to see that payables days have reduced from 53.3 days to 32.5 days from last year. This could result from a new supplier for the hotel own-label products negotiating faster payment or that a large payment to suppliers was made shortly before the year-end, causing payables to reduce and short-term borrowing to increase. It is difficult to determine accurately from just the year-end statement of financial position, however gaining the maximum credit possible from your suppliers could avoid the need for interest-bearing borrowings being required to fund working capital. Inventories are the main asset of the business and investment in them dominates JESSE's working capital. When inventories are removed in the calculation of the quick ratio, we see an increase from 0.9 to 1.1 in the period. The inventories days are high but have reduced from 166 days to 113 days. A reduction in the holding period of more than 50 days is a positive result for JESSE and may be a result of the online business being set up. To conclude on working capital, it does appear that the working capital position is a result of changes in trading conditions rather than poor management controls which is a positive sign when considering investment.

The gearing has moved slightly as a result of the short-term borrowings, increasing from 25.83% to 27.4%. The gearing level itself is not a major issue but it is clear from the bank's refusal that lack of security is an issue and the bank was obviously not interested in utilising the inventories.

3. Conclusion

JESSE appears to be a well-managed, ambitious, profitable enterprise and additional investment is likely to provide the funds required to continue the expansion and bring additional returns. There is sufficient interest cover for additional debt. Alternatively, this analysis of JESSE would suggest that an equity investment would also be viable, although perhaps less attractive to the existing owners. If an equity investment was sought then Mbuwa Plc would need to agree terms of return with JESSE. One note of caution is that a dividend of $293,000 appears to have been paid which is 72% of the profit for the year. Given that JESSE is looking for investment and is short of cash, such a large dividend pay-out appears on the face of it to be a poor management decision.

4. Recommendation

I would recommend that the investment be considered further and in particular reasons for the large dividend be established.

Apendix to report - financial ratios

Area/Ratio	Formula	2024	2023
Profitability			
Revenue growth	[2024rev/2023 rev - 1]*100	62.2	-
ROCE	PBITx100/CE	34.6	21.8
Net profit margin	PBITx100/Revenue	9.7	9.2
Asset turnover	Revenue/CE	3.56	2.37
GP margin	GPx100/Revenue	32.0	30.0

Liquidity and Working Capital management			
Current ratio	Current assets/Current liablities	2.95:1	4.05:1
Quick ratio	Current assets less inventory/Current liablities	1.06:1	0.93:1
Inventory days	Inventoryx365/cost of sales	112.6	166.3
Receivables days	Receivablesx365/revenue	27.7	30.6
Payables days	Payablesx365/cost of sales	32.5	53.3
Gearing			
Gearing ratio	NCLx100/CE	27.40	25.83
Interest cover	PBIT/Finance costs	13.6	10.0

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 13 JUNE 2024

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

Prince & Co have been auditors of Mafuta Refinery Plc for the past five (5) years. During these five (5) years the firm issued unmodified audit opinions.

Mafuta Refinery Plc. is a company in the refining of petroleum products. The company imports comingled crude oil which it processes to produce petroleum products. The crude oil is transported using a pipeline from the port of Beira in Mozambique. The refinery was constructed and commissioned thirty (30) years ago and in the last five (5) years there have been noted frequent breakdowns of the plant. Currently, the plant is operating at 10% of its capacity and this has resulted in the company facing serious liquidity problems. Mafuta Refinery Plc holds large stocks of raw materials, finished products and spares and components used in the maintenance of the plant. The company uses the services of Chemical Logistics in determining the quantity and value of work in progress and finished goods stock at the period end. Chemical Logistics has been providing this service to Mafuta Refinery Plc. from its inception and the Chief Executive Officer of Mafuta Refinery Plc. owns 5% shares in Chemical Logistics.

Two (2) years ago, Mafuta Refinery Plc. obtained a loan of K20 million secured on the company's non-current assets. One (1) of the conditions in the loan agreement is that Mafuta Refinery Plc. would be required to submit annual audited financial statements to the bank.

During the current financial period, the share price on the local securities market significantly increased and the interim financial statements indicated that the company would experience significant growth in the next three (3) years. Relying on the previous year audited accounts and the interim financial statements for the year, a large financial institution bought a significant number of shares in the company hoping to get significant returns on its investments.

Before finalization of the previous year audit, there were media reports that Mafuta Refinery Plc. was being investigated for fraudulent financial reporting by the securities commission. It was alleged that the company grossly overstated its closing inventory resulting in an overstatement of its profit. This had been going on for over three (3) years and it had not been detected by the auditors. This fraud was discovered in the current year and shareholders raised concern at the annual general meeting that the auditors did not detect the fraud. The shareholders resolved to sue Prince & Co. for professional negligence for any loss they may suffer as a result of the fraud. This resulted in a disagreement with the auditors resulting in the company resolving to terminate the agreement with Prince & Co before the end of their contract. The Engagement Partner in Prince & Co. indicated that the firm would be entitled to compensation as a result of the termination of its agreement with Mafuta Refinery Plc. and that the engagement letter with Mafuta Refinery Plc. included a clause that the firm would not be liable for professional negligence arising from the performance of audits.

Mafuta Refinery Plc. put the offer of audit services for the current year to tender. Your firm, Rose & Associates, submitted a bid to offer audit services to Mafuta Refinery Plc. and has been nominated to be auditor of Mafuta Refinery Plc. It will be the first time for the firm to audit a company in the oil industry. The firm will rely on the expertise of Sherry who recently joined the firm as Audit Manager after leaving Mafuta Refinery Plc. following the fraud. The financial year end of Mafuta Refinery Plc. is the same as that of several other audit clients of your firm. This is a busy period for your firm and most of the audit staff have more than one (1) audit assignment they are undertaking.

The following information relating to equipment has been extracted from the draft financial statements of Mafuta Refinery Plc. for the year ended 31 March 2024:

Item	Carrying amount K000	Recoverable amount K000	Value in use K000	Fair value K000
Asset 1	5 400	2 450	2 450	1 850
Asset 2	4 200	5 400	4 500	5 400
Asset 3	3 890	4 500	4 500	3 800
Asset 4	6 400	4 850	3 240	4 850

You have been assigned as Audit Senior on the audit of the financial statements of Mafuta Refinery Plc. for the year ended 31 March 2024. Based on the results of risk assessment undertaken at the planning stage of the audit, you concluded that audit risk is high and you took this into consideration when setting the materiality levels used in the audit.

The Audit Manager on the audit of the financial statements of Mafuta Refinery Plc informed you that the audit should be concluded by 2 May 2024 and the audit opinion will be signed on 15 May 2024. You are currently planning to perform audit procedures on subsequent events and you would like to delegate this to one (1) of your Senior Audit Assistants. He requires to be guided on the approach that he should take to identify subsequent events because this will be the first time that he will be doing work on subsequent events.

After the audit work was done and the audit report signed, there was a fire on 27 May 2024 caused by an electrical fault that destroyed inventory worth K23 million. The Insurers are still trying to confirm the cause of the fire and determine the actual value of the inventory lost in the fire.

Required:

(a) Evaluate the extent of legal liability of Prince & Co. by parties that could take legal action against it. (6 marks)

(b) Describe the matters that should be considered by Rose & Associates before accepting nomination as auditors of Mafuta Refinery Plc. (6 marks)

(c) Assuming that all ethical matters have been resolved and Rose & Associates accepts nomination as auditors of Mafuta Refinery Plc.:

(i) Assess the need for the use of the work of an expert in the audit of the financial statements of Mafuta Refinery Plc. and explain the impact of the work of the expert on the audit report. (6 marks)

(ii) Describe how audit risk and materiality in the audit of the financial statements of Mafuta Refinery Plc. will impact the audit plan and the nature and extent of substantive audit procedures. (4 marks)

(iii) Describe the matters that should be considered by the audit team regarding the impairment of equipment in the audit of the financial statements of Mafuta Refinery Plc. (6 marks)

(a) (i) Describe the audit procedures that should be applied by the audit team to identify subsequent events in the audit of the financial statements of Mafuta Refinery Plc. (6 marks)

(ii) Describe the impact of the event of 27 May 2024 on the audit of the financial statements of Mafuta Refinery Plc. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

Your firm of chartered accountants, Morgan & Ellis is auditor of Mukuba Plc and the audit for the financial statements for the year ended 30 June 2023 has just been concluded. An unmodified audit opinion was issued and the profit for the year is K10.5 million after tax.

The Kilimanjaro Group of companies started negotiations with the management of Mukuba Plc to take over the company. The net worth of the company was estimated at K100.5 million at the time. In the last negotiation meeting held at the Head Office of Mukuba Plc which meeting was attended by the Engagement Partner of the recent audit, a concern was raised on inventory valuation and the likelihood that inventory may have been overstated resulting in an overstatement of profit. The Engagement Partner when asked stated that he stood by the opinion issued and that the financial statements showed a true and fair view. A decision was made in this meeting for the Kilimanjaro Group to take over Mukuba Plc and the transaction was completed at the end of August 2023.

On 15 September 2023, Mukuba Plc.'s bankers resolved to recall an outstanding loan of K5 million with a threat to enforce the security if the loan was not repaid immediately. This was on account of the company's failure to meet the loan conditions. This resulted in the company facing serious liquidity problems and a significant drop in the share price. Initial investigations revealed that there was serious fraud involving overvaluation of inventory which the auditors did not detect during the audit resulting in an overstatement of profit in the financial statements for the year just ended. The misstatement of inventory has been going on for five (5) years from the time the company engaged R & E consultants to value inventory. The net worth of the company is much less than what the financial statements show as a result of the misstatement of inventory.

The bank could not recover the loan and Mukuba Plc filed for bankruptcy and a liquidator was appointed. The Kilimanjaro Group and the bank commenced legal action against Morgan & Ellis for professional negligence seeking damages for losses suffered.

In a meeting with the Audit Committee of Mukuba Plc it was agreed that corporate governance flaws led to the problems that the company was faced with. You emphasized the need for the company to follow best corporate governance practices except for the fact that they are principles based rather than rule based.

Required:

(a) Explain the strengths of the provisions of the Sarbanes Oxley Act against principles based approaches to corporate governance. (2 marks)

(b) Advise the Kilimanjaro Group and the bank on the intended litigation against Morgan & Lewis. (8 marks)

(c) (i) Describe three (3) matters that the audit team will consider in relying on the work of R & E Consultants in the audit of the financial statements of Mukuba Plc and explain the possible action if it decided not to rely on work of R & E Consultants. (6 marks)

(ii) Describe the impact of the work of R & E Consultants on the audit work and opinion on the financial statements audit of Mukuba Plc. (4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Your firm of chartered accountants is auditor of Kalomo Plc and this will be your first time auditing the financial statements of Kalomo Plc.

Kalomo Plc is a manufacturer of domestic and industrial gases. It is a subsidiary of Everest Group of companies. One (1) of the other subsidiaries of the Everest Group of companies supplies raw materials to Kalomo Plc. During the current financial year, Kalomo Plc bought a controlling interest in Supa Gas Ltd, a gas distribution company. Supa Gas Ltd is audited by a different firm of auditors and Kalomo Plc has indicated that it will prepare consolidated financial statements and has appointed your firm as auditors of the consolidated financial statements. Kalomo Plc will continue to distribute its products through Supa Gas Ltd.

You are planning the audit of the financial statements of Kalomo Plc and the consolidated financial statements for the year ended 31 March 2024.

Required:

Describe the matters that should be considered in planning the audit of the financial statements of Kalomo Plc and the consolidated financial statements. (6 marks)

(b) You are Audit Manager in your firm of chartered accountants and you are reviewing the working papers for the audit of the financial statements of Nkaka Ltd for the year ended 31 March 2024.

The working papers for tangible non-current assets show that included in the total amount is an amount of K65 million relating to land and buildings. A note in the working papers shows that K20 million of this amount relates to an investment property owned by Nkaka Ltd which is currently leased out to an oil marketing company and being used as its Head Office. The lease of this property is for a period of ten (10) years and the lease is in its third year.

The leased property is held in the financial statements at its original cost at construction more than a decade ago.

The audit of the financial statements of Nkaka Ltd is nearing completion. A review of the current working paper file for the audit of the financial statements for the year ended 31 December 2023 shows significant exceptions in the operations of the internal controls. As a result, the audit team followed a substantive approach to conduct the audit.

During the last week of the financial year, it was noted that sales revenue increased significantly compared to the previous year. Inquiries from management revealed that there was an increase in credit sales during this week amounting to K5.4 million and the conditions of sale was that Nkaka Ltd should retain title to the inventory sold until payment is received. The shareholders of Nkaka Ltd consider the sales revenue in making economic decisions of the company. The risk attributed to accounts receivables is much higher than the risk of the company as a whole as a result of the relaxation of credit vetting guidelines. A review of the minutes of the board of directors of Nkaka Ltd shows that it was resolved that a restructuring of the company will be undertaken during the first quarter of the following year. It was estimated that the cost of restructuring will amount to K2.5 million.

Required:

(i) Describe the audit risks that should be considered at the planning stage of the audit of the financial statements of Nkaka Ltd. (4 marks)

(ii) Discuss the accounting for the sales made during the last week of the financial year by Nkaka Ltd. (4 marks)

(iii) Suggest four (4) audit procedures that should be performed regarding the revenue figure in the financial statements of Nkaka Ltd. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Kimberly Plc. has been an audit client of your firm of chartered accountants for the past five (5) years. Kimberly Plc. is a manufacturer of domestic electrical appliances and has been in existence for over ten (10) years. The plant and equipment of Kimberly Plc. has not been replaced during this period resulting in frequent break downs and a drop in the quality of products manufactured. In an effort to maintain its customer base, the company gives a twelve (12) month warranty on all its products.

The year-end of Kimberly Plc. is 31 December. During the year ended 31 December 2023, the company carried out a revaluation of all its properties. The previous year's financial statements had a revaluation reserve surplus of K2.3 million. Arising from the current year's revaluation, a total amount of K0.90 million, being a revaluation deficit for a property revalued for the first time, was debited to the revaluation surplus account. During the year, the company resolved to discontinue the production of a certain line of electrical items and offered for sale the production equipment to a competitor. The equipment has been depreciated in the current year and the depreciated amount is included in the property, plant and equipment figure in the draft financial statements.

The draft statement of financial position of Kimberly Plc. has an amount of K0.300 million described as a general provision. This amount has remained the same for the last three (3) years. Subsequent to the period end in the new accounting period before the audit report was signed, a total of K1.2 million was spent in replacing and repairing defective equipment sold in 2023. This amount has been charged to the profit or loss account for 2024.

At the planning stage of the audit the Audit Senior requested for written representations from management acknowledging its responsibility for the financial statements. These representations had not been obtained at the time of finalizing the audit. The Audit Senior indicated that management declined to provide written representations some of which are required to be obtained by specific auditing standards. Management argued that the audit team should obtain evidence by performing audit procedures and not rely on representations made by it.

The Audit Senior is of the view that an adverse audit opinion should be issued. This is on account of incorrect accounting of material amounts in the financial statements. Furthermore, the Audit Senior observed that there existed a material uncertainty with regards the ability of Kimberly Plc. as a going concern and this is a serious matter justifying an adverse opinion despite the fact that management of Kimberly Plc. was willing to make adequate disclosure regarding the material uncertainty in the notes to the financial statements.

Below is the draft audit report prepared by the Audit Senior:

To: The board of directors of Kimberly Plc.:

Basis of opinion
The basis of the adverse opinion is the materiality of the matters of concern regarding incorrect accounting for provisions and subsequent events.

Opinion
Except for the matters explained in the basis of opinion paragraph, the financial statements of Kimberly Plc. show a true and fair view of the state of the company as at 31 December 2023.

Emphasis of matter paragraph
Material uncertainty with regards the ability of Kimberly Plc. as a going concern exists at the period end.

Signed: Audit Senior

Required:

(a) (i) Describe the matters that you will be concerned with at the finalization stage of the audit of the financial statements of Kimberly Plc. (4 marks)

(ii) For each matter in (i) above suggest suitable action that should be taken by the audit team. (4 marks)

(b) Evaluate and critique the draft audit report prepared by the Audit Senior. (6 marks)

(c) Suggest a suitable response by the audit team in view of the refusal by management of Kimberly Plc. to provide the requested written representations. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) You work for Chushi & Associates a two (2) partner firm of chartered accountants. You have been assigned by the Audit Manager to lead a team of auditors to conduct an audit of the financial statements of Cradle Ltd for the year ended 31 March 2024.

You recently completed the planning of this audit and concluded that audit risk is high. You advised the Audit Manager that you would reduce audit risk to acceptable levels and you would go ahead with the audit. The Audit Manager called you for a meeting at which he requested you to ensure that there will be need for close supervision of the work and necessary reviews should be carried out throughout the audit. He further requested that at the end of the audit work, the working papers should be peer reviewed before the issuance of the audit report.

A typical audit team of the financial statements of Cradle Ltd comprises the Engagement Partner, an Audit Manager, an Audit Senior and two (2) Audit Assistants.

Required:

Discuss the purpose of reviews in the audit of the financial statements of Cradle Ltd and describe how they are done. (6 marks)

(b) Kampala Ltd is a company that has been in wine distillation for over fifty (50) years. The company uses distilling methods inherited from the founder of the company. Wine matures in periods that range from five (5) to twenty (20) years before it can be sold. The company recognizes revenue when the wine is sold for consumption and is distributed through its own outlets under its brand name.

Chali & Co have been the auditors of Kampala Ltd for the past five (5) years. During this period the firm issued unmodified opinions. During the current financial year, there arose a disagreement between the firm and management regarding valuation of inventory and the accounting for the sale of wine under sale and buy back arrangements. The company wished to recognize revenue for such sales instead of treating them as a financing tool and recognizing a liability. Management intended to show a good performance by the company because it was negotiating a loan from it bank and audited financial statements will be required by the bank in making a decision. Chali & Co did not agree with the proposed accounting treatment which prompted management to terminate the contract for offer of audit services with Chali & Co.

Following the disagreement and eventual termination of the contract with Chali & co, Kampala Ltd put to tender the offer of audit services. Your firm of chartered accountants is considering bidding for the offer of audit services to Kampala Ltd. The firm does not have the experience in auditing companies in the industry that Kampala Ltd is in. The Managing Partner of your firm is keen on increasing the client base for the firm. You are responsible for client acceptance in your firm and he has called a meeting at which he wants you to brief him on the possibility of the firm submitting bid documents clearly explaining how the firm will be able to meet the requirements of Kampala Ltd.

None of the staff in your firm knows the owners of Kampala Ltd. Brief information that you have included the following:

1. The Chief Internal Auditor reports to the Finance Director and the internal audit reports are discussed with the Finance Director before releasing them. Due to pressure of work for the internal audit department, there have been no follow up audits conducted resulting in the same observations being made each year. As a matter of routine, the internal auditors attend the monthly inventory counts conducted at the major retail outlets. At the year end, the internal auditors attend inventory count at the transit warehouses which accounts for 55% of all inventory held by Kampala Ltd. Quarterly, the internal audit department conducts tests for the operating effectiveness of internal controls at the major outlets.
2. The company has a very tight timetable for the finalization of the audit because its Head Office determines the dates of the board meeting and the annual general meeting.

In response to the advert by Kampala Ltd for expression of interest to offer audit services, your firm decided to submit a proposal for offer of audit services to Kampala Ltd.

Required:

(i) Draft suitable notes containing matters that should be included in the audit proposal in response to the tender for offer of audit services by Kampala Ltd. (6 marks)

(ii) Describe four (4) matters that should be considered in relation to acceptance to offer audit services to Kampala Ltd assuming your firm is nominated auditor of Kampala Ltd. (4 marks)

(iii) Evaluate the extent to which use of internal audit can be made in the audit of the financial statements of Kampala Plc. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.2: ADVANCED AUDIT AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Evaluation of extent of legal liability:

In order for a litigant to succeed in suing the auditor and be awarded compensation the litigant should prove the following three matters:

1. That the auditors owe a duty of care
2. That there was a breach of duty of care by the auditor and
3. The litigant suffered loss as a result of the auditor's breach of the duty of care.

Using the information in the scenario, the following could possibly sue the auditors for professional negligence arising from failure to detect a fraud that had been going on for three years.

The bank that lent the company K20million:

Generally banks do not fall under the decision in the Caparo v Dickman case. This is because normally in their agreements with borrowers they include a clause for the submission of audited financial statements by the borrowers. By so doing they create a duty of care by auditors who audit the financial statements.

It is assumed know that banks rely on audited financial statements and if the auditors do not wish to be held liable they must issue appropriate disclaimers to that effect.

The following is the position:

- The auditors will be assumed to owe a duty of care to the bank unless appropriate disclaimers are in place.
- The bank should prove there was a breach of the duty of care by the auditors and
- The bank should prove it suffered loss as a result of the breach of the duty of care by the auditors.

The institutional investor that bought shares in Mafuta Refinery Plc.:

It has been held that the audits do not owe a duty of care to investors who buy shared relying on audited financial statements. This is according to the decision in the Caparo v Dickman case.

The institutional investor is subject to the decision of the Caparo case and the position is as follows:

- Must prove that there was a duty of care owed to them by the auditors
- Must prove that there was a breach of the duty of care by the auditors and
- Must prove that the institutional investor suffered loss as a result of the breach of the duty of care.

The shareholders of Mafuta Refinery Plc.:

The courts have held that the auditors owe a duty of care to the company being shareholders as whole. There is contract between the auditor and the client company. The resolution passed at the annual general meeting of Mafuta Refinery Plc. is valid and represents the company.

The position is as follows:

- It is assumed that the auditors owe a duty of care to it. The shareholders do not to prove this.
- The shareholder will require to prove that there was a breach of duty by the previous auditors and
- They should prove that they suffered loss as a result of the breach of the duty of care.

(b) Matters to consider in accepting nomination:

1. The firm should evaluate and consider whether it has staff with necessary skills and competences to undertake an audit of the financial statements of the refinery an industry it has no experience in.
2. The firm must reconsider its reliance on Sherry who it wishes to engage as Audit Manager. This will give rise to a self-review threat whose only safeguard will be not to assign her on this audit.
3. The year-end of Mafuta Refinery is the same as that of other clients. This is a busy period for the firm with staff working on more than one assignment. More pressure may result in audits not meeting quality standards being done.
4. The firm should consider the integrity of the management of Mafuta Refinery Plc. considering the disagreement with Rose & Associates the previous auditors. It would appear management does not understand the objective of an audit and thinks that the auditors are responsible for fraud detection.
5. Rose & Associates should consider the reasons why Prince & Co the previous were removed from office. Before accepting nomination the firms should request to communicate to the previous auditors to find out if there are any reasons why appointment should not be accepted.

(c)

(i) Need for use of an expert in the audit of the FS of Mafuta Refinery Plc.:

For Rose & Associates, this will be the first time for the firm to audit a client company in the oil industry. The nature of the products dealt in require specialist skills to measure in terms of quantity and valuation particularly that of work in progress. There is no indication that the firm has in-house experts who may be able to do this and so the need for the use of the work of experts is obvious. The firm has the option of relying on the work of the management expert currently used by Mafuta Refinery Plc. or the firm may require to engage its own auditor expert.

Mafuta Refinery Plc. uses the services of Chemical Logistics to determine the quantity of work in progress and finished products. Inventory in a manufacturing company such as Mafuta Refinery Plc. is material. A matter of concern is that Chemical Logistics has been doing this for the past ten years and now the Chief Executive Officer of Mafuta Refinery owns 5% shares in Chemical Logistics. The independence and objectivity of Chemical Logistics is brought into doubt.

Mafuta Refinery Plc. uses the services of Chemical Logistics to determine the quantity of work in progress and finished products. Inventory in a manufacturing company such as Mafuta Refinery Plc. is material. A matter of concern is that Chemical Logistics has been doing this for the past ten years and now the Chief Executive Officer of Mafuta Refinery owns 5% shares in Chemical Logistics. The independence and objectivity of Chemical Logistics is brought into doubt.

The relationship of the Chief Executive Officer of Mafuta Refinery Plc. with Chemical Logistics casts doubt about the work of Chemical Logistics and manipulations of closing inventory can easily be made for whatever reason and motive. For this reason, the current auditors should not rely on the valuation by Chemical Logistics. The auditors should appoint an auditor expert who is independent to confirm the inventory figures at the period end.

Impact of work of expert on the audit report:
The external auditors are responsible for the audit evidence that they gather during the audit. The work of the expert can be relied upon by the auditors but that does not remove the auditor's responsibility. The work and use of the work of an expert will not be included in the audit report unless the laws and regulations of the country require this to be done. The auditor is also solely responsible for the audit opinion not withstanding that reliance was made on the work of an expert.

(ii) Impact of risk & materiality on audit:
The high audit risk in the audit of the financial statements of Mafuta Refinery Plc. will have an impact on how the audit will be conducted. The possible impact on the audit plan will be as follows:

1. There should be a careful selection of audit team members so that experienced members are included here. The engagement of an auditor expert will be considered in view of the nature of the industry.
2. Close supervision of the work done will be made at all the stages of the audit. Emphasis to be made to the audit team members to observe professional skepticism during the audit.
3. The approach to the audit may be the substantive audit approach and this will require a high level of substantive tests.
4. In order to reduce audit risk to low and acceptable levels, materiality will be set at a lower level than if audit risk was low.
5. Consideration should be made of quality control reviews by one who was not involved in the audit.

(iii) Matters to consider on impairment of equipment in the audit of Mafuta Refinery Plc:

1. Consideration will be made to establish whether the equipment requiring impairment is included in the list of assets subject to impairment by the company.
2. Identify the assets that have been impaired by comparing the carrying value with the recoverable amount. When the carrying value is higher than the recoverable amount the asset is impaired.
3. For the assets that have been impaired, confirm that they have been correctly written down in the financial statements.
4. There will be need to ensure that the computation of impairment has been done correctly by:
    - Verifying the carrying values used in the impairment review with the balances in the general ledger.
    - Perform audit procedures on the determination of the value in use amounts.
    - Perform audit procedures for the determination of the fair values used in the impairment review.

(d)

(i) Audit procedures to identify subsequent events:

According to ISA 560 *Subsequent events* the auditors have an active duty to identify subsequent events from the period end to the date of the audit export. The objective of the auditor in doing so is to obtain evidence that management has corrected dealt with subsequent events according to IAS 10 *Events after the reporting period.*

The following are the ways in which the auditors can identify subsequent events:

1. Inquire from management on the following:
   - The status of items involving subjective judgment at the year end.
   - Whether the company has any commitments, borrowings or guarantees.
   - Whether there have been developments since the year end involving risk areas, provisions or contingencies
   - Latest position on litigations or claims that existed at the period end.
2. Obtain evidence concerning any litigation or claims from the company lawyers.
3. Require the audit team to be alert for items subsequent to the period end which could give evidence of conditions at the period end.
4. Obtain written representations from management that all events occurring subsequent to the period end that required adjustment or disclosure have been adjusted or disclosed.

(ii) Impact of the event of 27 May 2024 on the audit:

The event of 27 May 2024 relates to a fire that destroyed some inventory of Mafuta Refinery Plc.

This event occurred after the period end and after the audit report was signed. With regards the financial statements for the year ended 31 March 2024 the inventory value will not be affected by the inventory lost in the fire. This is because the inventory existed at the period end and the audit opinion will be for the period to the year end on 31 Mach 2024. This will be treated as a non-adjusting event.

The matter should be discussed with management and it may require disclosing this matter in the financial statements because of its materiality. If this is the case, then a new audit report will require to be issued after any changes to the documents containing the financial statements.

SOLUTION TWO

(a) Strengths of Sarbanes Oxley Act over principle based approach to corporate governance:
The Sarbanes Oxley act is a rule based legislation on corporate governance. The guidelines are contained in law and must be followed according to the letter of the law.

This means that there is no room to vary what the law says and variations are difficult to make. For principles based approach the principles can be applied across different situations and can be subject to abuse.

(b) Litigation against the auditors:

The general rule with regards the responsibilities of the auditors is that they owe a duty of care to the client company in the audit of financial statements. According to the decision in the Caparo case, the auditors do not owe a duty of care to third parties who rely on audited accounts to make economic decisions.

To succeed in suing auditors for professional negligence three criteria have to be proved to a court of law as follows:

1. That the auditors owe a duty of care to the litigant
2. That the duty of care was breached by the auditors and
3. That the litigant suffered loss as a result of the breach of duty of care by the auditors.

For a client company being all shareholders as a whole criteria number 1 is assumed and only 2 & 3 need to be proved.

For all other considered as third parties the following applied:

Advice to the Kilimanjaro Group on the untended litigation:
Generally the Kilimanjaro Group of companies is treated like a third party and is subject the provisions of the decision in the Caparo case.

In this case the Engagement Partner for the audit of the financial statements relied upon by Kilimanjaro Group of companies attended the last negotiation meeting at which Engagement partner affirmed that he stood by the audit opinion issued. By so saying the Engagement partner created a duty of care on the auditors and the courts will assume that the auditors owed Kilimanjaro Group of companies a duty of care. This is in accordance with the decided case of ADT v DTO whose facts are similar to the ones for Kilimanjaro Group of companies where the judge concluded that the audit partner created a contractual relationship.

The position is as follows for Kilimanjaro Group to succeed in suing the auditors:

- The court will assume that the auditors owe a duty of care because of the statement made by the Engagement Partner in the negotiation meeting.
- The Kilimanjaro Group of companies will need to prove that the auditors were in breach of the duty of care and
- That Kilimanjaro Group of companies suffered loss as a result of the breach of duty of care by the auditors.

Advice to the bank on intended litigation:
In the case of the bank lending money to Mukuba Plc., case law states that the auditors should know that banks rely on audited financial statements when making decisions to lend money and that they normally would require audited financial statements to be submitted to the bank annually. The banks include a close requesting for audited financial statements from their clients. For this reason auditors should include relevant disclaimers in the agreement with the client if they do not wish to be liable. Royal Bank of Scotland v Bannerman Johnston.

The court will deal with this matter as follows:

- The auditors will owe a duty of care to the bank because there is no disclaimer that has been issued.
- The bank will require to prove that there was a breach of duty of care by the auditors and
- That the bank suffered loss as a result of the breach of duty.

(c)

(i) Matters to consider in using the work of R & E Consultants:

1. The independence and objectivity of R & E Consultants. Lack of independence may influence the values determined by the consultants.
2. The qualification of R & E Consultants and the experience that they possess.
3. The assumptions used in the valuation and consider for reasonableness.
4. Membership of R & E Consultants to the relevant professional body that regulates the industry.

If it is concluded that the work of R & E Consultants is not appropriate for the audit, the auditors should consider engaging an auditor expert of their choice. In doing it will be necessary to ensure that the auditor expert is independent and has the necessary skills and competences to do the work.

(ii) Effect of work of experts on the audit and the opinion:
The statutory auditors are responsible for the audit evidence that is obtained in an audit. This is why the audit team should ensure that the work of the expert can be relied upon in gathering evidence on the audit of a client company.

Generally, auditor shall not refer to the work of experts in the audit report unless specifically required by law as is the case in the environment within which the audit is conducted.

The auditor is responsible for audit opinion reached and any attempt to share responsibility with experts will not be valid.

SOLUTION THREE

(a) Matters to consider in the audit of the financial statements of Kalomo Plc.:

1. This will be the first time to audit the financial statements of Kalomo Plc. Even after accepting appointment there is need to establish whether the firm has staff with knowledge of the industry that Kalomo Plc. is in. This may necessitate the engagement of an auditor expert if the firm lacks some skills.
2. There is need to consider the fact that Kalomo Plc. is a subsidiary company so there is need to know the extent of dealings with the parent company or other companies under the same control. The issue of related parties and related party transactions is important and the disclosure requirements.
3. There will be need to get full details of the acquisition of Supa Gas Ltd and the issue of goodwill arising on consolidation will have to be considered.
4. The fact that Supa Gas Ltd is audited by different auditors should be considered and the extent of reliance on the work of the other auditors in the audit of the consolidated financial statements.

(b)

(i) Audit risks in the audit of the financial statements of Nkaka Ltd.:

1. There is an audit risk that investment properties may not be separately disclosed in the financial statements as required by accounting standards resulting in the financial statements being misstated.
2. The sales revenue may be misstated. The significant increase in revenue at the end of current year could be an attempt to creative accounting with a view to show a better performance at the end of the financial year.
3. There is a risk that accounts receivables may be misstated arising from receivables owing for more than 90 days and the relaxation of credit vetting rules. The allowance for receivables may be understated and not in lien with the related accounting standard.
4. There is a risk that no provision is made on account of the intended restricting of the company. If it is likely that this will be done then a provision should be made in the current financial year and if this is not done the financial statements will be misstated.
5. There is a risk that Nkaka Ltd may include the inventory for which it holds title in the closing inventory when this should not be the case because property to inventory passes once a sale has been made.
6. The poor internal controls in Nkaka Ltd which appear to be ineffective could result in errors that could cause the financial statements to be misstated not to be detected and corrected.
7. There is risk that the leased property could be wrongly accounted for not in line with the relevant accounting standard for investment properties.

(ii) Accounting for sales at the period end:

The sales in the last week of the financial period do not look like normal sales. The following matters require to be considered with regards revenue:

- The motive for the relaxation of credit terms is probably in order to increase sales revenue for the year which will result in an increase in profit for the year. What is particularly worrying is that the increased sales were initiated by the Finance Manager who instructed Sales Representatives to deliver product on credit to retail outlets that are supposed to pay cash up front.

- The significant increase in revenue suggests that there is another motive for doing so and this may suggest wrong accounting for revenue considering the conditions of the sales that title to the inventory will remain in the name of Nkaka Ltd.
- Credit sales are normal in business and it is unusual that when they have been made Nkaka Ltd still retains tittle to the inventory. There is a risk that this inventory will be included in closing inventory for the year and yet the related revenue has been recorded in the current year.

(iii) Audit procedures – revenue

1. Perform analytical procedures on sales revenue on a weekly, monthly and annual basis and inquire on significant variations noted.
2. For a sample of sales made during the year confirm sales prices and confirm posted to correct general ledger accounts.
3. Review sales made around the period end and confirm to goods delivered and recorded in the correct accounting period.
4. Inquire of management the condition for sales in the last week of the accounting period and establish reason for retaining title to the inventory sold.
5. Review post year end transactions and confirm payments for the increased sales made in subsequent period. If amounts still outstanding for more than credit period discuss with management as the sale should not have been recognized but were just merely made to show increased sales revenue in the year.

SOLUTION FOUR

(a) Matters to consider and action to take at finalization of audit of Kimberly Ltd:

	(i) Matters to consider:	(ii) Action to be taken:
1	The accounting for the revaluation of properties should be considered. The accounting for the revaluation deficit of K0.90million debited to revaluation surplus is not correct. This should have been debited to the current year profit or loss account.	Request management to correct the accounting for the revaluation deficit of a property revalued for the first time.
2	The discontinued operation should be reclassified and disclosed separately in the financial statements. No depreciation should be charged to profit or loss for this in accordance with accounting standards.	Request management to reverse the depreciation charge for the year and to disclose separately the discontinued operations assets.
3	General provisions in the financial statements are not allowed. Current guidance is that only provisions meeting the requirements of IAS 37 should be provided for and these can only be used for the purpose for which they were established.	Obtain details of the general provision from management and if they do not meet the requirements of IAS 37 request management to reverse the provision.
4	The amount spent on repairs of defective equipment in early 2024 seems to relate to sales made in the prior year of 2023. It would appear that the general provision does not relate to this because it is much less and has existed for three years. Since the audit has not been concluded and the audit report signed this should be discussed with management and appears to be an adjusting event requiring that a provision for warranty amounting to the expenditure should be made in the financial year 2023.	Discuss this matter with management and request that a warranty provision be made in the financial statements for 2023.

(b) Critiquing draft audit report:

The valuation of the draft audit report is based on the information contained in the draft report. The benchmarks against which the report and the information it contains are the auditing standards on reporting. The suggestion by the Audit Senior that an adverse opinion should be given on account of the existence of material uncertainty is incorrect on account of the fact that management is willing to disclose this matter in the notes to the financial statements. In that case a qualified opinion as contained in the draft audit report is appropriate.

The following are the other matters regarding the draft report:

	Comment on draft report:	Recommendation for correction:
1	The draft audit report is addressed to the Board of Directors of Kimberly Ltd. The auditors are appointed by the shareholders to whom assurance should be given.	The audit report should be addressed to the shareholders of Kimberly Ltd.

2	In accordance with ISA 700 *Forming an opinion and reporting on financial statements,* the opinion paragraph should be placed above the basis for opinion paragraph. The position of the opinion paragraph in the draft report is not correct.	The basis for opinion and the opinion paragraphs should be swapped in accordance with the applicable standard.
3	There is no Key Audit Matter paragraph included in the draft audit report. According to ISA 701 *Communicating key audit matters in the independent auditor's report* requires that the KAM paragraph should be included in the audit report of listed companies and a statement that there are no key audit matters included.	A key audit matters paragraph should be included with a statement that there are no key audit matters to report on.
4	The inclusion of the material uncertainty with regards going concern in the emphasis of matter paragraph is incorrect. While this was the case previously, a new paragraph was introduced where this should be included.	A separate paragraph *Material Uncertainty Related to Going Concern* should be introduced where the material uncertainty should be explained.
5	The audit report should be signed by the Engagement Partner and not the Audit Senior as is the case here.	The audit report should be signed by the Engagement Partner who is overall responsible for the audit.

(c) Response on refusal to provide written representatives:

Management of Kimberly Plc. has not given the auditors written representations required in accordance with ISA 580 Written representations. Audits should be only be accepted or continued if the preconditions for an audit are present and these are confirmed by management giving the relevant representations acknowledging its responsibilities for:

- The preparation of the financial statements in accordance with applicable financial reporting framework.
- Putting in place internal controls necessary to enable the preparation of financial statements which are free from material misstatements.
- Providing the auditors with relevant information they require and that all transactions have been recorded and are reflected in the financial statements.

Some other auditing standards require that management provides written representations. In this case management has not provided the written statements acknowledging its responsibilities and also other representations requested for by the audit team.

In the first place the audit should have been declined when the written representations were not provided. The audit team should have brought this to the attention of senior staff in the firm who should have discussed the matter with the management of Kimberly Plc.

At this stage:

- The integrity of management of Kimberly Plc. is out into question.
- The reliability of oral and other evidence provided is questionable.
- Efforts should be made to obtain the necessary representations and if these efforts fail the firm should consider resigning from the engagement.

- With regards other written representations not provided meant to support other evidence, perform other alternative procedures and if they do not provide sufficient appropriate audit evidence consider modifying the audit opinion.

SOLUTION FIVE

(a) Purpose of reviews of audit work:

The purpose of reviews in an audit is to ensure that the work done by the audit team meets the quality standard expected for a quality audit whose results will form the basis of the audit opinion. Reviews are required to be carried out of all the work done by the various audit team members. Through these reviews any omission will be identified and referred back to the persons who did the work and attended to.

How reviews of the audit work of Cradle Ltd will be done:

1. The work done by the Audit Assistants will be supervised by the Audit Senior and the reviews will be evidenced by signing on the relevant space on the working papers that the work has been reviewed.
2. Once the work has been reviewed by the Audit Senior, the audit working paper files will be passed on to the Audit Manager for review of the work originated by the Audit Senior and that done by the Audit Assistants. Review points will be made and passed back for the attention of the originators of the working papers.
3. The working papers reviewed by the Audit Manager will be passed on to the Engagement Partner for a high level review and any review points will be referred back for attention. The Engagement Partner will pass on the working paper file to the peer review before signing the audit report.
4. The peer review will be done by the Partner who was not involved in the audit and this is referred to as a hot review since it is required before the signing of the audit report by the Engagement Partner.
5. The audit opinion and signing of the report will be made after the peer review.

(b)

(i) Notes containing matters to include in the audit proposal:

1. Details of the firm and the fact that it is large to be able to conduct such an audit.
2. An assessment of the needs and requirements of Kampala Ltd to confirm understanding.
3. A brief outline of how the firm will meet the requirements of Kampala Ltd.
4. Details of key staff of the firm to show that it has resources with skills and competences to be able to undertake the audit.
5. An estimate of the fee to be charged and details of how it has been determined.
6. Any other assumptions made to support the bid for the offer of audit services to Kampala Ltd.

(ii) Matters to consider in relation to acceptance as auditors:

1. Information regarding the owners of Kampala Ltd and key management staff.
2. Indications of possibility of limitation of scope.
3. The integrity of management and considering the difference that arose with the former auditors.
4. Availability of staff in the firm with competences and skills to undertake the audit.
5. Availability of experts if required. The valuation of inventory may require experts because the firm does not have experience in auditing companies in this industry.
6. The tight timeframe within which the work is expected to be compteded.

(iii) Possibility of using the work of internal audit and seeking direct assistance:
Using the work of internal audit or seeking direct assistance of the internal audit of Kampala Ltd should only be done in agreement with management. If the management does not agree to this then the statutory auditors have to perform all the necessary audit procedures to obtain the evidence they desire.

In the case of Kampala Ltd If management is agreeable to seeking to use the work of internal audit or seek direct assistance the following is the position:

Seeking to use the work of internal audit:
This is the situation where the audit team may wish to place reliance on some of the work that the internal audit department of Kampala Ltd would have done and has relevance to the audit of its financial statements.

Seeking direct assistance of internal audit:
In this situation the auditors may want direct assistance of the internal auditors by assigning them work which would have been done by the external auditors and supervised by the external auditors.

In the case of Kampala Ltd it would appear that the internal audit department is under the supervision of the Finance Director who can influence the internal audit work. In this case it will not be the best option for the auditors to rely on the work done by the internal auditors and so seeking direct assistance under supervision would be more appropriate.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4 : ADVANCED TAXATION

THURSDAY 14 JUNE 2024

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**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**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 - (C0MPULSORY)

Background

You are employed in TCX Associates, a firm of Chartered Accountants and you are dealing with the tax affairs of Chambishi Mining Corporation (CMC). The company is a Zambian resident subsidiary of a foreign based Multinational Mining company engaged in mining operations of various minerals. The groups financial statements are prepared in United States Dollars.

Tax obligations for previous year

Chambishi Mining Corporation has just received a notice from the Zambia Revenue Authority of a tax audit which will be conducted during the week starting on 12 February 2024 and the directors have asked you to help the entity prepare for the audit. You have ascertained that the company was compliant with its tax obligations in the previous year except for the following issues:

(1) The Mineral royalty tax for the month of March 2023 amounting to K75,600,000 was only paid on 31 May 2023, when the Mineral Royalty tax return for that month was also filed in.

(2) An error was made on the Pay As You Earn (PAYE) return for the month of June 2023. Although the return was submitted on the appropriate due date, income tax deducted from the emoluments of the company's employees for the month of June 2023 amounting to K89,546,400 was erroneously entered on the PAYE return as K85,946,400. The amount of K85,946,400 was accordingly remitted to the ZRA on the appropriate due date. This error was only discovered by an internal audit check in October 2023. The PAYE underpaid was remitted to the ZRA on 31 October 2023 and an amended PAYE return was filed in on this date.

(3) In August 2023, Chambishi Mining Corporation paid consultancy fees to Astute Legal Practitioners amounting to K510,000 net of withholding tax (WHT), for consultancy services rendered by the law firm to the company during that month. The company only remitted the WHT on the consultancy fees to the ZRA on 31 October 2023. The WHT return was also filed in on this date.

Financial performance for the year ended 31 December 2024

The following summarised statement of profit or loss for the year ended 31 December 2024, has been extracted from the financial statements of Chambishi Mining Corporation. All amounts are expressed in Zambian Kwacha.

	Note	K' 000
Gross profit		683,883
Employee costs	(1)	(96,400)
Corporate social responsibility	(2)	(68,550)
Other operating expenses	(3)	(216,800)
Other income	(4)	49,525
Profit before tax		351,658
Income tax expense	(5)	(32,828)
Profit for the year		318,830

Additional information:

Note 1: Employee costs

This includes employees' salaries of K46,500,000, Director's remuneration of K14,600,000 staff pensions for permanent pensionable employees paid of K32,900,000 and staff gratuities of K2,400,000.

The staff gratuities of K2,400,000 represents the annual charge for the current year in respect of gratuity payable to employees on three-year fixed term contract, which will expire next year. The total amounts of gratuities payable on expiry of these contract next year is K7,200,000. No gratuities were paid in the current year.

Note 2: Corporate Social Responsibility
This includes expenditure incurred in construction of a community police post in a council township outside the mining township amounting to K22,500,000, donations of medical supplies for the less privileged in the local mining community valued at K500 per recipient totalling K550,000 and environmental restoration costs for an abandoned mine amounting to K45,500,000.

Note 3: Other Operating expenses
Included in operating expenses are depreciation charges of K68,400,000, media adverts of K1,800,000, penalties and interest on statutory obligations of K83,115,000, auditors' remuneration of K2,533,000, impairment of mining equipment of K7,685,000 and environmental consultancy expenses of K9,430,000. The balance represents general allowable business expenses.

Note 4: Other income
This comprises income from hedging of K13,400,000 and interest income from short-term money market securities of K36,125,000 (net).

Note 5: Provisional Income Tax

The figure for the income tax expense in the statement of profit or loss shown above represents the provisional income tax paid by the company in the tax year 2024.

Note 6: Mineral Royalty Tax
The Mineral royalty tax paid by the company during the tax year 2024, has not been accounted for in the statement of profit or loss shown above. The company extracted and sold the following minerals during the tax year 2024:

Mineral	Category	Norm Value	Gross Value
Iron ore	Base metal	K45,800,000	K46,000,000
Emeralds	Gemstones	K86,500,000	K86,000,000

The company additionally extracted and sold 25,000 tonnes of copper in the year ended 31 December 2024:

The norm price of copper at the London Metal Exchange (LME) averaged US$8,400 per tonne throughout the year. The relevant average Zambian kwacha per US dollar rate approved by the Commissioner General was K24.00/US$1 for the year 2024.

Note:7 Unrelieved loss from hedging brought forward:
At 1 January 2024, had an unrelieved loss from hedging amounting to K9,640,000 which was suffered in the previous year, the tax year 2023.

Note 8: Unrelieved Tax Mining loss brought forward
The company incurred a tax adjusted mining loss of K32,500,000 in the year 2022 and generated tax adjusted mining profits of K49,250,000 in the tax year 2023.

Note 9: Capital Expenditure
At 1 January 2024, the company held the following capital assets which were imported from foreign suppliers and paid for in US dollars a year ago. The original costs of the assets on the date of purchase translated into Zambian Kwacha were as shown below:

Asset	**Cost**
Mineral processing equipment	K34,000,000
Mine excavating equipment	K65,000,000

The company constructed Chambishi Trust School, two (2) years ago at cost of K45,000,000 to provide primary and secondary school education to the local mining community. The school has since been handed over to the relevant authorities.

During the tax year 2024, the company incurred expenditure of K14,500,00 on general plant which was acquired from local Zambian suppliers and paid for in Zambian Kwacha.

Note 10: Indexation formula and other information
The indexation formula for capital allowances and mining losses, where applicable, is given below:

$$1+\frac{(R_2 - R_1)}{R_1}$$

The following Zambian Kwacha per US Dollar (ZMW/US$) average BOZ mid-exchange rates should be used where applicable:

Accounting Period	*Average BOZ Mid-Exchange rate*
	ZMW/ US$
Y/e 31 December 2022	K16.00
Y/e 31 December 2023	K20.00
Y/e 31 December 2024	K24.00

Required:

(a) With reference to Chambishi Mining Corporation's tax obligations for the previous year, advise the directors of the company's exposure to penalties and any interest on overdue/underpaid taxes and late tax submission of tax returns arising from the issues relating to:

(i) Mineral royalty tax for March 2023. (4 marks)

(ii) Errors on the Pay As You Earn return for June 2023. (4 marks)

(iii) Withholding Tax on Consultancy fees for August 2023. (4 marks)

You should assume that the BOZ discount rate is 11% per annum where applicable and that the tax rates for the tax year 2024 apply throughout

(b) Show how the loss incurred in the year ending 31 December 2022, was relieved in the tax year 2023 and determine the amount of the final taxable profit for the year ended 31 December 2023. (3 marks)

(c) Advise the directors of the tax treatment of the unrelieved loss from hedging brought forward on 1 January 2024, when computing taxable income for the year. (2 marks)

(d) Calculate the final tax adjusted mining profit for the tax year 2024. (17 marks)

(e) Compute the total amount of company income tax payable by the company for the tax year 2024. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section. Attempt any three (3) questions.

QUESTION TWO

For the purpose of this question, you should assume that today's date is 30 April 2024 and that the earnings ceiling for NAPSA contributions is K357,792 per annum.

Frankie Kasonge is a sole trader running a chain of retail shops. He has been in business for many years preparing his financial statements annually to 31 December. His annual turnover has always exceeded K800,000.

He wishes to admit his wife, Jullie Kasonge, into the business and incorporate it into a limited company. With effect from 1 June 2024, the business will be run as a limited company under the name; Fraju Limited. The following information has been provided:

Sole proprietorship

The adjusted business profit for the business will be K321,800 for the period of five (5) months from 1 January 2024 to 31 May 2024. This profit figure is after all necessary tax adjustments but before taking into account capital allowances.

The assets and liabilities the sole proprietorship will hold as at 31 May 2024 will be as follows:

	Original cost	**Income tax value at 1 January 2024**
	K	**K**
Shop buildings (including Land – K210,000)	1,400,000	880,600
Fixtures & fittings	300,000	150,000
Toyota Prado car (2600cc)	340,000	204,000
Toyota Mark-X car (2400cc)	220,000	176,000
Inventories	62,000	Not applicable
Bank loan	280,000	Not applicable
Payables	140,000	Not applicable

Frankie uses the Toyota Prado Car for both business and private purposes. It has been agreed with the Commissioner General that the business use is 60% of the total mileage.

Limited company

The business will be incorporated on 1 June 2024 into a limited company known as Fraju Limited and will commence trading immediately. The following information is available:

(1) The company will have an issued equity share capital of 100,000 equity shares of K1 each. Frankie will hold 60% of the shares while Jullie will hold the remaining 40% of the issued shares.

(2) Frankie and Jullie will personally manage the company as full-time working directors. Their annual salaries will be K441,600 and K374,400 for Frankie and Jullie respectively.

(3) The net profit as per accounts of the company for the period of seven (7) months from 1 June 2024 to 31 December 2024 is expected to be K1,580,000. This profit figure is before any withdraws of profits by each individual and NAPSA contributions. All expenses deducted in arriving at the net profit figure are allowable.

(4) The new company, Fraju Limited, will take over all the assets of the sole proprietorship and assume the liabilities at the following market values:

Assets/Liabilities	**Market value at 1 June 2024**
	K
Shop buildings (Land – K490,000)	2,200,000
Fixtures & fittings	170,000
Toyota Prado car (2600cc)	252,000
Toyota Mark-X car (2400cc)	170,000
Inventories	62,000
Bank loan	280,000
Payables	140,000

The Toyota Prado car and the Toyota Mark-X car will be used by Frankie and Jullie respectively on personal-to-holder basis. It is expected that each individual will use the respective motor vehicles 40% for private purposes.

Required:

(a) Advise Frankie of any four (4) income tax implications arising from incorporation of sole proprietorship on 1 June 2024. (4 marks)

(b) Compute the final taxable business profit made by Frankie, as a sole trader for the period up to 31 May 2024. (5 marks)

(c) Compute the amount of income tax and employees' NAPSA contributions payable by Frankie and Jullie for the tax year 2024. (5 marks)

(d) Compute the final taxable business profits and income tax payable by the company for the tax year 2024. (6 marks)

[Total: 20 Marks]

QUESTION THREE

GDR PLC, a prominent company, has been diligently managing its financial portfolio. In the fiscal year 2024, the company recorded profits in Zambia, totaling K324,500. The company ventured into foreign investments, receiving income from a foreign listed company comprising dividends of K22,750 (net) and bond interest of K22,500 (net). Withholding Tax (WHT) imposed on dividends in the foreign country was 35%, and whilst the WHT on bond interest deducted in the foreign country was 25%.

James Mungole, the Chief Financial Officer (CFO) of GDR PLC, earned an annual salary of K360,000 for the tax year 2024. In the tax year 2024, Mungole received royalty income from Zambian sources amounting to K17,000 (net) and interest from bonds issued by the Government of the Republic of Zambia amounting to K28,050 (net).

Mungole is renting a house for K48,000 per annum and has employed a maid whom he pays K2,000 per month. The company refunds Mungole the cost of rentals and the salary for the house maid.

During the tax year 2024, Mungole also received income from foreign sources comprising of rental income of K25,000 (net) and dividend income of K11,700 (net). The rental income was net of 15% foreign withholding tax and the dividend income is net of 35% withholding tax.

There is no Double Taxation Convention (DTC) between Zambia and the foreign country where income was generated. Double taxation relief is given unilaterally in Zambia as a credit against Zambian income tax on foreign income.

Required:

(a) Calculate the company income tax paid by GDR Plc for the tax year 2024. (9 marks)
(b) Calculate the income tax paid by James Mungole for the tax year 2024. (11 marks)

[Total: 20 Marks]

QUESTION FOUR

You should assume that today's date is 1 January 2024

You are employed as a tax consultant in a firm of chartered accountants. You are dealing with the tax affairs of the following clients of your firm.

LLB Limited

LLB Ltd a Zambian resident company engaged in manufacturing which is registered for VAT, seeking clarification on the distinctions between a tax audit and a tax investigation. LLB Ltd is keen on understanding the implications and potential consequences associated with both exercises.

LLB Limited is planning to purchase a new Volvo delivery truck under a hire purchase agreement in the next few weeks. The terms of the agreement required LLB limited to pay an initial deposit of K600,000 followed by six (6) monthly installments of K300,000 each starting on 1 February 2024. The cash price of the vehicle is K2,320,000 (VAT inclusive). The directors are keen to know what the taxation implications of this transaction will be.

Audrey Mphande

Audrey Mphande had been employed at LLB Limited, on a permanent and pensionable basis on 1 January 2023 at an annual salary of K360,000. LLB Limited set up a Share Option Scheme (SOS) two years ago as part of its employee compensation strategy. This share option scheme is not approved for tax purposes.

On 1 April 2023, Audrey was granted an option to purchase 2,500 ordinary shares of the company (each with a nominal value of K5) for an exercise price of K10.50 per share, under an unapproved share option scheme. The grant was on condition that the options were only exercisable once she had been employed for one (1) year, but she was required to hold the shares for at least six (6) months before she sold them.

Audrey plans to exercise the options on 1 April 2024 at which date share price is expected to be K11.50 per share. On 1 November 2024, she will sell the 2,500 shares for K12.00 per share being the expected market value of each share on that date.

Throughout the tax year 2024, Audrey will be provided with a Toyota Fortuner car, which the company bought a year ago, on a personal to holder basis. She will be provided with a company fuel credit card which is used to obtain free fuel of K2,500 per month throughout the year. The company will pay for the motor vehicle servicing costs which amount to K10,600 per month. She will use the car 60% for employment purposes. She will additionally be entitled to airtime worth K800 per month which will credited to her personal mobile phone, to be used to make business calls. PAYE to be deducted from her gross pay will be K 99,687. The only other income Audrey will receive during the tax year 2024 will be management fees of K55,250 (net) and treasury bill discount income of K11,475.

Audrey is seeking tax advice on the tax implications arising on exercise of share options in LLB.

Required:

(a) Explain the key differences between a tax audit and a tax investigation, considering the client's concerns. (4 marks)

(b) Advise the directors of LLB the tax implications of acquiring the Volvo delivery truck under a hire purchase agreement. Your answer should include relevant computations where appropriate. (4 marks)

(c) Advise Audrey the taxation implications of:

(i) The exercise of the share options on 2,500 shares on 1 May 2024. (3 marks)

(ii) The sale of 2,500 shares in LLB Corporation on 1 November 2024. (2 marks)

(d) Compute the amount of income tax payable by Audrey for the tax year 2024. (7 marks)

[Total: 20 Marks]

QUESTION FIVE

Estel General Insurance Ltd, is Zambian resident company providing general insurance services. The company is owned by five (5) Zambian resident individuals who formed the company five (5) years ago. Each individual owns 20% of the ordinary shares of the company.

The following information has been extracted from the financial statements of the company for the year ended 31 December 2024:

	K'000
Insurance claims paid to customers	115,650
Outstanding claims from customers on 1 January 2024	108,900
Outstanding claims from customers on 31 December2024	125,400
Gross insurance premiums	995,400
Re-insurance premiums paid	421,000
Provision for unearned premiums on 1 January 2024	183,900
Provision for unearned premiums on 31 December2024	215,500
Amounts received under reinsurance	163,650
Investment income (Note1)	16,830
Other income (Note 2)	28,556
Operating expenses (Note 3)	484,250

The following additional information is available:

Note 1: Investment income.

This comprises fixed deposit interest of K9,180,000 (net) and dividends from LuSE listed companies of K7,650,000 (net).

Note 2: Other income.

This comprises consultancy fees of K20,400,000 (net), profit on sale of short-term money market securities of K506,000 and gross income from letting of property of K7,650,000.

Note 3: Operating expenses.

These included the following items:

	K'000
Depreciation	5,296
Amortisation	1,855
Marketing & advertising expenses	1,234
Rental for business premises for outlets	36,850
Refreshments for the company's external auditors	122
Provisional income tax	74,200
Employee's salaries	155,300
General allowable operating expenses	209,393
	484,250

Provisional income tax paid amounted to K54,200,000 during the tax year 2024.

Note 4: Buildings, Implements, plant and machinery.

On 1 January 2024, the only assets qualifying for capital allowances included the following:

	Income Tax Value b/f	Original Cost
	K'000	K'000
Administrative offices	14,400	18,000
Pool motor cars	1,600	4,000
Nissan Navarra double cab van (2,800cc)	440	1,100

The Nissan Navarra Double cab van is used by the Chief Executive Officer on personal to holder basis. The motor vehicle is used for both business and private purposes. It has been agreed that the private use is 25% of the total mileage. The Chief Executive Officer is also accommodated in a company owned house. His gross annual emoluments are K1,450,000.

Note 5: Other information

The five shareholders of the company are planning to draw interest free loans from the company of K1,500,000 each to enable each individual finance the purchase of farmland in the Mukushi area of central province. The loans are repayable in ten (10) years' time. The Directors wish to know whether there will be any tax implications arising from the withdrawal of the loans.

Required:

(a) Compute the company income tax payable by Estel for the tax year 2024. (16 marks)

(b) Advise the Directors, using appropriate supporting computations, of the taxation implications that will arise if each of the shareholders of the company draw interest free loans K1,500,000. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4: TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

(i) MINERAL ROYALTY TAX RETURN

The due date for both the payment of Mineral Royalty Tax (MRT) and submission of the MRT return is the 14th day following the end of the month in which the minerals were sold. Therefore, the MRT was paid late by 1 month and 17 days late (i.e., 47 days) as it was paid on 31 May 2023, when it should have been paid on 14 April 2023.

(1) The penalty for the late payment of MRT is 5% per month or part thereof will amount to:

5% x K75,600,000 x 2 = K7,560,000

(2) Interest will be chargeable on the overdue tax at the BOZ discount rate plus 2%, the applicable rate will therefore be 13% (2%+11) and the amount of interest will be:

13% x K75,600,000 x 47/365
= K1,265,523

(3) The penalty for late submission of the MRT return will be 2,000 penalty units (K600) per month or part thereof as CMC is a company and will amount to:

2,000 x 2 = 4000 penalty units (or K600 x 2 = K1,200)

(ii) PAY AS YOU EARN

The PAYE for June 2023 was under paid and this will attract penalties and interest on the underpaid tax. The tax should have been paid by 10 July but was only paid on 31 October 2023 and was therefore paid late by 3 months and 21.

(1) The penalty for late payment of the under paid PAYE will be computed as follows:

PAYE underpaid; K89,546,400 - K85,946,400 = K3,600,000

Penalty: 5% x K3,600,000 x 4 = K720,000

(2) Interest will be chargeable on the underpaid at the BOZ discount rate plus 2% The amount of interest will be:

= 13% x K3,600,000 x 113/365

= K144,888

(3) Penalties will be imposed for filing in incorrect returns and these will amount to 17.5% of the amount if it is established that it was due to negligence, 35% of the amount if it was as a result of wilful default and 52.5% of the amount if was due to fraud.

(iii) WHT ON CONSULTANCY FEES

The due date for both the payment of WHT and submission of the WHT return is the 14th day following the end of the month in which the deduction of the tax was made.

Therefore, the WHT paid late by 1 month and 16 days late (i.e., 47 days) as it was paid on 31 October 2023, when it should have been paid on 14 September 2023.

(1) The penalty for the late payment of the WHT will amount to:

Amount of WHT paid:

K510,000x 15/85 = K90,000

Amount of penalty

5% x K90,000 x 2 = K9,000

(2) Interest will be chargeable at the BOZ discount rate plus 2% and will amount to:

13% x K90,000 x 47/365 = K1,507

(3) The penalty for late submission of the WHT return will be 2,000 penalty units (K600) per month or part thereof as CMC is a company and will amount to:

2,000 x 2 = 4,000 penalty units (or K600 x 2 = K1,200)

(b) COMPUTATION OF LOSS RELIEF

	2023
	K
Tax adjusted Mining profit/(loss)	49,250,000
Loss Relief (W)	(24,625,000)
Final Taxable mining profits	24,625,000
Loss Relief for 2023	
Indexed loss b/f	
[(1+(20-16)/16] x 32,500,000	40,625,000
Loss Relief for 2023	
(K49,250,000 x 50%)	(24,625,000)
Unrelieved loss c/f	16,000,000

The loss to be relieved is restricted to 50% of the taxable profits.

(c) Treatment of income hedging

When a loss is incurred in any tax year on hedging, that loss can only be deducted from future hedging income. The loss can be carried forward for up to ten years, as it is still treated as a loss from mining.

Therefore, the loss from hedging of brought forward of K9,640,000 brought forward at 1 January 2024 will be offset against the income from hedging of K13,400,000 generated during year. This will result in the final taxable income of from hedging income of K3,760,00 (K13,400,000 – K9,640,000)

(d) COMPUTATION OF TAX ADJUSTED MINING PROFIT

	K'000	K'000
Profit for the year		351,658
Add		
Depreciation	68,400	
Penalties & interest	83,115	
Impairment of assets	7,685	
Staff gratuities	2,400	
Police post	22,500	
Donations	550	
		184,650
		536,308
Less		
Hedging income	13,400	
Interest income	36,125	
Mineral royalty	328,516	
Capital allowances	36,385	
		(414,426)
Taxable mining profit before loss relief		121,882
Loss relief (W4)		(19,200)
Final taxable mining profit		102,682

WORKINGS

(1) COMPTATION OF MINERAL ROYALTY

	K'000
On first $3,999	
($3,999 x 25,000 tonnes x K24) x 4%	95,976
On next $1,000	
($1,000 x 25,000 tonnes x K24) x 6.5%	39,000
On next $2,000	
($2,000 x 25,000 tonnes x K24) x 8.5%	102,000
On excess $1,501	
($1,401 x 25,000 tonnes x K20.5) x 10%	84,060
	321,036
Iron ore (K45,800,000 x 5%)	2,290
Emeralds (K86,000,000 x 6%)	5,160
Total	328,516

(2) COMPUTATION OF CAPITAL ALLOWANCES

	K'000
Mineral processing equipment	
Indexed capital allowance	
(K34m x 20%) = K6.8m x [1 + (24 –20)/20.00]	8,160
Mine excavating equipment	
Indexed capital allowance	
(K65m x 20%) = K13m [1 + (24 – 20)/20.00]	15,600
Chambishi Trust school	
Wear & tear allowance	
(K45 m x 20%)	9,000
General plant	
Wear & tear allowance	
(K14.5m x 25%)	3,625
Total capital allowances	36,385

(3) Loss relief 2024

Loss Relief for 2023	K'000
Indexed loss b/f	
[(1+(24 – 20)/20] x K16m	19,200

Profits available for loss relief are limited to 50% of taxable mining for the year and this amounts to K60,941,000(K121,882,000 x 50%). Therefore, the whole loss will be relieved since it is less than 50% of the taxable mining profits.

(e) CHAMBISHI

COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K'000
Taxable mining profit	102,712
Income from hedging (K13,400 -K9,640)	3,760
Interest income (K36,125 x100/85)	42,500
Taxable income	148,972
Company income tax	
On mining profit (K102,712 x 30%)	30,805
On income from hedging (K3,760 x 30%)	1,128
On interest income (K42,500 x30%)	12,750
	44,692
Less tax already paid	
WHT on interest income (K42,500 x 15%)	(6,375)
Provisional income tax	(32,828)
Final company income tax payable	5,469

SOLUTION TWO

(a) The following are the taxation implications:

(1) The sole proprietorship will be deemed to have ceased trading on the date of incorporation since there will be change in the legal status of the business. Frankie will therefore, be assessed to income tax using the cessation rules.
(2) Since the tax year in which profits of the last full accounting period were assessed is the tax year 2023, the basis of assessment for the last period of trading is the current year basis of assessment, which is the tax year 2024.
(3) No capital allowances will be claimed on the assets by Frankie for the tax year 2024. However, balancing allowance and balancing charge will be calculated since the assets will be deemed to have been sold to the new company at their market values.
(4) A new company has been formed following the cessation of sole proprietorship. Therefore, the new company will be assessed to income tax using the commencement rules. Since the first accounting period is less than twelve (12) months, the normal rules will be used to determine the basis of assessment.
(5) The first financial statements will be prepared for a period of seven (7) months to 31 December. This means that the current year basis of assessment will be used and the profits will be assessed in the tax year 2024.
(6) The company will claim capital allowances on the assets taken over from the sole proprietorship at their market values.

(b) COMPUTATION OF THE FINAL TAXABLE BUSINESS PROFITS MADE BY THE SOLE PROPRIETORSHIP:

	K	K
Profits before capital allowances		321,800
Net balancing charge		352,200
Taxable business profits		674,000

WORKINGS – COMPUTATIONOF CAPITAL ALLOWANCES

	K	K
Shop buildings		
Income tax value brought forward	880,600	
Disposal proceeds		
Restricted to cost (K1,400,000 –KK210,000)	(1,190,000)	
Balancing charge	(310,000)	(309,400)
Fixtures & Fittings		
Income tax value brought forward	150,000	
Disposal proceeds	(170,000)	
Balancing charge	(20,000)	(20,000)
Toyota Prado Car		
Income tax value brought forward	204,000	
Disposal proceeds	(252,000)	
Balancing charge (restricted to: 48,000 x 60%)	(48,000)	(28,800)
Toyota Mark – X Car		
Income tax value brought forward	176,000	
Disposal proceeds	(170,000)	
Balancing allowance	6,000	6,000
Net balancing charge		352,200

(c) PERSSONAL INCOME TAX COMPUTATIONS PAYABLE FOR THE TAX YEAR 2024 FOR:

	K Frankie	K Jullie
Business profits	674,000	
Salary (K441,600 x 7/12) (K374,400 x 7/12)	257,600	218,400
Taxable income	931,600	218,400
Income Tax		
First K110,400	12,360	12,360
Excess (K931,600 – K110,400) x 37%	303,844	
Excess (K218,400 – K110,400)	---------	39,960
	316,204	52,320
Employees' NAPSA contributions		
Frankie (K357,792 x 7/12) x 5%	10,436	
Jullie (K357,792 x 7/12) x 5%		10,436

(d) FRAJU LIMITED

COMPUTATION OF TAXABLE INCOME AND COMPANY INCOME TAX PAYABLE FOR THE TAX YEAR 2024

	K	K
Business profit		1,580,000
Add:		
Personal – to-holder car benefit		
Frankie's car		36,000
Jullie's car		36,000
		1,652,000
Less:		
Directors' emoluments (257,600 + 218,400)	476,000	
Employer's NAPSA (357,792 x 7/12 x 5% x 2)	20,871	
Capital allowances:		
Shop buildings (K2,200,000 – K490,000) x 2%	34,200	
Fixtures & fittings (K170,000 x 25%)	42,500	
Toyota Prado Car (K252,000 x 20%)	50,400	
Toyota Mark – X Car (K170,000 x 20%)	34,000	
		(651,971)
Taxable business profit		994,029
Company income tax @30%		298,209

SOLUTION THREE

(a) GDR PLC INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K	K
Adjusted profits		324,500
Income from foreign sources:		
Dividends K22,750 x 100/65	35,000	
Interest K22,500 x 100/75	30,000	
		65,000
Final taxable income		389,500
Company income tax @ 30%		116,850
Less: DTR on:		
Dividends		(10,500)
Bond interest		(7,500)
Income tax payable		98,850

WORKINGS

(1) Double Taxation relief on the dividend is he lower of:

(i) Foreign WHT paid on the dividend
K35,000 x35% K12,250

(ii) And the Zambian tax attributed to the foreign dividend:
K35,000 x30% K10,500

DTR is therefore K10,500 being the lower amount

Double Taxation relief on the bond interest is the lower of:

(i) Foreign WHT paid
K30,000 x 25% K7,500

(ii) And the Zambian tax attributed to the foreign dividend:
K30,000 x30% K9,000

DTR is therefore K7,500 being the lower amount

(b) MUNGOLE
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K
Emoluments from employment	
Salary	360,000
Refund of rent	48,000
Refund of maid salary (K2,000 x 12)	24,000
	432,000
Other income :	
Royalties 17000 x100/85	20,000
Income from foreign sources	
Dividend K11,700 x 100/65	18,000
Total	470,000
Income tax	
On first K110,400	12,360
On excess (K470,000 - K110,400)	133,052
	145,412
Less WHT on Royalties (K20,000 x 15%)	(3,000)
Less DTR	(5,381)
Income tax payable	137,031
Total	

Workings

(1) Total assessable income

	K
Income chargeable to income tax	470,000
GRZ bond interest (K28,050 x 100/85)	33,000
Total assessable income	503,000

(2) Total amount of Zambian tax charge

	K
Income Tax	145,412
Withholding tax on GRZ bond interest(15% x K33,000)	4,950
Total Zambian tax charge	150,362

(3) Double taxation relief on dividend from foreign sources is the lower of:

(i) Foreign withholding tax paid

= K18,000 x 35%

= K6,300

(ii) Zambian income tax attributed to the foreign dividend

$$\frac{\text{Gross amount of foreign income}}{\text{Total Assessable income}} \times \text{Zambian Tax charge}$$

= K18,000/ K503,000(W1) x K150,362(W2)

= K5,381

DTR is therefore K5,381 being the lower amount.

SOLUTION FOUR

(a) **Differences between tax audit and investigation**

1. **Purpose and Scope:**

   Tax Audit: a tax audit is a routine examination of the company's financial records, tax returns, and compliance with tax laws and is conducted by the Zambia Revenue Authority. The purpose is to verify the accuracy of reported information and ensure compliance with tax regulations. Tax audits are typically random or triggered by specific criteria but are not necessarily indicative of suspected wrongdoing.

   Tax Investigation: a tax investigation is a more in-depth and thorough examination conducted when there is suspicion of tax evasion, fraud, or significant non-compliance. Investigations are initiated when tax authorities have specific concerns about a taxpayer's activities and require a detailed analysis to uncover potential misconduct.

2. **Initiation and Triggers:**

   Tax Audit: Tax audits are often initiated by tax authorities as part of their regular compliance procedures. They may also be triggered by specific events, such as a high level of discrepancies in reported figures or industry-specific risk factors.

   Tax Investigation: Tax investigations are typically triggered by specific red flags or suspicions of fraudulent activities. These red flags may include unusually low reported income, inconsistent financial statements, or information from whistle-blowers or third-party sources.

3. **Duration and Intensity:**

   Tax Audit: tax audits are generally conducted within a specific timeframe, often limited to a particular tax year or period. Audits are focused on specific areas of concern or risk, and the intensity may vary based on the complexity of the issues under review.

   Tax Investigation: Tax investigations can be prolonged and intense. They involve a thorough examination of a taxpayer's financial records, transactions, and activities. Investigations may extend to multiple tax years and may require the involvement of specialized investigators or forensic accountants.

4. **Nature of Interaction:**

   Tax Audit: During a tax audit, tax authorities may request additional information or clarification on certain items in the tax return. The interaction is usually more routine and administrative, and the taxpayer is expected to cooperate by providing the requested documentation.

Tax Investigation: During a tax investigation, the taxpayer is often subject to more intensive scrutiny. Investigators may conduct interviews, gather evidence, and collaborate with other regulatory bodies. The nature of the interaction is more adversarial, and the taxpayer may require legal representation.

5. **Outcomes and Consequences:**

Tax Audit: The outcome of a tax audit is typically a determination of whether the taxpayer's records are accurate and comply with tax laws. Adjustments may be made to the tax liability based on the findings, but penalties are usually limited to non-compliance issues.

Tax Investigation: The consequences of a tax investigation can be severe, including fines, penalties, and in some cases, criminal charges for tax evasion. The outcome depends on the nature and extent of the findings, and it may lead to significant financial and reputational damage for the taxpayer.

(b) Tax implications of Hire Purchase arrangement

(1) LLB Ltd will be able to claim input VAT on the cost of the truck as the vehicle will be owned by the company.

The amount of the input VAT recoverable will be:
K2,320,000 x 4/29 = K320,000

(2) The interest element on the cost will be an allowable deduction against the profits of LLB Ltd subject to the 30% Tax EBITDA, limitation of interest deductions rules.

The amount of the interest will be:
[K600,000 + (K300,000 x 6)] – K2,320,000
= K80,000

(3) LLB Ltd will claim capital allowances on the cost of the asset (excluding the interest) which will be allowable deductions when computing the taxable business profits.

The amount of the capital allowances claimable will be:
(K2,280,000) x 25/29 x 25% = K500,000.

(c) (i) Tax implications of the exercise of the options

On the exercise of share options by an employee under an unapproved share option scheme run by the employer, an income tax charge arises on the difference between the market value of the shares bought on the exercise of the options and the amount actually paid for them. This amount is chargeable as emoluments.

In Mphande's case the taxable amount will be:	K
Value of the shares bought	
K11.50 x 2500	28,750
Less amount paid by Mphande	
K10.50 x 2500	(26,250)
Taxable emoluments	2,500

(ii) Tax implication of the sale of the shares

On the sale of shares acquired under the share option scheme that is not approved for tax purposes in an unlisted company, property transfer tax is payable on the realized value of the shares sold. The shares have a realized value for property transfer tax purposes that is equal to the higher of their nominal value and the open market value, if this is greater than the sales price.

In Mphande's case, the amount of property transfer tax arising on the sale of the shares is: (2500 x K12) x 5% = K1,500

(d) AUDREY

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K
Salary	360,000
Personal to holder	0
fuel credit card	0
Motor vehicle servicing costs	0
Free airtime	0
Income from share options	
(K11.50 - K10.50) x 2,500	2,500
Taxable emoluments	362,500
Investment/Other income	
Management fees (K55,250 x 100/85)	65,000
Taxable income	427,500
Income Tax	
On first K110,400	12,360
On excess (427,500 - K110,400) x37%	117,327
	129,687
Less Tax already paid	
PAYE	(99,687)
WHT on Management fees (K65,000 x 15%)	(9,750)
Income tax payable	20,250
Total Marks	

SOLUTION FIVE

(a) ESTEL LTD GENERAL INSURANCE LTD

COMPUATION OF TAXABLE INCOME AND COMPANY INCOME TAX PAYABLE

	K'000	K'000
Gross premiums		995,400
Interest Income		
Fixed deposit interest		
(K9,180,000 x 100/85)		10,800
Other income		
Consultancy fees (K20,400,000 x 100/85)		24,000
		1,030,200
Less Re-insurance premium paid		(421,000)
Add:		
Reserve for unearned risks at 1 Jan 2024	183,900	
Reserve for unearned risks at 31 Dec 2024	(215,500)	
		(31,600)
Less		
Outstanding claims from customers at 1 Jan 2024	108,900	
Outstanding claims from customers at 31 Dec 2024	(125,400)	
		(16,500)
Less		
Actual losses/insurance claims paid to customers	115,650	
Amounts received under reinsurance	(163,650)	
		48,000
		609,100
Less Other allowable expenses		
Marketing expenses	1,234	
Rent for business premises	36,850	
Employee's salaries	155,300	
General operating expenses	209,393	
		(402,777)
Less Capital Allowances		206,323
Administrative offices (K18m x 2%)	360	
Pool motor cars (K4m x 20%)	800	
Nissan Navara double cab van (K1.1m x 20%)	220	
		(1,380)
		204,943
Add Taxable benefits		
Accommodation benefit (37.5% x K1,450,000)	544	
Personal to holder motor car benefit- Nissan Navarra	48	
		592
Taxable income		205,535
Company income Tax		
(K205,535 x 30%)		61,661
Less WHT on:		

Provisional income tax	(54,200)
Fixed deposit interest (K10,800,000 x 15%)	(1,620)
Consultancy fees (K24,000,000 x 15%)	(3,600)
Company income tax payable	2,241
Total Marks	

(b) Tax implications of interest free loans

Each shareholder holds more than 5% of the ordinary shares of the company, and therefore are effective shareholders of the company.

Estel Ltd will therefore be deemed to have made loans to its effective shareholders.

The company will be required to pay tax equal to the difference between the amount of the grossed-up equivalent of the loans and the actual amount of the loan.

The amount of income tax chargeable on the company will be:

K1,500,000 x 37/63 x 5 = K4,404,762

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 11 JUNE 2024

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)

Petit Elegant Plc (PE Plc) is a divisionalised company which has been selling toys for the last five (5) years. The company is located in the Lusaka Multi-Facility Economic Zone. It sells goods worldwide. In spite of having many competitors, the company has been making good profits since its first year of operation. PE Plc's strategy is to keep its cost at a minimum and compete on the basis of price.

Ms Lizzy Thokozile has recently been appointed as the Chief Executive Officer (CEO) of PE Plc after retiring as the CEO of a very successful toy making company. In PE Plc, she has observed the following:

- A sub-standard material is used in making the toys. This material may be dangerous to health, if children put them in their mouths. However, the company has not given any warning on the packaging of the toys. Products are advertised as being safe and are claimed to improve children's memory and motor skills at a faster rate than toys manufactured by other companies. However, this claim has not been scientifically proven.
- All the workers (including child labourers) are required to work for more than 80 hours per week which is far beyond the maximum working hours prescribed through legislation by the Ministry of Labour and Social Security. Since unemployment is high, workers are prepared to work longer hours for lower wage rates. PE Plc is successful in keeping its costs at a minimum by employing people at minimum cost (without paying fair wages/minimum wages or bonuses).
- Every year PE plc donates K450,000 to a political party whose leader is James Kakabalika. This is also because Mr Kakabalika is also the chairman of Lending Tree Ltd, a financing company, which provides finance to PE Plc at low interest rates.

Furthermore, the company has recently received adverse publicity through a local media which reported that the emissions from the factory are polluting the environment. There is no emission treatment plant at PE Plc. In addition, the material used by PE Plc is bad for the environment. The media has also highlighted and produced photographic evidence of the poor hygiene conditions at PE Plc and the fact that female workers who have young children are allowed to bring their children inside the factory; which could be dangerous.

After becoming aware of the above facts and reading the media publications, Ms Thokozile called a board meeting and communicated her view that "our dream is for the company to grow by leaps and bounds and become a market leader. However, this can only be achieved by incurring some costs in the short term and therefore we should stamp out all unethical practices."

However, Mr Reuben Mwale, the Finance Director, disagreed stating that "we are running the business for profit. If we gave up all these practices, our costs will increase and directly affect our performance. In addition, although we are asking workers to work more than the maximum hours, this helps them to earn more money, without which they might not be able to provide for their families."

About 75% of the shares in PE Plc are held by directors (excluding Ms Thokozile) and the remaining 25% of the shares are held by people outside PE Plc. There is no substantial holding by any shareholder; rather many people each hold a few shares. As a result, the directors are in a dominant position when it comes to making strategic decisions (the external shareholders are dormant).

Required:

(a) (i) Discuss the ethical issues with reference to the case given above and the impact on the performance of PE Plc (long-term as well as short-term) (9 marks)

(ii) Evaluate the stakeholders of PE Plc using Mendelow's matrix by mapping the following stakeholders of PE Plc.

- Employees
- Customers
- Directors of PE Plc
- Shareholders (other than directors)
- The government

(8 marks)

(N.B: In your mapping include a mapping matrix as you categorise the stakeholders and in your evaluation, give reasons for categorizing a stakeholder in a particular quadrant.)

(b) Division A of the PE Plc group produces a toy component which it sells externally, and can also transfer to other divisions within the PE group. It has set a performance target for the financial year 2024 to achieve a residual income of K480,000.

The following budgeted information relating to Division A has been prepared for the financial year 2024:

- Maximum production/sales capacity 800,000 units
- Sales to external customers 500,000 units at K3.70
- Variable cost per component K2.50
- Fixed costs directly attributable to the division: K140,000
- Capital employed: K2,000,000 with a cost of capital of 14%

Division B of the PE group has asked Division A to quote a transfer price for units of the component.

Required:

(i) Calculate the transfer price per component which Division A should quote to Division B in order that its budgeted residual income target will be achieved. (5 marks)

(ii) Evaluate why the transfer price calculated in (i) may lead to sub-optimal decision making from the point of view of the PE group taken as a whole. (4 marks)

(c) Division B now establishes that it requires 400,000 components. A quote has been obtained from Foloko Ltd (F Ltd), an external supplier, for the supply of 400,000 components at K3.40 each. However, F Ltd is not willing to quote for only part of the requirement of Division B.

Another external supplier, Sipuni Ltd (S Ltd) is willing to supply any quantity of the components at K3.60 each.

Required:

For each of the cases below (taken separately), state the source or sources from which Division B should purchase the components in order to maximise its own net profit and explain why the particular source or sources have been chosen, assuming that Division A is willing to supply the components to Division B:

(i) At an average price per component for the quantity required, such that the budgeted residual income of Division A will still be achieved; (5 marks)

(ii) At prices per component which reflect the opportunity cost for each component. (5 marks)

(d) Earnings before interest, tax, depreciation and amortization (EBITDA) is increasingly being used as a basis for valuing media companies.

Required:

Discuss the disadvantages of using the EBITDA as a measure of financial performance. (4 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

Little Angels Primary School (LAPS) is a public sector school. This primary school provides classes for children from the ages of 7 to 14. LAPS does not have a nursery (pre-school). There are 600 pupils and 20 teachers (including the principal) in LAPS. There are two classes each from grades 1 to 7; with class average size of 43 pupils.

The following is the financial information of LAPS for the year 2023:

- Government grant: K600,000 (general).
- Donation from Mrs Mwila Palesa: K20,000 (for special purposes of sports activities).
- Donation from Mr Chawanzi Dube: K10,000 (voluntary, for special purposes of internet service).
- Donation from Old Mariana, a retired teacher: K2,000 (for annual prize distribution).

Special purposes donations are donated on the strict condition that the funds provided are used for that particular purpose only. On the other hand, the government grant might be used for any purpose, i.e. management can decide how to use these funds.

The following points are noticed by management during the year 2023:

- Cost per pupil is K750 per annum.
- Management is interested in purchasing various books worth K2,500. However, no funds are available for this.

Required:

(a) Discuss the availability of the limited funds and how they may be utilized in the best possible way. (7 marks)

Other information on LAPS for the year 2023 is as follows:

(i) Out of the total 600 pupils, new admissions during the year were 150.
(ii) Out of the 20 teachers, 3 teachers were newly appointed for science, maths and crafts.
(iii) 3 exams in total were conducted during the year (including annual exams).
(iv) Sports competition during year: once only (after 2 exam)
(v) Quiz competition during year: 3 times.
(vi) Extracurricular activities, relating to drawings and arts: once only (after 2 exam).
(vii) Total computers purchased: 50.
(viii) Fees per pupil: (average) K4,000 per annum.
(ix) Salary per teacher (average): K60,000 per annum.
(x) In the first exam, 400 students appeared and out of these, 275 students passed the exam.

(xi) In the second exam, 375 pupils appeared and out of these 290 pupils passed the exam.

(xii) The final exam was compulsory for every pupil. 520 pupils appeared and out of these 455 pupils passed.

(xiii) Most of the pupils who failed, failed in language subjects.

(xiv) Out of the pupils who passed, 64 in the 1 exam, 101 in the 2 exam and 125 in the last exam secured more than 65% of the marks in all subjects.

(xv) The quiz competitions cover a range of topics (according to the key stages of pupils) e.g. general knowledge, science, maths and verbal and non-verbal communication. However, the pupils do not show much interest in participating in this activity.

Required:

(b) (i) Evaluate LAPS' performance on the basis of non-profit measures and state your own conclusions. (9 marks)

(ii) Give suggestions to improve the above factors in (b) (i) wherever necessary, including how the observed shortcomings can be improved. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Lusengu University is one of the most trusted universities in the region. The University started operating in 1975 with 10 students. However, at present the school has 10,000 students pursuing various programs in various disciplines. Due to huge number of students, the school purchased a new information system that has to be installed so that students can access most of school related issues online. Mr Mwangala is the IT Manager in-charge of a project team installing new software for students.

Mr Mwangala has been tasked to ensure the new system is installed by the second week of opening so that students who are on distant programmes can use the IT platform to access all services of offered by the school. Currently the IT department at Lusengu University has 10 workers. Despite having a reasonable number of workers, the works have not commenced yet and the team is waiting for Mr Mwangala to give them direction.

The installation is currently three (3) weeks behind schedule, with only one week left before the installation should be complete to allow student start self-registration. Due to the time constraints, Mr Mwangala is hoping to prioritise this project. He has indicated that he will use some of IT students in order for him to meet the deadline. He has cancelled all project meetings to try and focus his team on meeting the project deadlines. While this action has had some slight hope of finishing work on time, members of the team have been complaining that they cannot discuss problems easily due to lack of team meetings.

The head of department of the IT section has received some written petition against Mr Mwangala and all the experts in IT have appended their signatures raising issues. These experts are concerned with how this big project is being handled. They wondered why Mr Mwangala wants to use students who are not experienced at the expense of using the team members who are not engaged and are being avoided without an explanation. The morale of the team is being affected.

Mr Mwangala was asked to respond to the accusations of the team members and in his response, he has explained that his team has bad work attitude who like chatting instead of working and they like fighting him. Mr Mwangala has explained that he does not see any challenges arising from using students because the error rate for an expert is estimated at 10% while for the student's error rate is estimated at 15%. 5% different will be mitigated by him closely monitoring the project.

Required:

(a) Explain the possible consequences of using students on the project. (5 marks)

(b) Evaluate if the project is being poorly or well managed by Mr Mwangala. (10 marks)

(c) Suggest ways the head of department can use to resolve challenges so that the project is successful. (5 marks)

[Total:20 Marks]

<u>QUESTION FOUR</u>

The University of Palesa (UNPA) is funded by the Government, through the Ministry of Education. UNPA employs about 150 academic staff and 120 other staff both on full time and part time basis. The university has over 9,000 full-time and part-time students including distance and on line programmes. The university was recently visited by the Office of Auditor General, the Government appointed auditors.

The auditors criticised UNPA for the following reasons captured as audit findings for the year 2023:

1. The university operated at a deficit; its expenditure exceeded its income;
2. Student drop-out and failure rates were greatly in excess of the national average;
3. It could not accurately produce a head-count of the number of students enrolled'
4. Internal control of cash receipts was defective and in several areas there were discrepancies;
5. The level of student complaints was very high and increasing;
6. It had a large number of debtors, mainly ex-students, and was not doing anything to collect outstanding amounts;
7. It had an abnormally high level of staff turnover; and

8. The quality of education provided by UNPA had been given the lowest possible rating 'Poor' by the education standards inspectors.

Arising from these findings, the Minister of Education through the Board of UNPA replaced the Vice-Chancellor. The majority of UNPA's funding comes from government which has instructed the new Vice-Chancellor to prepare a new Strategic Plan for the period 2024-2029. The new Strategic Plan will be required to address the criticisms identified in the audit.

You are the Senior Management Accountant and have been asked by the Vice-Chancellor to prepare a report that addresses the issues raised by the auditors and other pertinent matters accordingly.

Required:

Prepare a report for the Vice-Chancellor which includes the following:

(a) Categorise under the headings, Operational, Management and Strategic, the recent criticisms made about UNPA and advise the Vice-Chancellor how control measures could assist in the successful implementation of the new strategic plan. (6 marks)

(b) Recommend, with reasons, what controls the university could use to assist in the improvement of any three of the areas criticised in the recent audit. (7 marks)

(c) Advise the Vice-Chancellor how information systems could support the successful implementation of the new strategic plan. (7 marks)

[Total: 20 Marks]

QUESTION FIVE

The Research Institute on Policy and Efficiency (RIPE) is a Government supported organization that conducts research on many issues with the aim of improving policy direction for economic development. In the recent past, RIPE has been conducting research on the improvements of budget performance for the country and corporates. The research team came across the theory of Beyond Budgeting (BB) which is identified with the 'Beyond Budgeting Round Table' (BBRT). BBRT is at the heart of a new movement that is searching for ways to build lean, adaptive and ethical enterprises that can sustain superior competitive performance.

BBRT advances the idea that budgeting should be abolished and an alternative business model should be substituted in its place. BB is a 'responsibility model' whereby managers are given goals which are based on benchmarks linked variously to world class performance, peers, competitors and/or earlier periods. This requires an adaptive approach whereby authority is devolved to managers. An organisation run in this manner will be more of a network than a hierarchy. The whole spectrum of modern management techniques and aids should be incorporated in an implementation of the BB model. IT networks provide easy communication between different component parts of an organization together with its customers, associates and suppliers. Quality programmes (TQM), process engineering (BPR), supply chain management (SCM), balanced scorecards and activity accounting all have a role. Advocates of BB claim that it does not provide a softer environment for management than budget compliance. Both individual and team performance should have a high visibility in a devolved management environment.

The majority of the Country Y businesses are small and medium enterprises that require financial support to grow their businesses. Most of the large enterprises are owned by foreigners with complex operations whose budgets are usually prepared by their head offices. However, the RIPE has produced a preliminary report on the BBRT research and has recommended that Government and companies adopt and implement these principles away from administering fixed budgets. The Director General of RIPE concluded by stating that 'the process of management is not about administering fixed budgets, it is about the dynamic allocation of resources'

Required:

(a) Discuss Six (6) principles to be adopted in the beyond budgeting implementation. (12 marks)

(b) Discuss two (2) advantages and two (2) disadvantages arising from the implementation of Beyond Budgeting by Country Y businesses. (8 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

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

(i) **Ethical Issues and the Impact on Performance of PE Plc**

Previously it was assumed that organisations were only responsible for their shareholders and their responsibility was to maximise the wealth of the shareholders by earning more and more profit. Later on, this view changed and nowadays organisations also have an ethical responsibility towards various other stakeholders, including the society at large.

Organisations are expected not to take decisions or engage in activities that would hurt the interest of any of these groups. However, being ethical has a cost in the short term which affects an organisation's short term performance.

It is clear from the following examples that the company has adopted unethical practices.

Use of substandard material

The use of substandard material saves cost but is unethical. Although it is known that the material could be dangerous to children's health, PE Plc has not stopped using it. This means that the company has put profit before the health of the children who play with its toys.

Although PE Plc has performed well until now, in the long term, customers will become aware that the material is dangerous to children's health and stop purchasing PE Plc's products. As a result, PE Plc's long-term performance will be affected.

Unethical labour practices

Various issues related to employees have been ignored by PE Plc such as its responsibility to enforce maximum working hours and provide good working conditions and fair pay to its employees. PE Plc has employed many unethical practices such as:

- Employing children which is prohibited by law
- Not paying fair wages to its employees
- Making it compulsory to work for more than the maximum working hours
- Not providing a crèche facility (day care /nursery)for young children of its employees

By adopting these practices, PE Plc is saving costs, but is ignoring its ethical responsibility.

Since its workers are in need of employment and money, they will not take any action against these unethical practices. However, they are likely to come to the attention of the public. This will affect the reputation as well as the performance of PE Plc in the long-term. This is because people prefer to deal with ethical companies.

False advertising/marketing

The company is aware that the material it uses is dangerous to children's health (if they put the toys in their mouth, as children are likely to do!) In such a case, it is the ethical responsibility of the company to display a warning on the packaging. However, no warning was given.

In addition, PE Plc tries to attract customers by falsely advertising that its products are safe and by giving exaggerated statements that its products are better than products of other companies and help to improve children's memory and motor skills.

By adopting these practices, the company may become successful in attracting customers and increasing revenues in the short term but in the long term, this will affect its reputation and, therefore, performance.

Environmental issues

As stated in the question, the material used by PE Plc is not environmentally-friendly. In addition, the company doesn't have a pollution treatment plant. Emissions from the factory are polluting the environment in Lusaka. An organisation should not improve its company at the cost of society. Society as well as the government will not accept this and legal action may be taken against PE Plc. This will affect the reputation as well as performance of PE Plc in the long term.

Therefore, although it may be expensive and will affect the short-term performance of PE Plc, the company should establish a pollution treatment plant and should use environmentally-friendly material.

Unethical practices

PE Plc donates a huge amount to the political party led by James Kakabalika. Although this helps it to obtain easy finance at low interest rates, this also puts its reputation at risk and it may become a target for legal and political investigations. The donations are a form of bribe and therefore this practice is not only unethical but also illegal. This is a poor management decision and could cause difficulties for PE Plc.

By stamping out this practice, the company may lose its ability to obtain finance at any time (from Lending Tree) and may also have to pay higher interest rates but it will eliminate the risk to its reputation.

On the other hand being ethical improves the performance of an organisation in the long term in the following ways:

- Employees are more loyal to ethical organisations.
- Customers are willing to buy products from ethical organisations.
- Suppliers are more willing to maintain and improve relationships with an ethical organisation.

(ii) **Stakeholders Mapping and Evaluation**

Potential business collaborators are more willing to associate with an organisation that has an established reputation for behaving ethically.

Interest

High **Low**

Power		
Low	**Keep informed** • Employees • shareholders	**Minimal effort**
High	**Key players** • Directors of PE Plc	**Keep satisfied** • customers) • the government

Employees

In PE Plc, although the employees have high level of interest in the organisation, they have very little power to influence the organisation. This is evident from the ways in which PE Plc is exploiting them. The employees cannot speak out against their exploitation because their livelihood depends on their employment at PE Plc. Therefore, they will be categorized in the **High interest-low power** quadrant.

Customers

Customers can influence the strategies of PE Plc. This is because there are many competitors in the market and therefore, customers will easily shift to another competitor. In the absence of customers, PE Plc will have no business. For example, if customers stop buying PE Plc's products because they are not quality products, then it will have no option but to improve the quality. Therefore, customers have influencing power.
However, customers have low interest in PE Plc as they may shift to another organisation. Therefore, customers should be categorized in the **high power-low interest** quadrant**.**

PE Plc Directors

It is clear from the case that the directors have the power to change its strategies as well as having a high interest in PE Plc. This is because they are the decision makers and hold significant shares in the company. They should, therefore, be categorized in the **high power-high interest** quadrant.

Shareholders (other than directors)
It is given in the case that, other than the directors, each of the shareholders holds only a few shares and therefore has little influence over the strategies of the company. However, they may have an interest in PE Plc since they are the owners. Therefore, they should be categorized in the **high interest-low power** quadrant.

The government
For any organisation, the government is always in a position to influence the strategies of the organisation. However the government does not have any interest in PE Plc. (it is not a publicly owned company, utility business or monopoly). Therefore, the government will be categorized in the **high power-low interest** quadrant.

(b)
(i) **Transfer Price per Component Quotation for Division A to Meet Budgeted RI Target**

Target residual income	480,000
Notional interest charge (14%x K2,000,000	280,000
Target profit	760,000
Budgeted fixed costs	140,000
Target contribution	900,000

Less: Contribution from external sales	
(500,000 x (K3.70-K2.50)	(600,000)
∴***Contribution needed from internal transfers***	**300,000**
	÷300,000 units
	= K1.00

	K
Contribution needed per unit transferred internally	1.00
Variable cost per unit transferred internally	2.50
Transfer price needed to achieve target residual income	3.50

(ii) **Transfer Price Evaluation**

The transfer price in (b)(i) has been derived from a target figure for residual income and does not reflect the opportunity cost of transfer. This could lead to sub-optimal decision making for one of two reasons.

- **if there is a substantial external market for the component**.
If Division A could sell all of its 800,000 units output capacity on the external market at K3.70, the transfer price would be below the market price. In this case Division A would sell all its output on the external market.
This action by Division A would not be in the best interest of the PE group. ***(2 marks)***
- **if the external market is limited to 500,000 units.**
If Division A can sell no more than 500,000 units externally, the opportunity cost of transfer is just the variable cost of production of K2.50. If Division B could obtain market supplies at a price below K3.50 (the transfer price) but above K2.50, it would want to do so. But this would be damaging for the profitability of the company as a whole. It would be better to manufacture internally for K2.50 than to buy externally at a higher price.

(c)

(i) **Average Transfer Price per Component**
If Division A were to supply 400,000 components to Division B, its external sales would be restricted to 400,000 components.

Division A

	K
Target contribution (part (b)(i))	900,000
Contribution from external sales (400,000x K1.2)	(480,000)
Contribution needed from internal transfers	420,000
	÷
Transferred units	400,000
Contribution needed per unit transferred	1.05
Variable cost per unit	2.50
Transfer price needed per unit transferred	**3.55**

At this transfer price, Division B would want to buy for 400,000 units from F Ltd for K3.40 each. Division A would be left with unutilized capacity of 300,000 units and unable to achieve its targeted residual income.

(ii) **Opportunity Cost Transfer Price (s) per Component**

The opportunity cost of transferring each product would be:

- The variable cost of product for the first 300,000 units i.e. K2.50;
- The external selling price for the next 100,000 units i.e. K3.70 per unit.

At these prices, Division B would want to buy the 300,000 units from Division A for K2.50 and the next 100,000 units from S Ltd for K3.60.

Division A would fail to achieve its targeted RI.

(d) **Disadvantages of Using EBITDA**

i. **Non-Operating Expenses -** EBITDA does not account for non-operating expenses like interest payments, taxes, depreciation and amortization. This can cause an overstatement of a company's actual cash flow and profits.

ii. **Capital Expenditures -** Another issue with EBITDA is that it does not account for capital expenditures that may have been used in a given period. Capital expenditures are purchases of long-term assets, like buying a new piece of equipment or building a new store.

iii. **Does Not Represent Company Performance -** EBITDA is not meant to be an exact representation of a company's performance. Instead, it is a measure of operational performance with the goal of excluding non-operating expenses to provide a more accurate picture of a company's operations.

iv. **Interest Payments -** EBITDA does not take into account the interest payments that a company makes. While these payments do not reflect the actual earnings of a company, they are still a cash outflow that must be accounted for when looking at a company's overall financial health.

SOLUTION TWO

(a) **Discussion of Availability of Limited Funds**

LAPS raises funds from the following sources:

- **Government Grant** which is not specific and therefore can be utilised by management at their discretion.
- **Donations from various people**: these funds are for special purposes and therefore management has no control over them.
- **Fees from pupils**: a reasonable fee is charged to the pupils. This money can be utilised for any purpose at the discretion of management.

Utilisation of funds

Although management is free to use the government grant and the fees received from the pupils in any way it sees fit, the management may have no choice but to use these funds for day to day operations. This is because the cost per student is higher than what is charged to them and therefore the government grant may need to be used to meet the shortfall.

For a school, books are an essential investment as they improve the quality of the pupils' education. However, there are no funds available for purchasing books. This may affect the quality of education.

Management needs to consider how to curtail its expenses in order to obtain money for books.

Management has no control over the donations from various people. This is because the donation is to be used is decided by the donor and management has to follow the terms and conditions of the donation.

(b)

(i) **Evaluation of LAPS' s Performance On Basis of Non-Profit Measures**

1. There are 450 continuing pupils and 150 new pupils. This means that the number of pupils has increased by more than 30% during the year. This indicates that LAPS has a good reputation and parents are keen for their children to be enrolled in LAPS.

2. Of 600 pupils, 400 appeared in the 1st exam. Out of these 400 pupils, 275 pupils passed, i.e. 69%. 64 pupils (about 24% of the pupils who passed) secured more than 65% of the overall marks. This ratio shows that the pupils are receiving a good education.

3. For the 2nd exam, of the 375 pupils who appeared, 290 passed, i.e. 77%. Of the pupils who passed, 101 pupils (approximately 35%) secured more than 65% overall. This ratio suggests that the teachers are motivated to educate their pupils, because a comparison of 1st and 2nd exams shows that the results have improved.
4. Final exams are compulsory for all the pupils. 540 of the 600 pupils, i.e. 90% of the pupils, appeared in exams. Of these 455 pupils, i.e. almost 84% of the pupils, passed. Out of the pupils who passed, 125 i.e. almost 28%, secured more than 65%. This ratio is a little disappointing only on the basis of the number of pupils who obtained first class marks.

This is because in the 2nd exam, 35% achieved 1st class results in the last exam only 28% achieved 1st class results. The reasons for this must be the extra activities and the annual function since pupils who participate in other activities might not concentrate on their regular studies.

5. The quiz contest covers many topics but the pupils do not show much interest in them. Teachers should reinforce to the pupils the importance of extracurricular activities. They should inform the pupils that this will help them in their future careers.

6. Most of the pupils who failed did so in language subjects. This indicates that pupils are not interested in these subjects or do not understand what the teacher is trying to explain to them. This suggests that the teachers of these subjects must learn how to present themselves before a class.

7. From the previous point, we can also conclude that the teachers appointed for the subjects other than language are quite efficient and hard-working.

8. School uniforms and course books are provided out of the school budget by charging only 30% of the original cost. This strategy would benefit both the pupils and the authorities. Pupils would not have to pay the market price and authorities would not undergo financial difficulty by providing these resources.

(ii) **Suggestions to improve above factors**

1. Of the pupils who failed, most lost their marks in language subjects. Therefore a new language teacher should be appointed. Grammar competitions should be arranged in addition to quiz competitions. In this way pupils' interest in language subject will be increased.

2. Sports activities and other competitions are affecting the regular studies of pupils. On the other hand, these activities are beneficial and so they should not be removed from their timetables. It is advisable for the school to open a library for extra studies. This will help pupils and also improve the school's reputation.

3. Quiz competitions are organised four times a year. However, pupils do not take the competitions seriously. These contests should be arranged twice a year and should be made compulsory for all pupils.

4. Extracurricular activities should be conducted in the middle of the academic year, i.e. not before the final exams. Alternatively, a proper time table should be given to pupils with information on plans for the entire academic year. This will enable pupils to manage their studies in a proper manner.

SOLUTION THREE

(a) **Possible consequences of using students on the project:**

i. More frustration on the team who feel are being sidelined
ii. Error rate of 15% is too big in IT and can have seriously consequences such as loss of trust
iii. High risk of having of malfunctioning software
iv. Frustration on the users who will have challenges when using system especially those in far distances students who will rely 100% for their school registration and materials
v. Possible system inversion risk- since students will be working on the systems, this will pause control risk of them being able to know how to get around the system.

(b) **Leadership style**

The leadership style of the manager is tending to be autocratic; that is team members are being told what to do without the opportunity to discuss the decision being made. This leadership style tends to be appropriate for staff who need a lot guidance through a project.

In this situation, most of the staff have a professional qualification, including that they are able to think though problems for themselves and monitor their own work effectively. A more appropriate management style would be participative. Mr Mwangala could discuss the work to be done and then let staff carry out this work. This approach would benefit staff by providing them with more responsibility and benefit Mr Mwaangala by freeing up more time to the monitor the overall progress of the project.

Lack of communication

This cancelling of project meeting can have an adverse effect on morale, as well as making communication between the team members more difficult. While it appears that more work will be carried out on the project, if staff feel that they are not being communicated to, or that they cannot discuss problem, then overall work efficiency is likely to suffer.

This problem is easy to resolve; Mr Mwaangala should re-introduce the team meetings and apologize for making the mistake of cancelling them in the first place. This will provide an appropriate channel of communication and help team members realize it was not their fault that the meetings were cancelled.

Lack of project updates

The other problem with cancelling team meeting is that project team members will not be aware of how the project is progressing overall. Team members may not feel motivated to work harder if they perceive that other members are not "pulling their weight". The possibility of conflicts within the team suggest that morale and trust may be low, and so motivation may be an issue.

Re-introducing the team meeting will assist communication and help all team members to see how the project is progressing. When all team members can see that everyone is working hard, then this will have a positive impact on morale and the overall amount of work being done.

Accountability for errors

Making team members accountable for errors is acceptable, where those members made mistakes in the first place. However, in this situation, the "trainee" system analysts were not responsible for a large percentage of the analysis work as this was carried out by the previous analysts.

Mwangala should really be grateful that these members are attempting to continue this important work, and not place hindrances in their way. An appropriate way of maintaining motivation would be to simply ask for explanation of any errors found; accountability for those errors can be decided later, if necessary.

(c) **Conflicts within the team**

The number of small disputes within the team indicate that working relationships are not good. These problems will tend to affect overall communication and working efficiently within the team, as members will not feel that they can discuss problems with each other.

In this situation, it is wrong to ignore the problem; his team is already behind schedule and trying to hide the problem will make it worse. The Head of department must attempt to resolve the conflicts in some way, preferably by meeting and discussing with the team members why the conflicts are arising.

If the problems cannot be resolved, the project will continue to fall behind schedule. The conflicts and the lack of trained analysts may indicate that the project deadlines need to be moved, or the project cancelled until a full working team with good relationships can be formed.

Competencies of these students should be assessed and proper orientation should be done to avoid sub- standard system.

SOLUTION FOUR

REPORT

To : The Vice Chancellor, UNPA
From : Senior Management Accountant
Date : 3rd January 2024
Subject: MATTERS TO CONSIDER IN THE 2024 – 2029 UNPA STRATEGIC PLAN

Introduction

This report has been prepared as requested by the Vice-Chancellor to outline matters highlighted in the recent audit and control measures that could be considered to help the UNPA structure its 2024 – 2029 strategic plan as well as the importance of information systems in the operations of the University.

Part (a)

UNPA has been subjected to eight different criticisms. These can be categorised as:

Operational

- It could not accurately produce a head-count of the number of students on roll.
- The internal control of cash receipts was defective and in several areas there had been discrepancies.

Management

- Its expenditure exceeded its income.
- Student drop-out and failure rates were greatly in excess of the national average.
- The level of student complaints was very high and increasing.
- It had a large amount of debtors, mainly ex-students, and was not doing anything to collect outstanding amounts.
- It had an abnormally high level of staff turnover.

Strategic

- The audit of the quality of education provided by UNPA awarded UNPA the lowest rating of 'Poor'.

Teaching note: These categories are indicative rather than definitive as some criticisms could fit more than one category, for example, a high level of staff turnover can be viewed as both an Operational and a Management criticism. Candidates were not expected to rigidly adhere to these categories; other sensible categories gained marks.

The Vice-Chancellor has been instructed to prepare a new strategic plan for the period 2024-2029. The new strategic plan has to address the eight criticisms and it is reasonable to assume that the Vice-Chancellor wishes to eradicate the eight criticisms. The role of the control measures will be to monitor performance in these eight areas and provide feedback and feed-forward information to enable managers to take appropriate action.

In general, the control measures should be designed to align performance with the strategic goals, values and vision articulated within the new strategic plan. The control measures are likely to take the form of Critical Success Factors (CSFs) which could be supported by Key Performance Indicators (KPIs). The reporting of performance against these control measures should be incorporated within the periodic management control reporting and could also be reported within a Balanced Scorecard framework.

Part (b)

Teaching note: For completeness, all the eight criticisms are dealt with. In some cases, more than one measure is proposed. Candidates were given credit for good answers even if their suggestion did not appear below.

- Operational. The operational areas which were criticised are most amenable to direct action and should be the quickest to rectify. These represent areas of the university's work which is going wrong on a daily basis and so immediate action is required.

Inaccurate head-count of the number of students on roll. If the university does not know how many students it has, this will have adverse implications for many aspects of the university's work ranging from time-tabling to funding.

Control action: the university should issue an identity card for each student and each student should be registered on a central database which is continually up-dated. If students are not in possession of a valid identity card they would be prevented from using university services, such as the library or the computer network.
Internal control of cash receipts was defective and in several areas there had been discrepancies.

The university will have a large number of cash transactions every day, for example in its restaurants, libraries and sports centres. If cash control is inadequate there is a danger of theft.

Control action: as far as possible restrict the use of cash for university transactions. Limit the amount of cash balances held within the university. Insist all cash over a sensible working balance is banked daily or more frequently if necessary. Separate duties, wherever possible, of staff handling cash and those responsible for accounting for cash.

- Management problems are more complex and not as amenable to quick solutions as are the operational ones.

UNPA's expenditure exceeded its income. This is not sustainable in the long-run because there is a danger that the university could become insolvent. Although the actions taken to address the operational criticisms will help, they will not be sufficient to align the university's income and expenditure. Other actions, which will take longer to implement, are required.

Control action: review all areas of expenditure, institute a cost reduction programme, consider increasing prices wherever possible and reduce investment in working capital.

Student drop-out and failure rates were greatly in excess of the national average. Student drop-outs and inflated failure rates indicate dissatisfaction with the university which will damage the university's reputation. They also point to inefficiencies in the teaching and learning process and will damage the university's cash flow.

Control action: conduct exit interviews with students who are leaving the university, review recruitment procedures and requirements, institute an academic audit of university programmes.

UNPA’s level of student complaints was very high and increasing. Similarly, to the student drop-out and failure rates, this indicates dissatisfaction with the university’s processes.

Control action: review the complaints procedures and address any systematic cause of complaints, for example, examination regulations. Survey the current students to identify areas of potential complaint. UNPA had a large amount of debtors, mainly ex-students, and was not doing anything to collect outstanding amounts. This criticism may be related to the university not accurately knowing how many students it has on roll. Once a student has left the university it will become more difficult to collect outstanding amounts. These debtors represent a loss to the university’s cash-flow.

Control actions: establish a target level of debtors and institute actions to reduce the outstanding level of debtors.

UNPA had an abnormally high level of staff turnover. Staff are a vital part of every organisation because they deliver the strategy. An abnormally high level of staff turnover indicates problems within the organisation. Staff turnover creates expense for the university and whilst it is normal for some staff to leave the university the abnormally high level will create an abnormally high expense and may impact on UNPA's level of quality.

Control action: conduct exit interviews with all staff that leave the university. Survey the existing staff and rectify any general causes of dissatisfaction.

At this level, the criticisms represent the most complex problems faced by the university. They cannot be resolved by single actions but will require holistic solutions.

UNPA had received the lowest possible rating for the quality of its education: ‘Poor’. This rating represents a public criticism of the university which is likely to affect its reputation. Externally, this could result in worsening recruitment of students. Internally, this implies that the university’s current students are receiving a sub-standard education. If this rating is not improved the university’s new strategic plan will be undermined.

Control action: establish a department responsible for quality. Codify existing quality procedures and produce new ones as necessary. Carry out periodic internal quality audits. Allocate investment in the new strategic plan to address areas of quality weakness. Make quality targets a part of all members of staff’s performance management objectives.

Part (c)

The university's information systems could support the successful implementation of the new strategic plan at a number of levels. Robert Anthony produced a hierarchy of control which was founded on a base of transactions processing. Above this was the level of operational control, above that management control and, at the highest level, strategic planning. This model has obvious applicability to UNPA and each level identified by Anthony will require support from university information systems.

Strategic The new strategic plan should identify Critical Success Factors which are those aspects of the university's operations that the plan has identified as being vital for its success: an example of a CSF would be that the university should operate at a surplus. It was criticised for being in deficit: its expenditure exceeding its income. This CSF could be monitored by means of a Key Performance Indicator, which in this case would be the university's operating position which could be reported upon monthly. The monthly reporting would entail use of an information system.
Teaching note: Additionally, information systems have, in themselves, been identified as an important strategic variable. This is for a number of reasons, the first being that information systems, together with their associated hardware infrastructure, are likely to be a significant proportion of the university's operating and capital costs. The information systems can also be an important competitive variable in that they can affect the way in which the university carries out its business: an example of this would be the university replacing lectures by webcasts. Thus, the information systems and the new opportunities they offer could be a source of competitive advantage. For these reasons the new strategic plan should incorporate within it an information strategy.

Management The university's information systems should support the management of UNPA by providing reporting and monitoring functions to demonstrate performance against the targets and KPIs identified in the new strategic plan. An example of this would be periodic reporting of the university's income and expenditure. Student drop-out and failure rates could also be reported periodically to managers with responsibility for these areas. The university would also need to know periodically the number of its debtors to check that its corrective actions were succeeding.

Operational The university's information systems should provide real-time information about key operational performance. It is important that the university should accurately know, at any time, how many students it has on roll and it should continually and accurately be able to account for its cash. This implies a need for immediate data capture which would be facilitated by devices such as the student identity card.

Conclusion

I hope the report addresses your concerns and for any other information please do not hesitate to contact me.

Signed: Senior management Accountant

SOLUTION FIVE

(a) A BB implementation should incorporate the following six main principles:

(1) An organisation structure with clear principles and boundaries; a manager should have no doubts over what he/she is responsible for and what he/she has authority over; the concept of the internal market for business units may be relevant here.

(2) Managers should be given goals and targets which are based on relative success and linked to shareholder value; such targets may be based on key performance indicators and benchmarks following the balanced scorecard principle.

(3) Managers should be given a high degree of freedom to make decisions; this freedom is consistent with the total quality management and business process reengineering concepts; a BB organogram (organisation chart) should be 'flat'.

(4) Responsibility for decisions that generate value should be placed with 'front line teams'; again, this is consistent with Total Quality Management (TQM) and Business Process Re-engineering (BPR) concepts.

(5) Front line teams should be made responsible for relationships with customers, associate businesses and suppliers; direct communication between all the parties involved should be facilitated; this is consistent with the Supply Chain Management (SCM) concept.

(6) Information support systems should be transparent and ethical; an activity based accounting system which reports on the activities for which managers and teams are responsible is likely to be of use in this regard. Beyond budgeting (BB) is essentially an approach that places modern management practices within a cultural framework.

(b) **Advantages**

The view held by proponents of the beyond budgeting model is that the following benefits may accrue as a result of its successful application by management:

- It creates and fosters a performance climate based on competitive success. Goals are agreed via reference to external benchmarks as opposed to internally-negotiated fixed targets. Managerial focus shifts from beating other managers for a slice of resources to beating the competition.

- It motivates people by giving them challenges, responsibilities and clear values as guidelines. Rewards are team-based, in recognition of the fact that no single person can act alone to achieve goals.
  It devolves performance responsibilities to operational management who are closer to the 'action'. This uses the 'know-how' of individuals and teams interfacing with the customer, which in turn enables a far more rapid adaptation to changing market needs.

- It empowers operational managers to act by removing resource constraints. Key ratios are set, rather than detailed line-by-line budgets. For example, gearing and liquidity ratios may be used to show there is enough cash in the bank to meet liabilities. Local access to resources is thus based on agreed parameters rather than line-by-line budget authorisations. This is aimed at speeding up the response to environmental threats and enabling quick exploitation of new opportunities.

- It establishes customer-orientated teams that are accountable for profitable customer outcomes. These teams agree resource and service-level requirements with service departments via the establishment of service level agreements.

- It creates transparent and open information systems throughout the organisation, which should provide fast, open and distributed information to facilitate control at all levels. The IT system is crucial in flexing the key performance indicators as part of the rolling forecast process.

Disadvantages

- Most Country Y businesses are SMEs and may not have the resources including systems infrastructure to successfully implement BB.
- The level of research particularly economic research aimed at finding specific solutions for the country and its businesses is still very low. Most managerial models are adopted from other countries which might not be suitable for Country Y.
- Little and no expertise to integrate other quality programmes for a successful BB implementation.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 14 JUNE 2024

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.

<u>QUESTION ONE</u> – (COMPULSORY)

The recent development of electric cars in the car manufacturing industry has made ZANGO plc, a mining company in Zambia, to consider investing in electric car battery manufacturing plant in Congo DRC. The investment would be done through setting up a subsidiary company called CONGA Ltd. The electric car batteries would then be exported mainly to the European market. ZANGA Plc has prepared the following forecasts over the five (5) year planning horizon:

Year	1	2	3	4	5
Revenue (€'000)	4,100	4,450	5,900	5,500	4,050
Operating costs (€'000)	670	910	1120	1,030	610

It is also expected that CONGA Ltd will pay royalties to ZANGA Plc of K10 million per year. The royalties are tax allowable in Congo DRC. However, the annual corporate tax of 25% is payable in the year taxable income is earned. The tax allowable depreciation is at an annual rate of 20% on a straight line basis. An amount equal to the amount of the tax allowable depreciation is required each year for the maintenance of non-current assets.

All the machinery required for this investment will be acquired from Europe and the initial investment cost of the operation is €6.5 million and there is no residual value at the end of the planning horizon.

As per company policy, it is expected that all net cash surpluses will be remitted to Zambia each year. The tax rate in Zambia is 30%, payable in the year taxable income is earned, and a double taxation treaty exists between Zambia and Congo DRC.

ZANGO plc has a gearing ratio (debt to equity) of 0.40. Shares in ZANGO plc have an equity beta (β) of 1.39. Meanwhile a quoted electric car battery manufacturing company in Congo DRC, BOJA plc with a gearing ratio (debt to equity) of 0.25, has an equity beta (β) of 1.11. The market return is 20% and the risk free rate is 8%. ZANGO Plc plans to finance the project by equity and debt in the ratio 55%:45%. The debt will comprise a 15% redeemable bond issued at par value of K1,000 with five (5) years' maturity. The bond has a market value of K1,089, and would be redeemed at a 10% premium.

The forecast exchange rates are as follows (ZMW/€'s):

Year	**Buying**	**Selling**
0	20.62	21.03
1	20.68	21.07
2	20.96	21.12
3	21.01	21.19

4	21.10	21.28
5	21.17	21.37

Required:

Write a report to the board of ZANGO Plc which should cover the following:

(a) Evaluating the financial viability of the proposed project (CONGA) in the electric car battery manufacturing using the Net Present Value method, by preparing an investment appraisal in Zambian Kwacha. (32 marks)

(b) Discussing other non-financial factors that should be considered before undertaking the proposed investment. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) Questions in this section. Attempt any THREE (3) questions.

QUESTION TWO

KNM Ltd, an unquoted mealie meal milling company, has been experiencing growth in demand due to the opening up of the foreign market, exporting mealie meal to the neighboring countries. This trend is expected to continue in the near future. To meet the growth in demand, the company needs to buy additional new machinery in two (2) months' time, and this is expected to cost $10 million. Management is concerned about the exchange rate and asked the bank for a forward rate contract to hedge its position. The bank has provided the following quotation:

Spot	**ZMW/$ 19.892 –20.125**
2 months forward	0.89 – 0.97 dis
3 months forward	0.92-0.99 dis

KNM Ltd recently distributed a high proportion of earnings as dividends to its shareholders and, therefore, little cash reserves remained. The company shareholding comprises of 56.5% founding family and 18% institutional shareholders, with the balance held various individuals.

KNM Ltd is considering how to raise the funds to finance the procurement of the machinery. The company has already raised some debt finance and this is secured against the company land and buildings.

Required:

(a) Compute how much KNM Ltd will be required to pay based on the forward contract. (4 marks)

(b) Discuss the issues that should be considered by the board in determining whether debt would be an appropriate source of finance. (16 marks)

[Total: 20 Marks]

QUESTION THREE

K&P Morgan Inc. a UK based company owes a US supplier $2.021 million payable in February. The spot rate is $/£ 1.3850 – 1.3871 and the K&P Morgan Inc. is concerned that the US dollar might strengthen. The company has decided to hedge its position using the option. Traded options are available at prices as shown in the following table:

$/£ Options £31,250 (cents per £1)

Strike Price	**Call**			**Put**		
	Jan	Feb	Mar	Jan	Feb	Mar

1.324	5.28	5.32	5.49	0.03	0.15	0.46
1.350	2.81	3.16	3.54	0.04	0.49	0.99
1.376	1.05	1.45	1.93	0.14	1.22	1.86

Assume you're the Financial Manager of K&P Morgan Inc. and you selected 1.376 as your strike price.

Alternatively, K&P Morgan Inc. can hedge its position using the fixed forwards contracts which the company's banker is willing to provide.

Note: Traded options have a contract size of £31,250.

Required:

(a) Illustrate how traded $/£ currency options can be used to hedge the risk. (8 marks)

(b) Show the outcome of the hedge if the spot rate in February is:
$/£1.3101 – 1.3120. (6 marks)

(c) Discuss the relative advantages and disadvantages of using foreign currency options compared with fixed forward contracts. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

MNK Plc is considering acquiring JPD Ltd with the following projected financial data which is expected to continue annually for the foreseeable future:

S/n	Description	Amount (K'million)
1	Sales	624
	Cost of goods sold, including depreciation	417
	Distribution costs and administrative expenses, including depreciation	55
	Capital allowances claimed	56.4
	Non-current assets purchased in the year	83
	Irredeemable bonds (market value K1,310)	31
	Corporation tax rate	30%

	Weighted average cost of capital in nominal (i.e. money) terms	20%
	Expected annual inflation rate	8%

The projected cash flows are in real terms and working capital changes are assumed to be insignificant because of the absence of growth. Depreciation is 20% on cost of non-current assets purchased. The irredeemable bonds were issued at the par value of K1,000. If the acquisition deal goes through, the board of MNK Plc would prefer a share-for-share exchange while the board of JPD Ltd expressed desire for a cash offer for the equity shares of the company.

Required:

(a) Compute the estimated equity market capitalisation of MNK Plc based on the given financial data (real cash flows) above. (12 marks)

(b) Advise the boards for both MNK Plc and JPD Ltd on the relative advantages and disadvantages of a share-for-share exchange, and cash payment as forms of bid consideration in the proposed acquisition of JPD Ltd equity shares. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

During an SME trade conference, the managers of three (3) Zambian companies are discussing their strategies towards foreign exchange risk.

Company A: Exports to several countries in Africa, Europe and North America.

Company B: Imports copper cables from China. Its Chinese supplier sources its raw materials (copper cathodes) from a Zambia mining company.

Company C: Is not involved in any form of foreign trade.

The three (3) companies all consider themselves to be risk averse. The companies have decided not to take any action against foreign exchange risk. Their reasons for not taking any action are follows:

Company A: Foreign exchange markets are efficient, and on balance their company is likely to gain from foreign exchange movements than to lose from them. There is therefore no point in paying for hedging foreign exchange risk as overall the company will not gain by using such hedges.

Company B: Company only trades with Chinese Company that sources its materials from Zambia, and as a result we are always invoiced in Kwacha, this prevents foreign exchange losses.

Company C: Since our company is not engaged in any form of foreign trade, foreign exchange rates are irrelevant to our company.

Required:

(a) Discuss the validity of the views of each of the three (3) Managers, with respect to risks of foreign trade. (10 marks)

(b) Discuss with examples, how any five (5) risks associated with foreign trade can be managed. (10 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

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2 w_a w_b r_{ab} s_a s_b}$$

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

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

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 3.6: ADVANCED FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

To: Board of Directors, ZANGO Plc
From: Financial Consultant
Date: xxxxxxxxx
Subject: Report on the Proposed Investment in Electric Car Battery Manufacturing

This report presents a financial evaluation of the proposed investment in the electric car battery manufacturing using the Net Present Value method. The NPV method gives a positive NPV of **K7.073,210.** Therefore, based on these results, the proposed investment should be undertaken because the wealth of the shareholders would be increased by **K7.073, 210**. You may refer to the appendix 1 attached for detailed financial evaluations.

However, before the decision to invest in the proposed investment is made, the following issues should be assessed:
(c)

i) The accuracy of the cash flow forecasts should be evaluated by looking at the process of how they have been established.
ii) The reasons for picking a five year planning horizon should be provided. It should be established if the valuation of cash flows is based upon a going concern. It may be more desirable to evaluate the project over the whole of its projected life.
iii) Risk is taken into account by using a CAPM derived discount rate. How has this rate been derived for a situation involving two countries? Does this fully reflect the risk of the project? Is the use of CAPM appropriate as it is a single period model? Other, theoretically weaker, measures of risk might be useful as an aid to decision-making e.g., sensitivity analysis of the key variables or simulation.
iv) Cash flow is usually assumed to occur at the end of each year. Greater accuracy would result if consideration were given to when during the year cash flow arises and these cash flows discounted at the appropriate rate.
v) Political and economic factors should be considered. How stable is the Congo DRC government tax policy? Will a change in government lead to changes in taxation policy, exchange controls, restrictions on the remittance of funds or attitudes towards foreign investment?
vi) The assumptions behind forecasting of should be established and consider their reasonableness and accuracy.

Do not hesitate to contact the undersigned for further clarifications.

Yours

Financial Consultant

APPENDIX 1: FINANCIAL EVALUATION USING NPV METHOD						
Year	0	1	2	3	4	5
	€'000	€'000	€'000	€'000	€'000	€'000
Revenue	-	4,100.00	4,450.00	5,900.00	5,500.00	4,050.00
Operating Costs	-	670.00	910.00	1,120.00	1,030.00	610.00

Maintenance Costs	-	1,300.00	1,300.00	1,300.00	1,300.00	1,300.00
Royalties	-	474.61	473.48	471.92	469.92	467.95
Taxable cash flows	-	1,655.39	1,766.52	3,008.08	2,700.08	1,672.05
Tax@25%	-	(413.85)	(441.63)	(752.02)	(675.02)	(418.01)
Tax relief	-	325.00	325.00	325.00	325.00	325.00
Investment Cost	(6,500.00)	-	-	-	-	-
Net cash flows	(6,500.00)	1,566.54	1,649.89	2,581.06	2,350.06	1,579.04
Exchange rate	20.62	20.68	20.96	21.01	21.1	21.17
Net cash flows (K'000)	(134,030.00)	32,396.12	34,581.62	54,228.06	49,586.19	33,428.29
Tax@5% (30%-25%)	-	(1,619.81)	(1,729.08)	(2,711.40)	(2,479.31)	(1,671.41)
Royalties	-	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
Tax@30% on royalties	-	(3,000.00)	(3,000.00)	(3,000.00)	(3,000.00)	(3,000.00)
Net cash flow	(134,030.00)	37,776.32	39,852.54	58,516.66	54,106.88	38,756.88
Discount@18%	1.000	0.847	0.718	0.609	0.516	0.437
Present Value	(134,030.00)	31,996.54	28,614.12	35,636.64	27,919.15	16,936.76
NPV	**7,073.21**					
Comment: The project should be undertaken as it provides a positive NPV of K7,073,210 which means the wealth of the shareholders would be increased.						
Workings		€'000				
1. Tax allowable depreciation (€6.5m x 20%)		1,300.00	1,300.00	1,300.00	1,300.00	1,300.00
2.Tax relief @25%		325.00	325.00	325.00	325.00	325.00
3. Royalties		10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
Exchange rate		21.07	21.12	21.19	21.28	21.37
Royalties (€'000)		**474.61**	**473.48**	**471.92**	**469.92**	**467.95**

Cost of Capital:

Cost of equity

$$\beta_a = \beta_e \frac{E}{E + D(1-t)}$$

β_a=1.11 x 0.75/0.75+0.25 (1-0.30) = 0.9

0.9= β_e x 0.55/0.55+0.45 (1-0.30)

β_e=1.42

Ke = 8% + 1.42(20%-8%) = 25.04 %

Cost of debt

Interest rate = 15% x K1000 x (1-0.3) = K105

Period	Cash flow	Discount@15%	PV	Discount@8%	
0	(1,089)	1.000	(1,089)	1.000	(1,089)
1-5	105	3·352	351.96	3·993	419.27
5	1,100	0·497	546.7	0·681	749.1
	NPV		**(190.34)**		**68.37**

IRR = 8% + 68.37/68.37+190.34 X (15%-8%) = 9.85%

WACC = (25.04 % X 0.55) + (9.85% X 0.45) = 18.2% round off to 18%

SOLUTION TWO

(a) Forward rate = 20.125 + 0.0097 = 20.1347
$10,000,000 x 20.1347 = K201,347,000

(b)

i. Retained earnings – often a preferred source of funds for smaller firms, these cannot be easily used here as the family shareholders expect significant dividends. This means that outside finance must be considered.
ii. High level of required funding relative to the size of the firm – could be perceived by potential investors as increasing business risk even though the expansion is in the same industry. This would increase required returns of equity investors before the increase in debt funding is even considered.
iii. Assets for loan security – since land and buildings are already mortgaged, the machinery will have to be used as security. The attractiveness of this depends on whether they are specialised or would have a ready resale market.
iv. Gearing levels – the company is already geared but it is not clear whether the current level is optimum. Raising further debt finance, subject to the taxation considerations below, should reduce the overall cost of capital, but such a significant sum is likely to be seen as high risk. The fixed interest payments could bankrupt the firm if the expected growth does not occur. This is likely to increase the required returns of shareholders and may mean that debt lenders demand higher returns than are being paid on the current loans.
v. Taxation – the high levels of investment will attract capital allowances. Depending on the current tax position of the firm and the treatment of those allowances by the revenue, the company may find itself in a non-tax paying position. This would negate the benefits of the cheaper debt finance.
vi. Agency costs – lenders often impose restrictive covenants on the company. This is particularly likely where such a significant level of funds is to be raised. A company largely in family control may be reluctant to have such restrictions, especially on dividend payments for example, which are appear to be used here to provide the family members with a source of income.
vii. Risk profile – the family members may be reluctant to take on further debt. The risk of bankruptcy mentioned above, is of greater concern to undiversified family owners than to the typically well diversified outside investor.
viii. Control – since the family retain voting control, the choice may be between debt finance and a rights issue, unless they are willing to give up control. If they do not have the funds to inject, a loan may be the only choice.
ix. Consideration should be given to alternatives such as leasing the machinery, or seeking venture capital funding (although that too may also require a loss of absolute family control).

SOLUTION THREE

(a)

- Put options
- February
- Strike of 1.376
- Contracts: 2,021,000 ÷ 1.376 ÷ 31,250 = 47
- 47 × 31,250 × 0.0122 = $17,918.75
  $17,918.75 ÷ 1.3850 = £12,937.73(payable now)

(b) In February:

Underlying transaction

$2,021,000 ÷ 1.3101	=	1,542,630.33
Profits on options:		
47 × 31,250 × (1.376 – 1.3101) = $96,790.625÷ 1.3120	=	(73,773.34)
		1,468,856.99
Add: premium		(12,937.73)
Total payment		£1,455,919.26

(c)

Fixed forward exchange contract

i) An immediately firm and binding contract (for example, between a bank and its customer)
ii) For the purchase or sale of a specified quantity of a stated foreign currency
iii) At a rate of exchange fixed at the time the contract is made
iv) For performance at a future time which is agreed upon when making the contract
Advantages of option contracts

Option contracts are attractive when:

i) The date on which the transaction being hedged will take place is uncertain
ii) There is uncertainty about the likely movement in exchange rates – the company can take advantage of any favourable movements in exchange rates, while continuing to hedge any unfavourable movements

Main drawbacks to option contracts

i) They are more expensive than fixed contracts, and the premium will have to be paid, whether or not the option is exercised
ii) They are traded in standard amounts, and therefore it is difficult to hedge exactly the sum required – in practice, the company will have to carry some of the risk itself, or use two different hedges to cover the transaction fully.

SOLUTION FOUR

(a) Estimated equity market capitalisation of MNK Plc

Net cash flows	K'million
Sales	624
Cost of goods sold (417 – 16.6)	(400.4)
Distribution costs and administrative expenses (55-16.6)	(38.4)
	185.2
Tax on operating profits (30% x 185.2)	(55.56)
Tax saved on writing down allowances (30% x 56.4)	16.92
Non-current assets purchased	(83)
Annual net cash flows	**63.56**

Depreciation = K16.6m (K83m x 20%)

Real discount rate (using Fisher effect):

$$r = \frac{(1+m)}{(1+i)} - 1 = \frac{(1+0.2)}{(1+0.08)} - 1 = 11.11\%$$

Since the annual net cash flows are perpetuities expressed in terms of real cash flows, it has been necessary to establish a real discount rate.

		£000
Corporate value =	$\frac{63.56}{1.11}$	572.10
Less market value of irredeemable bonds (K31m x 1.31)		(40.61)
Equity market capitalisation		**531.49**

(b) A share-for-share exchange is simply an exchange of paper and therefore should involve no strain on the cash resources of MNK Plc. However, there will be some dilution of existing shareholder control and, perhaps, some dilution of earnings per share. The latter will occur if the incremental earnings from the takeover divided by the new shares issued is less than the existing earnings per share of the bidding company. Shares are an expensive form of finance and so the board of MNK Plc should consider the service costs of financing a new share issue before a final decision is made.
From JPD Ltd shareholders' viewpoint, an offer in the form of shares may be difficult to evaluate as share prices will tend to fluctuate. There is also a risk that the value of the shares offered will fall during the course of the takeover. However, there are advantages in receiving the bid consideration in this form. It would allow JPD Ltd's shareholders to continue to hold this form of investment without incurring transaction costs and also allow them to have a continuing association with the business that formed the basis for their original investment.

The main advantages of offering cash from MNK Plc's viewpoint is that there will be no dilution of control, as no shares are issued, although the strain that a cash offer will impose on the liquidity of the company may eventually result in either the issue of new shares or loan capital to raise more cash. The main advantage of making a cash offer to the shareholders of JPD Ltd is that the value of the bid is certain, which may increase the chances of a successful bid. By receiving cash, shareholders in JPD Ltd will incur no transaction costs on the disposal of their shares. However, transaction costs will be incurred if the cash is reinvested in this form of investment.

SOLUTION FIVE

(a) There is some evidence that foreign exchange markets are efficient (in the context of the efficient market hypothesis), when foreign exchange rates are allowed to float freely. However, few currencies are allowed to float freely in response to economic forces. Where floating exchange rates exist, it is normally in the form of a managed float, where the government intervenes to influence the price of its currency.

<u>Company One</u>
Even if an efficient foreign currency market exists, the management of company one, would be engaging in a risky trade. The effect of changes in the exchange rate on the company's export transactions would depend on the strength of the Kwacha relative to the currencies in the countries to which company one exports. It is possible that the Kwacha depreciates against all the other currencies simultaneously, and therefore losses are incurred on export sales denominated in local currency due to exchange rate changes. The company might not be able to sustain such losses until more favourable exchange rate movements occur. Hedging, though costly can limit such foreign exchange losses (if any) to a known amount.

<u>Company Two</u>
Company two**,** only trades with China and is invoiced in Kwacha by its supplier. It might be thought that, as imports are contracted to be paid for in Kwacha there is no foreign exchange risk associated with such transactions. Debt swap/Multi – lateral debt netting of involving company B, the Chinese exporter of copper cables and its Zambian supplier of copper cathodes might be an appropriate payment mechanism. Economic exposure/risk, however, does still exist, as is explained for company three.

<u>Company Three</u>
Although company three is not engaged in foreign trade, exchange rate changes are still likely to be relevant to the company. One form of foreign exchange risk is economic exposure, which relates to the effects of unexpected changes in exchange rate on future cash flows. Therefore, changes in exchange rates might affect the company's competitive position. If exchange rate movements make foreign competitors' products cheaper, company three could lose sales to such foreign competitors. Additionally, although the company is not directly engaged in foreign trade, if it purchases components from other Zambian companies that are involved in foreign trade, such components might contain imported materials. Changes in exchange rates could directly affect the price company three pays for raw materials, even though these are purchased from Zambian suppliers .There are several other ways in which exchange rate changes could affect company three, including increased inflation resulting in higher interest rates and costs of production. Exchange rate changes are therefore relevant to the company.

(b) Risks of Foreign Trade
The management of risk associated with foreign trade will depend upon the nature of the risk:
Credit risk is the risk that the client will not pay or will only pay after the due date. It may be managed by:

(i) Credit screening before a contract is signed. This might involve a credit evaluation through a credit agency, use of information from trade associations, government databases, and bank or trade references.

(ii) More stringent terms of sale. Some terms of sale involve much less risk than others. The most secure is an advance cash payment. However, this is not a common mode of payment. Others in order of increasing risk include cash on delivery, documentary letters of credit, bills of exchange and open account.

(iii) The method of payment. The quicker and more secure the method of payment, the lower the risk. Extremes range from secure electronic funds transfer to sending a cheque in the post drawn on a foreign bank.

(iv) Insurance against non – payment or late payment. In many countries this is offered through government agencies. Insurance companies offer short - term insurance policies.

Physical risk, the risk of damage or theft in transit is best managed through insurance cover. Political risk is risk of non – payment or late payment as a result of the actions of a foreign government, e.g through the introduction of exchange controls, tariffs or quotas. Political risk protection is often offered by the same insurers as credit risk. Political risk might also be avoided by using different forms of international trade, for instance tariffs and quotas might be avoided by direct investment in the concerned country, exchange controls might be avoided by engaging in counter-trade or batter rather than trading using cash.
Culture risk is associated with different cultures, ways of doing business, attitude to religion or colours, gender, food etc. To mitigate such risks, research of the local market, culture, and business practices should be undertaken before engaging in international trade.

Foreign exchange risk refers to the losses that an international financial transaction may incur due to currency fluctuations. Foreign exchange risk can affect businesses who trade in international markets, and are engaged in the import/export of products or services to multiple countries.

There are three main types of foreign exchange risk, also known as foreign exchange exposure: transaction risk, translation risk, and economic risk. A fourth – jurisdiction risk – arises when laws unexpectedly change in the country where the exporter is doing business. This is less common and exists primarily in unstable countries. When Zambia's exchange rate increases relative to other countries, the price of its goods and services increases. Imports become cheaper. Ultimately, this can decrease the country's exports and increase imports.

Three ways in which Foreign Exchange Risks can be managed are as follows:
- The exporter can agree to accept payment in a different currency, such as euros.
- The exporter can contact a bank or foreign exchange service provider to negotiate a forward rate.
- The exporter and importer can then finalize sales price and payment terms with a commitment from the bank.

Ways to mitigate foreign currency risk due to economic exposure

Currency Risk Mitigation	Operational Strategies

Risk-sharing agreement	Diversify production facilities
Matching currency flows	End product markets
Currency swaps	Financing sources
Use many different currencies	Hedging

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 14 JUNE 2024

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.

<u>QUESTION ONE</u>

You work for the Office of the Auditor General (OAG) and you have been seconded to the International Organization for Supreme Audit Institutions (INTOSAI) secretariat for a period of three (3) months.

The scope of your work during this period will be to conduct peer reviews of two (2) INTOSAI members and evaluate their compliance with the Lima and Mexico declarations. You will be required as part of training to lead a team of auditors to undertake an audit of a recipient of public funds in one (1) of the two (2) countries.

Below are brief findings of the Supreme Audit Institutions of Serbia and Algeria together with details of an entity on which you will lead as Lead Auditor.

Supreme Audit Institution of Serbia:
The constitution of Serbia contains the provisions for the establishment of the Supreme Audit Institution (SAI). The country has a National Audit Commission which assesses the performance of the Supreme Audit Institution and reviews all the audit reports before they are published. On an annual basis, the Audit Commission determines the audits that the Supreme Audit Institution will require to conduct in the following year.

All Government ministries in Serbia are required by law to have internal audit departments. There is a sizeable number of ministries that have not yet established internal audit departments. The National Audit Commission includes mainly ministries and organizations without internal audit as topics for audit by the Supreme Audit Institution arguing that for those with internal audits it will be a duplication of effort for the Supreme Audit Institution because the internal auditors follow the same auditing principles.

Supreme Audit institution of Algeria:
The Supreme Audit Institution (SAI) of Algeria was established under the constitution as a department under the country's Ministry of Finance. The operations of the Supreme Audit Institution are fully funded by the Government through appropriations made to it through the Ministry of Finance. All requests for funding are made to the Ministry of Finance who fund the institution subject to availability of funds. The Supreme Audit Institution (SAI) of Algeria has a training department responsible for continuous training of its staff on matters related to public sector audits and risks. This is the first time that the Supreme Audit Institution (SAI) of Algeria has been subject to independent evaluation of its activities.

All reports of the Supreme Audit Institution (SAI) of Algeria are reviewed by a committee on state security. This is to enable the committee request the removal from the reports of any matters that border on state security.

The following information relates to Algeria Technical College which receives Government funding to train youths in various skills. This is done through a public, private partnership arrangement whereby the Government funds the training of youths and the training institution receives fees from Government for sponsored students. The following conditions apply to the scheme:

1. Each Institution that will enter into a public, private partnership arrangement to train youths will be required to employ an accountant who will be responsible for the financial records of the Government supported programs.
2. The Government will support training in the fields of carpentry, welding, construction and electrical. The youths will be trained in the manufacturing of school desks, fabrication of windows and door frames and the construction of schools and housing for staff.
3. The Government will inject funds for procurement of training equipment which will be maintained by the training institutions.
4. Youths will be sponsored by the constituents through the Constituency Development Fund and all constituents will sponsor fifty (50) youths annually. There are ten (10) constituencies that are likely to sponsor youths for skills training that will total to 500 youths in the first phase of the project.
5. The Ministry of Education will through the Constituency development committee and using constituency development funds buy off all the desks and other items manufactured. The profit made on provision of materials and construction shall be shared in the ratio of 60:40 to the Ministry of Youths and the training institutions respectively.
6. Annual financial statements should be kept and these will be subject to audits by the Office of the Auditor General (OAG).

One training institution that received funding under the public, private partnership agreement underwent a financial audit of its activities for the year ended 31 December 2023. The audit team made some serious observations regarding the use of funds injected by the Ministry of Youths during the conduct of the financial audit as follows:

1. A significant amount of K1.3 million was used by the institution for paying salaries of staff. This was treated as a receivable in the books of the youth's training program.
2. Inventory of manufactured goods was overstated and included goods that had been sold awaiting delivery to various schools. The inclusion of this inventory was meant to cover up a fraud that resulted in the loss of inventory worth K12.1 million.
3. The audit team discovered serious irregularities regarding the fees paid for students by the sponsoring constituencies.

You have been assigned to lead a team of auditors to conduct financial, performance and compliance audits on the funding to the Algeria Technical College. The Algeria Technical College prepared the draft financial statements that were subject to the financial audit. The public sector auditors will be required to prepare the information that will form the basis of the performance audit and conduct procedures which will enable the auditors reach a conclusion.

Required:

(a) Evaluate the performance of the Supreme Audit Institution (SAI) of Serbia against the provisions of the Mexico Declaration. (6 marks)

(b) Evaluate the performance of the Supreme Audit Institution (SAI) of Algeria against the provisions of the Lima Declaration. (6 marks)

(c) Describe the elements of the proposed performance audit of Algeria Technical College and explain the value for money principles using these elements. (8 marks)

(i) Distinguish a direct reporting engagement from an attestation engagement in the compliance audit of the Algeria Technical College. (2 marks)

(ii) Describe the elements to the intended compliance audit of the Algeria Technical College. (6 marks)

(i) Suggest , with justification, a suitable audit opinion on the financial statements audit based on the evidence obtained in the audit of Algeria Technical College. (2 marks)

(ii) Draft suitable opinion paragraphs in the financial statements audit of Algeria Technical College using the proposed audit opinion in (i) above. (6 marks)

(d) Describe the purpose of the intended forensic audit of the Algeria Technical College. (4 marks)

[Total: 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt any three (3) questions.

QUESTION TWO

(a) Kamunga district was established five (5) years ago by the Government in an effort to take development to least developed areas. There is little development in the town except for a significant number of subsistence farmers leaving in surrounding areas. The district council is being supported by central Government through monthly equalization funds to enable it meet its operational requirement.

Kamunga district Council has not received any funding in the past six (6) months resulting in the council facing serious liquidity problems. The council is three (3) months in arrears with regards wages of staff and has not paid its suppliers for over one (1) year.

You work for the Office of the Auditor General (OAG) and you have been assigned to lead a team of auditors to audit the financial statements of Kamunga District Council for the year ended 31 December 2023.

Required:

Describe the impact of the financial challenges faced by the Kamunga district Council on the audit of the financial statements for the year ended 31 December 2023. (4 marks)

(b) You work for the Office of the Auditor General (OAG) and you have been assigned to conduct a financial audit of the financial statements of Zambia Clay Industries Ltd a wholly Government owned company under the Industrial Development Corporation.

Zambia Clay Industries Ltd is a company in the manufacturing of building bricks and this involves mining of clay that is used in manufacturing. The company is subject to environmental laws and is liable to fines if the operations of the company cause harm to the environment. Its main source of one (1) of the raw materials used in production is Better Cement Ltd. Production equipment is supplied and maintained by Lusaka Engineering Company. Better Cement Ltd and Lusaka engineering Company are both wholly Government owned companies under the Industrial Development Corporation.

The Principal Auditor responsible for the audit of Government enterprises emphasized to you that you should conduct a risk assessment on Zambia Clay Industries Ltd before conducting the substantive audit procedures. He would like the audit to be conducted in line with the provisions of International Standards for Supreme Audit Institutions (ISSAIs). He would like you to report to him on the outcome of the risk assessment and also to propose any action that may be appropriate in the event that risk is assessed as higher than tolerable levels.

Your audit risk assessment of Zambia Clay Industry shows that it is above acceptable levels and the risk of material misstatements not being detected is high.

Required:

(i) Discuss the need for carrying out a risk assessment in the audit of the financial statements of Zambia Clay Industries Ltd a wholly Government owned company and suggest action that should be taken in view of a high audit risk. (6 marks)

(ii) Describe the audit risk regarding dealings of Zambia Clay Industries Ltd with Better Cement Ltd and Lusaka Engineering Company. (2 marks)

(iii) Describe four (4) substantive audit procedures that the audit team should perform regarding Zambia Clay Industries Ltd.'s dealings with Better Cement Ltd and Lusaka Engineering Company. (8 marks)

[Total: 20 Marks]

QUESTION THREE

In a rural district named Chinyunyu, located in Eastern Zambia, the Food Security Pack (FSP) Programme has been a beacon of hope for vulnerable but viable farmer households since its inception in November 2000. The district has faced recurrent unfavorable climatic conditions and the adverse effects of structural adjustment reforms in the 1990s, leading to a decline in productivity among local farmers.

Background

The FSP Programme was introduced as a Social Safety Net initiative by the Government aimed at empowering farmers who had lost their productive assets. The ultimate goal was to enhance food, nutrition, and income security, ensuring self-sustainability and poverty reduction. The programme operates in all 116 districts nationwide, with three major components: Rainfed Cropping, Wetland Cropping, and Alternative Livelihood Initiative (ALI).
Implementation of FSP Programme is as follows:

(1) Rain fed Cropping
- Beneficiaries receive a food security pack containing fertilizers (Compound D and Urea) and seeds (cereal and legume).
- Each household cultivates approximately 3/4 hectare for two consecutive years in the rainy season.
- The pack consists of 10Kg cereal, 10Kg legume, 2 by 50 Kg D Compound fertilizer, and 1 by 50 Kg Urea fertilizer.
- After two years, beneficiaries are weaned off, having gained the necessary skills and resources for sustained productivity.

(2) Wetland Cropping
- Beneficiary households receive a food security pack comprising fertilizer (D Compound and Urea) and seeds (cereal and vegetable) to cultivate 1 lima in winter.
- The pack includes 1 by 50 Kg D Compound fertilizer, 1 by 50 Kg Urea fertilizer, and seeds (maize or vegetable).

- Support is provided for two consecutive seasons, promoting year-round agricultural activities and resilience.

(3) Alternative Livelihoods Intervention (ALI)

- Focuses on non-crop agricultural inputs, emphasizing small livestock (goats, sheep, chickens) and other food security projects like Hammer mills and maize shellers.
- Beneficiaries can be individual households or communities, diversifying income sources and promoting sustainable practices beyond traditional farming.

Beneficiary Selection Criteria

To ensure effective targeting, the programme employs both primary and secondary selection criteria. Adequate own labor, land access (between ½ and 2 hectares), and household head or breadwinner not in gainful employment serve as primary criteria. Secondary criteria include factors like female, child, or disabled-headed households, those keeping orphans, households with more than seven (7) members, those with children under five (5) years, terminally ill heads, elderly heads, and unemployed heads (15 – 35 years).

Community Engagement and Sustainability

The FSP Programme fosters community involvement by incorporating a 10% payback or recovery mechanism. Beneficiaries are encouraged to either keep the recovered resources at the community level or sell them. The funds generated are then utilized for additional food-enhancing initiatives, creating a self-sustaining cycle within the community.

As a result of the FSP Programme, Chinyunyu is witnessing improved agricultural productivity, increased food and nutrition security, and a decline in poverty levels among vulnerable farmer households. The empowerment of these communities through sustainable practices is a testament to the success of the FSP Programme in achieving its overarching objectives.

Required:

(a) Suggest and describe the key parties to the performance audit of FSP. (6 marks)

(b) Describe the Performance Audit Process you would undertake for FSP. (8 marks)

(c) Explain the reporting relationship of the Office of the Auditor General with Parliament and Government using the Accountability Triangle. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

In a small district of Zambia, the Office of the Auditor General (OAG) receives a complaint regarding potential financial mismanagement in the local administration. The complainant, a concerned citizen, alleges that public funds allocated for a recent development project have not been utilized appropriately. The project aimed at constructing a new community center, but there are suspicions that the funds might have been misappropriated.

The Auditor General decides to initiate a comprehensive audit of the district's financial records to verify the allegations. The process involves the Audit Division of the OAG, which is responsible for conducting audits on various state organs, institutions, provincial administrations, and local authorities. This audit falls under the mandate of the OAG to ensure transparency, accountability, and the proper utilization of public funds.

The Deputy Auditor General in charge of the Audit Division assigns a team of auditors, including forensic auditors, to investigate the financial transactions related to the community center project. The team is given the task of examining accounts, scrutinizing procurement processes, and assessing the overall financial management of the district administration.

As per the constitutional provisions and the Public Finance Management Act, the auditors have the authority to access all relevant documents, visit the premises of the district administration, and request information from responsible officials. The audit team begins its work, facing challenges such as incomplete records, reluctance from certain officials, and outdated financial management systems.

The Corporate Services Division, headed by the other Deputy Auditor General, plays a crucial role in supporting the audit process by ensuring the availability of necessary resources, facilitating communication, and addressing logistical issues. The division also collaborates with the Audit Division to analyze the district's environmental, procurement, and contract practices.

Throughout the audit, the team faces pressure to deliver accurate and unbiased findings. The findings will be presented to Parliament, as required by the Constitution of Zambia, potentially leading to further investigations or legal actions if financial irregularities are confirmed.

The scenario unfolds as the auditors navigate through the complexities of the district's financial landscape, striving to uphold the principles of transparency and accountability embedded in the constitutional mandate of the OAG. The outcome of this audit will not only impact the district's reputation but also serve as a testament to the effectiveness of the Auditor General's role in safeguarding public funds at the grassroots level.

Required:

(a) Define effective auditing and conditions to achieve it in the public sector within the provisions of the Lima Declaration (5 marks)

(b) Explain the fundamental public sector auditing principles you need to apply in the assignment given to you (10 marks)

(c) Provide guidance on the stages of a forensic audit (5 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

The Zambia Development Agency (ZDA) is gearing up for a high-profile Investment and Trade Summit, bringing together key stakeholders, investors, and entrepreneurs from various sectors. The summit aims to showcase Zambia's economic potential, attract foreign investment, and promote the growth of the Medium Small and Micro Enterprise (MSME) sector.

Pre-Summit Preparation: In the lead-up to the summit, the ZDA has collaborated with the Ministry of Commerce, Trade, and Industry to coordinate a series of promotional activities. These include roadshows, webinars, and promotional materials highlighting Zambia's investment opportunities, regulatory frameworks, and the support services provided by the ZDA.

Investment Promotion: The ZDA, in adherence to its core function of promoting and facilitating investment, has identified key sectors for investment promotion. These include renewable energy, agribusiness, technology, and manufacturing. The Agency has engaged in targeted outreach to international investors, showcasing the benefits of investing in Zambia and the support mechanisms offered by the ZDA to facilitate a smooth investment process.

Trade Facilitation: With the goal of increasing Zambia's capacity to trade, the ZDA has organized trade exhibitions and matchmaking sessions during the summit. Local businesses, including MSMEs, have the opportunity to connect with international counterparts, fostering trade relationships and opening up new markets for Zambian products.

MSME Development: The ZDA recognizes the vital role of MSMEs in economic development. As part of the summit, dedicated sessions and workshops are planned to provide MSMEs with insights into accessing finance, improving business competitiveness, and leveraging global trade opportunities. The Agency is also launching initiatives to streamline registration processes and reduce barriers for MSMEs, aligning with its mandate to promote and facilitate the development of the MSME sector.

Multi-Facility Economic Zones and Industrial Parks: The ZDA is using the summit as an opportunity to update investors and stakeholders on the performance of existing

multi-facility economic zones and industrial parks. The Agency is also unveiling plans for new zones and parks, emphasizing their role in job creation, technology transfer, and sustainable industrial development.

Privatization Program Oversight: As part of its core functions, the ZDA is providing updates on the progress of the privatization program during the summit. The Agency aims to attract private sector participation, ensuring a transparent and efficient privatization process that contributes to economic growth.

Database Establishment and Accessibility Promotion: The ZDA is launching an online database of facilities during the summit, promoting accessibility to industry-related information. This database will serve as a one-stop-shop for investors, businesses, and entrepreneurs, facilitating informed decision-making and reducing the complexities of doing business in Zambia.

Public-Private Dialogue: Recognizing the importance of collaboration, the ZDA is facilitating public-public, private-private, and private-to-public dialogue sessions during the summit. These sessions provide a platform for stakeholders to discuss challenges, share insights, and collectively contribute to the formulation of policies that promote a conducive business environment.

As the summit unfolds, the Zambia Development Agency envisions that it will serve as a dynamic hub for promoting economic development, fostering partnerships, and creating a conducive ecosystem for investment, trade, and enterprise development in Zambia.

You are Principal Auditor assigned to conduct an audit on Zambia Development Agency following its successful hosting of the Investment and Trade Summit.

Required:

(a) Explain any four (4) types of audits you may conduct at the Zambia Development Agency, and their relevance to stakeholders. (8 marks)

(b) Describe four (4) general controls which you may need to review at the Zambia Development Agency. (12 marks)

[**Total: 20 Marks]**

END OF PAPER

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Performance of the SAI of Serbia against the Mexico declaration:

1. The fact that the establishment of the SAI is contained in the constitution of Serbia is in line with the provisions of the Mexico declaration on independence.
2. The existence of the National Audit Commission is contrary to the provisions of the Mexico declaration which requires that the SAI should be independent of any other entities.
3. The reviews of the reports of the SAI by the National Audit Commission is contrary to the provisions of the Mexico declaration which states that the SAI should be free to decide on the contents of the audit reports.
4. The determination of the audits that should be conducted by National Audit Commission is contrary to the Mexico declaration that states that the SAI should have a broad mandate and decide on the audits it wishes to undertake.

(b) Performance of the SAI of Algeria against the Lima declaration:

1. The establishment of the SAI being contained in the constitution is in line with the Lima declaration but providing that it should be under the Ministry of Finance is contrary to the Lima declaration requirement which requires that the SAI should be independent of other institutions.
2. The Lima declaration provides that funding to the SAI should be made directly from government funding. The fact that the funding of the SAI of Algeria is made through the Ministry of Finance is contrary to the Lima declaration and will impact on the independence of the SAI.
3. The existence of a training department within the SAI is aimed at ensuring that SAI staff possess the skills and competences to conduct audits and this is in line with Lima declaration principles.
4. The Lima declaration promotes international exchanges of ideas of INTOSAI members and this evaluation is in line with the Lima declaration principles.

(c) Elements of the proposed performance audit:

Objectives:

This is the overall objective of the public, private partnership arrangement which is to train youths in technical skills. Algeria Technical College will serve ten (10) constituencies and is expected to train 500 youths over a two (2) year period.

Inputs:

This element is for the resources that will be put in to facilitate youth training and will include the sponsorship funds and the funds that will be injected for the procurement of training equipment.

Processes:

This is the implementation stage of the program which will include the procurement of the necessary equipment and the actual training by the college.

Output:
This is the actual number of graduates in skills training after the initial two year period when the first graduates are expected.

Outcome:
This is the desired number of graduates initially intended in case the 500 trainees to graduate after the two years period.

Economy:
This principle of value for money will measure the use of the resources and whether the best amount would have been spent on the inputs. There will be acquisition of training equipment and this element will measure whether there was wastage in the procurement of equipment.

Efficiency:
This element aims at measuring whether the actual output could have been achieved using lesser resources. The question will be to measure whether the cost of training for the number of graduates could have been achieved using lesser resources. A measure of wastage of resources.

Effectiveness:
This is a measure of whether the objectives have been met. In this case there will be a comparison of the output against the intended outcome of 500 graduates after the two year period.

(i) Direct reporting engagement and attestation engagement:

Attestation engagement:
This is an engagement where the subject matter information is prepared by the responsible party and the auditor gathers evidence and gives assurance on the subject matter. In the case of the audit of Algeria Technical College, the audit of the financial statements is an example of an attestation engagement in that the financial records are prepared by the college and the public sector auditors gives assurance on these financial statements.

Direct reporting engagement:
In the case of a direct reporting engagement, the auditor prepares the subject matter information and conducts audit procedures as well as issue a report. This is the case with the performance audit where the public sector auditors will gather the required information and carries out audit procedures to enable him form a conclusion.

(ii) Elements to the intended compliance audit:

The authorities and the criteria:
The authorities that govern the operations of the training under the private public partnership are the regulations that have been agreed upon and that must be implemented by the Algeria Technical College.
From the authorities that govern the project the public sector auditor will select suitable criteria which will be used to measure actual performance against. The criteria will be

discussed with the responsible party so that they know the basis of the comparison of the actual performance.

The subject matter:
This is a statement of compliance that is prepared. The college is required to report how it has performed and the statement is prepared by management showing how performance has been compared to the agreed criteria.

The three parties to the compliance audit:
There are three parties to the intended compliance audit as follows:

The responsible party – This is the Algeria Technical College which is the one implementing the project.

The public sector auditor – who are the auditors that will perform the audit and issue a conclusion based on evidence gathered.

The interested parties – from the project activities and in this case includes the government which wishes to instill skills in youths.

(i)

i. **Suitable audit opinion**:
Because of the significance of the matters observed during the audit of the financial statements of Algeria Technical College and the fact that the financial statements could not be amended and the fact that further funding depends on satisfactory performance and accountability on the funds, an adverse opinion is recommended.

ii. **Draft audit opinion**:
Extracts of the audit report:

(ii) **Adverse Opinion**
In our opinion, because of the significance of the matter discussed in the Basis for Adverse Opinion paragraph the financial statements do not present fairly the financial position as at the period end.

Basis for Adverse Opinion
As explained in the notes to the financial statements there was a disagreement regarding the fraud on inventory and the funds misused by the Algeria Technical College which amounts are material to the financial statements necessitating the issue of an adverse opinion.

(d) The purpose of the intended forensic investigation will include the following:
- To establish whether there was a fraud that actually took place and how it was perpetuated without being discovered.
- Establish how much money is involved and could have been lost arising from the fraud.
- To identify the individuals who are involved in the fraud and

- Make a decision on the outcome of the investigation. Decision could include considering taking legal action against the people involved.

SOLUTION TWO

(a) Impact of financial challenges on the financial audit of Kamunga District Council:
In conducting financial audits, the public sector auditors are expected to consider whether there are considerations that may cast doubt about the ability of the audited entity as a going concern. This assessment is necessary because it impacts on the basis upon which the financial statements are prepared.

In the case of Kamunga District Council, the aim of government by establishing the council is to take development to less developed areas. The fact that the council is facing liquidity challenges does not mean that the government will not continue to fund the council. The going concern concept will not have any relevance here and the Office of the Auditor General (OAG) should go ahead with the audit on the premise that funding will continue to be made by central government.

The financial statements of Kamunga District Council will require to be prepared on the basis that funding will continue and that it is a going concern.

(b)

(i) Argument for conducting risk assessment of Zambia Clay Industries Ltd and action to take:

Public sector auditors follow a risk based approach to auditing whereby for the following reasons:

- So that they can identify risky areas and address their audit efforts to these areas where misstatements are likely to occur.
- To respond appropriately to the identified risk
- It is a requirement of auditing standards that audits should be conducted using this approach.

In this case the audit team concluded that risk is above acceptable levels. In private sector auditing, this would have caused the auditors not to continue the audit in view of the fact that the risk that an inappropriate opinion will be reached is high and so there is no need to continue with the audit.

In the public sector auditing, however, this is not the approach that will be taken. The mandate to conduct audits is contained in the constitution and the public sector auditors will be expected to continue the audit according to their mandate despite audit risk having been assessed above the acceptable level.

(ii) Audit risk of related parties & related party transactions:
Better Cement Ltd and Lusaka Engineering Company are related parties to Zambia Clay Industries because they are all wholly owned government enterprises under the IDC. The audit risk in the audit of Zambia Clay Industries is that the related parties may not be disclosed as required in the financial statements of Zambia Clay industries and also that the dealings may not be correctly quantified and disclosed.

The risk of fraud in dealing with related parties is high and fraud may lead to the misstatement of financial statements.

(iii) Audit procedures for related party transactions:

1. Inquire from management of Zambia Clay Industries details of all related parties to Zambia Clay Industries.
2. Obtain written representations from management acknowledging that all related parties have been disclosed to the auditors.
3. During the performance of other audit procedures the auditors should be skeptical and look out for any relationships that may be indicative of related party relationship with Zambia Clay Industries.
4. Inspect the draft financial statements and confirm that identified related parties have been disclosed as required and the financial dealings quantified and disclosed.

SOLUTION THREE

(a) **The key parties to the performance audit of FSP:**

The performance audit on the Food Security Pack (FSP) Programme in Chinyunyu, Eastern Zambia, would involve various parties to ensure a comprehensive evaluation of the program's effectiveness and impact. Here are the key parties involved in the performance audit:

Below are the key parties involved in the performance audit:

1. **The Supreme Audit Institution** – The Office of the Auditor General and the audit team that will be assigned to carry out the performance audit are one of the three key parties to the performance audit of the FSP. The audit team should have the competences and skills to carry out a quality audit whose results can be relied upon to reach an appropriate conclusion.

2. **The responsible party** – These are the government agencies that are responsible for the execution of the FSP program and they are the ones that will be subject to the performance audit to be conducted.

   In the case at hand the following are the government agencies responsible for the program:

   - Ministry of Agriculture: As the overseeing authority, the Ministry of Agriculture at the national and local levels would be a primary party involved. This includes officials responsible for designing, implementing, and monitoring the FSP Programme.
   - Social Welfare Department: This department may be involved in assessing the social impact of the program, especially concerning vulnerable households and individuals targeted by the FSP.
   - Internal Audit and Evaluation Units: Government bodies responsible for auditing and evaluating social programs would be crucial in conducting an impartial assessment of the FSP Programme's efficiency and compliance with established guidelines.

3. **The intended users:**

   The main intended user of the outcome of the performance audit is parliament which represents government and confers the responsibility to spend public funds using the FSP program. The government is interested in the correct use of public funds in accordance with the value for money principles for the benefit of the general citizenry.

   The ultimate beneficiaries and intended users in the case at hand are the community of farmers and households that are supposed to benefit from the FSP program and these too will be interested in the outcome of the performance audit to be conducted.

(b) **Performance Audit Process**

Planning:

- Clearly outline the goals and scope of the performance audit.
- Identify the criteria and standards against which the FSP Programme will be evaluated.
- Assemble a diverse and skilled team, including auditors, evaluators, and subject matter experts.

- Develop Audit Plan: Create a detailed plan outlining the audit methodology, data collection strategies, and timeline.

Conducting:

- Visit Chinyunyu for on-site assessments, conduct interviews, and gather quantitative and qualitative data.
- Review program documentation, reports, and financial records to ensure compliance and effectiveness.
- Engage with all relevant parties, including government officials, community leaders, and beneficiaries.

Reporting:

- Preliminary Findings: Share initial findings with stakeholders for feedback.
- Draft Audit Report: Prepare a comprehensive audit report highlighting key findings, conclusions, and recommendations.
- Present the draft report to key stakeholders for discussion and input.

Follow-up:

- Monitor and ensure that recommendations from the audit are implemented.
- Periodic assessments to track the FSP Programme's progress post-audit.
- Establish mechanisms for ongoing feedback from stakeholders to inform program adjustments.

(c) **Accountability Triangle**

The reporting relationship of the Office of the Auditor General (OAG) with Parliament and Government in the context of the FSP Program can be explained using the Accountability Triangle framework and can be explained as follows:

In Zambia, the **Office of the Auditor General (OAG)** holds significant responsibility conferred by Parliament to audit public resources. The primary function of the OAG is to ensure transparency, accountability, and proper management of public finances. The Constitution of Zambia and related legislation empower the Auditor General with specific responsibilities.

In turn, the Office of the Auditor General is required to submit audit reports to **Parliament** and other stakeholders. In the context of the FSP Programme, the OAG has a responsibility to ensure that the resources allocated for the program are used effectively and efficiently to achieve the intended objectives by conducting audits and evaluations to assess the performance and impact of the program on the targeted farmer households in Chinyunyu and other districts.

Further, the responsibility **conferred on the government** by Parliament to manage public resources is outlined through various legislative and constitutional provisions. These provisions establish a framework for the government's stewardship of public funds and resources, ensuring transparency, accountability, and efficient utilization for the benefit of the citizens.

Overall, the responsibility conferred on the Government of Zambia by Parliament to manage public resources encompasses budgetary planning, fiscal management, accountability, transparency, legislative oversight, and compliance with legal frameworks. These responsibilities are essential to ensure the effective and efficient utilization of public funds for the benefit of the Zambian people. The government is expected to submit accountability reports to Parliament.

SOLUTION FOUR

(a) **Effective Auditing and Assurance Responsibilities in the Public Sector within the Lima Declaration**:

The Lima Declaration emphasizes the importance of promoting good governance and accountability in the public sector. Effective auditing and assurance responsibilities, in this context, involve the application of principles that ensure transparency, accountability, and the proper use of public funds. In the given scenario, the OAG's actions align with these principles.

1. Independence and Objectivity:
    - The Auditor General, acting on a complaint, demonstrates independence by initiating an audit without external influence.
    - The audit team, including forensic auditors, ensures objectivity in assessing financial transactions related to the community center project.
2. An established audit reporting structure, with audits covering a substantial proportion of public sector activities and entities. The audit team, under the Deputy Auditor General, is tasked with a thorough examination of accounts, procurement processes, and overall financial management to identify potential mismanagement.
3. A system within which recommendations by public sector auditors are acted upon
    - The audit process is transparent, with the findings set to be presented to Parliament, aligning with the constitutional mandate of the OAG.
    - The potential presentation to Parliament enhances accountability, as it allows for public scrutiny and possible further investigations or legal actions.
4. Professional standards for the conduct of public sector audits. This would require the application of International Standards of Supreme Audit Institutions (ISSAIs) issued by INTOSAI, in the conduct of the audit.

(b) When conducting a comprehensive audit of the district's financial records, the public sector auditors will require to adhere to the fundamental public sector auditing principles. These principles apply across all public sector audits and guidance is given by ISSAI 100: Principles of public sector auditing.

The following are the general principles that should be applied in the assignment:

i. **Ethics and independence** – This relates to the audit team that will conduct the assignment that ethical guidelines for the SAI should be complied with including that of independence to ensure that the team remains objective in the performance of the audit.

ii. **Documentation** – All the work that will be performed should be adequately documented in a manner that one who may not have been part of the audit team could still reach the same conclusion as if they had been on the audit team. The documentation will form the basis for the conclusion to be reached.

iii. **Audit risk** – Should be considered in planning and executing the audit of the local administration. This will enable the audit team to respond appropriately to any risks identified.

iv. **Communication** – Between the audit team and the management of the local administration should be maintained throughout the audit. This should be two way communication and the views of the audited entity should be taken into account.

v. **Audit team and management team** – The work to conduct the audit of the local authority should be assigned to staff with the necessary skills and competences to perform it. The work should be closely supervised so that an audit of the right quality will be performed.

vi. **Professional judgment, due care and professional skepticism** – the audit team that will be assigned on this audit should apply professional judgment during the cause of the audit in making professional decisions. Further, the team should apply professional skepticism and look out for any contradictory evidence that many exist.

vii. **Quality control** – the audit of the local administration should be performed in a manner that it meets the quality control guidelines of the SAI in accordance with ISSAI 40: Quality control.

(c) **The stages of a forensic audit:**

1. **Planning and Scope Definition**:
   - Define the objectives of the audit, including specific areas of concern such as the community center project.
   - Determine the scope of the audit, identifying key financial transactions, documents, and individuals to be examined.
   - Allocate resources, including personnel and technology, necessary to conduct the audit effectively.
2. **Information Gathering**:
   - Obtain access to relevant documents, such as financial records, contracts, procurement documents, and correspondence related to the project.
   - Conduct interviews with key stakeholders, including officials responsible for project management and finance, to gather information and insights.
   - Utilize forensic accounting techniques to analyze financial data for anomalies or irregularities.
3. **Data Analysis and Examination**:
   - Scrutinize financial transactions, examining invoices, receipts, bank statements, and other financial documents for discrepancies or signs of fraud.
   - Review procurement processes to assess compliance with regulations and identify any instances of fraud or favoritism.
   - Analyze patterns and trends in financial data to identify potential areas of concern or suspicious activities.
4. **Investigation and Evidence Collection**:
   - Conduct on-site visits to the premises of the district administration to verify the existence of assets and the implementation of the community center project.
   - Gather evidence to support findings, including photographs, witness statements, and additional documentation as necessary
   - Maintain chain of custody for evidence collected to ensure its integrity and admissibility in potential legal proceedings.
5. **Reporting**:
   - Prepare a comprehensive report detailing the findings of the forensic audit, including any instances of financial mismanagement, fraud, or non-compliance with regulations.
   - Present the findings to the relevant authorities, including the Auditor General's office, Parliament, and other oversight bodies.
   - Provide recommendations for corrective actions to address identified weaknesses and prevent future instances of financial misconduct.

SOLUTION FIVE

(a) Types of audits you may conduct at the Zambia Development Agency

i. **Financial Audit**
- **Objective:** To examine the financial records and transactions related to the summit's organization, including budgetary allocations, expenses, and revenue.
- **Relevance to Stakeholders:** Ensures proper financial management, transparency, and accountability, providing stakeholders with confidence in the utilization of funds.

ii. **Compliance Audit**
- **Objective:** To assess ZDA's adherence to relevant laws, regulations, and policies in organizing the summit.
- **Relevance to Stakeholders:** Ensures that ZDA operates within the legal framework, promoting a fair and ethical business environment.

iii. **Performance Audit**
- **Objective:** To evaluate the achievement of objectives set for the summit and the impact on the promotion of investment, trade, and MSME development.
- **Relevance to Stakeholders:** Provides insights into the overall success of the summit in meeting its intended goals, guiding future strategic planning.

iv. **Information Technology (IT) Audit**
- **Objective:** To assess the security and integrity of the online database of facilities launched during the summit.
- **Relevance to Stakeholders:** Ensures the protection of sensitive information, fostering trust among users and stakeholders relying on the online database.
- **Relevance to Stakeholders:** Enhances ZDA's ability to proactively manage risks, safeguarding the organization and its stakeholders.

(b) Reviewing controls at the Zambia Development Agency (ZDA) would involve assessing various aspects of their operations to ensure the security, integrity, and efficiency of their processes.

Below are four general controls that should be considered:

i. Access Controls:
- Review the processes for user authentication to ensure that only authorized personnel have access to sensitive information within the agency's systems.
- Evaluate the implementation of Role Based Access Control to ensure that individuals have the appropriate level of access based on their roles within the organization.
- Check for mechanisms in place to monitor and log user activities, especially those related to the online database, to detect and respond to any unauthorized access attempts.

ii. Data Security and Encryption:
- Assess whether data, especially in the online database, is encrypted during transmission and storage to protect it from unauthorized access or interception.
- If applicable, review data masking techniques to ensure that sensitive information is appropriately obscured, minimizing the risk of unauthorized exposure.
- Examine data retention policies to ensure that data is stored only for necessary periods, reducing the risk of unauthorized access over time.

iii. Change Management Controls:
- Evaluate the processes in place for approving and implementing changes to the systems, including updates, patches, and modifications to the online database.
- Ensure that there is a version control mechanism to track changes made to the systems and databases, allowing for easy identification and reversal of unauthorized alterations.

- Assess the procedures for testing changes before they are applied to the live environment to minimize the risk of introducing vulnerabilities.

iv. **Incident Response and Business Continuity**:

- Review the incident response plan to ensure that there are well-defined procedures for identifying, containing, eradicating, recovering, and learning from security incidents.
- Examine the backup and recovery processes for critical systems and databases, including the online database, to ensure business continuity in the event of data loss or system failure.

By thoroughly reviewing these general controls, the Zambia Development Agency can enhance its overall security posture, ensuring the protection of sensitive economic and investment-related information during the Investment and Trade Summit.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 14 JUNE 2024

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. Formulae, 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>- (COMPULSORY)

External Auditors for some city councils have often raised concerns over the governance and operational sustainability of some of their wholly-owned business ventures or companies , such as:

(i) Financing expenditure in excess of approved budgets.
(ii) Increased loan loss allowances.
(iii) The need for the impairment of assets in non performing enties.
(iv) Observance of significant value – for - money risks.
(v) Increases in reported losses, and
(vi) The financial sustainability and management of major projects.
(vii) Accounts not been signed off by auditors due to delays in completion of audits, as a result of difficulties in resolving audit queries, and concerns about the financial position of business ventures.

Required:

(a) Discuss the impact auditors of public service organisations (PSOs) such as the Kitwe City Council (KCC) may have in the:

(i) setting up of financial strategy, (4 marks)
(ii) the types of reports the public sector auditors might issue, and (4 marks)
(iii) the potential impact of such reports on the achievement of value for money in PSOs. (4 marks)

(b) When Public Service Organisations (PSOs), such as KCC setup business ventures, they should consider the risks and returns relating to such investments and business decisions.

Explain the responsibility of the Chief Financial Officer regarding the:

(i) evaluation of risks and returns before such a decision is made, and (4 marks)
(ii) how a risk assessment (within the Treasury Management Strategy) could help the decision making. (12 marks)

(c) Auditors for public Service Organizations (PSOs) have over the years repeatedly raised concerns over the financial sustainability of city councils. The following activities can help financial managers of PSOs develop solutions to become more financially sustainable:

(i) Long term service agreements (3 marks)
(ii) Diversification of sources of income (3 marks)

(iii) Pursuing profitable business opportunities (3 marks)

(iv) Setting up and managing financial reserves (3 marks)

Discuss with examples why each of these activities could help to ensure appropriate service levels and financial sustainability of city councils is maintained.

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

Zambia has announced a number of reforms aimed at promoting economic come back including investing in building projects. This follows, the country having borrowed heavily and trying to recover from the financial shock.

Required:

(a) Discuss four (4) main available methods of financing available for national Governments. (6 marks)

(b) Discuss the role of the debt management office in the public sector. (5 marks)

(c) Explain two (2) potential sources of borrowing (either domestically or externally) that a country like Zambia might utilize to help its economy recover from a major financial shock, and discuss the benefits or drawbacks of these different sources of borrowing. (9 marks)

[Total: 20 Marks]

QUESTION THREE

In the bustling city of Muzulu, the Ministry of Local Government is facing a daunting challenge in revitalizing its aging public transportation infrastructure for rail transport. The current system is outdated, inefficient, and struggling to meet the increasing demands of the growing population. The city council acknowledges the need for a comprehensive upgrade of its rail infrastructure but is constrained by budget limitations.

In response to this predicament, the city council is contemplating the implementation of a Public-Private Partnership (PPP) to address the transportation infrastructure issue. The proposal involves collaborating with private entities to fund, develop, and manage the new public transportation system.

The plan includes building state-of-the-art railway lines, implementing smart technology for real-time tracking, and ensuring accessibility for differently-abled citizens. The private partners, comprised of reputable transportation companies, would contribute a significant portion of the investment, expertise, and resources needed for the project.

However, concerns arose among citizens about the potential drawbacks and benefits of such a PPP arrangement. Some argue that private involvement may prioritize profit over public interest, leading to increased fares and potential service inequalities. On the other hand, proponents assert that PPPs can bring innovation, efficiency, and timely execution that may be challenging for a purely public-funded project.

Required:

Evaluate the effectiveness of Public-Private Partnerships in addressing the challenges of the city's transportation infrastructure.

In your evaluation include:

(a) Addressing the potential concerns raised by citizens, (4 marks)

(b) The long term implications of adopting the PPP model, and (10 marks)

(c) Three (3) advantages and three (3) potential risks (3) of PPPs. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Imagine you are an economic advisor to the government of Zambia, and you have been tasked with assessing the fiscal implications of the 2022 and 2024 national budget. The budget highlights changes in the allocation of resources across different functions and the shift in funding sources for 2022 and 2024.

EXTRACT OF 2022-2024 NATIONAL BUDGET

	2024 Budget		**2022 Budget**	
Source	***Amount ('K' Billion)***	***Share of Budget (%)***	***Amount ('K' Billion)***	***Share of Budget (%)***
Domestic Revenue	141.11	79	98.86	57
Domestic Financing	16.33	9.3	24.46	14
Foreign Financing	17.01	9.7	47.85	28.22

Grants	3.44	2	1.82	0.78
Total Budget	**177.89**	**100**	**172.99**	**100**
Functions	**2024 Budget**		**2022 Budget**	
	Amount (K)	% of Budget	Amount (K)	% of Budget
General Public Services	58.93 Billion	33.1	86.4 Billion	49.9
Defence	9.92 Billion	5.6	7.6 Billion	4.4
Public Order and Safety	6.76 Billion	3.8	3.5 Billion	2
Economic Affairs	39.76 Billion	22.3	33.7 Billion	19.5
Environmental Protection	1.45 Billion	0.8	971.9 Million	0.6
Health	20.91 Billion	11.8	13.9 Billion	8

Required:

(a) Analyze the changes in the allocation of resources across functions for 2022 and 2024 in Zambia's national budget. (3 marks)

(b) Analyze the impact of the changes in domestic and foreign financing on the country's fiscal health. (5 marks)

(c) Explain the role of grants in the budget and suggest ways to leverage them effectively for sustainable development. (2 marks)

(d) Explain any five (5) functions of the budget in Zambia. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

Government of Country Z recently held General Elections to elect new members of parliament. The National Assembly is in the process of constituting parliamentary committees and one such critical committee is the Public Accounts Committee. One of the Terms of Reference of the Public Accounts Committee is to review the report of the Auditor General. Management of the National Assembly has therefore organized an orientation workshop for the members of the Parliamentary Accounts Committee on Public Financial Management and has written to Office of the Accountant General to assist with orientation of the Members of Parliament.

Required:

As Director of Finance in the Office of the Accountant General, the Accountant General has requested you to prepare a presentation:

(a) Explaining the concept of Public Financial Management. (4 marks)

(b) With the help of examples, explaining the Institutions that are deemed to be public sector organisations for the purposes of Public Financial Management. (6 marks)

(c) Discussing the key difference between Public and Private Sector which lead to distinct characteristics of public sector financial management. (10 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

(a) The Public Audit Act of 2004 outlines the audit requirements for the public sector in Zambia.

External auditors have an increasing influence on the development of financial strategy. Their influence is not only restricted to their opinion on the truth and fairness of the financial statements and the reporting of any material misstatements in the accounts but also on their assessment of value for money.

This assessment may influence the organisation's ability to obtain funding or their financial standing with banks and other lending institutions through adverse credit rating . This may have an effect on the organisation's ability to obtain credit for projects and investment.

External auditors assess the financial resilience of local authorities and the strength of systems and controls in place to ensure good value for money is achieved. Audit reports highlight risks associated with significant projects or programmes, the strength of governance arrangements and the degree to which required savings have robust plans.

There may be further influence where the external auditors have undertaken value for money audits or reports in the public interest. These reports are in the public domain and can cause adverse publicity that leads to stakeholder action and changes to policy or even legislation.

As a financial manager, it is important to be aware of the range of regulators that exist for an organisation as part of the finance manager's role to understand the rules (financial and otherwise) within which the organisation must operate.

Financial strategy and service alignment to resources must be developed within the constraints of the regulators and appropriate business and financial records must be maintained to demonstrate compliance to the auditors.

The cost of compliance must also be taken into consideration when developing financial strategy, especially where the penalties for non- compliance could cause unnecessary financial pressures.

The public sector is subject to more regulation and inspection than the private sector, because of the need to openly and independently demonstrate how public money has been spent.

Financial managers of public service organisations need to appreciate the interdependencies across organisations of budget planning when there is a wholly owned commercial company, where failure could have a significant impact on the public sector owner.

(b) CFO responsibility

It is entirely the responsibility of the individual local council to interpret the legislation and determine the boundary of their activities, which would be deemed within or outside of the law.

They have a responsibility to ensure the decision makers understand the financial implications of their choices, through clear reporting that shows this – positive or negative so that informed choices can be made.

The CFO should be the voice of reason, or realism, when investment plans could present significant risk to the Council, or are not aligned to the corporate objectives, and /or to the capability to deliver or afford the plans.

Balancing risk and return in PSOs when investing or borrowing

There is always a high level of subjectivity when assessing risk for doing something new as we are essentially looking into the future: asset prices cannot be reliably forecast, nor can business decisions be predicted with certainty.

In the treasury management context, for both borrowing and investment, it is usual to work within a system of risk constraints and attempt to obtain best value within those constraints. The same applies with an investment in a company.

In balancing risk against return, local authorities should be more concerned to avoid risks than to maximise return, and such organisations should ensure that priority is given to security and liquidity when investing funds.

In other contexts, it may be necessary to obtain a certain level of return from investment balances and so the financial challenge is to achieve this with minimum risk. However, even in these circumstances, it would be unusual and poor governance, for there to be no overarching framework of controls to mitigate the risks.

Risk Appetite

A clear statement, which is explicit about the level of risk an organisation is prepared to tolerate, is essential to begin framing a sensible treasury strategy.

The following can be taken as a general guideline for preparing risk appetite statements in any sector:

i. The risk appetite statement should be compatible with any general statement of financial risk appetite in the authority's overall risk policy or risk register.
ii. Preparation of the statement should take account of the materiality of treasury risks for the authority. An authority that is more or less debt free with a low level of investments may have a different attitude to treasury risk to an authority that has a relatively high level of debt or investments proportionate to its population or income.
iii. The statement should flow naturally from the statement of the objectives of treasury management (and could therefore logically follow it in the authority's treasury management policy statement).
iv. The authority's risk appetite may change over time. In times of greater financial difficulty, the authority may want a lower level of risk or revenue account volatility from its treasury operations. Or it might be more inclined to take risks on something like an energy company.
v. Statements are likely to be subjective, but one way to sharpen the focus might be to position the authority relative to other local authorities, e.g. 'the authority is not highly

exposed to treasury risks and can therefore accept a higher risk portfolio than most other authorities' or 'the authority wishes to take a relatively low exposure to risk compared with most authorities'.

vi. The statement should be consistent with the level of treasury skills and experience available to the authority. For example, if officers do not have time to manage credit ratings and credit analysis, the authority may decide to place its deposits with the government.

vii. The statement should identify the main areas where the authority gives itself the freedom to take a position which is not the lowest risk, e.g. by investing in financial institutions or major projects not only in the government.

Any such statement will be driven by subjective influences, but good examples will enable qualitative and quantitative parameters to be considered when evaluating the risks around any investment decision.

All these elements should assist decision makers to be aware of the level of risk of their decision, and map it to the risk appetite statement for that type of activity to see if it is within the current appetite. Decisions that give rise to risks outside of the appetite of the organization should not be undertaken. If the risks associated with running a business have been properly explored and then compared to the risk appetite for a new activity, the decision whether to go ahead with a new business can be different.

(c)

(i) Long-term agreements

Using long term agreements can help reduce the risk of volatile funding by building in some certainty to long term financial agreements such as minimum guaranteed funding, and time bound release of funding to match budget cycles.

Financial managers should also seek to influence payments to contractors that limit price rises through the life of the contract, thus reducing the volatility of spending, so that smoothing of budgets can take place where volatile funding is likely.

(ii) Diverse sources of income

Financial strategy should ensure that a range of income sources is used wherever possible to help smooth peaks and troughs in funding needs, and spread risk of funding loss. Reliance on one source – be it central government or one main benefactor – places a public service organisation in a much more financially risky position than one that is able to obtain smaller amounts of funding from a range of funding streams.

(iii) Seeking opportunities

The most successful organisations that rely on external funding sources are those who:

- keep aware of funding streams available
- have enough resources to seek funding (which can be time consuming)
- complete applications on time, as often the time frame for application can be tight

Examples of local authorities who have a dedicated officer for seeking grant funding from any source demonstrate that they are much more successful in obtaining funding, and obtain more funding than those councils who rely on officers applying for grants on a more ad-hoc basis as a small part of their day job. This has been seen in practice, where an external funding officer is employed and targets are usually set for generating grant income. Charities and third sector organisations employ dedicated staff to generate donations and fundraising and apply for grants.

(iv) Managing financial reserves

Managing financial reserves is a key activity for financial managers in all types of organsiations. Making decisions or recommendations regarding when to hold reserves (and where to invest them), and when to spend or simply capital budgeting, are especially important when formulating strategies to cope with volatile funding.

SOLUTION TWO

(a)

- Domestic – Banks, Individuals and Others
- External – Banks, Financial Institutions and Governments
- Sale of Government Assets and Forfeited Assets
- Taxes and Non Tax Revenues collected from citizens

(b) The DMO's remit is to carry out the Government's debt management policy of minimising financing costs over the long term, taking account of risk, and to minimise the cost of offsetting the Government's net cash flows over time, while operating within a risk appetite approved by Ministers in both cases.

It is responsible for external debt negotiations, other forms of negotiations, and all other funding operations.

Funding and transaction execution is a core function of debt management. The number and type of activities may differ significantly across DMOs depending on the government's level of access to different funding sources.

(c) **Treasury Bills**

Treasury bills are defined as government financial instruments that have a maturity period of less than a year. They are therefore used for short term financing.

Treasury bills are the shortest-term Treasury securities, those that mature within a year (from the time they are issued). The Treasury issues three- and six-month bills every week, and a one-year bill (the so-called 'year bill') once a month.

Treasury bills are discount instruments. Rather than making interest payments, they are issued at a discount to face value and mature at face value. The interest rate is a function of the purchase price, the face value and the time remaining until maturity.

Bills are quoted in terms of their discount rate, or interest rate based on a 360-day year. As with bond yields, when the discount rate is going up, a bill is losing value.

A 'bond-equivalent yield' can be calculated for a bill, to allow for a comparison with other debt instruments.

Government Bonds

Treasury bonds are financial instruments that have a maturity period of more than one year. They are also known as gilts, or gilt-edged securities .When buying them, you are effectively lending money to the government, which promises to pay back the amount in full (known as the principal) at a set date, along with interest (known as the coupon). A conventional 'gilt-edged security' is the simplest and oldest form of government stock. The bond pays out half the annual coupon every six months until the maturity date, when the final coupon payment and principal (the initial investment) are paid to the holder in full. This means you can sell the gilt before its redemption date, in which case you might not recoup your initial investment. However it also means that you can buy gilts below par and hold them until redemption to make a profit. Of course, if you buy them above par you can make a capital loss on redemption.

For both bonds and treasury bills, these may be traded, but will only rarely be spent on goods and services. In this way, the expected increase in inflation due to the increase in national wealth is lower than if the government had simply printed the money and increased the more liquid forms of wealth (i.e., the money supply).

SOLUTION THREE

(a) To assess the effectiveness of Public-Private Partnerships (PPPs) in addressing Metropolis' transportation infrastructure challenges, a comprehensive evaluation framework should be established. This framework considers various dimensions to ensure that the partnership aligns with the city's goals, meets the needs of its residents, and provides a sustainable, high-quality transportation system. Here are key aspects to consider:

Financial Viability:

- Analyze the financial contributions from both the public and private sectors.
- Assess the cost-effectiveness of the project compared to traditional public funding models.
- Ensure that the financing structure is transparent and adheres to sound financial practices.

(b) Service Quality and Innovation:

- Evaluate the quality of services provided by the private partners.
- Assess the incorporation of innovative technologies for improved efficiency and user experience.
- Consider feedback from users regarding the reliability, accessibility, and overall satisfaction with the transportation services.

Social Equity and Inclusion:

- Examine the extent to which the transportation system meets the needs of all citizens, including marginalized and differently-abled populations.
- Monitor any disparities in service coverage and accessibility, ensuring that the system benefits the entire community.

Project Timeliness and Implementation:

- Evaluate the adherence to project timelines and milestones.
- Assess the efficiency of decision-making processes and problem-solving during implementation.
- Examine the flexibility of the partnership to adapt to unexpected challenges and changes in circumstances.

Long-Term Sustainability:

- Consider the long-term maintenance and sustainability of the transportation infrastructure.
- Assess the environmental impact and sustainability practices integrated into the project.
- Evaluate the potential for the private partners to adapt and upgrade the system as future needs arise.

Community Engagement and Communication:

- Gauge public awareness and understanding of the PPP model.
- Collect feedback from citizens through surveys, public forums, and community engagement initiatives.
- Ensure transparent communication about project updates, challenges, and successes.

(c) BENEFITS

- PPP provides external finance for the construction of an asset that public sector may not be able to provide.
- It encourages innovation in approach by focusing on performance indicators and outputs.
- Tying of payments to when construction of assets is completed ensures that private sector is incentivized to deliver on time.

RISKS

- External financing may be more expensive in the long term when compared to the cost of government borrowing.
- Off balance sheet nature of financing may encourage public sector to use PPP when not value for money.
- Long term nature of financing requires long term service contracts that are inflexible when circumstances change.

By employing this multi-dimensional evaluation framework, the city can systematically analyze the success of the PPP arrangement in revitalizing its transportation infrastructure. Regular monitoring and feedback mechanisms will allow for adaptive management, ensuring that the project stays on course and meets the evolving needs of the community.

SOLUTION FOUR

(a) The budget for General Public Services has decreased from 49.9% in 2022 to 33.1% in 2024, indicating a significant shift in priorities.Economic Affairs has seen an increase from 19.5% in 2022 to 22.3% in 2024, highlighting a focus on economic development.

Environmental protection has increased from 0.6% in 2022 to 0.8% in 2024.

Defence has seen an increase from 4.4% in 2022 to 5.6% in 2024.

Health has also seen an increase from 8% in 2022 to 11.8% in 2024.

(b)

- Foreign Financing has reduced from 28.22% in 2022 to 9.7% in 2024, indicating a reliance on domestic sources.
- Government should focus on enhancing domestic revenue collection mechanisms to reduce reliance on foreign financing.
- Implement tax reforms and anti-corruption measures to increase revenue streams.
- The reduction in Foreign Financing may pose challenges in funding large-scale projects. Encourage strategic partnerships and explore alternative financing mechanisms.
- Monitor potential inflationary pressures resulting from increased reliance on domestic financing. Implement effective monetary policies to address inflation.

(c) Leverage grants effectively by directing them towards critical areas with limited budget allocation, such as environmental protection and community amenities. Ensure grants align with long-term development goals.

(d) Functions of the budget.

1. To determine the levels of income and expenditure.
2. To stimulate the recovery from a trade recession. This can be done by reducing taxes in order to increase the volume of purchasing power and to stimulate consumers demand and encourage investment in the country.
3. To control inflation. A large budget surplus will reduce money supply and reduce the level of inflation.
4. To reduce inequality of incomes through progressive taxation.
5. To control the balance of trade. High import taxes will reduce demand for imports.
6. Providing subsidizes to stimulate key industry sectors of the economy .e.g. fertilizer subsidies.
7. To create employment by budgeting for projects that can give employment especially to the youth.
8. Infrastructure development e.g. schools, hospitals, bridges are all budgeted for.

SOLUTION FIVE

(a) Public Financial Management is the system by which financial resources are planned, directed and controlled to enable and influence the efficient and effective delivery of public service goals. It encompasses the mechanism through which public resources are collected, allocated, spent and accounted for, and therefore includes budget cycle, public procurement, audit practices and revenue collection.

(b) The public sector includes all national, sub national governments, other entities that would meet the definition of a government unit, and all enterprises that would be deemed to be public corporations**.**

(c) **Examples of diferences between Public and Private Sector which lead to distinct characteristics of public sector financial management, eg SOEs, statutory bodies.**

i. The relationship between citizens and those who use services and the state is based on the rights , the public interest , and funding through taxation.
ii. As individuals and other entities are required to pay taxes for services, these taxes must be spent by government in the public interest, to high standards of ethics and governance, in a manner that promotes values for money.
iii. Government is often a monopoly provider of goods and services, and the absence of competition and a profit motive determining a fair way in which to allocate scarce resources and achieve value for money can be challenging.
iv. There are many complex and competing objectives faced by governments and operating in a political environment adds addition pressure.
v. Challenge from others parts of government or external providers of funding, who may also have both legitimate expectations as to how resources will be utilized and their won stakeholders to satisfy.

END OF SUGGESTED SOLUTIONS