CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 9 SEPTEMBER 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

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 Mwisa Co, is owed K37,500 by its credit customers at the start, and K39,000 at the end, of its year ended 31 December 2023.

During the accounting period, Mwisa Co made cash sales of K263,500 and credit sales of K357,500, contras with the payables accounts amounted to K15,750. Irrecoverable debts of K10,500 were written off and Mwisa Co, wishes to retain its allowance for irrecoverable debts at 5% of total receivables.

How much cash in total was received by Mwisa Co from its customers during the year?

A. K329,750
B. K593,175
C. K593,250
D. K614,650

(2 marks)

1.2 A car was purchased by Bao for K200,000 on 1 April 2020 and was depreciated at 20% each year straight line, assuming no residual value.

Bao's accounting policy is to charge a full year's depreciation in the year of purchase and no depreciation in the year of sale. The car was traded in for a replacement vehicle on 1 August 2023 for an agreed trade-in value of K90,000.

What was profit or loss on disposal of the vehicle for the year ended 31 December 2023?

A. Profit K50,000
B. Profit K10,000
C. Loss K50,000
D. Loss K10,000

(2 marks)

1.3 A business compiling its accounts for the year to 31 January each year pays rent quarterly in advance on 1 January, 1 April, 1 July and 1 October each year.

After remaining unchanged for some years, the rent due was increased from K72,000 per year to K90,000 per year as from 1 July 2023.

Which of the following figures is the rent expense which should appear in the statement of profit or loss for the year ended 31 January 2024?

A. K82,500

B. K81,000

C. K84,000

D. K80,000

(2 marks)

1.4 Which of the following best describes the entries that are made using the purchase daybook totals at the end of each month?

A. Debit purchases with total net purchases, credit payables' ledger control with total gross purchases and debit sales tax account with total sales tax.

B. Debit purchases with total gross purchases, credit payables' ledger control with total net purchases and credit sales tax account with total sales tax.

C. Debit payables' ledger control with total net purchases, debit sales tax account with total sales tax and credit purchases with total gross purchases.

D. Debit payables' ledger control with total gross purchases, credit purchases with total net purchases and credit sales tax account with total sales tax.

(2 marks)

1.5 The following differences have been identified when comparing the cash book with the bank statements of a business:

(i) Bank interest received K40, had not been entered in the cashbook.

(ii) An interbank receipt of K6,200 and K460 from two customers have not been entered in the cashbook.

(iii) A receipt for K650 has been recorded in the cashbook as K750.

(iv) Cheques drawn for K3,940 entered in the cashbook are not showing on the bank statement.

Which of the following need to be adjusted in the cash book?

A. (i) and (ii) only

B. (iv) only

C. (i), (ii), (iii)

D. All of the above.

(2 marks)

1.6 Dickson Co recorded an amount of K3,175 for rent and rates paid. Both the rent and rates account and the bank account were debited.

What would be the journal to correct this error?

A. Dr Suspense K3,175 Cr Bank K3,175

B. Dr Suspense K6,350 Cr Bank K6,350

C. Dr Bank K3,175 Cr Rent and rates K3,175

D. Dr Rent and rates K6,350 Cr Bank K6,350

(2 marks)

1.7 A business compiled the following information for the year ended 31 December 2023:

	K
Opening inventory	193,100
Purchases	494,500
Closing inventory	211,350

The margin is always 40%

Based on these figures, what was the revenue for the year?

A. K666,750
B. K793,750
C. K1,190,625
D. The revenue figure cannot be calculated from this information.

(2 marks)

1.8 In relation to statements of cash flows prepared in accordance with IAS 7, which, if any, of the following statements are correct?

1. The direct method of calculating net cash from operating activities leads to a different figure from that produced by the indirect method, but this is balanced elsewhere in the cash flow statement.
2. An entity making high profits must necessarily have a net cash inflow from operating activities.
3. Profits and losses on disposals of non-current assets appear as items under cash flows from investing activities in the statement of cash flows or a note to it.

A. Statement 1 only
B. Statement 2 only
C. Statement 3 only
D. None of the statements

(2 marks)

1.9 Which one of the following accounting concepts requires adjustments to account for accrued expenses when preparing annual accounts?

A. Historical cost
B. Going concern
C. Consistency
D. Matching

(2 marks)

1.10 Makiko counted and valued inventory on 31 December 2023 which had a cost of K72,250. This valuation included slow-moving items which had cost K11,400. These items will be offered for sale at a special price of cost less 20%.

What is the correct valuation of inventory to include in Makiko's accounts at 31 December 2023?

A. K69,970

B. K62,850

C. K67,530

D. K74,250

(2 marks)

[Total: 20 Marks]

SECTION B

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

<u>QUESTION TWO</u> – (COMPULSORY)

The following are financial statements of Zicamunobe Limited:

Zicamunobe Limited Income Statement for the year ended 30 April 2024

	K'000
Sales revenue	426,540
Cost of sales	(417,950)
Gross profit	8,590
Distribution costs	(230)
Administration expenses	(3,555)
Operating profit	4,805
Investment income	35
Interest charge	(670)
Profit before tax	4,170
Income tax expense	(1,500)
Profit for the period	2,670

Zicamunobe Limited Statement of Financial Position as at:

	30 April 2024	30 April 2023
	K'000	**K'000**
Non-current Assets:		
Plant property and equipment	3,790	3,120
Intangible assets	2,530	1,100
Investments	-	205
	6,320	4,425
Current Assets:		
Inventories	1,700	1,050
Receivables	3 850	2,170
Cash in hand	215	15
Total Assets	**12,085**	**7,660**

Equity and Liabilities

Equity		
Share capital (K1)	2,150	1,150
Share premium	1,750	1,500
Revaluation	1,090	900
Retained earnings	2,420	1,620
	7,410	5, 170
Non-current Liabilities		
Long term loan	2,470	550
Current Liabilities		
Trade payables	375	120
Interest payable	580	890
Taxation	1,250	930
Total Equity and Liabilities	**12,085**	**7,660**

Additional information

1. Ordinary dividend paid was charged to retained earnings.
2. Property that had cost K840,000 with a carrying value of K460,000 was sold for K310,000. The profit or loss on disposal was included within cost of sales.
3. Ordinary shares were issued during the year at fair value.
4. The following is an extract from the schedule of Non-current assets:

	30 April 2024 K'000	30 April 2023 K'000
Property, plant and equipment Cost	7,250	5,890
Accumulated depreciation	(3,460)	(2,770)
Carrying amount	3,790	3,120

5. Proceeds from sale of Non-current asset investments amounted to K245,000. The profit or loss on disposal of these investments was included in cost of sales.

Required:

(a) Prepare **Zicamunobe Limited's** Statement of Cash flows for the year ended **30 April 2024** in line with IAS 7, using the indirect method. (17 marks)

(b) Explain three (3) advantages of cash flow accounting to various users of accounting information. (3 marks)

[Total: 20 Marks]

QUESTION THREE

(a) You are a trainee accountant for Kumbuka Ltd and you have just returned from the workshop in Livingstone that was organized by the Zambia institute of chartered accountants (ZICA). The workshop, among other things tackled the issue of "qualitative characteristics of financial information".

Required:

Your supervisor has asked you to prepare brief notes on the subject to be presented at the Kumbuka internal workshop. The notes should explain each of the following characteristics, and giving a specific practical example on how each one relates to financial statements:

(i) Relevance (2 marks)

(ii) Faithful representation (2 marks)

(iii) Comparability (2 marks)

(iv) Understandability (2 marks)

(v) Verifiability (2 marks)

(b) Twapwisha and Twaya did set up a partnership business sharing profits and losses in the ratio 4:3 respectively. Under their partnership agreement, the partners are entitled to 5% per annum interest on capital and interest is charged on their drawings at 6% per annum.

As Twaya has more operational responsibilities, she is entitled to a salary of K50,000 per annum. Interest is not calculated on the partners' current account balances.

The partners' accounting period ends on 31 March 2023 and the following transactions took place during the year under review:

(i) Twapwisha's capital contribution on 1 April 2022 was K600,000 and a further K250,000 was introduced on 1 July 2022. On the other hand, Twaya's capital contribution was introduced into the business on 1 October 2022 amounting to K400,000.

(ii) On 1 October 2022, Twapwisha and Twaya made drawings of K80,000 and K100,000 respectively.

(iii) Twaya's salary was to be paid to her effective 1 July 2022 when her responsibilities were enhanced.

(iv) The partnership business made profits for the year ending 31 March 2023 amounting to K350,500. This was before taking any of the above items into consideration.

(v) Being the first year of trading, there was no balance on any one's current account at the beginning of the period.

Required:

Prepare for the partnership, for the year ended 31 March 2023:

(a) The profit and loss appropriation account. (6 marks)

(b) The partners' current accounts. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Kalaba Limited is a large mining contracting firm based in Solwezi, North-western Zambia. The following trial balance at 31 December 2023 was prepared by a trainee Finance Officer:

			Debit	Credit
			K	K
Ordinary Share Capital				60,000
General Reserve			30,000	
Motor Vehicles	–	at Cost	54,000	
	–	Accumulated depreciation as at 1 January 2023		18,000
Fixtures and Fittings	–	at Cost	66,000	
	–	Accumulated depreciation as at 1 January 2023		33,000
Inventory at 1 January 2023				42,700
Cash at bank			4,100	
Trade receivables			48,400	
Trade payables				18,900
Discount received			5,200	
Discount allowed				2,400
Sales				220,000
Purchases			141,000	
12% Debentures				48,000
Interest on loan				7,200
Salaries and wages			34,000	
Rent expenses			19,500	
Electricity			7,600	
Purchase returns			2,500	
Sales returns				2,200
Selling and distribution expenses			9,500	
Dividends paid				3,000
Retained profit				6,000
			421,800	461,400

The following additional information was provided:

(i) The Directors of Kalaba Ltd proposed to transfer K15,000 of the profits to the general reserve. Closing inventory at 31 December 2023 was K35,000.

(ii) Salaries amounting to K8,500 were outstanding at the end of the period.

(iii) Rent was prepaid by K3,900 for the first three (3) months of 2024.

(iv) Straight line depreciation for the year is to be provided as follows:

Motor vehicles 33⅓%

Fixtures and fittings 10%

Required:

(a) Prepare a corrected trial balance as at 31 December 2023. (12 marks)

(b) Prepare a Statement of profit or loss for the year ended 31 December 2023, for internal purposes. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

Zero Auto Shop bought the following four vehicles for hire as taxis.

Serial No	Date Purchased	Cost
		K,000
ABG324	1 July 2021	K 1,300
BKM495	30 April 2022	K 1,800
CRV215	30 September 2022	K 2,000
DFK400	1 March 2023	K 3,000

On 30 September 2022 Zero Auto Shop part exchanged the vehicle ABG324 with the new one CRV215. The exchange allowance was agreed at K800. The balance of the amount due for the new vehicle was settled by cheque.

Zero Auto Shop charges depreciation at the rate of 20% per annum and proportional to the number of months of ownership.

Required:

(a) Calculate the amounts of depreciation to be charged to the Statement of profit or loss for 2021,2022 and 2023. (9 marks)

(b) Prepare the motor vehicles accounts for the years ended 31 December 2021, 2022 and 2023. (4 marks)

(c) Prepare the motor vehicles allowance for depreciation account for the years 2021, 2022 and 2023 (4 marks)

(d) Prepare the disposal and Part Exchange accounts (3 marks)

[Total:20 Marks]

QUESTION SIX

Msoro runs a business centre where he provides printing, internet, and related services to the public. Msoro has not kept an up-to-date record of his business transactions. The only record is the summary of the cash book for all transactions in the year and its opening position.

Msoro summary cashbook for the year ended 31 March 2024

	Dr		Cr
	'K'		'K'
Opening balance	18,750	Wages and salaries	37,500
Cash sales banked	1,370,000	Printing and internet accessories	751,000
		Insurance services	31,500
		Computer purchases	250,000
		Computer repairs	17,000
		Rent	18,500
		Electricity	2,000
		Balance c/d	281,250
	1,388,750		1,388,750
Balance b/d	281,250		

Further, Msoro has the following opening balances available from its old ledger accounts:

Statement of financial position as at 1 April 2023

	'K'	'K'
Non current assets		
Buildings at cost	500,000	
Less accumulated depreciation at 1 April 2023	(150,000)	
		350,000
Inventory of printing and internet accessories		185,000
Computers (carrying amount)		125,000
Insurance prepaid		13,750
Bank		18,750
Total assets		692,500
		675,000
Capital		
Electricity owing		7,500
Rent owing		10,000
Total equity and liabilities		692,500

The following additional information is relevant:

(i) At 31 March 2024, comparison between Msoro's cash book and bank statement reviewed that bank charges amounting to K15,000 had not yet been recorded by Msoro in the cash book.

(ii) The insurance shown in the cash book was paid for 12 months to 30 June 2024.

(iii) All cash sales had been banked. Msoro does not sell printing and internet services on credit, neither does he purchase the accessories on credit.

(iv) Buildings are depreciated at 5% per annum on cost.

(v) Computers purchased during the current year were purchased on 1 October 2023. Msoro charges full year depreciation in the year that an asset is bought. Computers are depreciated at 20% per annum on reducing balance basis.

(vi) Inventory of printing and internet accessories on 31 March 2024 were K230,750.

(vii) Electricity owing on 31 March 2024 was K6,000.

Required:

(a) Prepare Msoro's statement of profit or loss for the year ended 31 March 2014 (12 marks)

(b) Prepare Msoro's statement of financial position as at 31 March 2024. (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.1 FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) ZICAMUNOBE Limited

Statement of Cash flows for the year ended 30 April 2024

	K'000	K'000
Cash flows from Operating activities		
Profit before tax	4,170	
Adjusted for:		
Interest charge	670	
Investment income	(35)	
Depreciation	1,070	
Loss on disposal of NCA (W1)	150	
Profit on sale of investment (W2)	(40)	`
Operating profit before working capital changes:	5,985	
Increase in inventories (1,700 – 1,050)	(650)	
Increase in receivables (3,850 – 2,170)	(1,680)	
Increase in payables (375 – 120)	255	
Cash generated from operations	3,910	
Interest paid (W3)	(980)	
Income tax paid (W4)	(1,180)	
Net cash from Operating activities		1,750
Cash flows from Investing activities		
Purchase of tangible NCA (W5)	(2010)	
Purchase of intangible NCA (W6)	(1430)	
Disposal proceeds on sale of NCA	310	
Proceeds on NCA investment	245	
Income on investment	35	
Net cash used in Investing activities		(2,850)
Cash flows from Financing activities		
Issue of shares (W7)	1,000	
Share premium (W8)	250	
Long-term Loan (2,470 – 550)	1,920	
Dividends paid (W9)	(1,870)	
Net cash from Financing activities		1,300
Net increase in cash and cash equivalents (Note)		200
Cash and cash equivalents at 1.05.2023 (Note)		15
Cash and cash equivalents at 30.04.2024 (Note)		215

b)

— Directs management attention towards entity's ability to generate cash

— More comprehensive way to measure performance and compare with other companies or same company from year to year.

— Easier to understand and to audit.

— Cash flow reporting satisfies the need of all users better, ie decision making by management; stewardship to shareholders and auditors as well as employees.

Workings for (a):

1. **Loss on sale of Non-current assets**

Net book value	K460,000
Sale proceeds	K310,000
Loss	(K150,000)

2. **Profit on sale of investment**

Book value of investment	K205,000
Sale proceeds	K245,000
Profit	K 40,000

3. **Interest paid**

Interest payable account

	K 000		K 000
2024 Cash	980	2023 Bal. b/f	890
30/4/2024 Bal. c/d	580	30/4/2024 IS expense	670
	1,560		1,560

4. **Income tax paid**

Income tax payable

	K 000		K 000
2024 Cash	1,180	1/5/2023 Bal. b/f	930
30/4/2024 Bal. c/d	1,250	30/4/2024 IS expense	1,500
	2,430		2,430

5. **Purchase of Non-current asset**

Property, plant and equipment account at Cost

	K 000		K 000
Balance b/d	5,890	Disposal (Property)	840
Revaluation	190		
Acquisition (bal. fig.)	2,010	Balance c/d	7,250
	8,090		8,090

Alternatively

Purchase of Non-current asset

Property, plant and equipment account at Carrying amount

	K 000		K 000
Balance b/d	3, 120	Disposal (Property)	460
Revaluation	190	Depreciation (w10)	1, 070
Acquisition (bal. fig.)	2,010	Balance c/d	3,790
	5,320		5,320

6. **Purchase of Intangible assets**

	K'000
Balance 30/4/2024	2,530
Less: Balance 30/4/2023	1,100
Therefore, addition	1,430

7. **Issue of shares**

(2,150 -1,150) K1,000

8. **Share premium**

(1,750 -1500) K250

9. **Dividends paid**

	K'000
Retained earnings 1.05.2023	1,620
Profit for the year	2,670
Retained earnings 30.04.2024	(2,420)
Therefore, dividend paid	1,870

10. **Depreciation charge for the year**

Accumulated depreciation

	K 000		K 000
		Bal. b/d	2,770
Disposal (840-460)	380		
Bal. c/d	3,460	Charge for year (bal. fig)	1,070
	3,840		3,840

SOLUTION THREE

a) i) Relevance

Information is relevant when it helps users evaluate past, present and future events, or it confirms or corrects previous evaluations. Relevance may be applied in likely dividends payouts by analyzing the financial statements.

ii) Faithful representation

It is another fundamental qualitative characteristic that requires financial transactions to be presented according to their substance and economic reality and not merely according to their legal form. E.g. Leasing transactions where ownership is with the lessor, the leasee has the right to direct use and obtain the economic benefits.

Faithful representation further requires information that faithfully represent the performance and position of an entity to be complete, neutral and free from error.

iii) Comparability

It is one of the enhancing qualitative characteristics that require financial information to be comparable, that is, financial information over a period of time should be treated in a consistent manner from one accounting period to another and from one entity to another. For example, use of same accounting policy enhances comparability.

Note that it is acceptable however to change a policy if the alternative policy enhances more relevance and reliability of financial information.

iv) Understandability

It is another one of the enhancing qualitative characteristics. It states that information needs to be readily understandable by users. Information that may be relevant to decision making should not be excluded on grounds that it may be too difficult for certain users to understand.

Understandability depends on the way information is presented and capabilities of users.

It is assumed that users have:

- Reasonable knowledge of the business and its economic activities and
- are willing to study the information provided with reasonable diligence.

Example include the notes and other disclosures.

v) Verifiability

It is the extent to which information is reproducible given the same data and assumptions. For example, if a company owns equipment worth K250,000 and told an accountant the purchase cost, salvage value, depreciation method, and useful life, the accountant should be able to reproduce the same results.

Different observers should be able to agree on what the information means.

b) i) Twapwisha and Twaya's appropriation account for the year ended 31 March 2020

	K	K
Net profit for the year		350,500
Add: interest on drawings:		
Twapwisha (6% x K80,000 x 6/12)		2,400
Twaya (6% x K100,000 x 6/12)		3,000
		355,900
Less interest on capital:		
Twapwisha (5% x K600,000 + 5% x K250,000 x 9/12)	39,375	
Twaya (5% x K400,000 x 6/12)	10,000	
Salary – Twaya (9/12 x K50,000)	37,500	(86,875)
Residual profits		269,025
Share of profit:		
Twapwisha (4/7 x 269,025)	153,729	
Twaya (3/7 x 269,025)	115,296	
		(269,025)
		0

ii)

Partners' current accounts

	Twapwisha	Twaya		Twapwisha	Twaya
	K	K		K	K
Drawings	80,000	100,000	salary		37,500
Interest on drawings	2,400	3,000	Interest on		
			Capital	39,375	10,000
			Share of profit	153,729	115,296
Balance c/d	110,704	59,796		----------	----------
	193,104	162,796		193,104	162,796
			Balance c/f	110,704	59,796

SOLUTION FOUR

(a) Kalaba Limited
Corrected Trial Balance as at 31 December 2023

			Debit	Credit
			K	K
Ordinary Share Capital				60,000
General Reserve				30,000
Motor Vehicles	–	at Cost	54,000	
	–	Accumulated depreciation as at 1 January 2023		18,000
Fixtures and Fittings	–	at Cost	66,000	
	–	Accumulated depreciation as at 1 January 2023		33,000
Inventory at 1 January 2023			42,700	
Cash at bank			4,100	
Trade receivables			48,400	
Trade payables				18,900
Discount received				5,200
Discount allowed			2,400	
Sales				220,000
Purchases			141,000	
12% Debentures				48,000
Interest on loan			7,200	
Salaries and wages			34,000	
Rent expenses			19,500	
Electricity			7,600	
Purchase returns				2,500
Sales returns			2,200	
Selling and distribution expenses			9,500	
Dividends paid			3,000	
Retained profit				6,000
			441,600	441,600

(b) Kalaba Limited's
STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2023

	K	*K*	*K*
Revenue (220,000-2,200)			217,800
Cost of Sales:			
Opening inventory		42,700	
Purchases	141,000		
Purchase returns	(2,500)		
		138,500	
		181,200	
Closing inventory		(35,000)	
			146,200
Gross Profit			71,600
Other Income – discount received			5,200
			76,800
Expenses:			
Salaries and wages (34,000+8,500)		42,500	
Selling and distribution expenses		9,500	

Rent expense (19,500 – 3,900)	15,600	
Electricity	7,600	
Discount allowed	2,400	
Interest on loan	7,200	
Depreciation: motor vehicles (54,000 × 33 1/3%)	18,000	
Fixtures & fittings (66,000 × 10%)	6,600	
		(109,400)
Loss for the year		(32,600)

SOLUTION FIVE

Part (a)

2021

ABG 324	20% x 1,300 x 6/12	**130**

2022

ABG 324	20% x 1,300 x 9/12	195
BKM 495	20% x 1,800 x 8/12	240
CRV 215	20% x 2,000 x 3/12	100
		535

2023

BKM 495	20% x 1,800	360
CRV 215	20% x 2,000	400
DFK 400	20% x 3,000 x 10/12	500
		1,260

(b) Ledger Accounts

2021 MOTOR VEHICLES

	K000		K000
Balance b/c	1,300		
		Balance c/d	1,300
	1,300		1,300

2022 MOTOR VEHICLES

	K000		K000
Balance b/d	1,300		
Bank	1,800	Disposal	1,300
Bank	2,000	Balance c/d	3,800
	5,100		5,100

2023 MOTOR VEHICLES

	K000		K000
Balance b/d	3,800		
Bank	3,000	Balance c/d	6,800
	6,800		6,800

(a) ALLOWANCE FOR DEPRECIATION

	K000		K000
		Balance b/f	-
		Depreciation -or P/L	130
Balance c/d	130		
	130		130

ALLOWANCE FOR DEPRECIATION

	K000		K000
Disposal	325	Balance b/c	130
		Depreciation -or P/L	535
Balance c/d	340		
	665		665

ALLOWANCE FOR DEPRECIATION

	K000		K000
		Balance b/f	340
		Dep'n -P/L	1260
Balance c/d	1,515		
	1,925		1,925

(d)

2022 MOT VEHICLES DISPOSAL

	K000		K000
		Accu'm Dep'n	325
Plant -Carry amount	1,300	Part Exchange allow.	800
		Profit & Loss	175
	1,300		1,300

2022 PART EXCHANGE A/C

	K000		K000
Disposal -Part Exch Allow	800		
Bank	1,200	Balance c/d	2,000
	2,000		2,000

SOLUTION SIX

Msoro's statement of profit or loss for the year ended 31 March 2024

	'K'	'K'
Revenue		1,370,000
Less cost of sales:		
Opening inventory	185,000	
Purchase of printing and internet accessories	751,000	
Closing inventory	(230,750)	(705,250)
Gross profit		664,750
Less expenses:		
Rent (W3)	8,500	
Wages and salaries	37,500	
Insurance (W1)	37,375	
Electricity (W2)	500	
Repairs to computers	17,000	
Bank charges	15,000	
Depreciation expenses:		
Buildings (W4)	25,000	
Computers	75,000	215,875
Net profit		448,875

Msoro's statement of financial position as at 31 March 2024

	Cost	Accmtd Dep'n	Carrying amount
	'K'	'K'	'K'
Non-current assets:			
Buildings	500,000	(175,000)	325,000
computers	375,000	(75,000)	300,000
	875,000	250,000	625,000
Current assets:			
Inventories		230,750	
Bank (W5)		266,250	
Insurance prepaid		7,875	
Total current assets			504,875
Total assets			1,129,875
Capital and liabilities:			
Capital b/f			675,000
Net profit			448,875
Capital c/f			1,123,875
Current liabilities:			
Electricity owing			6,000
Total capital and liabilities			1,129,875

Workings:

1. Insurance expense:

	'K'
Paid per bank statement	31,500
Less prepaid c/f (31,500*3/12)	(7,875)
Add prepaid b/f	13,750
Charge for the year	37,375

2. Electricity expense:

	K
Paid per bank statement	2,000
Add owing c/f	6,000
Less owing b/f	7,500
Charge for the year	500

3. Rent expense:

	K
Paid per bank statement	18,500
Less owing b/f	10,000
To profit or loss	8,500

4. Depreciation expense:

	K
Buildings (5%*500,000)	25,000
Computers (20%*[125,000+250,000])	75,000

5. Amended cash book balance:

	K
Balance per question	281,250
Less bank charges (to profit and loss)	(15,000)
To statement of financial position	266,250

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2 BUSINESS STATISTICS

WEDNESDAY 11 SEPTEMBER 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 for one if not given by the Invigilator.

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

SECTION A – (COMPULSORY)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

1.1 The statistical method that can be used summarize or to describe a collection of data is called:

A. Analytical statistics

B. Inferential statistics

C. Descriptive statistics

D. Sampling

(2 marks)

1.2 During a five-week period, a carpenter's weekly incomes were as follows: K4,140, K3,795, K4,370, K3,910, and K4,600. Calculate the standard deviation of this data.

A. K329.31

B. K294.54

C. K86,756.00

D. K108,445.00

(2 marks)

1.3 If Z is a standard Normal variable, and the value of $Z = -1.9$. Calculate the value of the probability $P(Z > -1.9)$.

A. 0.0287

B. 0.9713

C. 0.1841

D. 0.5000

(2 marks)

1.4 Given ungrouped data of exam scores, how do you find the interquartile range?

A. Subtract the lowest score from the highest score.

B. Divide the 3rd quartile by the first quartile

C. Subtract the 1st quartile from the 3rd quartile

D. Add the extreme quartile values.

(2 marks)

1.5 Calculate the standard deviation of the following data set: 19, 35, 25, 20, 22, 15, 10:

A. 62.41

B. 7.90

C. 20.85

D. 146

(2 marks)

1.6 In time series analysis, which of the following is found using the method of moving average.

A. Irregular variation

B. Cyclic variation

C. Season variations

D. Secular trend

(2 marks)

1.7 The table below show the probability distribution of days taken to complete a construction project where x is the number of days taken for construction,

X	3	4	5	6
$P(X)$	0.11	0.26	0.57	0.06

The average number of days the project would take is;

A. 0.25

B. 0.4

C. 4.58

D. 5.00

(2 marks)

1.8 A parent collect money from her creditors and splits the money into the ratio $4 : 5$ and the largest part is $K70{,}000$. What is the smallest part?

A. K56,000

B. K93,333

C. K60,000

D. K40,000

(2 marks)

1.9 An investment broker has provided all clients with a list of several possible independent investments, each having a probability of 0.8 of yielding a substantial profit. A client Mr. Pungwa, decides to purchase five (5) of the investments. What is the probability that all five (5) yield a profit?

A. 0.00032

B. 0.8

C. 0.2

D. 0.3277

(2 marks)

1.10 The mean of a set of data is 40 with a median of 50. If the standard deviation of the data is 12, what is the coefficient of variation?

A. 0.24

B. 0.80

C. 0.30

D. 0.83

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

(a) Why is data interpretation and evaluation important? (3 marks)

(b) An automobile dealer calculates the proportion of new cars sold that have been returned at various numbers of times for the correction of defects during the warranty period. The results are shown in the following table.

Number of Returns	0	1	2	3	4
Proportion	0.28	0.36	0.23	0.09	0.04

(i) Find the expected number of returns of an automobile for corrections for defects during the warranty period. (2 marks)

(ii) Find the standard deviation of the number of returns of an automobile for corrections for defects during the warranty period. (5 marks)

(c) Two (2) machines A and B, are used to pack sweets. A sample of five (5) packets was taken from each machine and the mass of each packet measured to the nearest gram, was noted. The table below shows the masses for each machine

Machine A (mass in g)	16	14	22	20	18
Machine B (mass in g)	10	12	26	23	19

(i) Find the mean deviation of the masses of the packets taken in the sample for machine A. (4 marks)

(ii) Find the mean deviation of the masses of the packets taken in the sample for machine B. (4 marks)

(iii) Based on the answers in (i) and (ii), which machine is more efficient. Explain your answer. (2 marks)

[Total: 20 Marks]

QUESTION THREE

The Management of Riteshop Supermarket wants to find out if there is a relationship between the number of times a specific product is promoted on the intercom system in the store and the number of units of that product sold. To experiment, the management selected a product and promoted it on the intercom system for seven (7) days. The following table gives the number of times this product was promoted each day and the number of units sold.

Number of Promotions Per Day (x)	15	22	42	30	18	12	38
Number of Units sold Per Day (Hundreds) (y)	11	22	30	26	17	15	23

Required:

(a) Draw the scatter plot of the data. (2 marks)

(b) Calculate the equation of the regression line. (11 marks)

(c) Compute r and r^2 and explain what they mean. (5 marks)

(d) Predict the number of units of this product sold on a day with 35 promotions. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Jaz-Tech Corporation manufactures computer monitors. The following data are the numbers of computer monitors produced at the company for a sample of 10 days.

24, 32, 27, 23, 35, 33, 29, 40, 23, 28

(i) Calculate the mean number of computer monitors. (3 marks)

(ii) Determine the median number of the data. (2 marks)

(iii) Calculate the standard deviation. (5 marks)

(a) The daily sales total (excepting Sunday) at a small restaurant has a probability distribution that is approximately normal, with a mean m equal to K1,230 per day and a standard deviation s equal to K120.

Required:

What is the probability that the sales

(i) will exceed K1,400 for a given day? (3 marks)

(ii) will not exceed K1,100 for a given day? (3 marks)

(iii) will be between K1,350 and K1,500 for a given day? (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) The distribution of the price of the equity share of a company in a stock exchange is shown below:

Share Price (K)	**Number of Sessions**
50 – 60	50
60 – 70	90
70 – 80	96
80 – 90	80
90 – 100	40

Required:

(i) Compute the mean (5 marks)

(ii) Compute the standard deviation (3 marks)

(iii) Compute the coefficient of variation (2 marks)

(iv) Calculate the median of the data (4 marks)

(b) A construction company applies for contracts in two firms A and B. Let the chance of winning a contract in A and B be independent with $P(A)=0.3$, $P(B)=0.5$ and $P(A\cup B)=0.65$

Required:

Determine

(i) $P(A\cap B)$ (2 marks)

(ii) $P(A\cap B^{c})$ (2 marks)

(iii) $P(A^{c}\cup B)$ (2 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Three (3) employees of XYZ firm have been nominated for the position of a Manager. The three (3) employees are Mr. Banda, Mr. Songolo and Mr. Temo, their probability of becoming managers are 0.3, 0.2 and 0.5 respectively. The probabilities that the Bonus scheme will be introduced if Mr. Banda, Mr. Songolo and Mr. Temo becomes manager are 0.8, 0.1 and 0.4 respectively.

Required:

(i) What is the probability that the Bonus scheme will be introduced? (6 marks)

(ii) If the Bonus scheme has been introduced, what is the probability that the Manager appointed is Mr. Banda? (2 marks)

(b) The following stem and leaf diagram shows that the scores, X, obtained by a group of students in an examination.

Score	Key: 6/1 means 61
2	1 2 8
3	3 4 7 8 9
4	1 2 3 5 6 7 9
5	0 2 3 3 5 5 6 8 9 9
6	1 2 2 3 4 4 5 6 6 8 8 8 9 9
7	0 2 3 4 5 7 8 9
8	0 1 4

Required:

Compute

(i) The modal score (1 mark)

(ii) The quartile deviation (3 marks)

(iii) The mean (2 marks)

(iv) The standard deviation (4 marks)

(v) Describe the shape of the distribution (2 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.2 BUSINESS STATISTICS SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 C

1.2 A

1.3 B

1.4 C

1.5 B

1.6 C

1.7 C

1.8 A

1.9 D

1.10 C

SOLUTION TWO

(a) Data interpretation holds significant importance to researchers, analysts, economists and accountants for the following reasons: Informed Decision –Making: It empowers individuals and organisations to make decisions based on evidence and facts rather than intuition.

(b)

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

$$= \sum_{x=0}^{4} P(X = x)$$

$$= 0(0.28) + 1(0.36) + 2(0.23) + 3(0.09) + 4(0.04)$$

$$= 0 + 0.36 + 0.46 + 0.27 + 0.16$$

$$= 1.25$$

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

$$E(X^2) = \sum_{x=0}^{4} x^2 P(X = x)$$

$$= 0^2(0.28) + 1^2(0.36) + 2^2(0.23) + 3^2(0.09) + 4^2(0.04)$$

$$= 0 + 0.36 + 0.92 + 0.81 + 0.64$$

$$= 2.73$$

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

$$= 2.73 - 1.25^2$$

$$= 2.73 - 1.5625$$

$$= 1.1675$$

Thus, standard deviation $= \sqrt{Var(X)}$

$$= \sqrt{1.1675}$$

$$= 1.08$$

(c)

(i) Machine A

$$\overline{x} = \frac{\sum x}{n} = \frac{90}{5} = 18$$

x	$x = 18$	$\lvert x-18 \rvert$
16 14 22 20 18	-2 -4 4 2 0	2 4 4 2 0
		12

$$\text{Mean Deviation} = \frac{\sum \lvert x-18 \rvert}{5}$$

$$= \frac{12}{5}$$

$$= 2.4$$

(ii) Machine B

$$\overline{x} = \frac{\sum x}{n} = \frac{90}{5} = 18$$

x	$x = 18$	$\lvert x-18 \rvert$
10 12 26 23 19	-8 -6 8 5 1	8 6 8 5 1
		28

$$\text{Mean Deviation} = \frac{\sum \lvert x-18 \rvert}{5}$$

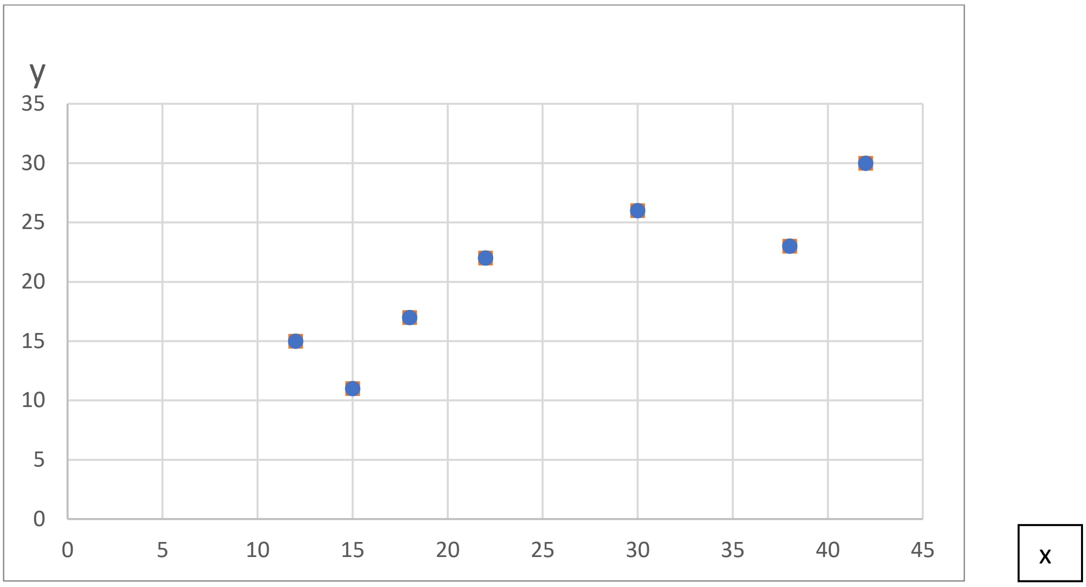
$$= \frac{28}{5}$$

$$= 5.6$$

(iii) Machine A is more efficient because the mean deviation is smaller than that of machine B.

QUESTION THREE

(a) **Scatter plot**



(b) Summary statistics table:

X	Y	XY	X^2	Y^2
15	11	165	225	121
22	22	484	484	484
42	30	1260	1764	900
30	26	780	900	676
18	17	306	324	289
12	15	180	144	225
38	23	874	1444	529
177	**144**	**4049**	**5285**	**3224**

Therefore,

$$\beta = \frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - \left(\sum X\right)^2} = \frac{7\times 4049 - 177\times 144}{7\times 5285 - (177)^2} = 0.504$$

and

$$\alpha = \overline{Y} - \beta \overline{X} = \frac{144}{7} + 0.504\left(\frac{177}{7}\right) = 7.83$$

Hence, the least–squares regression line is

$$y = \alpha + \beta x = 7.83 + 0.504x$$

(c)

(i) $$\boldsymbol{r} = \frac{\boldsymbol{n}\sum \boldsymbol{xy} - \sum \boldsymbol{x} \sum \boldsymbol{y}}{\sqrt{[\boldsymbol{n}\sum \boldsymbol{x}^2 - (\sum \boldsymbol{x})^2][\boldsymbol{n}\sum \boldsymbol{y}^2 - (\sum \boldsymbol{y})^2]}}$$

$$= \frac{7(4049) - (177)(144)}{\sqrt{[7(5285) - 177^2][7(3224) - 144^2]}}$$

$$\boldsymbol{r = 0.89}$$

Comment: there is a very strong positive correlation between x and y

$$\boldsymbol{r^2 = 0.79}$$

Interpretation: 79% of variations can be explained by the filled value

(d) $\boldsymbol{Y = 7.83 + 0.504x}$

$$\boldsymbol{Y = 7.83 + 0.504(35) = 25.47}$$

SOLUTION FOUR

(a)

(i) Mean

$$\bar{X} = \frac{1}{n}\sum x = \frac{24 + 32 + 27 + 23 + 35 + 33 + 29 + 40 + 23 + 28}{10} = \frac{294}{10} = 29.4$$

(ii) Median

$$23, 23, 24, 27, 28, 29, 32, 33, 35, 40$$

$$Md\ = \frac{28 + 29}{2} = 28.5$$

(iii) Standard deviation

$$\boldsymbol{S} = \sqrt{\frac{\sum x^2 - f\bar{x}^2}{f - 1}}$$

$$S = \sqrt{\frac{8926 - 10(29.4)^2}{10 - 1}} = 5.6$$

(b)

(i) $Z = \frac{X - 1230}{120}$

$P(X \geq 1400)$

$$P\left[\frac{X - 1230}{120} \geq \frac{1400 - 1230}{120}\right]$$

$$= P[Z \geq 1.417]$$

$$= 1 - 0.9222$$

$$= 0.0778$$

(ii) $P(X \leq 1100)$

$$P\left[\frac{X - 1230}{120} \leq \frac{1100 - 1230}{120}\right]$$

$$= P[Z \leq -1.083]$$

$$= 1 - 0.8599$$

$$= 0.1401$$

(iii) $P\left[\frac{1350 - 1230}{120} < \frac{X - 1230}{120} < \frac{1500 - 1230}{120}\right]$

$$P[1 < Z < 2.25]$$

$$P[Z < 2.25) - P[Z < 1]$$

$$0.9878 - 0.8413$$

$$= 0.1465$$

QUESTION FIVE

(a)

Share Price (K)	f	**Mid–point** x	fx	$\left(x-\bar{x}\right)$	$\left(x-\bar{x}\right)^2$	$f\left(x-\bar{x}\right)^2$
50 – 60	50	55	2750	-19.2	368.64	18,432
60 – 70	90	65	5850	-9.2	84.64	7,617.6
70 – 80	96	75	7200	0.8	0.64	61.44
80 – 90	80	85	6800	10.8	116.64	9,331.2
90 – 100	40	95	3800	20.8	432.64	17,305.6
	$\sum f = 356$		$\sum fx = 26,400$			$f\left(x-\bar{x}\right)^2 = 52,747.84$

(i) $\bar{x} = \dfrac{\sum fx}{\sum f} = \dfrac{26,400}{356} = 74.2$

(ii) $S^2 = \dfrac{\sum f\left(x-\bar{x}\right)^2}{n-1}$

$= \dfrac{52,747.84}{356-1}$

$= 148.6$

Standard deviation $= \sqrt{Variance}$

$= \sqrt{148.6}$

$= 12.2$

(iii) $CV = \dfrac{S}{x} \times 100\%$

$= \dfrac{12.2}{74.2} \times 100\%$

$= 16.4\%$

(iv) Median $= L_k + \frac{w}{n_k}\left(\frac{n}{2} - CF_{K-1}\right)$ K=3

$= 70 - \frac{10}{96}\left(\frac{356}{2} - 140\right)$

$= 70 - \frac{10}{96}(38)$

$= \mathbf{73.958}$

(b)

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

$= 0.3 + 0.5 - 0.65$

$=0.15$

(ii) $P(A \cap B^{\subset}) = P(A) - P(A \cap B)$

$=0.3 - 0.15$

$= 0.15$

(iii) $P(A^{\subset} \cup B) = P(A^{\subset}) + P(B) - P(A^{\subset} \cap B)$

$P(A^{\subset} \cap B) = P(B) - P(A \cap B)$

$=0.5-0.15$

$=0.35$

$P(A^C \cup B)$=0.7+0.50-0.35 $= 0.85$

QUESTION SIX

(a)

(i) Let $\mathrm{A} =$ an event that Mr. Banda becomes manager

$\mathrm{B} =$ an event that Mr. Songolo becomes manager

$C =$ an event that Mr. Temo becomes manager

$D =$ an event that the Bonus Scheme was introduced

We are given,

$$\mathrm{P}(\mathrm{A}) = 0.3, \mathrm{P}(\mathrm{B}) = 0.2, \mathrm{P}(C) = 0.5, \mathrm{P}(D/\mathrm{A}) = 0.8, \mathrm{P}(D/\mathrm{B}) = 0.1$$

and

$$\mathrm{P}(D/C) = 0.4$$

By total probability theorem, we have

$$\mathrm{P}(D) = \mathrm{P}(\mathrm{A})\mathrm{P}(D/\mathrm{A}) + \mathrm{P}(\mathrm{B})\mathrm{P}(D/\mathrm{B}) + \mathrm{P}(C)\mathrm{P}(D/C)$$

$$= (0.3\times 0.8) + (0.2\times 0.1) + (0.5\times 0.4)$$

$$= 0.24 + 0.02 + 0.20$$

$$= 0.46$$

(ii) $$\mathrm{P}(\mathrm{A}/D) = \frac{\mathrm{P}(\mathrm{A}\cap D)}{\mathrm{P}(D)}$$

$$= \frac{\mathrm{P}(\mathrm{A})\mathrm{P}(D/\mathrm{A})}{\mathrm{P}(D)}$$

$$= \frac{0.3\times 0.8}{0.46}$$

$$= 0.5217$$

(b)

(i) Mode $= 68$

(ii) $Q_1 = \frac{1}{4}(n+1)^{th} = 13^{th} value$ value

$$\therefore Q_1 = 46$$

$Q_3 = \frac{3}{4}(n+1)^{th} = 38^{th} value$ value

$\therefore Q_3 = 69$

Therefore,

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

$= \frac{69-46}{2}$

$= 11.5$

(iii) $\bar{x} = \frac{\sum x}{n} = \frac{2873}{50} = 57.46$

(iv) $S^2 = \frac{\sum x^2}{n} - \bar{x}^2 = \frac{177353}{50} = 57.46^2 = 245.4084$

$\therefore$ Standard deviation $= \sqrt{245.4084} = 15.7$

(v) $Q_1 = 46, Q_2 = 60$ and $Q_3 = 69$

$Q_3 - Q_2 < Q_2 - Q_1$ i.e. $9 < 14$ 0

Therefore, the distribution has a negative skew.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.3: BUSINESS ECONOMICS

TUESDAY 10 SEPTEBER 2024

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

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8. Present legible and tidy work.

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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 An outward shift in the production possibilities curve of an economy can be caused by an increase in

A. Unemployment
B. The labour force
C. Output
D. Demand

(2 marks)

1.2 In a market economy…………………

A. Demand determines supply and supply, in turn, determines prices.
B. Supply determines demand and demand, in turn, determines prices.
C. Supply and demand determine prices and prices, in turn, allocate the economy's scarce resources.
D. The allocation of scarce resources determines prices and prices, in turn, determine supply and demand.

(2 marks)

1.3 Monetary policy is concerned with all the following Except……………..

A. Money supply
B. Exchange rate
C. Taxation rates
D. Interest rates

(2 marks)

1.4 If two (2) nations trade based on the principle of comparative advantage, which of the following would be true?

A. Each nation would increase its consumption possibilities.
B. A smaller number of goods would be available in each nation.
C. Total world production would decrease.
D. One nation would gain at the expense of the other nation.

(2 marks)

1.5 In a simple closed economy, all investment spending must come from……………..

A. Money creation.
B. Debt issuance.
C. Foreign borrowing.

D. Saving.

(2 marks)

1.6 When the Government prints too much money, prices ……………………….

A. Fall
B. Rise
C. Remains constant
D. Becomes zero

(2 marks)

1.7 In a country with a population of 25 million people there are 16 million in the total workforce and 2 million unemployed. What is the rate of unemployment?

A. 8%
B. 11.1%
C. 12.5%
D. 44%

(2 marks)

1.8 A tightening of monetary policy in an open economy operating with a flexible exchange rate would most likely lead to…………………………………

A. Higher domestic interest rates and an exchange rate appreciation.
B. Higher domestic interest rates and an exchange rate depreciation.
C. Lower domestic interest rates and an exchange rate appreciation.
D. Lower domestic interest rates and an exchange rate depreciation.

(2 marks)

1.9 Which one of the following defines the economic growth rate?

A. An increase in real investment.
B. An increase in real Gross Domestic Product.
C. An increase in the Gross Domestic Product price deflator.
D. An increase in Gross Domestic Product.

(2 marks)

1.10 If a country sold more goods and services to the rest of the world than it purchased from the other countries, then the country has a………

A. Trade deficit.
B. Trade surplus.
C. Budget surplus.
D. Budget deficit.

(2 marks)

[Total: 20 Marks]

SECTION B

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

<u>QUESTION TWO</u> – (COMPULSORY)

Supply and demand are fundamental concepts in economics. They essentially describe the relationship between how much of a good or service is available (supply) and how much consumers are willing and able to buy (demand). This interaction dictates the price of the good or service in a market.

Required:

(a) Outline any five (5) factors that influence the demand for goods and services. (10 marks)

(b) There is neither excess demand nor supply in equilibrium. Illustrate this concept using an appropriate diagram. (5 marks)

(c) From the following demand and supply functions

Demand Function: Qd = 100 – 2P

Supply Function: Qs = 20 + 4P

(i) Compute the equilibrium quantities and price. (3 marks)

(ii) State the effect of imposing a K2 tax on buyers with respect to the equilibrium price and demand. (2 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

John was employed as a Shop Attendant at one of the leading multinational supermarket in Lusaka. He resigned from his job to start his own shop using the experience he gained while working as a Shop attendant. As an employee he was entitled to an annual salary of K48,000. He has no saving and no shop of his own to start his business. He has to borrow money and rent business premises.

For his business, he will be required to pay K20,000 per annum in wages for his two (2) assistants, K8,000 interest on borrowed money and K36,000 as rentals per annum.

In economics, for an entrepreneur to calculate profit, both explicit and implicit costs must be considered. Profit is the excess of revenue over these costs.

(a) Define the following concepts:

(i) Explicit costs. (2 marks)

(ii) Implicit costs. (2 marks)

(b) Calculate John's economic profit if his shop earned total revenue of K120,000 per annum from his shop. (6 marks)

(c) How much profit is John earning from the point of view of the person on the street. (4 marks)

(d) What explains the difference between the two (2) profit figures in (b) and (c). (3 marks)

(e) What would happen to John's business if total revenue were K110,000 instead? (3 marks)

[Total: 20 Marks]

QUESTION FOUR

The demand for money is the relationship between the quantity of money people want to hold and the factors that determine that quantity. John Maynard Keynes popularized the liquidity preference theory, which tries to explain the motives for holding money. The quantity of money households wants to hold varies inversely with the interest rate. The supply of money on the other hand is autonomously determined by the central bank, through its monetary policies. Equilibrium in the money market occurs at the interest rate at which the quantity of money demanded is equal to the quantity of money supplied. Changes in both money supply and the demand for money will lead to changes in the interest rate.

Required:

(a) Explain the motives for holding money according to the liquidity preference theory. (6 marks)

(b) Outline any two (2) factors that may cause changes in the demand for money. (4 marks)

(c) Other than monetary policy, outline any three (3) functions of the central bank. (3 marks)

(d) Suppose you are given the following information about an economy: Money Supply (Ms): Ms = 20,000 and Money Demand (Md): Md = 25,000 – 1000r where r is the interest rate

(i) Given the above information, what is the equilibrium interest rate in this economy? (2 marks)

(ii) Suppose that the central bank decides to increase the money supply. Illustrate with the use of a diagram the effect of this change. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Jack limited invented a new product called "Data Buster" which helps consumers save on data usage on all networks in Zambia. The gadget has been performing well in terms of sales as 10,000 units were sold at launch. The firm cannot keep pace with the staggering demand on the gadget. The firm hopes to expand operations by mass producing the gadget and then lower the selling price. It is expected that this action will spur sales further and help the firm maximise its revenue. The gadget currently sells for K10,000 and the quantity demanded at this price is 4,500 units. If the price was reduced to K7,500, it is forecast that the quantity demanded would increase to 6,000 units.

Required:

(a) Define Price Elasticity of demand. (2 marks)

(b) Calculate the price elasticity of demand using the 'point method' (Round off your answer to the nearest whole number). (4 marks)

(c) Interpret the meaning of the calculated figure in terms of Total Revenue (TR) (2 marks)

(d) Calculate the effect on Total Revenue (TR), of the change in price if demand is met at both the old and the new prices, of the change in price. (4 marks)

(e) Outline any four (4) factors that influence the price elasticity of demand. (8 marks)

[Total: 20 Marks]

QUESTION SIX

Globalization and regional economic groupings (REGs) are two powerful forces shaping the world economy today, with a complex and often dynamic interplay between them. Technological advancements, trade liberalization policies, and international organizations, such as the World Trade Organization (WTO) and the International Monetary Fund (IMF), play a key role in facilitating globalization. Examples of REGs include the European Union (EU), the North American Free Trade Agreement (NAFTA), the Association of Southeast Asian Nations (ASEAN), and the Southern African Development Community (SADC).

Required:

(a) Explain the concept of globalization. (3 marks)

(b) Outline any four (4) drivers of globalization. (8 marks)

(c) Outline any three (3) support services the IMF offers to its member countries. (6 marks)

(d) State any three (3) values or principles of the WTO. (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 C

1.4 A

1.5 D

1.6 B

1.7 C

1.8 A

1.9 B

1.10 B

SOLUTION TWO

(a) The demand for goods and services is influenced by a complex interplay of several factors, broadly categorized into consumer factors and market factors.

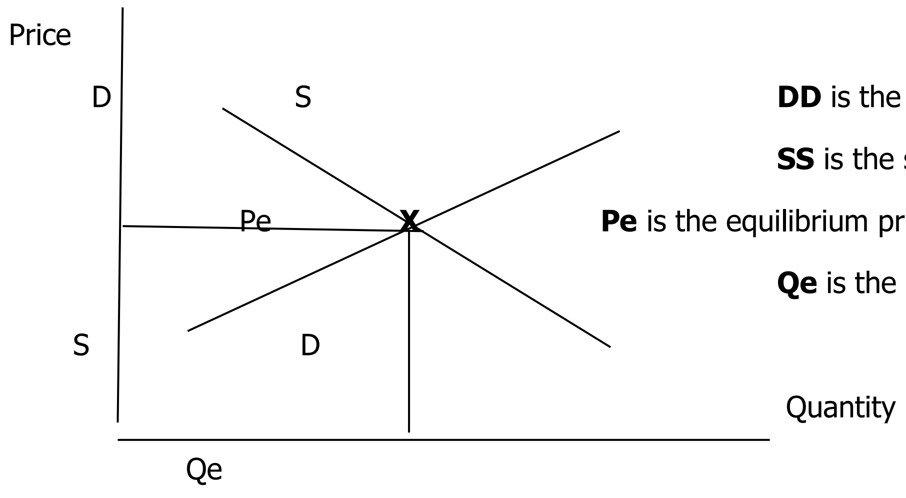
Consumer factors:

- **Price**: This is the most direct and often the most significant factor. Generally, as the price of a good or service increases, demand decreases (and vice versa). However, the sensitivity of demand to price changes varies depending on the type of good (luxury vs. necessity) and the availability of substitutes.
- **Consumer income**: As income rises, consumers can afford to purchase more goods and services, leading to increased demand. However, the relationship between income and demand is not always linear. For certain goods (inferior goods), demand might decrease as income rises due to changes in preferences.
- **Consumer preferences and tastes**: These can be influenced by various factors like fashion trends, cultural norms, advertising, and personal experiences. Changing preferences can lead to significant shifts in demand, even for established goods and services.
- **Expectations**: Consumers' expectations about future prices, income, and the overall economic climate can influence their current buying decisions. For instance, if they expect prices to rise in the future, they might buy more now, leading to a temporary increase in demand.

Market factors:

- **Availability of substitutes**: The presence of close substitutes can significantly impact demand. If good A becomes more expensive, consumers might switch to good B, reducing demand for A. The elasticity of demand, which measures the sensitivity to price changes, is closely related to the availability of substitutes.
- **Number of consumers in the market**: An increase in the population size generally leads to an increase in demand for most goods and services. However, this can vary depending on the specific good and the demographics of the new consumers.
- **Market size and accessibility**: The size and accessibility of the market can influence demand. For instance, a product marketed only in select cities will have lower demand than one readily available nationwide.
- **Government policies and regulations**: Government policies like taxes, subsidies, and regulations can impact both the supply and demand for goods and services. For example, a tax on sugary drinks might decrease demand for them.

(b) The demand curve slopes downwards, indicating that as the price increases, consumers are willing to buy less. Conversely, the supply curve slopes upwards, showing that producers are willing to supply more when the price rises.



DD is the demand curve.

SS is the supply curve.

Pe is the equilibrium price.

Qe is the equilibrium quantity.

Equilibrium Point: The point where the two curves intersect (X) is the equilibrium point. This point represents the price (marked on the vertical axis) and quantity (marked on the horizontal axis) at which both supply and demand are equal. There is no pressure for the price to change because neither buyers nor sellers have an unsatisfied desire to buy or sell at that point.

If the price is set above X, there will be excess supply. Conversely, if the price is set below X, there will be excess demand, which will put upward pressure on the price until equilibrium is established.

(c)

(i) Given that:

Demand Function: Qd = 100 – 2P

Supply Function: Qs = 20 + 4P

In equilibrium, Qd= Qs

100 – 2P = 20 + 4P

80=6P

Therefore, P = 80/6 =13.33

Equilibrium Price = 13.33

Equilibrium quantity, substitute, P in any of the functions: 100-2(13.33) = 100-26.66 = **73.34**

(ii) The effect of imposing a K2 tax on equilibrium price and demand on buyers.

Tax on buyers:

- **Decrease in Demand**: When a K2 tax is imposed on buyers for each unit purchased, the effective price they pay (price + tax) increases. This leads to a decrease in the quantity demanded, as consumers become less willing to purchase the good or service at the higher effective price. The demand curve will shift leftward, representing the new lower demand at each price point.
- **Increase in Equilibrium Price**: Due to the reduced demand, the market will no longer be in equilibrium at the original price. To restore equilibrium, the price needs to increase. The new equilibrium price will be higher than the pre-tax price, but the exact increase will depend on the elasticities of demand and supply.
- **Tax Revenue**: The government collecting the tax earns K2 per unit sold, creating tax revenue. However, this revenue may not always offset the loss in consumer welfare due to decreased demand and higher prices.

SOLUTION THREE

(a) Costs in economics

(i) Explicit costs are the actual, out-of-pocket costs incurred by the business to purchase the costs of production

(ii) Implicit costs are input costs that do not require the outlay of money by the firm

(b) Explicit costs = wages + Interest + Rent = K20,000 + K8,000 + K36,000 = K64,000

Implicit costs = His salary foregone in employment = K48,000

Economic Profit = Total Revenue – (Explicit + Implicit costs)

= K120,000 – (K64,000 + K48,000) = K8,000

(c) Accounting Profit = Total Revenue – Explicit costs

K120,000 – K64,000 = K56,000

(d) The difference in the profit figures is K48,000 which is the implicit cost

(e) If John's total revenue were K110,000, he would incur an economic loss of K2,000 and it would be wise to close the business.

SOLUTION FOUR

(a) **Motives for holding Cash**

- Money Demand for Transactions: This involves the money needed for buying goods and services. It emphasizing the essential role of money as a medium of exchange in daily economic activities.
- Money Demand for Precaution: This refers to the need for holding cash to meet unforeseen changes and emergencies. Individuals might hold onto money or easily accessible funds to cover unexpected medical costs, car repairs, or other financial demands.
- Money Demand for Speculation: This involves holding cash in expectation of a fall in the price of bonds and other securities which are inversely related to the interest rate. When the nominal interest rate is low, people hold onto money, even if it provides no interest income. But this changes as the interest rate ticks upward.

(b) **Reasons why the demand for money might change**:

- **Changes in national income**: when real GDP increases, there are more goods and services to be bought. More money will be needed to purchase them. On the other hand, a decrease in real GDP will cause the money demand curve to decrease.
- **Changes in the price level (inflation or deflation)**: if the price of everything increases by say 20% you need 20% more money in order to buy things. When there is an increase in the price level, the demand for money increases. Conversely, when there is a decrease in the price level, the demand for money decreases.
- **Changes in money technology**: the demand for money is driven by the transactions motive (we want money so we can buy things). When new technologies make it easier to convert wealth into money, we keep less of it on hand.

(c) **Functions of the Central Bank**

- **Currency regulator or bank of issue**: Central banks possess the exclusive right to manufacture notes in an economy. All the central banks across the world are involved in issuing notes to the economy.
- **Bank to the government**: One of the important functions of the central bank is to act as the bank to the government. The central bank accepts deposits and issues funds to the government. It is also involved in making and receiving payments for the government. Central banks also offer short term loans to the government in order to recover from bad phases in the economy.
- **Custodian of Cash reserves**: It is a practice of the commercial banks of a country to keep a part of their cash balances in the form of deposits with the central bank. The commercial banks can draw that balance when the requirement for cash is high and pay back the same when there is less requirement of cash.
- **Custodian of International currency**: An important function of the central bank is to maintain a minimum balance of foreign currency. The purpose of maintaining such a balance is to manage sudden or emergency requirements of foreign reserves and also to overcome any adverse deficits of balance of payments.

- **Lender of last resort**: The central bank acts as a lender of last resort by providing money to its member banks in times of cash crunch. It performs this function by providing loans against securities, treasury bills and also by rediscounting bills.

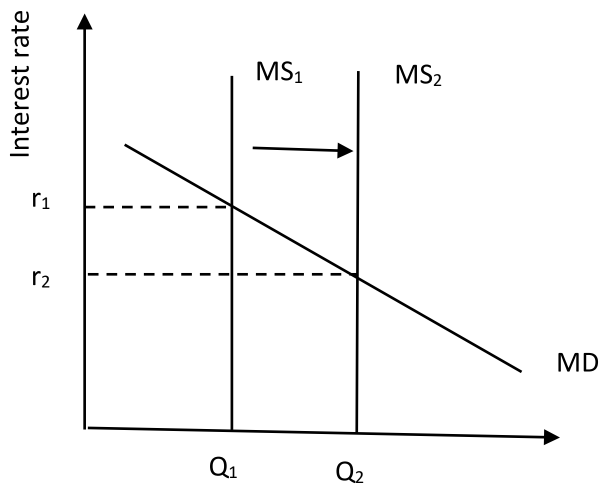
(d)

(i) To find the equilibrium interest rate you need to find the interest rate that equates money supply to money demand. Hence,

$$20{,}000 = 25{,}000 - 1000r$$

$$\mathbf{r = 5 \text{ or } 5\%}$$

(ii) An increase in the Money Supply (MS1 to MS2) causes the Interest Rate to fall. Interest rates fall from i1 to i2 and the Equilibrium Point drops, showing an increase in the Demand for Money.



SOLUTION FIVE

(a) Price elasticity of demand is a measure of the responsiveness of quantity demanded to a change in price

(b) At K10,000

Change in Quantity = 6,000 – 4,500/4,500 = 0.333 = 33.3%

Change in Price = K10,000 – K7,500/K10,000 = 0.25 = 25%

PED = 33.3%/25% = -1.332(ignoring the minus sign 1.332)

(c) Since PED = 1, demand is unitary and a fall in price would result in a same increase in quantity demanded and Total Revenue would remain the same

(d) Revenue at old price K10,000 x 4,500 = K45,000,000

Revenue at new price K7,500 x 6,000 = K45,000,000

Total Revenue remains constant 0

(e) The following are the factors that influence price elasticity of demand:

- **Availability of substitutes**
  - A good with closed substitutes has elastic demand
  - A good without closed substitutes such as food or salt has inelastic demand.
- **Luxuries vs Necessities**
  - Luxuries are goods which make life easy and enjoyable. Life can continue without hence demand is elastic.
  - Necessities are goods needed for survival. Life cannot continue without them hence they have inelastic demand.
- **Percentage of income**
  - Small items in expenditure have inelastic demand
  - Big items in expenditure have elastic demand.
- **Time**
  - In the short run demand is inelastic
  - In the long run demand is elastic
- **Habit**
  - When habit is strong demand is inelastic
  - When habit is weak demand is elastic.

SOLUTION SIX

(a) **Globalization** may be defined as the interdependence and integration of different national economies. It reflects the tendency of markets to become global rather than national and for it to be difficult to view ant national economy as a stand-alone entity.

(b) **Drivers of globalization**

- Improved communications
- Reduction of transport costs
- Political realignments
- Growth of global industries and institutions
- Breakdown of some trade barriers by free trade organisations and treaties.

(c) **The IMF supports its membership by providing:**

- Policy advice to governments and central banks based on the analysis of economic trends and cross-country experiences.
- Research, statistics, forecasts, and analysis based on tracking of global, regional and individual economies and markets.
- Loans to help countries overcome economic challenges.
- Concessional loans to help fight poverty in developing countries
- Technical assistance and training to help countries improve the management of their economies.

(d) **The main values or principles of the WTO are:**

- Non-discrimination- a country should not discriminate between trading partners.
- More Open- WTO encourages the removal or lowering of trade barriers.
- Predictable and transparent: A stable and predictable environment is beneficial to all partners.
- Competitive trading environment- WTO promotes a fair and competitive global trading environment.
- WTO promotes global trading practices that are mutually beneficial to both developed and developing/emerging countries.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 13 SEPTEMBER 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.

QUESTION ONE

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

1.1 Which one (1) of the following is the first requisite for any contract?

A. Agreement
B. Consideration
C. Negotiation
D. Meeting

(2 marks)

1.2 Which one of the following defines an invitation to treat?

A. An offer made to the Public
B. An invitation to receive offers from the public
C. An offer to sell
D. All of the above

(2 marks)

1.3 A contract of Sale has been defined differently by so many scholars. Which one of the following definitions is the most acceptable one?

A. The purchaser makes the contract with the vendor, even if the vendor still has something to do to put the goods into a deliverable state.
B. The purchaser notifies the vendor he is ready to receive delivery.
C. The Seller transfers or agrees to transfer the property in the goods to the buyer for a money consideration called the price.
D. Passing of property has occurred.

(2 marks)

1.4 Which one (1) of the following is not a vitiating factor?

A. Mistake
B. Frustration
C. Misrepresentation
D. Undue influence

(2 marks)

1.5 Which one of these remedies requires payment of a reasonable amount to cover work done, even though there was no agreed upon sum or the work is less than what was contracted for?

A. Specific performance
B. Injunction
C. Rescission

D. Quantum meruit

(2 marks)

1.6 Which of the following is not true about limited companies?

A. They have legal capacity to enter into contracts.
B. They have directors as its agents.
C. They are not exempt from tax.
D. They do not need court orders to alter their share capital

(2 marks)

1.7 Which of the following is not true about Partnerships?

A. They are regulated by the law

B. Accounting firms do not qualify as Partnership

C. Limited liability partnership has partners as agents of the firm

D. All of the above

(2 marks)

1.8 Which of these is not true consideration?

A. Something a party did prior to contemplation of the contract.
B. A promise to perform a pre-existing contractual obligation to a third party.
C. Money or price
D. A favor in return for money

(2 marks)

1.9 In a strict liability tort, it is necessary to prove that:

A. The other person intended to do the specific act.
B. The other person intended to do the specific act and, in some cases, that the person intended harm.
C. A reasonable person would not have acted that way.
D. The specific act occurred.

(2 marks)

1.10 Which one (1) is true about customary law as a source of Law?

A. It is judge made
B. It is based on indigenous practices of citizens
C. Customs and International customary law are the same
D. The Parliament must approve it

(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) April is a Zambian entrepreneur who runs a milling company known as Orapril Milling Company. April has decided to sell shares to some people to increase her capital base due to a high demand for mealie-meal from the public. April has since written to Chomba offering to sell him a block of shares in Orapril Milling Company. In her letter, which arrived on Tuesday, April asked Chomba "to let her know by next Saturday." On Friday morning, Chomba replied by letter accepting the offer. However, by 18:00 hours he changed his mind and telephoned April. April was not in the office, but her telephone answering machine recorded Chomba's message stating that he wished to withdraw his acceptance. On Monday, April opened Chomba's letter of acceptance which arrived that morning, and then played back her message recording machine, which played the message indicating that Chomba was withdrawing the acceptance.

April is confused, and wishes to know whether an agreement has been formed or not; and also if there are any legal consequences ensuing from Chomba's action.

Required:

With reference to the above scenario, advise April on the principles of the law of contract relating to offer and acceptance, clearly stating whether or not an agreement was formed. (10 marks)

(b) A company at law is said to be a separate and distinct entity from its owners. Explain the principle of law on separate legal personality with reference to the case of **Salomon v Salomon.** (10 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) Explain the various rules governing meetings of companies and the different types of resolutions that are put at meetings. (10 marks)

(b) Mundubi and Mabvuto are about to enter or form a partnership. Mundubi is not sure of what a partnership entails and decides to approach you for advice.

Required:

Explain to Mundubi on any five (5) differences between a Partnership and a Limited Company. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Oswald Electronics Ltd sells topnotch computers, laptops, mobile phones and other electronics. These products are imported from Tanzania and come in Zambia either by Oswald Electronics Ltd's own trucks or hired planes. On the 15 of January, 2024, one of the trucks carrying phones and other electronic accessories developed a fault right at Mulungushi river in Kapiri Mposhi District and required that the truck be emptied for it to be repaired.

Fishermen and villagers who were nearby were called in to help offload the over 500,000 phones and accessories that the truck was carrying. The villagers and fishermen stole a number of phones which they later on sold to others who were not at the scene.

As the truck was being emptied, some phone batteries dropped into the river and later on exploded polluting the water which led to a number of fish, frogs and crocodiles dying. Maluba's three dogs ate the poisoned fish as he was busy scrambling for the phones. The dogs have all died. Three (3) weeks later, he sued Oswald Electronics Ltd in the High Court for Zambia claiming damages for the loss of his Germany Shepherd dogs valued at K60,000 and the judgment was made yesterday afternoon. In reading out the judgment, the Judge said, "*Following judicial precedent, there must be "duty of care, the duty must have been breached, the breach must have been caused by the tortfeasor (wrongdoer) and it must not be remote*".

Required:

(a) In reference to the sale of phones by the fishermen and villagers, discuss three (3) exceptions to the *nemo dat quod non habet* rule. (9 marks)

(b) (i) Define judicial precedent (1 mark)

(ii) Explain any two (2) advantages and two (2) disadvantages of judicial precedent. (4 marks)

(c) In view of the Judge's judgment above, explain:

(i) Duty of care (3 marks)

(ii) Damage (3 marks)

[Total: 20 Marks]

QUESTION FIVE

Moffat has been running his business first on his own. Recently, he met his friend Allan and the duo would like to work together to form a limited liability company or any other form of business. They have come to you to help them elucidate on the differences between the following:

Required:

(a) Unlimited companies and companies limited by guarantee (6 marks)

(b) Sole proprietorship and partnership (6 marks)

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

(d) Nominal capital and Issued share capital (4 marks)

[Total: 20 Marks]

QUESTION SIX

Lupupa a Shiwangandu Business tycoon has been doing business in his personal capacity for some time. However, he wants to incorporate a limited company which will still stand after his demise and will be distinct from him looking at the shares he wants to hold. He has been informed that he needs to make resolutions and have proper management to run this type of company once incorporated. He is confused because last week, his uncle informed him that he can also incorporate a company limited by guarantee. Puzzled by this, he has come to you for advice.

Required:

(a) Explain to him about limited companies in relation to a company limited by guarantee. (12 marks)

(b) Assuming he incorporated a company limited by shares, what would that mean? (5 marks)

(c) List for Lupupa the types of resolution that he will be making after incorporating a limited company. (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.4: COMMERCIAL AND CORPORATE LAW SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 A

1.2 B

1.3 C

1.4 B

1.5 D

1.6 D

1.7 B

1.8 A

1.9 D

1.10 B

SOLUTION TWO

(a) This question invites candidates to examine the way in which contractual relations can come into existence. It requires a treatment of the rules relating to offer and acceptance and the possibility of revoking offers in relation to unilateral contracts. The answer will set out the general law applicable before applying it to the circumstances of the problem scenario.

A contract is a legally binding agreement where one makes an offer and the other accepts unconditionally. For there to be a valid contract, four main elements must be present which are offer, acceptance, consideration and intention to create legal relations. An offer is an undertaking, capable of acceptance to be bound on particular terms. The person who makes the offer is the offeror; the person who receives the offer is the offeree. An offer sets out the terms upon which the offeror is willing to enter into contractual relations with the offeree. An offer may, through acceptance by the offeree, result in a legally enforceable contract. Acceptance is necessary for the formation of a contract. Once the offeree has assented to the terms offered, a contract comes into effect. Both parties are bound: the offeror can no longer withdraw their offer, nor can the offeree withdraw their acceptance. Acceptance does not have to be in the form of express words, as it can be implied from conduct. Generally, acceptance must be communicated to the offeror. An offer may be revoked at any time before acceptance and once revoked it is no longer open to the offeree to accept the original offer (*Routlegde v. Grant (1828)*).

In the above scenario, April has made an offer to Chomba and an offer **can be defined as a definite promise to be bound on certain specific terms.** An offer once made by an offeror has legal consequences. **The offer must be accepted by the offeror for there to be a legal contract. In Carlill v Carblioc Smokeball Co. (1893),** the defendant company manufactured a patent medicine, called 'smokeball'. In various advertisements they offered to pay £100 to any person who caught influenza after having sniffed the smokeball three times a day for two weeks. They also stated that they had deposited £1,000 in the Alliance Bank in Regent Street to show their 'sincerity'. There was an offer made in this case just like in Chama's case.

For there to be an agreement, **there has to be acceptance of that offer**. Chomba purported to accept April's offer and thus communicated to him. **The offer must be communicated without any qualification (counter offer).** There are a number of rules governing acceptance**. Acceptance is not effective until communicated to and received by the offeror.** Acceptance must be communicated by the offeree or by someone with his authority. **In Powell v Lee (1908),** P applied for the post of headmaster of a school. He was called for interviews and the managers (D being one) passed a resolution appointing him, but they did not make any arrangements for notifying him. However, one of the managers without authority informed P that he had been appointed. The managers subsequently re-opened the matter and appointed another candidate. It was held that P failed in his action for breach of contract since acceptance had not been properly communicated to him.

Once acceptance has been communicated, it is effective. Thus, it can be said that there is an agreement and a **withdrawal from the agreement means that Chomba is in breach of the agreement**. Thus, **it must be said that an offer can only be withdraw if it has not been accepted.**

The **offeror may expressly or impliedly prescribe the method** of communicating acceptance, although there will be **valid acceptance if the offeree adopts an equally expeditious method,** unless the offeror has made it clear **that no method will be adequate**. In the first instance Chomba used the post meaning the postal rule applied which states that where the parties contemplate acceptance by post, acceptance is complete when the letter is posted, even if the letter is lost in the post. In **Household Fire Insurance Co v Grant (1879)** D applied for shares in the company. A letter of allotment (the acceptance) was posted to him, but it never arrived. The company later went into liquidation and D was called upon to pay the amount outstanding on his shares. It was held that he had to do so. There was a contract between the company and himself which was completed when the letter of allotment was posted, regardless of the fact that it was lost in the post. Thus, an agreement was made immediately Chomba placed his letter in the mail box so he is bound by this agreement with April, therefore he cannot revoke the acceptance or else he is going to be liable.

For instantaneous or electronic means **of communication acceptance is only effective when accessed by** the other party. So the communication by leaving a message on the telephone could only be effective **after being accessed by Chama** and an offer cannot be revoked unless if it before acceptance and it has to be communicated. In Byrne **v. Van Tienhoven (1880)**, the offeror posted a letter of revocation before the offeree posted his acceptance. Nevertheless, there was a contract, because the acceptance was posted before the revocation arrived.

OR a different position correctly argued and supported with authorities

(b) The principle of the law established in the case is that, **when a company is incorporated it company stands alone from its sponsors** and **has legal capacity to sue or be sued in its own name.** Upon incorporation, the company is **liable for its debts and sponsors cannot be answerable for the company's debts and cannot be treated as one with the company**. The company can own property and also perpetual succession.

The brief facts in **Salomon v Salomon [1897]** is that Salomon sold his leather business to a company he formed and was the principle shareholder. He was paid for the shares, in part, by a debenture on the company. Within a year the company went bankrupt and, as a secured creditor he was entitled to be paid first. Other creditors sued contending that Salomon and the company were one and could therefore not be entitled to be paid for the debenture. The court held that Salomon and the company were separate legal personalities and Salomon as a secured creditor could be paid first. `

SOLUTION THREE

(a) **Company meetings**

The procedure of a meeting of the company depends on the type of meeting being held. It may be a meeting of all the shareholders or of a class of shareholders. Some meetings are mandatory while others are left to the discretion of the company and they may be regulated by the decree or the articles or both. There are three types of general meetings: **Annual general meetings, Extraordinary general meetings and Class meetings**. ***Barron v Potter (1914)***

Annual general meeting

The company's annual general meeting must be held within three months of the end of each financial year. If a company holds its first annual general meeting within 18 months of its incorporation, it need not hold it in the year of its incorporation or in the following year.

If default is made in holding the annual general meeting, the Registrar may, on the application of any member, call, or direct the calling of, a general meeting and give such directions as he thinks fit including direction that one member of the company present in person or by proxy shall be deemed to constitute a meeting. The business to be transacted at the annual general meeting is regulated by both the decree and the articles. The business includes:

- Appointment of auditors and fixing of their remuneration
- Declaration of a dividend, if any
- Consideration of the accounts, balance sheets and the reports of the directors and auditors Election of directors in place of those retiring
- Special business, that is, any other business

Extraordinary general meeting

This is provided for under $139 of the Act which states as follows:

An extraordinary general meeting of a company may be convened in accordance with other provisions of this Act, or:

- by the directors whenever they think fit; or
- if the articles so provide, by any other person in accordance with those provisions.

Any general meeting other than an annual general meeting is an extraordinary general meeting. Such meetings are usually convened by the directors to deal with urgent matters, which cannot await the next general meeting. **Re El Sombero Ltd (1958)**

Class meeting

The meetings of classes of shareholders are provided for under section 140 of the Act which reads as follows:

Unless the articles provide otherwise, a meeting of members of a particular class may be convened:

- by the directors whenever they think fit; or

- by two or more members of that class, holding, at the time that notice of the meeting is sent out, not less than one-twentieth of the total voting rights of all the members having a right to vote at meetings of that class.'The Act provides for the holding of a general meeting of holders of a class of shares for the purpose of varying the rights attached to the class of shares. The regulations of the company as to its general meetings apply to class meetings, but the quorum is two persons, at least, holding one third of the issued shares of the class. If all the shares in the class are held by one person, he is entitled to do what a meeting of that class could do under the articles.

(b) **Partnership:** This is the voluntary association of two or more persons to carry on a business for profit as co-owners. Partners need only shake hands to establish this partnership of course there is need to negotiate a written agreement, a contract between them, that states the terms of their agreement to become partners. A written contract can avoid confusion, disputes and litigation later. Partnership agreement is a contract, and therefore all partners must consent to the partnership agreement. The partnership agreement is subjected to the provisions under the 1890 Act. Another thing worthy mentioning are the **Fiduciary duties;** the partner owes to each other fellow partners fiduciary duties equivalent to those an agent owes to a principal. For instance, without its approval. He/she must or may not start selling Cadillacs on his or her own without the partner's consent. A partner must also communicate the information which may affect the partnership and may not use it for private gain.

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

SOLUTION FOUR

(a) Exceptions to the *nemo dat quod non habet* rule (no one can give what he has not got). Exceptions in this case means a seller without proper title can pass good title following circumstances:

1. *Estoppel* – This occurs where the owner of the goods being sold conducts himself as if the seller has title to the goods and in an event that the seller sells the goods based on the owner's conduct, the owner will be estopped (stopped) from denying that he conducted himself as if he gave the seller powers to sell – *Eastern Distributors Ltd v. Goldring (1957)*.

   In the case at hand, if Oswald Electronics Ltd conducted itself in a way that the villagers/fishermen who sold stolen phones in the village were the actual owners of the phones, then Oswald Electronics would be stopped from denying the fact that it made buyers believe that the sellers had title to the phones. Thus the villagers would pass good title even if they are not the owners.

2. *Agency* – An agent has authority to sell the principal's goods which are not his. Therefore, if the villagers/fishermen sold the phones as Oswald Electronics Ltd's agents, they would have the right to pass title even if they were not owners.

3. *Sale under Common Law or Statutory Power* – This is where a creditor or pawnbroker may sale pledged goods when the debtor defaults. Thus can transfer title even if not the owner. Therefore, if the villagers/fishermen were creditors to Oswald Electronics Ltd and the company pledged the phones as security for a debt, the villagers will have power to sell the phones if the company defaulted even if they were not the owners.

4. *Sale by a person with voidable title* – A person who acquires goods under a voidable title will acquire a good title to the goods provided he buys under good faith and can pass title anytime before revocation. Thus whoever buys the phones from the villagers/fishermen without knowing that there was a breakdown where the phones were got from would pass good title if he decided to sell the phones he got.

5. *Sale under Disposal of Uncollected Goods Act CAP 410* – This Act provides for disposal of uncollected goods after a certain period of time e.g. 6 months. Thus a person who may have gotten the phones for repair and the phone is not collected within six months would have the right to sell the phone even if not his.

6. *Sale under market overt* - This is one of the common law exceptions to *nemo dat quod non habet* rule which states that a buyer who buys the goods in good faith from an open market between 06:00 and 18:00 hours would get good title because all those who sale in open markets are presumed to be owners. So if phones were sold on an open market, a buyer who buys them in good faith would have good title.

7. *Sale by seller in possession of goods or documents* – This an exception to the *nemo dat* rule which mean that if a seller has sold goods to buyer 1 but retains

the goods or documents of title to the goods, he would have the right to sell the same goods to buyer 2 even if he is not in fact the owner as he could have sold to buyer one.

8. *Resale by buyer in possession of goods with consent of seller* – where a buyer gets goods from the seller with his consent, e.g. if he has not finished paying, he can still pass good title to the new buyer as long as the new buyer is not aware of his status.

(b)

(i) Judicial Precedent – This is a previous court decision which another court is bound t follow by deciding a subsequent case in the same way. This is standing by the decision – *stare decisis* - as long as the case is similar and cannot be distinguished.

(ii) Any **Two Advantages and Two Disadvantages of Judicial Precedent**

Advantages

- Certainty – the law becomes certain and predictable.
- Clarity – the law is clearly laid down and can be followed.
- Flexibility – the law is flexible enough to adapt with current needs of society.
- Details – the law develops enough interpretations which can used to solve many legal matters.
- Practicality – the law becomes practical as it is based on day-to-day happenings in society.

Disadvantages

- Uncertainty – Following judicial precedent may result in judges making illogical decisions, making the law uncertain.
- Lack of Clarity – At times it becomes unclear to get to get what the judge is trying to say due to conflicts in opinions over the same matter.
- Inflexibility – Judicial precedent makes the law rigid and may hinder the law from moving with times.
- Too Bulky – making it hard to get the point. There would be too many rulings on the same point of law.
- Impracticality – sometimes precedents may be created perpetuating wrong doing.

(c)

(i) *Duty of Care* – Duty of Care is also known as the neighbour principle established the case of *Donoghue v. Stevenson (1932)*. You owe a duty of care to persons who are so closely likely to be affected by your actions. In this case, Maluba would have to prove that he was owed a duty by Oswald Electronics Ltd, that the duty was breached, and the breach is what caused the death of his dogs.

(ii) *Damage* – This is the loss or injury which comes as a result of the wrongdoer's actions. In this case, the death of the dogs is the damage. Damage must not be too remote a consequence of the defendant's breach of duty. These cases illustrate the above points *Donoghue v. Stevenson (1932); Michael Chilufya Sata v. Zambia Bottlers Ltd (2003) and* in the case of *Arida Mercy Chulu (2000)* where it was emphasized that only aperson who has suffered damage can sue.

SOLUTION FIVE

(a) ***Unlimited Company*** – This is a company whose members do not have limited liability i.e. if the debts of a company exceed its assets, members can be pursued to settle the debts of a company. It is a company only to an extent that it is a separate legal entity from its members and it has capacity to sue and be sued in its own name. Members only come in if the debts of a company cannot be satisfied by its assets, but as long as it is sound, their liability is limited to what they invested. Unlimited companies have share capital and usually formed for profit making. Whilst a ***Company Limited By Guarantee*** is one whose members' liability is limited to the amount of money pledged or guaranteed by them to be paid in case of winding up. They do not have share capital and are usually formed for charity purposes.

(b) **Sole Proprietorship and Partnership** – This is a business that is owned by one person who contributes all the capital, makes independent decisions, does not share profits with anyone and runs the business alone, those may be have employees or a number of family members working with him. The business has to be registered under the Registration of Business Names Act. Whilst **a partnership** is a business formed and run by two or people who contribute the required capital and share profits. The partners make decisions in consultation with each other and partnerships are regulated by the Partnership Act 1890.

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

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

SOLUTION SIX

(a) My advice to Lupupa is that, a limited company is one where the liability of the members is limited. The members are liable to a limited amount. Beyond that limit they cannot be called upon to contribute to the liabilities of the company. Thus, assuming that in the event of winding up of a company the assets are not sufficient to pay the liabilities, then the private property of the shareholders cannot be attached or forfeited to pay the company's liabilities.

A private company limited by shares or by guarantee is obliged under the Companies Act to include the word "limited" in its name as provided under section 36(1) of the Act, while a public limited company must have "Plc" at the end of its name.

On the other hand, Companies limited by guarantee have liability of the members limited to the amount the members agree to contribute to the company in the event that the company is wound up. Each subscriber to an application for incorporation of a company limited by guarantee is required to sign a declaration guaranteeing that amount they will pay in the event that the company winds up.

The guaranteed amount may differ from member to member or it may be fixed by the articles. The liability of the members can only be enforced during the winding up of the company as members cannot be called upon to pay their guaranteed amounts during the operation of the company.

While in some jurisdictions, companies limited by guarantee may or may not have share capital, in Zambia such companies have no share capital. This means that such companies do not receive their initial capital from their members. Their sources of initial capital include grants, subscriptions, endowments etc.

Section 10(6) of the Act prohibits companies limited by guarantee from carrying on business for purposes of making a profit for members or anyone concerned with their promotion or management. It is for this reason that companies limited by guarantee are confined almost exclusively to charitable and philanthropic causes. A company limited by guarantee can never be a public company. Under Section 37 of the Act, the Registrar may, on application from such a company, allow it to dispense with the word "limited" in its name. In practice this provision is often invoked.

(b) A company limited by shares have share capital. A company limited by shares is one where the liability of its members i.e. its shareholders, is limited to the unpaid amount (if any) on the shares held by them. In Section 9 of the Act and Section 52 of the Corporate Insolvency Act, members of the company who still owe money for the shares that they have, will be called upon to contribute in the event that the company is wound up and its assets are not sufficient to discharge its liabilities. This liability of the members can also be enforced when the company is in normal existence. A company limited by shares can be private or public.

(c) **Types Of Resolutions**

1. Ordinary Resolution
2. Extraordinary Resolution
3. Special Resolution

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 9 SEPTEMBER 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.

QUESTION ONE

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

1.1 Which of the following characterize a manager as being effective?

A. They use a minimum amount of resources for the amount of outputs produced.
B. They devote a large amount of time to planning.
C. They achieve their goals.
D. They interview, select, and train people who are most suitable to fill open jobs.

(2 marks)

1.2 Which of the following is the main reason for the existence of an organization?

A. The vision of an organization.
B. The mission of an organization.
C. The objectives of an organization.
D. The Chief Executive Officer (CEO) of an organization.

(2 marks)

1.3 Which of the following is a crucial aspect of strategic planning?

A. It is a broad concept that consists of business and corporate strategy.
B. It is an overall concept that consists of strategy formulation and implementation.
C. It is a broad concept that consists of environmental and internal analysis.
D. It is a general concept that consists of business inputs and outputs.

(2 marks)

1.4 What leadership style should be adopted by a manager who has been allocated a team that requires direct supervision?

A. Laissez-faire
B. Paternalistic
C. Autocratic
D. Democratic

(2 marks)

1.5 Teams are products of effective and goal oriented groups. The following are stages in group formation.

A. Storming – Forming – Norming – Adjourning – Performing.

B. Forming – Adjourning – Storming – Norming – Performing.

C. Norming – Forming – Storming – Adjourning – Performing.

D. Forming – Storming – Norming – Performing – Adjourning.

(2 marks)

1.6 Koontz and O'Donnel are the advocates of ………………approach to management.

A. System approach

B. Empirical

C. Contingency

D. Operational

(2 marks)

1.7 Which of the following statements is true?

A. Corporate Social Responsibility means buying food for the community.

B. Corporate Social Responsibility means the company must pay all taxes.

C. Corporate Social Responsibility means taking positive and meaningful. responsibility towards the community social and environmental issues.

D. Corporate Social Responsibility involves building houses for workers.

(2 marks)

1.8 Which of the following is NOT a merit of globalization?

A. Rise of emerging, newly industrialized nations.

B. Increased importance of global economic policy.

C. Transactions with individuals and Organizations in other countries.

D. It creates trade barriers among Nations.

(2 marks)

1.9 What is the planning horizon?

A. The distance ahead for the forecasts on which plans are made.
B. The time period within which uncertainty is very low.
C. The time ahead for which there is no information.
D. The maximum time for which managers can make plans.

(2 marks)

1.10 Lean management focuses on…………………………….

A. Defining value from the standpoint of the end customer
B. Eliminating all waste in the business processes
C. Continuously improving all work processes, purposes and people
D. All of the above

(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)

ABC handlooms limited set up a factory for manufacturing jute bags in a remote village as there were no raw materials available in the cities. The revenue earned by the company was sufficient to cover the costs and the risks. The demand for bags was increasing day by day, so the company decided to increase production to generate higher sales. To that effect, they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees.

Required:

(a) Identify and explain the two (2) main objectives of management discussed above. (10 marks)

(b) State any two (2) values which the company wanted to communicate to the society. (4 marks)

(C) Explain any three (3) disadvantages of a private limited company over a Public Listed Company (PLC). (6 marks)

[Total: 20 Marks]

QUESTION THREE

Motivation can be defined as incitement or inducement to fulfill an action. Motivation can drive the employees of an organization to meet their individual goals as well as the company's overall goals. In other words, it is a state of mind, filled with energy and enthusiasm, which drives a person to work in a certain way to achieve desired goals. Leadership and motivation also goes hand in hand. There are many different forces that guide and direct our motivations. It is important to ensure that every team member in an organization is motivated.

Required:

(a) Explain the five (5) key 'Leadership Skills'. (10 marks)

(b) State any five (5) theories of motivation and state their pioneers as well. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

The production function deals with Planning; Organising and Controlling production activities. Production Management is responsible for the longer term strategic decisions about production and short term operational decisions.

Required:

(a) State two (2) long term and two (2) short term decisions of production organisation. (8 marks)

(b) Explain the four (4) aspects of Marketing activities (8 marks)

(c) State four (4) activities involved in the management of finances. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Explain the meaning of ethics. (2 marks)

(b) Describe five (5) situations which could cause ethical conflict and threaten compliance with the fundamental principles. (10 marks)

(c) Many companies operate a series of board sub committees responsible for supervising specific aspects of governance.

Required:

Identify the four (4) main board committees in an organization. (8 marks)

[Total: 20 Marks]

QUESTION SIX

You are a Finance Director in one of a well-established company. Your Division had recruited a number of new staff through the office of human resources. New staff are expected to undergo an orientation program in order to be familiarized with the work environment,
As a Finance Director, you have been requested to prepare slides for a presentation in accounting and finance functions and also making it clear to new staff the difference between financial management and management of finance and other issues of divisionalisation in the organizations.

Required:

(a) Distinguish between financial management and management of finances that you would include in your slides for a presentation. (2 marks)

(b) Explain any four (4) treasury management function of your organization. (8 marks)

(c) State any two (2) main objectives of Human Resources Management. (2 marks)

(d) Apart from recruitment of new employees, state any three (3) functions of Human Resources Section of an organization. (3 marks)

(e) State five (5) factors that influence the extent of centralized or decentralization that exists in organizations. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5: MANAGEMENT THEORY AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 C

1.2 B

1.3 B

1.4 C

1.5 D

1.6 D

1.7 C

1.8 D

1.9 A

1.10 B

SOLUTION TWO

(a) The Company is fulfilling the organizational and social objectives of management:

1. Organisational objectives include survival, profit and growth.
   - In order to survive, ABC handlooms Ltd. earns enough revenues.
   - Company's profits are sufficient to the cover the cost and the risks.
   - Since demand for bags was increasing day by day and so the company decided to increase production to generate higher sales, it implies that the company exploits fully its growth potential.
2. Social objectives involve the creation of benefits for the society.

   'The company decided to employ people from the nearby villages as very few job opportunities were available in that area. It also decided to open schools and crèches for the children of its employees'

(b) Values:

- Providing employment opportunities in rural areas
- Concern for the environment

(c) Disadvantages of private organisations over public organisation (Plc.)

1. Although the company can raise new capital by issuing new shares, it cannot do this by offering new shares for sale to the public. The amount of new capital it can raise may be restricted by the limited number of shareholders.
2. Lack of capital may restrict the growth of the private limited company
3. The shares are not freely transferable, because the approval of the other shareholders is required for a transfer of shares.
4. It may be difficult for a private limited company to borrow from the bank, because the bank may regard a small company as credit risk.

SOLUTION THREE

(a) The following are the key leadership skills:

- **Entrepreneurship**: the ability to spot business opportunities and mobilize resource to capitalize on them
- **Interpersonal skills:** such as networking, rapport-building, influencing, negotiating, conflict resolution, listening, counseling, coaching and communicating assertively**.**
- **Decision- making and problem-solving skills,** including 'seeing the big picture'
- **Time management and personal organization**
- **Self-development** skills: the ability to learn continuously from experience, to grow in self-awareness and to exploit learning opportunities

(b) Various theories for motivation, and their pioneers:

- Maslow's hierarchy of needs- By Abraham Maslow
- Herzberg's two Factor theory- Frederick Herzberg
- Vroom's expectancy theory- Victor Vroom
- McGregor's theory X and Y – Douglas McGregor
- McClelland's theory of needs- David McClelland
- Likert's organizational management styles- Rensis Likert
- Adam's Equity theory- Stacey Adams
- Locke and Latham's Goal setting theory needs- Edwin Locke and Gary Lathiam

SOLUTION FOUR

(a) Long term decisions

1. The selection of equipment and production processes
2. Job design and methods
3. The location and layout of factories
4. Ensuring that the organisation will have the right number of employees with the right skills

Short term decisions

1. Production planning and control
2. Quality management
3. Inventory control
4. Maintenance and repair activities

(b) The four aspects of Marketing activities

1. Sales and support

   This includes selling through persuading customers who buy the product and services using various ways e.g. direct, online, telephone etc.

2. Marketing Communications

   Bring products to the attention of potential customers and reasons for buying through brochures, catalogues, adverts and promotions.

3. Operational Marketing

   Through marketing research, brand marketing, customer management etc.

4. Strategic marketing

   Marketing at strategic level; the contribution of marketing to the competitive strategy of the organisation.

(c) Activities involved in the management of finances.

1. The responsibility of handling cash
2. Reconciling banking transactions
3. Managing invoices and other financial documents
4. Recording and managing business transactions
5. Preparation and maintenance of Books of Accounts.

SOLUTION FIVE

(a) The meaning of ethics: Ethics are a set of moral principles to guide behavior.

(b) Five (5) situations which could cause ethical conflict, threatening compliance with the fundamental principles are:

1. **Advocacy:** Furthering the employer's cause aggressively without regard to reasonableness of statements made.
2. **Self-interest:** Financial interests, loans and guarantees, incentive compensation arrangements, personal use of corporate assets, external commercial pressures.
3. **Intimidation:** Threats of dismissal from employment, influence of a dominant personality.
4. **Familiarity:** Making a business decision that will benefit a close family member, long association of a business contact, acceptance of a gift.
5. **Self-review:** Business decisions being subject to review and justification by the same Accountant responsible for making those decisions or preparing the data supporting them.

(c) **Four (4) main board committees in organisations and their roles**:

1. **Audit Committee**: This is the most important committee staffed by non-executive directors, responsible for liaising with external audit, supervising internal audit and reviewing the annual accounts and internal controls.
2. **Nomination Committee**: responsible for recommending the appointments of new directors to the board.
3. **Remuneration Committee**: responsible for advising on executive director remuneration policy and the specific package for each director.
4. **Risk Committee**: responsible for overseeing the organisation's risk response and management strategies.

SOLUTIONS SIX

(a) Difference between Financial management and Management of Finances

1. Financial management deals with issues such as dividends, cash inflows, investment and operating decisions that affects profits.
2. Management of finance deals with managing the books of accounts effectively. It deals with issues of handling cash, invoices and other financial documents as well as recording the affairs of the business in the books of accounts.

(b) Treasury management functions include:

1. Arranging finances such as bank overdraft facility in times of expected cash shortages.
2. Managing receipts and payments in foreign currencies due to adverse exchange rates and making measures to reduce exposures to foreign currency risks which might result into losses.
3. Cash budgeting which involves forecasting cash floors on routine basis, i.e. daily, weekly, monthly or even annually.
4. Making payments to suppliers, paying salaries and banking receipts of money to customers.

(c) Main objectives of human resources are:

1. To create and maintain a cooperative and healthy working relationship between management and employees in the organization.
2. To comply with the employment law, dealing with legal responsibilities of the organization related to members of staff.
3. Finding and strategically attracting human resources required by the organizations in order to achieve its objectives while at the same time motive them.

(d) Functions of human resources management are:

1. Keeping of staff records
2. Staff retention so that staff turnover is reduced
3. Training and staff development to enhance the skill of the workforce.
4. Forecasting employment requirements
5. Identifying training gaps for staff
6. Dealing with disciplinary issues for erratic staff.
7. Dealing with matters relating to employment law.

(e) The factors that influence centralization and decentralization are:

1. The mission or objectives of the organization
2. The size of the organization
3. The nature and type of the organization

4. The geographical separation of the organization
5. The output that the organization provides and its markets
6. The management style used by the organization.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 11 SEPTEMBER 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 In the context of an organization's information systems, which component is responsible for ensuring that data is stored securely and accessed by authorized users?

A. Database Management System.
B. Customer Relationship Management.
C. Enterprise Resource Planning.
D. Human Resource Management System.

(2 marks)

1.2 .... is a primary risk to the reliability of data and information within an information system

A. Data Redundancy
B. Data Persistency
C. Data Inconsistency
D. Data Encryption

(2 marks)

1.3 Which menu tab in MS-Excel would you select for error checking?

A. Formulas
B. Data
C. Review
D. Insert

(2 marks)

1.4 Mention a fundamental IT application control used in businesses to verify the identity of users accessing sensitive systems and data?

A. Data Encryption.
B. Two-Factor Authentication.
C. Role-Based Access Control.
D. Data Masking.

(2 marks)

1.5 Which of the following is **NOT** a typical function of an operating system?

A. Booting.

B. Translating a program from one language to another.
C. Managing multi-tasking.
D. File management.

(2 marks)

1.6 What is a memorandum?

A. A document used for communication.
B. Document used for both internal and external communication.
C. A document used for internal communication only.
D. A document used for external communication only.

(2 marks)

1.7 A message is the………… idea transmitted by the sender.

A. Careful
B. Raw
C. Encoded
D. Considered

(2 marks)

1.8 Which of the following represents informal communication?

A. A meeting to make decisions in the accounts department.
B. A discussion during tea break at the staff canteen.
C. A one day's workshop in the board Room.
D. A meeting after an Auditing exercise.

(2 marks)

1.9 Which of the following is **NOT** a required document for a meeting?

A. Notice
B. Agenda
C. Invoice
D. Minutes

(2 marks)

1.10 What is the purpose of visual aids in a presentation?

A. To confuse the audience.
B. To entertain the audience.
C. To support and enhance the verbal message.
D. To replace verbal communication.

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

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

You have recently started working as an accountant for a small but busy company that sells electrical devices. The company has been in business for over 20 years. At present, the use of computers is limited to word processing; with is no accounting package.

The son of the present owner is shortly to take over the day-to-day management of the company. He believes that the business needs to be modernized and has asked you to send him an email explaining some of the advantages and disadvantages of using accounting packages in an organization.

Required:

(a) Outline five (5) disadvantages of using accounting packages in an organization. (10 marks)

(b) State how an organization such as the Zambia Bureau of Standards can implement IT application controls to ensure the identification and completeness of data within its information systems. (5 marks)

(c) Knowing how to use the computer is essential to ensure safety and a peace of mind. List five (5) uses of passwords in the organization's computerized system. (5 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) The Government continues to utilize state-of-the art techniques for the purpose of accessing information for the sake of "national security" justified currently under the Computer Security Act. New bills and legislation continue to attempt to find a resolution to these problems, but new guidelines, policies and procedures need to be established and laws need to be enforced to their full extent if citizens are to enjoy their right to privacy as guaranteed under the constitution. If security products are not safe from every attack and if current laws may not always be efficient in addressing the problem correctly, is there anything a user might be able to do? A good starting point might be establishment and implementation of a good computer security policy.

State any six (6) items a good computer security policy may contain. (12 marks)

(b) Describe two (2) facilities of editing and spell and grammar checking for the word processing software, by explaining how each facility contributes to the efficient production of quality documents. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The Zambia Wildlife Conservation (ZWC) is a non-profit organization dedicated to preserving and protecting the country's diverse wildlife and natural habitats. With conservation projects spanning national parks, wildlife reserves, and community based initiatives, ZWC rely on robust information systems to collect, analyze, and disseminate data vital for wildlife management and conservation efforts.

Describe five (5) basic skills involved in using the internet within Zambia Wildlife Conservation, emphasizing their importance in accessing and sharing conservation related information. (10 marks)

(b) Memory is the electronic holding place for the instructions and data a computer needs to reach quickly. It's where information is stored for immediate use. Memory is one of the basic functions of a computer, because without it, a computer would be able to function properly. Memory is also used by a computer's operating system, hardware and software.

Explain five (5) differences between RAM and ROM. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

Your colleague recently obtained a higher qualification and hopes to have her salary upgraded. Therefore, she has to inform the Managing Director about the same. She seeks your advice as to whether she should write a letter or perhaps see the Managing Director in person to request for a salary upgrade. You advise her to write a letter but she does not remember the contents of some parts of a letter.

Required:

(a) Explain when the following are used:

(i) Dear Sir/Madam (2 marks)
(ii) REF (2 marks)
(iii) Yours faithfully (2 marks)
(iv) Yours sincerely (2 marks)
(v) Pp (2 marks)

(b) Explain the functions of the following paragraphs of a letter?

(i) Opening paragraph (2 marks)
(ii) Closing Paragraph (2 marks)

(c) Explain any three (3) advantages which a letter has over oral communication? (6 marks)

[Total: 20 Marks]

QUESTION SIX

You were a Secretary in a meeting that was held couple of weeks ago. One of the duties of a secretary is to ensure that minutes are prepared and distributed to members in advance before the next meeting. However, due to your busy schedule, there was an oversight on your part to do so. The next meeting is scheduled to take place today. You wish to inform the chairperson about the delayed minutes and request the possibility of rescheduling the meeting through email because it is convenient for both of you.

Required:

(a) State four (4) advantages for using emails for internal customer communication. (3 marks)

(b) Write an email to the chairperson of the meeting informing him/her about the delayed minutes and request for a postponement of the meeting to next week. (12 marks)

(c) State four (4) duties of a chairperson of a meeting. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.6: BUSINESS COMMUNICATION SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 A

1.2 C

1.3 A

1.4 B

1.5 B

1.6 C

1.7 C

1.8 B

1.9 C

1.10 C

SOLUTION TWO

(a) **Disadvantages of accounting packages over manual system**

1. The initial time and costs involved in installing the system and training personnel
2. The need for security checks to make sure that unauthorized personnel do not gain access to data files
3. The necessity to develop a system of coding and checking
4. Lack of 'audit trail'. It is not always easy to see where a mistake has been made
5. Possible resistance on the part of staff to the introduction of the system
6. Limitation on customization
7. Need of upgrades and system maintenance
8. It would be a learning curve

(b) **IT application Controls to ensure the identification and completeness of data**

1. **Data Validation Controls**: Implement validation checks to verify the completeness and accuracy of data entered into information systems. Validation controls include data type checks, range checks, and consistency checks to ensure data integrity.
2. **Unique Identifier Controls**: Assign unique identifiers to each record or data entity within information systems to facilitate data identification and prevent duplication. Unique identifier controls help maintain data integrity and enable efficient data retrieval and analysis.
3. **Audit Trails**: Implement audit trail mechanisms to track changes made to data within information systems, including user actions, timestamps, and system activities. Audit trails provide visibility into data modifications and facilitate accountability and traceability.
4. **Data Reconciliation**: Perform periodic data reconciliation processes to reconcile data between different systems or data sources to ensure consistency and completeness. Data reconciliation controls help identify discrepancies and discrepancies in data sets and facilitate data synchronization.
5. **Data Quality Assurance**: Establish data quality assurance procedures and metrics to monitor the quality and completeness of data within information systems continuously. Data quality assurance controls include data profiling, data cleansing, and data validation to maintain high data quality standards.

(c) **Five uses of password.**

1. Authentication
2. Identification
3. Authorization
4. Access Control
5. Retrieval

SOLUTION THREE

(a) **Items a good computer security policy may contain**

1. Defining "reasonable expectations" of privacy regarding such issues as monitoring people's activities
2. Defining access rights and privileges and protecting assets from losses, disclosures or damages
3. Defining responsibilities of all users
4. Establishing trust through an effective password policy
5. Specifying recovery procedures
6. Requiring violations to be recorded
7. Providing users with support information

(b) **Facilities of editing and spell and grammar checking for the word processing software:**

1. **Editing facilities**

   Word processors allow the text in a document to be amended, or edited, without having to re-type the whole document. E.g. individual words or sentences can be deleted; individual words replaced or new words and sentences added.

   Editing facilities make document production efficient because existing documents can be amended rather than retyped. Quality documents will be produced because amendments can be made to improve it and making it more presentable and understandable for the recipient.

2. **Spell and Grammar checking**

   A spell-check checks the work in a document against an electronic dictionary and brings potentially misspelt words to the attention of the user. Similarly, a grammar check brings examples of poor grammar to the attention of the user. The user can then decide whether to amend the spelling or grammar in a document before it is sent to the intended recipient.

   The provision of spell and grammar checking makes document production efficient because the computer can check documents much faster than any human proof-reader.

SOLUTION FOUR

(a) Basic skills involved in using the internet

1. **Web Browsing**: Employees should be proficient in using web browsers to access and navigate websites, search engines, and online databases relevant to wildlife conservation. Familiarity with browser features such as bookmarks, tabs, and search functions facilitate efficient information retrieval.
2. **Online Research**: Employees should be able to conduct online research to gather information, resources, and best practices related to wildlife conservation. This includes using search engines effectively, evaluating the credibility and reliability of online sources, and citing sources appropriately.
3. **Email Communication**: Proficiency in using email for communication and collaboration is essential for exchanging information, coordinating activities, and networking with paPrtners and stakeholders. Employees should know how to compose, send, receive, and manage emails securely and professionally.
4. **File Sharing and Collaboration**: Knowledge of online file sharing and collaboration tools enables employees to share documents, reports, and multimedia files with colleagues and partners remotely. Familiarity with cloud storage platforms, document sharing applications, and version control ensures efficient collaboration and document management.
5. **Social Media Management**: Understanding of social media platforms and their role in communication, outreach, and awareness-raising is beneficial for promoting ZWC's conservation initiatives and engaging with the public. Employees should know how to create, manage, and share content on social media platforms effectively.
6. **Online Security Awareness**: Awareness of online security threats and best practices helps employees protect sensitive information, prevent unauthorized access, and safeguard against cyber threats. This includes recognizing phishing attempts, using strong passwords, and adhering to security policies and guidelines.
7. **Data Privacy Compliance**: Knowledge of data privacy regulations and compliance requirements ensures that employees handle and share conservation-related data responsibly and ethically. Employees should understand the importance of data privacy and take measures to protect personal and sensitive information online.
8. **Continuous Learning**: Given the dynamic nature of the internet and online tools, employees should demonstrate a willingness to learn and adapt to new technologies, platforms, and digital trends relevant to wildlife conservation. Continuous learning enhances digital literacy and empowers employees to leverage online resources effectively in their conservation work.

(b) **Differences between RAM and ROM**

RAM – Random Access Memory

- Memory that is directly available to the processing unit
- Holds the data and programs in current use
- Data can be written onto or read from

- It needs electricity to flow and retain information
- Cost effective but slower access & lower storage capacity
- Its volatile, when the computer power is switched off, contents of the memory are erased

ROM – Read Only Memory

- Data is written permanently to the memory
- New data can’t be written into the memory or changed
- It’s used only for reading
- It’s non-volatile memory, contents of the memory are erased when power for the computer is switched off
- Bootstrap program is always held in ROM

SOLUTION FIVE

(a)

(i) Dear Sir/Madam – Used when you do not know the name or sex of the person to whom you are writing.

(ii) REF – Used when you are responding to a letter you received

(iii) Yours faithfully – When salutation used was Dear sir, Dear madam or Dear Sir/Madam

(iv) Yours sincerely – When salutation was 'Dear Mr/Miss/Ms/Mrs Banda' or similar

(v) pp – Used when you are signing on behalf of another person

(b)

(i) Introduction – Reason for writing the letter or some background information

(ii) Conclusion- States the writer's hopes or suggests what action should be taken either by the writer or the reader

(c) Advantages of a letter over oral communication:

- Keeps a permanent record
- Gives chance to the sender to critically analyse the message before sending
- Gives chance to the receiver to analyse the message before responding
- It is authoritative

SOLUTION SIX

(a) Advantages of emails for internal communication

- Messages can be sent and received very fast
- Messages can be sent any whereat the same time
- A hard copy message can easily be printed
- Complex messages can be attached to email covering message.
- It is cheaper to send an email compared to a local telephone.
- One message can easily be sent to multiple recipients at the same time.

(b) Email

To: Maxchanda@ gmail.com

Cc:

Bcc:

Subject: Delayed Minutes and request to postpone the meeting

This serves to inform you about the delayed minutes of the previous meeting that was held on (date). This delay is due to a very busy schedule of activities such that there was not enough time to complete the document. Committee members are equally very busy with an in-house workshop that is going on now.

However, I wish to assure you that the minutes will be ready in the next three days.

Therefore, I am requesting for the meeting to be postponed to next week to enable members to complete certain tasks as there is an overran of activities and also minutes are not yet ready.

Your consideration in this matter will be highly appreciated.

Regards

Linda Kabu

(c) Duties of a chairperson:

- To ensure that correct proceedings are followed
- To encourage members to participate during the meeting
- To sign approved minutes
- To prepare an agenda and notice for a meeting in liaison with the secretary.
- To help in the contribution made by other members.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.1 : FINANCIAL REPORTING

MONDAY 9 SEPTEMBER 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

(a) An investor Controls an investee when the investor is exposed to, or has rights to, variable returns from its involvement with the investee and has the the ability to use its power over the investee to affect the amount of the investor's returns. Control is presumed to exist when the parent owns greater than (>) 50% of the voting power.

Required:

Besides the greater than 50% rule, what other factors may entitle the investor to have Control over an investee Company? (5 marks)

(b) Zangy holds investments in two entities namely Wana Plc and Nkisu Plc. The three (3) entities' financial statements for the year ended 31 March 2024 are given below:

	Zingy Plc.	Wana Plc.	Nkisu Plc.
Non-current assets:	K'000	K'000	K'000
Property, plant and equipment	82,500	42,500	37,500
Investments	18,000	-	-
	100,500	42,500	37,500
Current assets:			
Inventories	16,500	15,000	14,000
Trade receivables	21,500	15,000	15,500
Cash and cash equivalents	5,500	5,000	4,500
Total current assets	43,500	35,000	34,000
Total assets	144,000	77,500	71,500
Equity and liabilities:			
Equity shares of K1 each	35,000	25,000	25,000
Share premium	20,000	-	-
Retained earnings	27,500	22,000	14,000
	82,500	47,000	39,000
Noncurrent liabilities:			
Loan notes	25,000	12,500	11,000
Deferred tax	19,500	6,000	8,500
Total noncurrent liabilities	44,500	18,500	19,500
Current liabilities:			
Trade and other payables	12,500	8,500	10,000
Current tax payable	4,500	3,500	3,000
Total current liabilities	17,000	12,000	13,000
Total equity and liabilities	144,000	77,500	71,500

The following information is relevant:

(1) On 1 April 2023, Zangy Plc acquired 15 million of the ordinary share capital of Wana for K8 million cash and a share exchange of three (3) shares in Zangy Plc for every two (2) shares acquired in Wana Plc. Only the cash consideration has been recorded by Zingy Plc.

On the date of acquisition, the retained earnings of Wana Plc were K17.5 million; while the market price of Zangy and Wana's shares were K4 and K2.4 respectively.

(2) At the date of acquisition, the fair values of Wana Plc's net assets were equal to their carrying amount with the exception of:

- Non depreciable land with the carrying amount of K25 million that had a fair value of K30 million.
- Plant with the carrying amount of K10 million and a fair value that exceeded the carrying amount by K4 million. The remaining economic life of the plant on 1 April 2023 was two (2) years. Straight line depreciation is used.

(3) Zingy Plc also purchased 10 million shares in Nkisu Plc on 1 April 2022 for a cash payment of K6 million, when the retained earnings of Nkisu Plc were K7.5 million.

(4) At 1 April, 2023, no provision had been recognized by Wana Plc for its mine which requires decommissioning in April 2028. The present value of the decommissioning costs is K3 million and will be paid in five (5) years' time, which is the end of the mine's life. Wana's Plc cost of capital is 8%.

(5) The inventories of Wana Plc and Nkisu Plc include goods bought from Zangy for K12 million and K10 million respectively. Zingy Plc supplied the goods at cost plus markup of 25% to both companies.

(6) The trade receivables of Zingy Plc include K3 million receivable from Wana Plc and K1.5 million receivables from Nkisu Plc. The trade payables of Wana Plc and Nkisu Plc include the equivalent amounts payable to Zingy Plc.

(7) The remainder of investments in Zingy Plc is a 10% investment in an unrelated entity carried at fair value through profit or loss. The fair value of the investment at 31 March 2024 was K6.8 million.

(8) It is group policy to measure non-controlling interest at fair value at the date of acquisition and Wana Plc's share price at that date can be deemed to be representative of the fair value of the shares held by the non-Controlling interest.

(9) An impairment test conducted on 31 March 2024 revealed that goodwill on acquisition of Wana Plc was impaired by K0.8 million and investment in Nkisu Plc was impaired by K0.4 million.

Required:

Prepare the Consolidated statement of financial position of Zangy group for the year ended 31 March 2024. (35 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt ANY THREE questions.

QUESTION TWO

The following is the trial balance of Zicamunobe Plc for the year ended 31 December 2024.

	K'000	K'000
Revenue		1,820
Cost of sales	500	
Distribution costs	420	
Administrative costs	480	
Finance cost	108	
Dividends paid	90	
Trade receivables	88	
Trade payables		184
Bank	168	
Inventory	192	
Deferred tax asset as at 1 January 2024	156	
Current tax	65	
Property at valuation (Land K312,000)	1,032	
Plant and equipment at cost	600	
Investment property	320	
Investment income		32
Accumulated depreciation:		
Plant and equipment		216
Equity shares K0.8		240
Share premium		408
Retained earnings		419
20% Bank loan		900
	4,219	4,219

The following information is relevant:

(1) On 31 December 2024, Zicamunobe Plc made a bonus issue of 200,000 equity shares. This has not been recorded in the books of Zicamunobe Plc.

(2) The current tax figure in the trial balance represents an under/over provision of income tax for the previous year. The directors have estimated income tax for the year to 31 December 2024 to be K98,000. Total net deductible temporary differences at 31 December 2024, before taking into account effects of revaluation in (v) below, amounted to K400,000. The deferred tax to report in other comprehensive income relating to the valuation of property in (v) below amounted to K3,000. The income tax rate applicable to Zicamunobe Plc is 35%.

(3) Zicamunobe Plc acquired an item of plant on a four (4)-year lease term on 31 December 2024. The plant has an economic useful life of ten years. Both the Right of use asset (ROUA) and lease liability (obligation) at that date was K180,000. The interest rate implicit in the lease agreement was 10%. Zicamunobe Plc is required to pay annual lease rentals

of K56,780 in arrears. The lease has not yet been recorded in the books of Zicamunobe Plc.

(4) Finance cost relates to interest paid on a 20% bank loan. Zicamunobe Plc obtained the loan on 1 April 2024.

(5) Property was revalued by professional valuers for the second time on 31 December 2024 to K1,056,000 of which K332,000 relates to land. The previous valuation was done on 31 December 2023 which resulted in a deficit of K12,000. The deficit was charged to administrative cost. The effects of the latest valuation have not been reflected in the books of Zicamunobe Plc.

(6) Buildings are depreciated on straight line basis with nil scrap value. The building had a remaining useful life of 20 years at 31 December 2023. Plant and equipment on the other hand are depreciated at 20% per annum using reducing balance method.
Depreciation of buildings is charged to administrative costs while that of plant and equipment and leased plant is charged to cost of sales.

(7) Investment property in the trial balance is based on its fair value of K340,000 at 31 December 2023. Zicamunobe uses IAS 40 Investment Property fair value model to account for investment properties.

Required:

(a) Prepare the statement of profit or loss and other comprehensive income for Zicamunobe Plc for the year ended 31 December 2024. (8 marks)

(b) Prepare the statement of changes in equity for Zicamunobe Plc for the year ended 31 December 2024. (4 marks)

(c) Prepare the statement of financial position for Zicamunobe Plc for the year ended 31 December 2024. (8 marks)

[**Total: 20 Marks]**

QUESTION THREE

Chibeza Limited is a manufacturing entity based on the Copperbelt Province of Zambia.

The Directors of Chibeza Limited (Chibeza) require advice on the accounting treatment of a number of transactions in finalising the preparation of financial statements for the year to 31 December 2024. They have asked you to advise on the accounting treatment of the following transactions:

The Directors entered into a lease contract to rent a multi floor building from Kapunda Limited (Kapunda) commencing 1 January 2024 for a term of four (4) years. A refundable deposit of K2 million was paid by Chibeza to Kapunda on 1 January 2024. This deposit will be repaid by Kapunda to Chibeza at end of the lease term. A market return of 8% per annum would arise if this amount was invested by Chibeza over the 4 years.

The lease contract obliges Chibeza to pay an annual rent of K3 million for the first two (2) years and K2.5 million thereafter. All rentals are due at the beginning of each year of the lease (ie 1 January). The interest rate implicit in the lease is 10%.

Chizeba immediately incorporated fittings into the building at a cost of K5 million on 1 January 2024 putting the property in a useable state. The lease agreement requires that these fittings must be removed so that the property is returned to Kapunda in its original state. Chibeza has estimated the cost of removing these fittings at the end of the lease term at K0.5 million (the fittings will have a nil residual value). Chibeza's cost of capital is 12%.

Required:

(a) Briefly explain the accounting requirements for lessors in accordance with IFRS 16 Leases. (6 marks)

(b) Advise the directors of Chibeza Limited on the accounting treatment of the transactions in the scenario above, showing amounts that must be reported in the company's financial statements for the year ended 31 December 2024. (14 marks)

[Total: 20 Marks]

QUESTION FOUR

You work for a consultancy firm, Fraluca, that provides advice to would-be investors in limited liability companies. Confidence in the operational efficiency and effectiveness of each company is established by calculating and interpreting the following ratios:

1. Gross profit margin
2. Operating profit margin
3. Quick (Acid test) ratio
4. Inventory days
5. Receivables collection period
6. Payables Payment Period

A potential investor seeks your advice as to which company to invest in between NPZ and CMZ, both being suppliers of mining equipment. The following are their financial statements for the year ended 30 September 2023:

STATEMENTS OF FINANCIAL POSITION AS AT 30 SEPTEMBER:

	NPZ	**CMZ**
	2023	2023
	K'000	K'000
Non-Current Assets:		
Land and Buildings	500	300
Motor Vehicle	80	35
Plant and Machinery	325	185
	905	520
Current Assets:		
Inventories	105	100
Trade Receivables	445	375
Cash and Cash equivalents	230	170
	780	645
	1,685	1,165
Equity:		
K1.00 Ordinary shares	500	300
Revaluation reserve	240	150
Retained Earnings	305	130
	1,045	580
Non-Current Liabilities:		
12% Loan Notes	280	200

Deferred Tax	30	10
	310	210
Current Liabilities:		
Trade Payables	240	290
Current Tax	90	85
	330	375
	1,685	1,165

STATEMENTS OF PROFIT OR LOSS AND OTHER COMPRHENSIVE INCOME FOR THE YEAR ENDED 30 SEPTEMBER 2023

	NPZ	**CMZ**
	K'000	K'000
Revenue	2,830	1,605
Cost of sales	(540)	(480)
Gross profit	2,290	1,125
Administrative expenses	(420)	(135)
Distribution costs	(270)	(102)
Other operating expenses	(165)	(118)
Operating profit	1,435	770
Finance costs	(120)	(40)
Investment income	40	10
Profit before tax	1,355	740
Income tax expense	(145)	(105)
Profit after tax	1,210	635
OTHER COMPREHENSIVE INCOME		
Revaluation surplus	105669	(30)
Total Comprehensive Income	1,315	605

Required:

(a) Calculate the ratios stated in 1 to 6 above for both companies. (12 marks)

(b) Comment on the performance of each company in terms of profitability, liquidity and efficiency of operations (8 marks)

[Total: 20 Marks]

QUESTION FIVE

Twashuka Ltd assembles bicycles from bought-in-components and distributes them to various wholesalers and retailers mainly on credit. The following transactions for Twashuka Ltd require your advice when preparing financial statements for the year ended 31 March 2024:

Transaction one

Twashuka Ltd factored trade receivables on 1 April 2023 to the value of K20 million with Reality Finance Company (RFC). RFC paid Twashuka Ltd K18 million upfront through Twashuka Ltd's bank account. The difference of K2 million was prudently charged as an administration expense by Twashuka Ltd. The terms of the sale are that Twashuka Ltd will have to refund RFC any amounts relating to trade receivables that remain uncollected by RFC after six months. Twashuka Ltd will also be charged interest of 3% per annum of the net amount owing from the entity.

At 31 March 2024, RFC had not received any amount from Twashuka Ltd's customers and Twashuka Ltd de-recognized the receivables in their books at 31 March 2024. (7 marks)

Transaction two

To improve public perception of its products, Twashuka Co embarked on a research and development project. The project was aimed at improving the production process of its bicycles. The research stage began on 1 April 2023. Twashuka Co evenly spent K350,000 per month evenly from 1 April 2023 to 30 June 2023 when immediately the development stage commenced. Twashuka Co spent K550,000 per month to develop the process that was completed on 31 December 2023.

Twashuka Ltd was unsure of the outcome of the project until 31 August 2023 following a successful testing.

The new method was launched on 1 February 2024 and is expected to be in use for five (5) years from then.

Twashuka Ltd had capitalized all costs incurred in the year to 31 March 2024 with no amortization charged. (7 marks)

Transaction three

In the accounting year to 31 March 2024, Twashuka Ltd made an operating profit before tax of K400 million. Income tax charge for the year has been estimated at K60 million but an under provision of tax amounting to K15 million was recorded for the year ended 31 March 2023. Non-current assets were revalued for the first time at 31 March 2024 leading to a revaluation surplus of K120 million. Twashuka Ltd's policy is to recognize deferred tax on revaluation surplus and the applicable tax rate for the company is 25%.

Twashuka has recognized the K60 million only as income tax expense for the year ended 31 March 2024. (6 marks)

Required:

Explain the appropriateness of the accounting treatment applied by Twashuka Ltd to each of the above transactions, clearly stressing the required accounting treatment.

[Total: 20 Marks]

END OF PAPER

CA 2.1: FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) The following factors shall entail investor has control over investee besides the 'greater than 50% voting power':

When the parent has the:

- Right to appoint, re-assign or remove key management personnel who can direct the relevant activities.
- Rights to appoint or remove another entity that directs the relevant activities.
- Rights to direct the investee to enter into, or veto changes to transactions for the benefit of the investor
- Other rights such as those specified in management control.
- Rights to cast a majority of votes at meetings of the board of directors.
- Power over > 50% voting rights by agreement with other investors.

(b) Zangy group consolidated statement of financial position as at 31 March 2024.

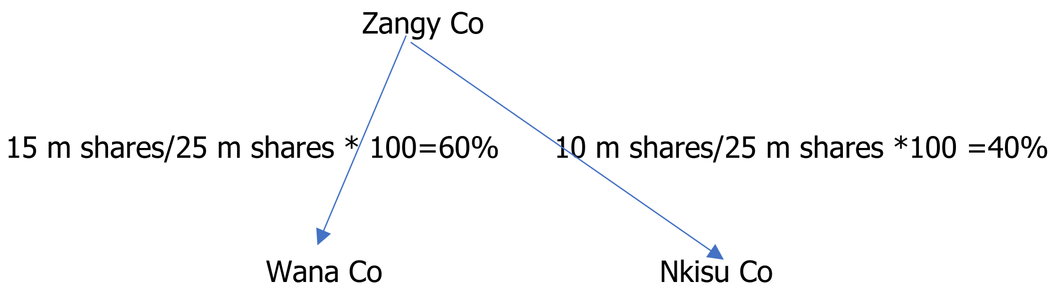
Non-current assets:	**K'000**
Goodwill (W2)	69,700
Property, plant and equipment (82,500+42,500+5,000+2,000+2,400)W3	134,400
Financial asset (W6)	6,800
Carrying amount of investment in Nkisu Co	7,400
Total non-current assets	218,300
Current assets:	
Inventory (16,500+15,000-2,400 W5)	29,100
Trade receivables (21,500+15,000-3,000 W5)	33,500
Cash and cash equivalents (5,500+5,000)	10,500
Total current assets	73,100
Total assets	291,400
Equity and liabilities:	
Equity shares of K1 each (35,000+22,500 W9)	57,500
Share premium (20,000+67,500 W9)	87,500
Retained earnings W4	29,816
	174,816
Non-controlling interest (W8)	24,344
Total equity	199,160
Non-current liabilities:	
Loan notes (25,000+12,500)	37,500
Deferred tax (19,500+6000)	25,500
Environmental provision	3,240
Total non-current liabilities	66,240

Current liabilities:

Trade and other payables (12,500+8,500-3,000 W5)	18,000
Current tax payable (4,500+3,500)	8,000
Total current liabilities	26,000
Total equity and liabilities	291,400

WORKINGS (ALL AMOUNTS IN K'000)

1. Group structure



2. Goodwill on acquisition on Wana Co

	K'000
Purchase consideration:	
Cash	8,000
Share exchange (15,000/2 shs*3 shs*K4)	90,000
Non-controlling interest at acquisition(10,000 shs*K2.4)	24,000
	122,000
Less fair value of net assets at acquisition (W3)	(51,500)
Gross goodwill	70,500
Less impairment loss	(800)
Net goodwill	69,700

3. Net assets of Wana Co

Item	At acquisition	At reporting	Movement
	K'000	K'000	K'000
Share capital	25,000	25,000	-
Retained earnings	17,500	22,000	4,500
Fair value adjustments:			
Land	5,000	5,000	-
Plant	4,000	2,000	*(2,000)
Environmental Provision	(3,000)	(3,240)	** (240)
Mine	3,000	2,400	***(600)
	51,500	53,160	1,660

*Depreciation of fair value plant = 4,000/2 years=2,000 pa

**unwinding of provision for decommissioning costs =8%* 3,000 = 240 pa

*** Mine decommissioning cost depreciation=3,000/5 yrs=600 pa.

4. Group retained earnings.

	K'000
Zangy Co	27,500
PUP on sales to Wana Co (W5)	(2,400)
PUP on sales to Nkisu Co (W5)	(800)
Fair value gain of financial asset (W6)	2,800
Zangy's share of Wana Co (60%*1,660) W3	996
Zangy's share of Nkisu PARE (40%*(14,000-7,500) W7	2,600
Zangy's share of impairment loss of Goodwill (60%*800)	(480)
Impairment loss of investment in Nkisu	(400)
	29,816

ALTERNATIVE WORKING:

Group retained earnings:

	Zangy Co	Wana Co	Nkisu Co
Per question	27,500	22,000	14,000
Less pre-acquisition retained earnings		(17,500)	(7,500)
			6,500
PUP - Wana	(2,400)		
PUP - Nkisu	(800)		
Unwinding of discount -provision for decommissioning		(240)	
Fair value depreciation(2,000+600)		(2,600)	
		1,660	
Fair value gain of financial asset	2,800		
Zangy's share of Wana(60%*1,660)	996		
Zangy's share of Nkisu (40%*(14,000-7,500))	2,600		
Zangy's share of impairment loss of goodwill	(480)		
Impairment loss of investment in Associate	(400)		
	29,816		

5. PUP on sale of goods

Zangy to Wana= 25/125*12,000=2,400

Dr group retained earnings 2,400

Cr group inventory 2,400

Zangy to Nkisu = 40%*(25/125*10,000)

Dr group retained earnings 800

Cr CA of investment in Nkisu 800

6. Other investments/Financial asset investment:

	K'000
Total value of investments of Zangy	18,000
Less: cash consideration on purchase of Wana Co	(8,000)
Less: consideration on purchase of Nkisu Co	(6,000)
Equals: fair value of 10% investment in other entity	4,000
Fair value gain	2,800
Fair value at reporting date	6,800

7. Carrying amount of investment in Nkisu Co

	K'000
Cost of investment	6,000
Zangy's share of Nkisu Co Post acq. Ret earnings (40%*6,500)	2,600
PUP on intra group sales	(800)
Impairment loss of investment in Nkisu Co	(400)
	7,400

8. NCI at reporting date:

	K'000
NCI at aquisition	24,000
NCI share of Wana Co Post acq ret earnings(40%*1,660)	664
NCI share of impairment loss of goodwill	(320)
	24,344

9. Share exchange values

Number of shares issued as purchase consideration =(15,000/2 shs*3 shs)=22,500 shares.

To equity share capital (22,500 * K1) = 22,500

To share premium (22,500 shares * K4) =67,500

SOLUTION TWO

(a) **Zicamunobe Plc**

SOPL and OCI for the ended 31 December 2024

	K'000
Revenue	1,820.00
Cost of sales **W4**	(576.80)
Gross profit	1,243.2.00
Investment income	32.00
Other income (340 - 320)	20.00
Distribution cost	(420.00)
Administrative cost **W4**	(504.00)
Finance cost 20% x 900 x 9/12	(135.00)
Profit before tax	236.20
Income tax **W5**	(179.00)
Profit for the period	57.20
Other comprehensive income:	
Revaluation gain 48**W1** – 3	45.00
Total comprehensive income	102.20

(b) **Statement of changes in equity for the year ended 31st December 2024**

	Ordinary shares	Revaluation surplus	Share premium	Retained Earnings	Total
	K'000	K'000	K'000	K'000	K'000
Bal. 1st Jan	240		408	419	1,067
TCI		45		57.2	102.2
Dividends				(90)	(90)
Bonus issue	160		(160)		0
Total	**400**	**45**	**248**	**386.2**	**1,079.20**

(c) **Statement of financial position as at 31st December 2024**

Assets	**K000**	**K000**
Non-current assets		
Property, plant and equipment W2	1, 363.20	
Right of use asset (ROUA) W2	180.00	
Investment property	340.00	
Deferred tax (140 w5 - 3)	137.00	2, 020.20

Current assets		
Inventory	192.00	
Trade receivables	88.00	
Bank	168.00	448.00
Total assets		**2,468.20**
Equity and Liabilities		
Equity		
Ordinary shares	400.00	
Share premium	248.00	
Revaluation surplus	45.00	
Retained earnings	386.20	
		1,079.20
Non-current Liabilities		
Lease obligations W 3	141.22	
Loan	900.00	
		1, 041.22
Current liabilities		
Trade payables	184.00	
Lease obligations W 3 (56.78 -18)	38.78	
Accrued interest (135 -108)	27.00	
Taxation	98.00	
		347.78
Total equity and liabilities		**2,468.20**

WORKINGS FOR SOLUTION TWO

W1 Revaluation of property

	Building	**Land**
	K'000	**K000**
Valuation at 31 December 2023	720.00	312
Depreciation (K720,000/20yrs)	(36.00)	-
Carrying value at 31 December 2024	684.00	312
Revaluation surplus (bal. fig)	40.00	20
Valuation at 31 December 2024	724.00	332
Total revaluation surplus (40+20)	60.00	
Transferred to administrative cost		12
Transferred to other comprehensive income		48

W2 Property, plant and equipment

	K'000	**K'000**
Property		
At valuation		1,056.00

Plant and equipment

At cost	600.00	
Depreciation:		
Balance b/f	216.00	
Charge for the year 20% x (600 - 216)	76.80	
Balance c/f	292.80	307.20
		1, 363.20
ROU		
At fair value	180.00	
Depreciation charge	-	180.00
Total		**1,543.20**

W3 lease obligations

	K'000
Fair value of asset at inception of lease	180.00
Interest @ 10%	18.00
Rental	(56.78)
Obligation after next 12 months	**141.22**

W4 Cost of sales & admin. Costs	**COS**	**Admin**
	K'000	**K'000**
As per trial Balance	500.00	480.00
Depreciation:		
Buildings W1		36.00
Plant and equipment W2	76.80	
Reversal of revaluation surplus		(12.00)
	576.80	**504**

W5 Taxation

	K'000	
Deferred tax asset:		
At 31 December 2023	156.00	
At 31 December 2024 35% x 400	(140.00)	
Decrease in deferred tax asset	16.00	
Current tax	98.00	
Under provision	65.00	
Charge to the SPL		**179.00**

SOLUTION THREE

(a) IFRS 16 requires lessors to account for leases in accordance to the nature of the lease, that is, whether finance or operating lease.

A finance lease is one that transfers substantially all economic benefits and risks relating to ownership of the asset from the lessor to the lessee. In determining whether the lease transfers substantially all economic benefits and risks relating to ownership of the asset to the lessee, the commercial substance of the contract must be considered. Any lease that is not a finance lease must be an operating lease.

Finance Lessors must derecognise assets leased out under finance leases and instead recognise an investment in the finance lease. The investment in finance lease is initially measured at the initial investment in the lease which includes all the cash flows incurred to avail the asset to the lessee. Subsequently, the investment in the finance lease is measured at amortised cost using the interest rate implicit in the lease. Finance income is reported in profit and loss statement.

Operating lessors must continue to account for ownership of the asset under lease as per applicable accounting standard, for example IAS 16 Property, plant and equipment. The total minimum lease payments (MLPs) receivable must be recognised as income in the profit and loss statement over the lease term on a straight line basis.

(b) There are a few components to account for in the scenario as follows:

- Lease liabilities under IFRS 16.
- Financial asset (receivable) in respect of the refundable deposit under IFRS 9.
- Right of Use Asset (ROUA) arising from the lease under IFRS 16.
- Fittings to capitalise and include in PPE under IAS 16.
- Decommissioning provision to recognise under IAS 37 and capitalise as part of the cost of the fittings under IAS 16.

These components will be accounted for as follows:

1. **Lease liabilities:**

   Initially recognise at inception of the lease, ie 1.1.2024, and measure at the PV of the lessee's MLPs. Subsequently measure at amortised cost with the finance costs reported in PL. The following amounts would be involved:

Initial lease liability

Date	Future cash flow		PV
	K'000	DF @ 10%	K'000
1.1.2025	3000	0.909	2,727
1.1.2026	2500	0.826	2,065
1.1.2027	2500	0.751	1,878
Initial lease liability at 1.1.2024			6,670

Lease liability at 31.12.2024 and finance costs for y/e 31.12.2024

	K'000
Initial liability at 1.1.2024	6,670
Finance cost to charge in PL for y/e 31.12.2024	
10%*6672	667
Carrying amount at 31.12.2024	7,337
Current liability portion	667
Non-current liability portion	6,670

2. **Financial asset (receivable) in respect of the refundable deposit.**

   The refundable deposit is a financial asset under IFRS 9 (a right to receive cash). Financial assets are initially measured at fair value (in this case PV of amount receivable in future). This is a debt instrument asset with predetermined contractual cash flows and so must subsequently be measured at amortised cost using the original effective interest rate. Amounts involved up to 31 December 2024 are as follows:

Initial receivable in respect of refundable deposit at 1.1.2024

	K'000
Amount paid as refundable deposit on 1.1.2024	2,000
Financial asset recognised at 1.1.2024 in respect of deposit 2000*1.08^-4	1,470
Loss on initial recognition of receivable to capitalise as part of ROUA	530

Financial asset in respect of deposit as at 31.12.2024

	K'000
Initial amount at 1.1.2024	1,470
Finance income to report in PL for y/e 31.12.2024	
8%*1470	118
Carrying amount of asset at 31.12.2024	1,588

3. **ROUA**

   The initial amount of the ROUA is the aggregate of amounts of cash incurred at inception of the lease, the initial lease liability and any provision for decommissioning the asset under lease. In this case the decommissioning provision has been treated as relating to the fittings as opposed to the asset under lease (see below).

   Subsequently, the ROUA is amortised over the shorter of the lease term and the useful life of the asset.

   Amounts to report in respect of the ROUA up to 31 December 2024 are as follows:

ROUA		K'000
Cash amounts incurred at 1.1.2024		
Advance rental paid on 1.1.2024		3,000
loss on deposit paid		530
initial lease liability		6,672
Initial Carrying amount of ROUA at 1.1.2024		10,202
Amortisation charge - y/e 31.12.2024	10,202/4	(2,550)
Carrying amount of ROUA at 31.12.2024		7,651

4. **Fittings incorporated into the building**

   These must be recognised and measured in accordance with IAS 16. Initially, measure the fittings at cost including the decommissioning provision. Subsequently, depreciate over the useful life, in this case, the lease term.

   Amounts to report in respect of the fittings up to 31 December 2024 are as follows:

Fittings and fixtures to include in PPE		
Purchase/ fitting cost		5,000
Decommissioning provision for removal of fittings	$500*1.12^{-4}$	318
Initial cost of fittings		5,318
depreciation to charge in PL for y/e 31.12.2024		(1,329)
Carrying amount of the fittings in PPE at 31.12.2024		3,988

5. **Decommissioning provision**

   IAS 37 requires that an entity must recognise a provision where an obligation exists as a result of a past event or transaction. In this case, the obligation arises at the time (1.1.2024) the fittings are incorporated. Further, the provision is capitalised where it arises from acquisition of an asset. This appears to apply in this case. The provision must initially be measured at its present value in accordance with IAS 37. The subsequent changes including the unwinding of the discount is reported in profit or loss.

   Amounts to report in respect of the provision up to 31 December 2024 are as follows:

Provision for decommissioning the fittings		
Initial provision liability		318
Unwinding of discount to charge in PL for y/e 31.12.2024	12%*318	38
Provision to report in SFP at 31.12.2024		356

SOLUTION FOUR

(a) **Computation of the ratios** **NPZ** **CMZ**

		NPZ	CMZ
Gross Profit % age	=	Gross Profit x 100 / Sales	
	=	2,290 x 100 / 2,830	1,125 x 100 / 1,605
		80.9%	**70.1%**
Operating Profit % age	=	1,435 x 100 / 2,830	770 x 100 / 1,605
		50.71%	**47.98%**
Quick Ratio	=	CA - Inventory : Current Liabilities	
		780 -105 : 330	645 -100 : 375
		675 : 330	545 : 375
		2.04 : 1	**1.45 : 1**
Inventory Days	=	Average Inventory x 365 / Cost of Sales	
	=	105 x 365 / 540	100 x 365 / 480
		70.97 days	**76.04 days**
Receivables Collection Days	=	Receivables x 365 / Credit Sales	
	=	445 x 365 / 2,830	375 x 365 / 1,605
		57.39 days	**85.28 days**
Payables Payment Days	=	Payables x 365 / Credit Purchases	
	=	240 x 365 / 540	290 x 365 / 480
		162 days	**220 days**

(b) COMMENT ON PERFORMANCE OF EACH COMPANY USING COMPUTED RATIOS

Based on the calculated ratios, both companies appear to be making huge profits, possibly because the technology of the product (mining equipment) is new and in its growth stage. The company can afford to charge premium prices. However, NPZ is incurring more operating expenses compared to CMZ, as can be seen in the reduction to operating profit margins.

NPZ have a better liquidity because their credit control ensures that they collect from customers within 2 months (57.39 days) of credit sales. For this reason, they can also manage to pay suppliers within 3 months (162 days). On the other hand, CMZ have liquidity problems; no wonder CMZ, takes longer to pay suppliers because they do not collect their dues from customers in the shortest period.

It is difficult to recommend which entity is attractive to investors based on the ratios that have been calculated. There would be need for more information to be given to provide insight into the attractiveness of the entities to investors.

SOLUTION FIVE

Transaction one

The accounting treatment applied by Twashuka Co is inappropriate.

The qualitative characteristics of faithful representation requires transactions to be recorded based on their substance and not form. In this factoring transaction, as Twashuka Co still bears the risk of all irrecoverable debts, the substance of factoring is that it's a loan secured on the company's receivables of K20 million. The de-recognition of receivables from Twashuka Co's records was incorrect and they need to be re-instated by the following entries:

Dr receivables	K20 million	
Cr loan		K18 million
Cr administrative expense		K2 million

Additionally, the finance cost on the uncollected balance needs to be recognized as the transaction in substance is a loan as follows:

Dr finance cost	K540,000	
Cr accrual (loan)		K540,000

Transaction two

The accounting treatment applied by Twashuka Co is inappropriate. IAS 38 Intangible assets requires research costs to be expensed in the period they are incurred because at research stage, it is difficult to ascertain the probability of economic benefits flowing to the entity as a result of research activities.

The total research costs of K1.05 million (K350,000*3 months) should be expensed in the statement of profit or loss for the year ended 31 March 2024.

Development expenditure totaling K1.1 million (K550,000 * 2 months) should be expensed in the profit and loss for the year ended 31 March 2024. This is because it arose before the conditions for capitalizing were satisfied.

Development expenditure totaling K2.2 million (K550,000*4 months) to be capitalized as it arose after the IAS 38 conditions for capitalizing were satisfied. The capitalized development expenditure would need to be amortized for two months, the period within which developed asset was put to use. The amortization charge for the year to 31 March 2024 would be K0.73 million (K2.2 million/5 years *2/12). The carrying amount of deferred development expenditure on 31 March 2024 would be K2.127 (K2.2 million-K0.073 million).

Transaction three

The accounting treatment of income tax by Twashuka Co is incorrect. According to IAS 12 Income Taxes, the estimate of tax on the profits for the year is the initial basis for the annual charge but it gets adjusted for any over or under provision of tax in the previous year and movement on deferred tax.

Therefore, the under provision of K15 million in the previous year increases the estimate of tax for the year ending 31 March 2024 and movement in deferred tax of K30 million (25%* K120 million increases the annual charge as well to a total of K105 million (K60 million +K30 million+K15 million). However, the increase in deferred tax relates to other comprehensive income and must therefore be presented in Other comprehensive income against revaluation gain.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

DRAFT FIVE

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)

According to Goldsmith and Samson (2004), sustainability is a long-term programme involving a series of sustainable development practices, aimed at improving organisational efficiency, stakeholder support and market edge.

Required:

(a) Explain the role of management accounting in meeting the needs of stakeholders, particularly about sustainability. (6 marks)

(b) Explain three (3) ways in which sustainability may impact an organisation. (6 marks)

Yamikani Manufacturing Ltd (YML Ltd) produces three products A1, B2 and C3. YML Ltd currently uses absorption costing. The selling prices are set using a full cost-plus approach. It is company policy to add a 20% profit mark-up in the setting up of selling prices. All three products use the same materials and type of labour. The Management feels that costings and hence selling price are less accurate. Therefore, management has directed that activity-based costing (ABC) be used instead of absorption costing.

The following information is made available:

Budget

Product	**A1**	**B2**	**C3**
Production and sales volumes (units)	30,000	24,000	33,000
Direct costs:	K/unit	K/unit	K/unit
Materials	37.50	42.00	33.00
Labour	45.00	54.00	36.00

Overheads:	**Total cost (K)**
General Facility	541,500
Materials orders	474,000
Machine set-up costs	420,000
Maintenance costs	630,000

Additional information:

Activity	**Cost driver**
General Facility	Number of machine hours
Materials orders	Number of purchase orders
Machine set-up costs	Number of batches
Maintenance costs	Number of labour hours

Product	A1	B2	C3
Number of machine hours per unit	1.0	0.8	1.1
Batch sizes (units)	750	1,200	600
Number of purchase orders per batch	4	5	4
Number of labour hours per unit	2.5	3.0	2.0

Required:

(c) Explain three (3) disadvantages of using absorption costing. (6 marks)

(d) Calculate the budgeted full production cost per unit of each product using activity-based costing. (16 marks)

(e) Calculate the selling price for each product. (6 marks)

[Total: 40 Marks]

SECTION B

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

QUESTION TWO

Kumbo Tea Estates (KTE) is a Zambian company that establishes, grows and manages tea plantations. The company has established about 700 hectares of tea plantations that have matured and are productive. These existing tea plantations yield about 3,100Kg of green leaf per hectare (Ha) per year. Green leaf is the main materials used in the production of tea (made tea). KTE's existing factory was installed and commissioned in 1990 and is now old. However, following some extensive repairs and modification, the factory is able to produce tea at an outturn of 20%. Therefore, from a 1kg of green leaf, 0.2kg of made tea is produced. The current cost structure of KTE is provided below:

	K
Green leaf cost	2,100,000
Production cost	1,800,000
Variable production cost	657,000
Total direct cost	**4,557,000**
Support costs (Fixed)	3,000,000

The above cost structure was in line with the 31 December 2023 management accounts produced by the Finance department of the company. During the year 2023, KTE sold all the made tea at a price of K20 per Kg. The made tea was sold as bulk tea packed in 50kg sacks.
The Finance department of KTE has just completed the 2024 budget preparation and included in their assumptions are among others;

1. Implementation of good agriculture practices which will result in higher yields of green leaf per hectare in the year 2024;
2. Implementation of modern production techniques and efficient work flow which will increase the outturn of made tea to 22%;
3. Maintain the current price of made tea; and
4. Increase direct costs by 12% and other costs by 50%.

Required:

(a) Calculate the total profit for the year 2023. (5 marks)

(b) Calculate the minimum amount of green leaf that the company should harvest in the year 2024 and the yield per hectare. (8 marks)

(c) Explain the importance of determining the minimum amount of green leaf in (b) above. (3 marks)

(d) Calculate the total profit for the year 2024 if the planned yield per hectare is estimated at 3,900 Kg of green leaf per year. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Fonex Ltd (F Ltd) is a medium sized company which manufactures and sales juice called Fruitex. The environment in the juice industry is very competitive as there are many new drinks being introduced on the market. This has been worsened by the economic environment where factors, such as unemployment, exchange rates, and inflation have shown a rising trend.

In order to remain competitive on the market, Fonex Ltd has been considering a number of factors such as increasing the advertising budget for the coming year, enhancing the past sales records and enhancing market research into consumer behavior, preferences and market trends.

The principal budget factor for Fonex Ltd is the sales volume. The sales budget is therefore the primary budget from which the majority of the other budgets are derived. Before the sales budget for the year 2024 can be prepared, the Managing Director at Fonex has guided that a sales forecast must be made, which should take into account the factors pointed out above.

For the year 2024, Fonex Ltd wishes to use the actual results for 2023 as the basis for the preparation of the 2024 budget. The summarized statement of profit or loss results for the year 2023 was as follows:

	K’000	**K’000**
Sales revenue (1,000,000 bottles)		10,000
Less Cost of sales:		
Direct materials	2,000	
Direct labour	1,600	
Production overheads	1,000	
		4,600
Gross profit		5,400
Fixed administration and selling expenses		3,400
Profit		2,000

The following information has been provided for 2024:

(i) Fonex Ltd has estimated to sell 1 200 000 bottles of Fruitex in 2024.

(ii) In order to achieve the 1 200 000 sales volume, Fonex Ltd plans to reduce the sales price per bottle by 10%.

(iii) Direct material and direct labour cost per unit will increase by 10%.

(iv) Arising from market research, a special taste additive costing K0.54 per bottle will be added to complete production.

(v) Production overheads are absorbed at K1 per bottle and it is estimated that production will be equal to sales.

(vi) Fixed administration and selling expenses are expected to increase by 8%.

Required:

(a) Explain why the following factors should be taken into account in forecasting sales by Fonex Ltd:

(i) Competition
(ii) Economic environment
(iii) Increased advertising
(iv) Past Sales trends and patterns
(v) Market research

(10 Marks)

(b) Calculate the budgeted production cost per bottle of Fruitex for the year 2024. (4 marks)

(c) Prepare the budgeted statement of profit or loss for the year 2024 (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Carnivore Hotel Ltd (CHL) runs a chain of hotels in Africa and Asia. It has a hotel in Lusaka which is known as CHL (Lusaka) and is rated as a five-star hotel in the hospitality industry. CHL (Lusaka) offers accommodation, restaurant and conference facilities. The hotel management is worried about the performance of the restaurant. There is currently a debate as to whether to continue this area of business. However, the business consultant has predicted that there will be a slump in demand for accommodation next year due to unpredictable factor conditions. As a management accountant, you have collected the following information that includes costs, proposed sales and demand for each service.

Cost information:	**Accommodation**	**Restaurant**	**Conference**
	(K per client)	(K per client)	(K per client)
Materials (linen, food, stationery)	280	120	600
Labour	200	60	350
Variable overheads	60	50	240
Fixed overheads	120	40	150
Sales information:			
Sales price	K850	K350	K2,500
Sales ratio	3	5	1
Demand information:			
Projected number of clients	6,000	13,500	1,500
Other information:			
Labour hours per service	1	3	2
Total labour hours available for the year: 22,250 hours.			

Required:

(a) Prepare the optimum service (production) plan including the projected profit for CHL assuming that labour hours are the ONLY limiting factor. (8 marks)

If the CHL management decides to drop the restaurant service, it is expected that the maximum number of customers and labour hours will be 8,000 and 9,000 respectively.

Required:

(b) Formulate the problem using linear programming.
- (i) Define the variable (1 marks)
- (ii) Establish the constraints (4 marks)
- (iii) Construct the objective function (1 marks)

(c) Calculate the optimal mix of accommodation and conference clients which would enable CHL to maximize its contribution and the resulting total contribution. (6 marks)

(N.*B. You may use the graphical approach or the mathematical approach to solve the* problem.)

[Total: 20 Marks]

QUESTION FIVE

Deluxe Ltd manufactures tomato source from raw tomatoes, which the company sources from subsistence farmers in Lusaka Province. As part of the strategy and budgetary planning for the year 2024, the company did a review of the performance of the year 2023. From the performance review, it was observed that:

1. the inventory control for its raw materials was weak leading to the company incurring high holding costs.
2. the company's decision making process has in the past concentrated more on quantifiable factors in terms of relevant costs or benefits, with less or little attention being paid to the non-quantifiable factors. The head of strategy in the company emphasized to the managers in the company to pay attention to the non-quantifiable factors in decision making as these factors might influence the eventual decisions made.
3. the previous performance operating reports have been prepared using the standard absorption costing system and not using standard marginal costing system and hence one of the Budget Committee members wanted to know if there would be any difference in the way variances are calculated.

In order to have a proper understanding of the functions of a system of budgeting, one of the newly recruited managers in charge of the Human Resources Department, asked the Budget Committee Secretary (the management accountant) to share some notes on the functions of a budgeting system.

Required:

(a) Explain the overall objective of inventory control and any three (3) types of the holding costs. (4 marks)

(b) Explain how the following non-quantifiable factors would influence decision making: customers, competitors, political pressures and legal constraints. (4 marks)

(c) Explain the differences in the way variances are calculated, if an organisation uses standard marginal costing instead of standard absorption costing. (4 marks)

(d) Explain any four (4) functions of a system of budgeting. (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.2: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) The role of management accounting

Management accounting systems provide information specifically for the use of managers within an organisation.

As business environments become increasingly dynamic and competitive, it is increasingly important for managers to develop coherent business strategies and to have tools and processes in place which provide relevant and reliable information to support decision making, planning and control.

Management accounting helps to direct and support the performance of employees and departments within an organisation so that they work as efficiently and effectively as possible. Management accounting is also a way of trying to ensure that individual goals are aligned with the organisation's overall goals and business strategy.

Management accounting is essentially a set of management processes that enable organisations to define and execute their strategies and to measure and analyse performance to inform decision-making. The central premise of management accounting is to improve an organisation's performance.

Management accountants need to play a role in ensuring that sustainability aims are recognised, objectives are set and performance is measured. The information provided by the management accountant will help support decision making.

Sustainability involves developing strategies that balance environmental, economic and social needs.

The eventual aim is that the organisation only uses resources at a rate that allows them to be replenished, and that emissions of waste are at a level the environment can absorb.

(b) Impact of sustainability

Sustainability may impact an organisation in several ways. These include:

(i) Quality – By attempting to reduce waste and rework, an organisation may also improve the efficiency of its production process and improve the quality of its output.

(ii) Process and product design – Improvements in operational efficiency should be designed into the production process. Products should be designed to minimise the number of resources needed to produce them. Where waste is created, it should be recycled where possible.

(iii) Supply chain – An organisation implementing sustainability will look to purchase materials from sustainable sources, and select suppliers that share its objectives and, if possible, are located the minimum possible distance away from it.

(c) Disadvantages of absorption costing

There are a few disadvantages of absorption costing:

(i) Unit costs that include fixed overheads, which is the case with absorption costing, are less useful for decision making. Decision making (such as whether to make a product or to buy it from an external supplier) normally requires clear visibility of the cost of producing a unit of a product, but fixed costs are not directly related to the production of a unit of a product.

(ii) Profit can be manipulated by increasing production, the higher levels of inventory that result will contain an element of fixed overhead. Deferring the recognition of fixed overhead can help to manipulate profits in the short-term.

(iii) There is no rigorous attempt to understand why fixed overheads are being incurred. This is a particular problem when fixed overheads are a high percent of total costs.

(d) Cost per client using ABC

Product	A1	B2	C3
	K/unit	K/unit	K/unit
Direct materials	37.50	42.00	33.00
Direct labour	45.00	54.00	36.00
Production overheads [w(vi)]	26.60	23.03	21.66
Total cost per unit	109.10	119.03	90.66

Workings

(i) Rates

Product	Cost pool	Total cost driver	Rate
	K		
General Facility	541,500	85,500 machine hours	K6.33/machine hour
Materials orders	474,000	380 purchase orders	K1,247.37 / order
Machine set-up costs	420,000	90 batches	K4,666.67/batch
Maintenance costs	630,000	213,000 labour hours	K2.96/labour hour

(ii) Number of machine hours

	Hours
A1: 1hr/unit x 30,000 units	30,000
B2: 0.8hr/unit x 24,000 units	19,200
C3: 1.1hr/unit x 33,000 units	36,300
Total	85,500

(iii) Number of batches

Product	Production volume (units)	Batch size (units)	Number of batches
A1	30,000	750	40
B2	24,000	1,200	20
C3	33,000	1,100	30
Total			90

(iv) Number of purchase orders

Product	Number of batches	Orders per Batch	Number of orders
A1	40	4	160

B2	20	5	100
C3	30	4	120
Total			380

(v) Number of labour hours

Product	Number of units	Labour hours per unit	Number of Labour hours
A1	30,000	2.5	75,000
B2	24,000	3	72,000
C3	33,000	2	66,000
Total			213,000

(vi) Overheads apportionment

	A1	B2	C3
	K	K	K
General Facility (6.33 x 30,000/19,200/36,300)	189,900	121,536	229,779
Materials orders (1,247.37 x 160/100/120)	199,579	124,737	149,684
Machine set-up costs (4,666.67 x 40/20/30)	186,667	93,333	140,000
Maintenance costs (2.96 x 75,000/72,000/66,000)	222,000	213,120	195,360
Total cost	798,146	552,726	714,823
Number of units	30,000	24,000	33,000
Overhead cost per unit	26.60	23.03	21.66

(e) Selling prices

Product	A1	B2	C3
	K/unit	K/unit	K/unit
Total cost per unit	109.10	119.03	90.66
Mark -up profit (20%)	21.82	23.81	18.13
Selling price per unit	130.92	142.84	108.79

SOLUTION TWO

(a) Green leaf: 3,100kg x 700 Ha = 2,170,00kg

Made tea: 2,170,000 x 20% = 434,000kg

Price VAT exclusive: K23.2/1.16 = K20 per Kg

	K
Revenue (K20 x 434,000kg)	8,680,000
Variable costs	(4,557,000)
Contribution	4,123,000
Fixed costs	(3,000,000)
Profit	**1,123,000**

(b) Current variable cost K10.5 per Kg of made tea

Revised variable cost (K10.5 x 1.12) = K11.76 per kg of made tea

Contribution per Kg of made tea (K20 per Kg – K11.76 per Kg) = K8.24 per kg of made tea

Fixed costs (K3,000,000 x 1.5) = K4,500,000

Made tea to breakeven (K4,500,000/K8.24) = 546,116.5 Kg

Outturn of 22%, green leaf (546,116.5/0.22) = **2,482,347 Kg**

Yield per Ha (2,482,347/700) = **3,546.2 Kg per Ha**

(c) The minimum amount of green leaf that KTE should harvest is essentially the breakeven point. The determination of the breakeven point when budgeting is important as it sets the minimum level of activity that the company should operate at to recover its costs. A company that operates below its breakeven point would be making a loss while operating above the breakeven point would result in profit.

(d) Planned yield: 3,900 Kg

BEP yield: 3,546.2 Kg

Profit: (3,900 – 3,546.2) x 700 Ha x 22% x K8.24 = K448,958

SOLUTION THREE

(a) Why the following factors should be taken into consideration in forecasting sales by Fonex Ltd:

(i) **Competition** - Competition in the industry should be considered as it impacts on business sales either by reducing the likely sales volume, or by forcing sales price reductions, or it may force a company to additional sales effort or marketing expenditure to compete effectively. Companies that take into account the competitive environment tend to have more accurate sales forecasts.

(ii) **Economic environment** – the economic environment plays a huge role in terms of a company's prospects in a market. Many economic factors, such as unemployment, exchange rates, and inflation affect pricing and can influence the demand for a product or service. For example, high unemployment, high exchange rates, and high inflation causes consumers to have less spending power, which translates into lower sales and revenue. Companies that study these factors can usually predict consumer spending and plan their marketing efforts to improve performance.

(iii) **Increased advertising** – Advertising increases sales by telling potential customers about the product, telling current customers about improvements to the product, and any special offers available to them. In a competitive environment, the anticipated level of effort of advertising would help in forecasting accurate sales.

(iv) **Past sales trends and patterns** - By looking at past sales trends and patterns, the business can identify factors that may have contributed to sales growth or decline, such as seasonality, market trends, or changes in consumer behavior. This information can then be used to create more accurate sales forecasts that take these factors into account.

(v) **Market research** - Market research data plays a pivotal role in sales forecasting as it provides valuable insights into consumer behavior, preferences and market trends. By analyzing this data, businesses can identify potential market opportunities and tailor their sales strategies accordingly and hence come up with more accurate sales forecast.

(b) **Budgeted production cost per bottle of Fruitex**

	K
Direct materials (w1)	2.20
Direct labour (w2)	1.76
Taste additive	0.54
Production overheads	1.00
Production cost per unit	5.50

Workings

1. Direct materials = K2, 000, 000/1, 000, 000 bottles = K2.00 per bottle
   10% increase = K2.00 x 1.1 = K2.20

2. Direct labour = K1, 600, 000/1 000 000 bottles = K1.60 per bottle
   10% increase = K1.60 x 1,1 = **K1.76** per bottle

(c) **Budgeted income Statement for the year 2024**

	K'000	K'000
Sales revenue (1 200 000 x K9/bottle)		10, 800
Less Cost of sales		
Direct materials (1 200 000 x K2.2/bottle)	2, 640	
Direct labour (1 200 000 x K1.76/bottle)	2, 112	
Taste additive (1 200 000 x K0.54/bottle)	648	
Production overheads (1 200 000 x K1.00/bottle)	1, 200	
		6, 600
Gross profit		4, 200
Fixed administration and selling expenses (3 400 000 x 1.08)		3, 672
Profit		**528**

Workings

1. Selling price per bottle = K10, 000 000/1, 000, 000 bottles = K10.00 per bottle
   10% reduction = K10.00 x 90% = **K9.00**

SOLUTION FOUR

(a) Optimum service (production) plan

Service	Labour hrs/client	Number of clients	Labour hours required	Labour hours available
				22,250
Conference	2	1,500	3,000	19,250
Accommodation	1	6,000	6,000	13,250
Restaurant	3	4,416	13,250	0

Profit Statement

Service	Contribution per client (K)	Number of clients	Total contribution (K)	Rankings
Accommodation	310	6,000	1,860,000	2
Restaurant	120	4,416	529,920	3
Conference	1,310	1,500	1,965,000	1
			4,354,920	
Less Fixed costs			(1,485,000)	
Profit			2,869,920	

Working

Service	Accommodation	Restaurant	Conference
Contribution per service	310	120	1,310
Labour hour per service	1	3	2
Contribution per labour hour	310	40	655
Rank	2	3	1

(b) Formulating the problem

(i) Define the variables

Let x = number of accommodation clients

Let y = number of conference clients

(ii) Establish the constraints

Labour hours = $x + 2y \leq 9{,}000$

Sales demand = $4x + y \leq 8{,}000$

Non-negativity = $x \geq 0, y \geq 0$

(iii) Objective function

Maximum contribution : C = 310x + 1,310y

(c) **Solve simultaneous equations**

X+2y = 9,000…(1) x 4

4x+y = 8,000….(2) x – 1

4x+8y = 36,000

-4x-y = -8,000

0 -7y = 28,000

Y= 28,000/7 = 4,000

X= (8,000 -4,000)/4
X = 1,000

- Accomodation clients (X) = **1,000**
- Conference clients (Y) = **4,000**

Maximum contribution

C = 310x + 1,310y

Total contribution = K310 x 1,000 + K1,310 x 4,000

= **K5,550,000**

SOLUTION FIVE

(a) The overall objective of inventory control is to maintain inventory levels so that the total of the following costs - holding costs, ordering costs, and stock out costs is minimized.

If inventories are too high, holding costs will be incurred unnecessarily. The types of holding costs are:

- *Costs of storage and stores operations*. Larger inventories require more storage space and possibly extra staff and equipment to control and handle them.
- *Interest charges*. Holding inventories involves the tying up of capital (cash) on which interest must be paid.
- *Insurance costs*. The larger the value of inventories held, the greater insurance premiums are likely to be.
- *Risk of obsolescence.* The longer an inventory item is held, the greater the risk of obsolescence.
- *Deterioration.* When materials in store deteriorate to the extent that they are unusable, they must be thrown away with the likelihood that disposal costs would be incurred.

(b) How non-quantifiable factors might influence the eventual decisions:

1. *Customers* – any decisions about new products or product closures, the quality of output or after-sales service will inevitably affect customer loyalty and customer demand. It is also important to remember that a decision involving one product may have repercussions on customer attitudes towards a range of products.
2. *Competitors* - In a competitive market, some decisions may stimulate a response from rival companies. For example, the decision to reduce selling prices in order to raise demand may not be successful if all competitors take similar action.
3. *Legal constraints* - a decision might occasionally be rejected not that it is not financially viable, but because of doubts about the legality of the proposed action.
4. *Political pressures* - Some large companies may suffer political pressures applied by the government to influence their investment or disinvestment decisions.

(c) If an organisation uses standard marginal costing instead of standard absorption costing, there will be two differences in the way the variances are calculated as follows:

1. The *sales volume variance* for a marginal costing system will be valued at standard contribution margin (i.e. sales price per unit minus variable costs of sale per unit), not standard profit margin.
2. In *marginal* costing, fixed costs are not absorbed into product costs and so there are no fixed cost variances to explain any under or over absorption of overheads. There will, therefore, be no *fixed overhead volume variance*. There will be a fixed overhead expenditure variance which is calculated in exactly the same way as for absorption costing systems.

(d) The functions of a system of budgeting are as follows:

1. To ensure the achievement of the organisation's objectives - quantified expressions of objectives are drawn up as targets to be achieved within the timescale of the budget plan.
2. To compel planning -planning forces management to look into the future, to set out detailed plans for achieving the targets for each responsibility area and to anticipate problems and seek solutions to the anticipated problems.
3. To communicate ideas and plans - a system of budgeting acts as a formal system of communication by ensuring that each person affected by the organisation plans is aware of what he or she is supposed to be doing. This communication might be one-way, with managers giving orders to subordinates, or there might be a two-way dialogue.
4. To co-ordinate activities – a system of budgeting ensures that activities of different departments are coordinated to ensure maximum integration of effort towards common goals. This implies that what one department does should be aligned to the activities of other departments. For example, that the purchasing department should base its budget on production requirements and that the production budget should in turn be based on sales expectations.
5. To provide a framework for responsibility accounting - budgets require that managers of budget centres are made responsible for the achievement of budget targets for the operations under their personal control.
6. To establish a system of control - control over actual performance is provided by the comparisons of actual results against the budget plan. Departures from budget can then be investigated and the reasons for the departures can be divided into controllable and uncontrollable factors.
7. To motivate employees to improve their performance – a system of budgeting ensures that the interest and commitment of employees can be retained by letting them know how well or badly they are performing. The identification of controllable reasons for departures from budget with managers responsible provides an incentive for improving future performance.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

TUESDAY 12 SEPTEMBER 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 – COMPULSORY</u>

You are the Audit Senior on the audit of the financial statements of Luangwa Plc for the year ended 31 December 2023. The audit is in the final stage and you are performing the statement of financial position audit procedures.

The following figures relating to motor vehicles were extracted from the figure of property, plant and equipment in the statement of financial position:

	K'000
Balance b/f at cost 01/01/2023	20,000
Additions during the year	5,000
Disposals	(3,000)
Closing balance at cost	22,000
Depreciation b/f	7,000
Charge for the year	1,500
Depreciation related to disposals	(2,300)
Closing depreciation balance	6,200
Net book balance 31 December 2023	K15,800

The disposal relates to a vehicle that was sold for K810,000 resulting in a profit on disposal of K110,000 credited to profit or loss. Luangwa Plc. maintains an asset register of its tangible non-current assets.

The following events took place after the year end:

1. One (1) of the motor vehicles included in the year-end figures above was involved in an accident on 12 February 2024 before signing of the audit report. The vehicle was not comprehensively insured and was extensively damaged.

2. It was discovered on 12 January 2024 that there was an error in the computation of the depreciation charge for the year which should have been K700 000 more than the charge in the above figures.

3. A court case against the company by the Environmental Council was decided upon on 24 February 2024 and the amount was only disclosed as a contingent liability in the financial statements. Legal action against the company commenced in December 2023.

4. The audit report was signed on 21 February 2024.

The summary of uncorrected misstatements shows that there was an amount of K2.1 million in uncorrected misstatements. You requested management to correct the financial statements on account of this amount and management made a correction of K0.9 million leaving a total of K1.2 million as uncorrected. The materiality figure set at the planning stage of the audit was K1.5 million.

Included in the documents containing the financial statements of Luangwa Plc is the Report of the directors which shows a growth of 9% in profitability against the 3% growth according to the audited financial statements.

Required:

(a) Describe five (5) substantive audit procedures on the disposal of the motor vehicle in the statement of financial position of Luangwa Plc. stating the financial statement assertions being tested. (10 marks)

(b) (i) Describe the other information contained in the financial statements of Luangwa Plc. (2 marks)

(ii) Describe the substantive audit procedures and action that should be performed on the audit of other information in the documents containing financial statements of Luangwa Plc. (4 marks)

(c) Evaluate events 1 to 3 in the scenario and suggest suitable action by the audit team where necessary. (6 marks)

(d) (i) Suggest, with justification, a suitable opinion based on sufficient appropriate evidence having been obtained considering the uncorrected misstatements. (8 marks)

(ii) Suggest, with justification, suitable opinions assuming there was a limitation of scope in obtaining audit evidence regarding the uncorrected misstatements. (4 marks)

(iii) Draft extracts of the opinion paragraphs for the suggested opinions in (i) and (ii) above. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

You are an Audit Manager in Chushi & Associates and you are responsible for client acceptance. The firm is a two (2) partner firm and currently specializes in the audit of trading companies. The Managing Partner brought to your attention an advertisement by a construction company, Road Contractors Ltd, inviting reputable firms of auditors to bid for the offer of audit services.

The period end of Road Contractors Ltd is 31 December and the majority of your firm's clients have 31 December as their year-end. Most of the audit staff are assigned to more than one (1) audit in order to meet the tight deadlines by the clients. The Managing Partner assured you that pressure of work should not raise much concern because he is in discussions with Maria the current Finance Manager of Road Contractors Ltd who has expressed interest in joining the firm as Audit Senior and she could easily lead a team to conduct the audit of Road Contractors Ltd. The Managing Partner held discussions with the Chief Executive Officer of Road Contractors Ltd whom he personally knows having previously worked with him for the same company. He was assured that the company will award the contract for the offer of audit services to your firm.

Road Contractors Ltd currently has two (2) major road construction projects both of which have three (3) more years before completion. In view of liquidity challenges arising from payments being received based on work certified, the company suggested that the audit fee should be based on work certified annually. Road Contractors Ltd uses the services of external engineering consultants to certify work and to determine the revenue to be recognized. Furthermore, the Chief Executive Officer requested that Chushi & Associates to help in getting a replacement for Maria who has since resigned from the position of Finance Manager.

Required:

(a) Explain five (5) ethical matters in the audit of the financial statements of Road Contractors Ltd and for each matter suggest a suitable safeguard. (10 marks)

(b) (i) Explain your response in accepting appointment if risk is assessed as high during the discussions with management of Road Contractors Ltd. (4 marks)

(ii) Explain the matters that should be considered by your firm before bidding for the offer of audit services to Road Contractors Ltd. (6 marks)

[Total: 20 Marks]

QUESTION THREE

Lukanga Plc is a manufacture of school desks and the company has grown over the last three (3) because of increased demand for school desks in the country. The turnover has increased from K2.5 million per year three (3) years ago to K50 million currently. The manufacturing of desks is carried out in Lusaka where the head office is located and the company has sales outlets in each of the provinces of Zambia. The company uses a standard costing system and values its inventory at standard cost.

Due to the growth in the company, purchasing and stores departments have been established. The stores department is under the supervision of a Stores Manager. The department is responsible for the custody of raw materials, components used in production and finished products. The provincial outlets place orders of their needs of desks and these are transferred depending on availability. The purchasing department under the supervision of the Purchasing Manager is responsible for the procurement of raw materials and components. Deliveries of raw materials and components are made directly to the stores department.

Bwalya & Associates have been auditors of Lukanga Plc from the time the company was established ten (10) years ago. The company obtained a stock exchange listing two (2) years ago and there have been changes in the management of the company since then. At a recent board of directors meeting it was resolved that the auditors of Lukanga Plc should provide actuarial services to the company in addition to conducting the audit of the financial statements.

You are the Audit Manager for the audit of the financial statements of Lukanga Plc for the year ended 31 March 2024. In reviewing the audit working papers, you noted a high incidence of written representations having been obtained by the audit team to support other evidence obtained. There was a decrease in the amount of accounting estimates made by management during the year. During the year under audit, Lukanga Plc had business dealings with a subsidiary company from whom it buys raw materials and there was a significant amount owing to the subsidiary at the period end. The related party relationship was discovered during the process of conducting audit procedures by the audit team. Management of Lukanga Plc did not make any disclosure of related parties and related party transactions,

Required:

(a) Explain four (4) areas in the audit of the financial statements of Lukanga Plc Ltd where professional skepticism should have been applied. (4 marks)

(b) Evaluate and justify the need to change the contents of the engagement letter with Lukanga Plc. (4 marks)

(c) (i) Suggest four (4) control activities in the purchasing system of Lukanga Furniture Plc. (4 marks)

(ii) For each control activity suggested in (i) above, explain the control objective. (4 marks)

(iii) For each of the control activities in (i) above, describe a suitable test of control. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Crocodile Plc. is an audit client of your firm of Chartered Accountants. The company was recently listed on Lusaka Securities Exchange. As per listing requirements, the company constituted a Board of Directors comprising seven (7) members. Five (5) of the board members are executive members holding senior positions in the company. The remaining two (2) are independent Non-Executive Board members none of whom is an accountant. Chris is the Board Chairperson and Chief Executive of Crocodile Plc positions he has held from inception of the company. The company set up an Audit Committee in conformity to the listing requirements. The Audit

Committee comprises John the Finance Manager who is Chair of the Committee, one (1) Non-Executive Director and one (1) Executive Director.

Crocodile Plc. is a manufacturer of domestic electronic appliances which it supplies to leading retail shops. The company gives a one (1) year warranty on all equipment supplied. The condition of the warranty is that the company will repair any defective equipment and if not repairable it will replace the equipment. Annually, at the end of the accounting period a warranty provision is recognized in the financial statements. Crocodile Plc sells the electronic equipment to the retail outlets on consignment basis and is paid only when the equipment is sold to customers by the shops. Technology in electronic appliances changes very fast and it is common for the company to recall any inventory considered obsolete. At the end of the financial year, the company holds significant quantities of finished goods at its main warehouse and the various retail outlets.

The company has an internal audit department whose main role is to evaluate and test the effectiveness of the internal control activities of Crocodile Plc. The most recent internal audit report highlighted serious internal control deficiencies. An analysis of the revenue for the past one (1) year shows a significant decline in revenue. This resulted in the company relying on short term overdraft facilities with the bank and the facility is due for re-negotiation before the end of the audit. Suspension of the facility is likely to have a serious negative impact on the company so much that it may fail to meet its obligations to the suppliers. During the current year, a performance based payment system was implemented for the management of Crocodile Plc.

You have been assigned to the audit of the financial statements of Crocodile Plc for the year ended 31 March 2024 as Audit Senior. You have been provided with the draft financial statements for the year and included in long term liabilities is an amount of K250 million representing a secured loan that the company obtained from its bankers.

Required:

(a) Explain four (4) audit risks that must be considered at the planning stage of the audit of the financial statements of Crocodile Plc for the year ended 31 December 2023 and for each risk suggest a suitable response. (8 marks)

(b) (i) Explain the relationship between financial statement assertions and the substantive audit procedures that should be performed in the audit of the financial statements of Crocodile Plc. (4 marks)

(ii) Explain four (4) substantive audit procedures that should be performed in the audit of inventory in the financial statements of Crocodile Plc. (4 marks)

(iii) Explain four (4) audit procedures that should be performed in the audit of the loan in the financial statements of Crocodile Plc. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

You work for Rose & Co, a firm of chartered accountants that was established two (2) years ago. The firm has steadily grown from having five (5) clients in the first year to nine (9) clients currently. The main area of concentration for the firm is in the trading industry targeting small and medium size trading companies.

Bronze Ltd is a manufacturing company that was established one (1) year ago and is looking for its first auditors. It is a partnership owned by three (3) partners two (2) of whom do not take part in the running of the company. The companies recently put to tender the offer of audit services and among other services required is that the auditors should conduct the statutory audit and assist in the finalization of the preparation of the final accounts for the year ended 31 December 2023.

You are responsible for client acceptance in Rose & Co. and the firm decided to bid for the offer of audit services to Bronze Ltd. All the Audit Seniors in your firm have clients whose year-end is 31 December and they are busy during this time. You have a short list of applicants for the position of Audit Seniors whom you can call and offer employment at short notice. You are considering employing John, the son of one (1) of the owners of Bronze Ltd. John is currently responsible for the financial records of Bronze Ltd. You plan to assign John on the audit of the financial statements of Bronze Ltd if your firm is appointed auditor of Bronze Ltd.

In response to the tender that you submitted, Rose & Co has been nominated to be auditor of Bronze Ltd. The fee quoted in the bid was favorable to the company as it was half the fee proposed by the other two (2) firms that bid for the offer of audit services. Bronze Ltd will contribute 25% of the total fee income of Rose & Co.

Required:

(a) Explain the concept of audit and assurance using the information in the scenario. (4 marks)

(b) Explain three (3) matters that should be considered before accepting appointment as auditor of Bronze Ltd. (6 marks)

(c) Explain five (5) ethical matters in the audit of the financial statements of Bronze Ltd and suggest suitable safeguards that should be applied. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.3: AUDITING PRINCIPLES AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Audit procedures for disposals of motor vehicles:

	Audit procedure	FS Assertion
1	Examine the supporting documentation for the disposal to confirm that the sale was authorized.	Authorization.
2	Trace the sales proceeds of K1 700 to the cash book.	Completeness
3	Recalculate the computation of the profit on disposal of the motor vehicle.	Accuracy
4	Examine the asset register and confirm that the motor vehicle has been removed from the register.	Accuracy, completeness
5	Examine the change of ownership by examining the documents completed for the change.	Rights and obligations.

(b) Other information in the documents containing financial statements of Luangwa Plc:

(i) The other information in the audit of the financial statements of Luangwa Plc.:

The other information contained in the documents containing the financial statements of Luangwa Plc. is the Report of the Directors which shows a growth rate of 9% in profitability against a growth of 3% shown by the financial statements.

(ii) Audit procedures and action to have be taken:

1. Read the other information contained in the documents containing the financial statements for any inconsistences with the evidence obtained during the audit.
2. Identify any inconsistences that may exist between the other information and the financial statements and respond appropriately.

Inconsistency identified:

The inconsistence between the other information and the evidence from the financial statements appears material with the directors reporting a growth of 9% against a growth of 3% shown by the financial statements. The matter should have been discussed with management to establish which one requires correction.

If the other information is misstated, then the audit team should have requested management to correct the other information.

(c) Action to take for events 1-3

Event 1

The vehicle was extensively damaged and so cannot be used in the business. The vehicle existed at the period end and so will be correctly included in figure for property, plant and equipment which includes motor vehicles. This is an example of a non-adjusting event.

Event 2

This event took place before the audit report was signed. The error related to the financial statements for the current year under audit. The auditors should discuss this matter with management and request management to correct the financial statements. This should be accounted for as an adjusting event.

Event 3

The determination of the court case took place after the signing of the financial statements. This matter should be discussed with management and a request should be made to management for the financial statements to be corrected. If corrections are made, the auditors will require to perform audit procedures on the corrections and issue a new audit report.

This is an adjusting event which was incorrectly simply disclosed in the financial statements but a provision should have been made in the financial statements.

(d)

(i) Suggested audit opinion – sufficient appropriate audit evidence

The totaled uncorrected misstatements is material at an amount of K1.2 m against a materiality level of K1.5m used in the audit. Considering undetected misstatements it is likely that the total aggregate of uncorrected misstatements could exceed the materiality figure. For the purposes of the opinion the misstatement is considered material to the financial statements.

The suitable opinion in these circumstances is a modified audit opinion and the form of modification will depend on whether the misstatement is pervasive to the users of the financial statements. The following are the two possibilities in a situation where sufficient appropriate audit evidence has been obtained

Qualified opinion – If it is assumed that the misstatements are not pervasive to the users of the financial statements, then the suitable audit opinion is a qualified audit opinion.

Adverse opinion – if it is concluded that the misstatement is pervasive to the users of the financial statements then the opinion should be an adverse opinion stating that the financial statements do not show a true and fair view.

(ii) Suggested audit opinion – limitation of scope

The uncorrected misstatements are material considering the materiality level. Assuming that there was a limitation of scope in gathering evidence the following is the position regarding audit opinions:

If the matter is considered not to be pervasive to the users of financial statements a qualified opinion will be appropriate.

If on the other hand the matter is considered material, a disclaimer of opinion will be appropriate as an audit opinion.

(iii) Extracts of audit reports showing opinion paragraphs:

Qualified opinion

In our opinion, except for the effects of the matter described in the Basis for Qualified Opinion section of our report, the financial statements present fairly, in all material respects (or give a true and fair view of) the financial position of the company…

Basis for Qualified Opinion

A qualified audit opinion has been reached on account of the fact that even though the uncorrected misstatements are material, they do not impact decisions made by users of the financial statements.

If the assumption made is that the misstatement will adversely impact the decision of users of the financial statements, then the opinion will be a disclaimer as follows:

Adverse opinion

In our opinion, because of the significance of the matter discussed in the Basis for Adverse Opinion section of our report, the financial statements do not present fairly (or do not give a true and fair view.

Basis for Adverse Opinion

As explained in the notes to the financial statements the total of the uncorrected misstatements is significant to the financial statements and the effect impacts adversely on the financial statements.

Disclaimer of opinion

We do not express an opinion on the financial statements. Because of the significance of the matter described in the Basis for Disclaimer of Opinion section of our report, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

We were not able to obtain information regarding the uncorrected misstatements and could not determine whether adjustments were necessary.

SOLUTION TWO

(a) Ethical matters in the audit of the financial statements of Road Contractors Ltd:

	Ethical matter	Safeguard
1	Currently the firm specializes in the audit of trading companies. There is a risk that material misstatements may not be detected on account of lacking the necessary skills and competences in auditing clients in the road construction industry.	Consider the use of auditor experts and train staff in the audit of clients in this industry.
2	If discussions with Maria come to fruition and she joins the firm and assigned to the audit of Road Contractors Ltd this will result in self-review and familiarity threats.	Maria should not be assigned Audit Senior on this audit. Someone else with the necessary skills and competences should be engaged and assigned Audit Senior.
3	The Managing Partner and the CEO of Road Contractors Ltd previously worked for the same company. This poses a familiarity threat as the two appear to be close. The Managing Partner may be involved in the audit of Road Contractors Ltd and his objectivity will be impaired.	The Managing Partner should not play any role in the audit of the financial statements of Road Contractors Ltd.
4	The request made by the CEO of Road Construction Ltd that the firm should help in the recruitment of the Finance Manager for the company to replace Maria brings up a self-interest threat. Doing so will result in the loss of objectivity on the part of the audit team.	The firm should not be involved in making management decisions. This should not be accepted. The only thing the firm could do is to end at shortlisting of possible candidates and let management of Road Construction Ltd make the final selection.
5	The suggestion by management of Road Contractors Ltd that the audit fee should be based on work certified annually is a contingent fee arrangement. This could result in a self-interest on the part of the firm and if work certified is overstated, this will result in the firm receiving a higher fee. The objectivity of the audit team members will be affected by this.	The audit fees should not be based on a future event such as the work certified. The fee should be based on time spent and the level of staff involved in the audit.

(b)

(i) Response in accepting appointment if risk assessed as high:

Risk is assessed at the planning stage of the audit and if it is considered high and above acceptable levels, the only option available is to decline appointment. If on the other hand risk is considered high but not to the extent of declining the audit, the following can be done by the audit team:

- Reduce detection risk which is the only element under the control of the auditor by doing any of the following
- Assign more experienced staff to undertake the audit work.
- Closely supervise the work and emphasize to the audit team on the need and importance of observing professional skepticism during the audit.
- Have audit work done reviewed by someone who was not involved in the audit.

(ii) Matters to consider before accepting appointment:

1. There is need to consider whether the firm has the competences and skill required to undertake an audit of a road construction company considering that the firm specializes in the audit of trading companies.
2. Consideration should be made on the year-end of Road Contractors which is similar to the firm's other clients. It will be necessary to establish the reporting requirements of the company and consider whether the firm will be able to meet them.
3. Consider the need for more human resources considering that most of the firm's staff are already assigned to more than one audit.
4. Since Road Contractors Ltd is in an industry that the firm is not familiar with, there will be need to consider the use of an auditor expert is obtaining evidence about certain assertions in the financial statements.
5. The firm will need to consider integrity of the management of Road Contractors Ltd unless management is already known.

SOLUTION THREE

(a) Areas where professional skepticism should be applied:

1. The increase in the revenue figure from K2.5 million in previous years to K50 million currently is an area where professional skepticism should be applied. There is a risk that transfers of desks to the provincial outlets could be recognized as revenue when the stocks could still be held by the outlets.
2. The use of standard costing to value inventory is allowed by IAS 2. The audit team should apply professional skepticism when performing audit procedures on the standard costs used to ensure that only relevant costs are included otherwise inventory could be overstated which could result in an overstatement of inventory and the financial statements.
3. The use of professional skepticism should be applied in placing reliance on the written representations obtained to support evidence obtained during the audit.
4. Professional skepticism should be applied in performing audit procedures on the accounting estimates. There is a risk of management bias in determining accounting estimates.
5. The auditors should use professional skepticism with regards related parties and related party transactions. The fact that management did not disclose the related party relationship that exists may suggest the existence of other related parties not disclosed. During the cause of the audit the audit team should be alert for the existence of other related parties.

(b) Justification in changes in the engagement letter:

1. The fact that the company obtained a listing on the securities exchange justifies the need to change the terms of the engagement. Previously the company was a private company and the accounting requirements may have been different considering the new status of being a listed company.
2. The change in management of Lukanga Plc will necessitate changes in the engagement letter. This is in order to avoid any misunderstanding with the new management considering the fact that the initial engagement letters will have been issued when there was different management.
3. The change in the scope of work to be performed by the auditors from auditing the financial statements to including actuarial services necessitates a change in the contents of the engagement letter.

(c) Internal controls:

	(i) Control activities	(ii) Control objectives	(iii) Tests of control
1	Reorder levels at which point purchase initiated.	To avoid stock-outs by initiating purchase so that goods arise before stores run out.	For a sample of stores items confirm by inspection that re-order levels have been set.
2	Pre-numbered purchase requisition.	So that purchases are made on the strength of accountable documents and no	Inspect used and unused purchase requisitions and

		unauthorized purchase can be initiated and acted upon.	confirm that they are pre-numbered.
3	Authorization of purchase requisitions by the Stores Manager	So that no unauthorized purchases are initiated and acted upon.	For a sample of purchase requisitions raised inspect and confirm they are authorized by the Store Manager.
4	Authorization of purchase orders by the Purchase Manager.	To prevent unauthorized purchase and committing the company to unauthorized purchases.	For a sample of purchase orders raised in the past, examine and confirm that they were approved by the Purchasing Manager.
5	Purchases above K50 000 subject to tender committee approval.	To ensure purchases are made considering the authority given and that no purchase above limit without following tender procedure.	For a sample of purchases above K50 000 examine the supporting documents and confirm supposed by minutes of a dully convened tender committee.
6	Goods Received Notes numbered and raised for all goods received.	To ensure that the company will only pay for goods received. Further to ensure that no payment will be made based on a fake GRN	For a sample of purchases made in the past confirm that one of the supporting documents is a pre-numbered Goods Received Note.
7	Quality controls on receipt of goods and evidenced in writing.	To ensure the company does not receive defective or damaged goods.	For a sample of Goods Received Notes confirm goods were inspected by confirming that relevant part on the GRN for inspection is signed by the responsible person for quality control.
8	All payments for goods supported by relevant payment copies of the GRN, Purchase order and the original copy of the invoice.	To avoid duplicate or fraudulent payments using the same documents already used in another payment.	For a sample of paid amounts inspect the supporting documents and ensure they are the correct copies and photocopies used to support a payment.

SOLUTION FOUR

(a) Audit risks in the audit of the financial statements of Crocodile Plc.:

	Audit risk	Audit response
1	Crocodile Plc. is a public interest company whose shares are listed on a stock exchange. If the company does not comply with the listing rules there is a risk that it may be charged penalties and in the extreme case the shares could be delisted on the stock exchange. Provisions could be understated if penalties are charged.	The audit team should be skeptical throughout the audit and look out for any non-compliance with listing requirements.
2	Warranty provision – there is an audit risk that provision for warranty may be misstated, and this could result in the misstatement of financial statements.	Determine how management determines warranty provision and obtain the necessary written representations.
3	Performance based payments to management – there is an audit risk here in that management may misstate the financial statements with a view to meet the targets on which performance pay is based.	Be alert and look out for misstatements on any amounts requiring judgment such as warranty provisions. This is an area where management may wish to manipulate the financial statements.
4	Internal control weaknesses – a recent internal audit report highlighted serious internal control weaknesses. Such weaknesses could result in misstatements not being detected or prevented resulting in the financial statements being misstated.	The audit team could conduct tests of controls and if results suggest the existence of ineffective controls then a substantive approach to auditing should be used rather than a combined approached.
5	Poor liquidity of the company – The use of short-term bank facilities suggests serious liquidity problems for Crocodile Plc. This could result in the company failing to meet its debts as they fall due and could have going concern implications particularly in relation to the basis of preparing the financial statements.	The audit team should assess management's assessment of the company as a going concern. The audit team should look out for any evidence of the company having going concern problems and discuss these with management and ensure the correct basis of preparing the financial statements is used.

(b)

(i) **Relationship between financial statements assertions and audit procedures:**

Financial statement assertions are claims made by management concerning the figures contained in the financial statements. The main assertions on the figures are that the financial statements were prepared according to the applicable financial reporting framework and the relevant accounting standards.

In designing audit procedures, the auditors will consider the assertions in the figures. The audit procedures will be designed with a view to confirm the validity of the assertion. For example, by including an amount of plant & equipment in the figure for property, plant and equipment, management is claiming that the equipment existed at the period end. To test the assertion of existence, the auditors will inspect a sample of plant & equipment at the period end.

(ii) Audit procedures for inventory:

1. Plan to attend inventory count at areas where significant inventory is held.
2. Alternatively seek third party confirmation for inventory held by third parties.
3. Inquire from management of Crocodile Plc on the basis for valuing inventory and obtain the working for the valuation and recompute as necessary.
4. Review the standard costs used in inventory valuation and confirm that only relevant costs are included and the elements are comparable with current market prices.
5. Review the inventory count instructions issued for adequacy and reliability as a basis for the year-end inventory count.
6. Inquire from management on the valuation of work in progress at the period end and recalculate for arithmetical accuracy.

(iii) Audit procedure for the loan amount in the financial statements:

1. Confirm the in the cash book and on the bank statement that K20m was received.
2. For any loan payments made during the year, agree the cash outflow to the cash book and bank statements.
3. Review board minutes for approval of K20m loan borrowing.
4. Recalculate the loan interest using the agreed loan interest and agree interest in the financial statements.
5. Review bank correspondence to identify whether any late payment interest has been charged and agree these have been charged to profit or loss account as a finance charge.
6. Obtain direct confirmation at the year end from the bank of the outstanding balance and any security provided.
7. Agree confirmed amounts to the loan schedule and financial statements.
8. Agree closing balance of the loan to the trial balance and draft financial statements.
9. Confirm that the loan is disclosed as a current liability and non-current liability in the financial statements.

SOLUTION FIVE

(a) **Concept of audit and assurance:**

The concept of audit can be described as one where an assurance provider examines the financial statements of the responsible party and gives assurance to interested parties.

Using the information in the scenario the company is owned by three partners two of whom do not take part in the day to day running of the company. It is possible that the company may not be run in their best interest of the non-active partners.

The partners rely on the financial statements prepared but the problem is to determine how reliable they are. The only assurance that the partners can have is if the financial state nets are independently audited by external auditors who will give assurance. The external audit will enhance the credibility of the financial statements to the satisfaction of the non-active partners.

The assurance will be given by independent auditors who will perform audit procedures and come up with evidence that will give them a basis for the assurance to be given through the audit opinion.

(b) Matters to consider before accepting appointment as auditor of Bronze Ltd:

1. There is need to consider whether the firm has the resources required to conduct the audit. In terms of human resources most of the staff of Rose & Co are busy at the period end of Bronze Ltd. it will be necessary to take this matter into consideration before accepting appointment.
2. The firm has experience in the audit of trading companies. Kudu Ltd is in manufacturing, the firm should consider the availability of necessary skills to conduct an audit of a manufacturing company.
3. There is need to consider ethical matters that may exist and unless safeguards can be put in place, the firm may need to decline appointment.

(c) Ethical matters in the audit of the financial statements of Bronze Ltd:

	Ethical matter	**Safeguard**
1	Lack of experience in manufacturing industry by the audit team in view of the fact that the firm is experienced in the audit of trading companies. This could result in the lack of professional competence and skill required to conduct a quality audit.	The firm should consider training the staff and in some cases may consider to engage the services of an auditor expert.
2	The request by Bronze Ltd that the firm should assist in the finalization of the financial statements will give rise to self-review threat as well as self-interest threats if accepted.	The firm should decline the request to help prepare the financial statements. If it is accepted suitable safeguards such as using separate teams should be considered.
3	Consideration to employ John, the son of one of the owners of Bronze Ltd may give rise to self-review threat if he will be assigned on the audit of Bronze Ltd a company that he works for.	If employed by the firm, John should not be assigned to the audit of Bronze Ltd. The firm should employ someone else who has no previous connection with Bronze Ltd.

4	The quoted fee for the audit of Bronze Ltd is much lower than the current market prices and this is lowballing which could give rise to a self-interest. The firm may not conduct a quality audit in order not to perform the audit at a loss.	The firm should conduct the audit in accordance with auditing standards and use the same level of staff it would have used if it had charged economic fees.
5	The fact that the fee income that will come from Bronze Ltd will be 25% of the total fee income for the firm suggest that it will have a high % income from one client which will result in a self-interest threat that will impact the objectivity of the firm and audit team members.	If accepted, the firm should put safeguards such as requiring that the working papers for the audit of Bronze Ltd should reviewed by an independent partner who will not have been involved in the audit.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 12 SEPTEMBER 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 K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged above 5 years	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc	22,561	29,329	18,049	23,463
SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732

Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	Aged 2 to 5 years		**Aged above 5 years**	
Motor vehicles for the transport of goods - with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs				
GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,697	13,302	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	33,766	14,632	26,531	11,497
Panel Vans				
GVW not exceeding 1.0 tonne	13,353	5,786	7,630	3,061
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	13,907	10,662	6,413	4,916
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	15,453	11,847	7,726	5,923
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	9,272	7,108
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,462	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1.	**Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	30%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Cylinder capacity of 1500 cc and less	20%
	Cylinder Capacity of more than 1500 cc	30%
2.	**Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**	
	Customs Duty	
	Percentage of Value for Duty Purposes	15%
	Minimum specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
3.	**Buses/coaches for the transport of more than ten persons**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Seating Capacity of 16 persons and less	25%
	Seating Capacity of 16 persons and more	0%
4.	**Trucks/lorries with gross weight exceeding 20 tonnes**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

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

Elena and Selina are in partnership engaged in Construction and Civil Engineering. They share profits and losses in the ratio of 5:4 respectively after allowing for annual partnership salaries of K210,000 for Elena and K195,000 for Selina. The partnership accounts are prepared annually to 31 December.

On 1 May 2024, Melania was admitted to the partnership and with effect from that date, the partnership agreement was changed. Profits and losses were now to be shared in the ratio 5:4:1 amongst Elena, Selina and Melania respectively after allowing for annual partnership salaries of K264,000 for Elena, K228,000 for Selina and K198,000 for Melania.

For the previous tax year ended 31 December 2023, the partnership made a tax adjusted loss of K202,500. For the year ended 31 December 2024, the partnership made a net profit as per accounts of K735,200. This profit figure was after taking into account the following items:

(1) Salaries and wages which included partners' salaries of K595,000, employee's salaries of K1,866,000, employees' professional membership fees of K117,500, employer's NAPSA contributions of K43,300 and NAPSA penalties of K45,600. The figure for employee's salaries includes the annual salary of K168,000 for Luwi, Elena's daughter, who is employed in the business a Marketing Officer. Other Marketing officers employed in the partnership are entitled to annual salaries of K114,000 each.

(2) Legal and professional fees which included legal fees for the recovery of trade debts of K36,400, legal fees for renewal of lease of business premises amounting to K21,500, fees on partners' personal legal advice of K65,000 and partner's professional membership fees to the Institute of Engineering of K15,000.

(3) Gifts and entertainment expenses which included gifts of dairies to customers bearing the partnership's name (of K300 per customer) totalling K18,000, entertainment expenses for employees of K24,300 and entertainment expenses for partners amounting to K16,500.

(4) Bad debt expenses which included trade debts written of amounting to K32,300, loans to employees written of K26,500, trade debts previously written subsequently recovered of K10,500, decrease in general and specific provisions of bad debts of K12,300 and K8,500 respectively.

(5) Miscellaneous expenses which included stationery amounting to K18,700, office printers costing K65,000, toner cartridges for printers costing K23,400, marketing expenses of K43,200 and utility bills of K45,000. One third of the expenditure on utility bills relate to the partner's private residences.

Additional information

(1) The partners withdrew some goods from the business, for personal and family use. The total cost of the goods withdrawn was K29,750 which the partners reimbursed and included within sales revenue in the statement of profit or loss. The partnership makes a margin of 15% on all sales of these types of goods.
(2) At 1 January 2024, the partnership held the following assets qualifying for capital allowances:

Asset	Income Tax Value b/f	Original Cost
	K	K
Computers	675,000	900,000
Construction equipment	1,237,500	1,650,000

During the year, the partnership constructed new administrative offices at a cost of K1,800,000 (including the cost of land of K600,000)

(3) During the tax year 2024, Elena and Selina used their own private motor vehicles, which each individual bought a year ago, partly for business purposes. Elena owns a Nissan Navara double cab van (2,560cc) with an original cost of K1,240,000 whilst Selina owns a Toyota Land cruiser (VX6) SUV having a cylinder capacity of 3,300cc with an original cost of K1,320,000,

The total distance travelled by each individual in each vehicle in the tax year 2024 was 80,000 Kilometres. It has been agreed with the Commissioner General that 24,000 kilometres done by each individual in each vehicle was for private purposes.

(4) The motor vehicle running expenses for Elena's and Selina's motor vehicles during the year amounted to K39,000 and K36,000 respectively. The motor vehicle running expenses were paid for by each partner and were not included in the statement of profit or loss for the year ended 31 December 2023.

Required:

(a) Prepare a computation showing the maximum amount of losses brought forward available for relief for each partner as at 1 January 2024, in respect of the tax loss suffered by the partnership in the previous tax year. (3 marks)

(b) Calculate the amount of capital allowances claimable by the partnership for the tax year 2024. (5 marks)

(c) Compute the tax adjusted business profit for the partnership business for the year ended 31 December 2024. (9 marks)

(d) Prepare a computation showing the allocation of the tax adjusted profits to each partner and calculate the final taxable income for each partner for the tax year 2024. (17 marks)

(e) Compute the income tax payable by each partner 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

Benjamin Mwelwa was employed as Project Manager by Cinda Quarries Limited on a five-year non-renewable fixed term contract. His contract of employment commenced on 1 September 2019 and expired on 31 August 2024. Benjamin was entitled to an annual basic salary of K405,000 payable monthly in arrears, transport allowance K8,438 per annum, housing allowance of K42,000 per annum and general purpose allowance of K52,650 per annum.

During the tax year 2024, Benjamin received a refund of medical bills he incurred in the month of July 2024 amounting to K9,500. Benjamin's employer made the following additional monthly payments incurred on his residence:

	K
Telephone bills	850
General maintenance expenses	1,500
Security Guard's allowance	1,950

On expiry of his contract on 31 August 2024, he received accrued leave pay of K11,850 and contract gratuity of 35% of his cumulative basic salary up to the date of expiry of the contract.

The payments and deductions made from his gross emoluments in the tax year 2024 included:

	K
Employee's NAPSA Contributions	17,890
Employee's NHIMA Contribution	4,050
Professional subscriptions	34,975
Donations to political parties	5,000
Income tax paid under pay as you earn	43,692

Other Income

Benjamin received the following additional income during the year ended 31 December 2024:

	K
Fixed deposit interest	2,500
Consultancy fees	15,725
Winning from Betting	12,300
Copy right royalties	22,100

Required:

(a) Compute the amount of gratuity received by Benjamin on expiry of his contract of employment in the tax year 2024. You should state its tax treatment. (2 marks)

(b) Compute Benjamin's personal Income tax payable for the charge year 2024. You should indicate by the use of zero (0) for any emoluments that are not taxable. (16 marks)

(c) State the due date for the payment of the income tax deducted from emoluments under the PAYE system and the consequences of paying the tax late. (2 marks)

[Total: 20 Marks]

QUESTION THREE

Chisamba Farms Limited is a Zambian resident company engaged in farming and manufacturing. For the year ended 31 December 2024, the company generated the following results:

	K
Profits from manufacturing (Note 1)	11,400,500
Profits from farming (Note 2)	14,760,400
Investment income (Note 3	875,500

The following additional information is relevant:

(1) The profit from manufacturing was the tax adjusted profit before capital allowances. At 1 January 2024, the company held a building used in manufacturing operations which was constructed and brought into use five (5) years ago at a cost of K16,500,000, comprising the following items:

	K
Land	6,000,000
Staff canteen	1,200,000
Factory unit	7,200,000
General administration offices	2,100,000
	16,500,000

Capital allowances on implements, plant and machinery used in manufacturing were determined to be K1,250,000 for the tax year 2024.

(2) The farming profits were the tax adjusted business profit before capital allowances. The company incurred the following capital expenditure in relation to the farming operations during the year ended 31 December 2024:

	K
Construction of dip tanks for cattle	980,000
Construction of four (4) farm dwellings at K300,000 each	1,200,000
Construction of storage facilities	1,500,000

During the year the company sold irrigation equipment for K4,200,000. The equipment was acquired at a cost of K3,900,000 two (2) years ago.

(3) Investment income comprises GRZ bond interest of K527,000 (net) and dividends of K348,500 (net) received from Zambian resident companies.

(4) The provisional income tax paid by the company for the tax year 2024 was K4,470,600.

Required:

(a) Compute the final taxable profits after capital allowances for Chisamba farms Ltd for the tax year 2024:

(i) from manufacturing operations (7 marks)

(ii) from farming operations (6 marks)

(b) Calculate the amount of company income tax payable by Chisamba Farms Ltd for the tax year 2024. (7 marks)

[Total: 20 Marks]

QUESTION FOUR

Zambia Constructions Limited is a Zambian resident company operating in the construction industry. The company is a member of the Association of Building and Civil Engineering Contractors (ABCEC) of Zambia and is registered for VAT under the Cash Accounting Scheme for VAT purposes.

The company has provided you the following information in respect of the month ended 30 June 2024:

(1) Standard rated sales invoices of K1,540,000 were issued to customers during the month. The total amount of cash received in respect of these invoices during the month was 60%. The balance was still outstanding at the end of the month and will be settled by clients in two (2) equal monthly instalments.

(2) Standard rated purchases for the month amounted to K398,000. This figure includes K159,700 for purchases of construction materials on credit from suppliers, which will be settled in August 2024, whilst the remaining balance was paid for in cash during the month.

(3) Standard rated expenses for the month were made up of the following:

	K
Petrol	115,000
Entertaining customers	46,000
Telephone expenses	56,000
Advertising and marketing	69,600
General overheads	92,800

All of the above figures for the expenses are inclusive of VAT. Expenditure on petrol and entertaining customers was paid for in cash during the month, whilst, only 70% of the expenditure on the remaining expenses was paid for during the month. The remaining balance will be settled at the end of July 2024.

(4) Bad debts written off during the month in relation to standard rated invoices were K34,000. The bad debts were written off on 30 June 2024 and they arose in respect of two (2) invoices of K17,000 each which were due for payment on 31 December 2022 and 31 May 2023 respectively.

(5) The company purchased a Toyota Land Cruiser car for K450,000 with a cylinder capacity of 3,000 cc provided to the Production Manager, on a personal to holder basis. The company also bought a Tata Truck for K348,000 (VAT inclusive) for use exclusively in the business. The vehicles were bought under a credit facility and the company was required to pay an initial deposit of 30% of the purchase price on 1 June 2024. The balance will be paid in six equal instalment commencing on 1 July 2024.

(6) The company sold office equipment which was surplus to its requirements for K75,400 (VAT inclusive) on 30 June 2024, receiving an immediate cash payment of K52,200. The remaining balance of K23,200 will be settled by the client on 30 July 2024.

(7) Unless stated otherwise all of the above figures are exclusive of VAT

Other information

Zambia Constructions Limited imported a second hand BMW Sedan car from Japan at a cost of $12,000 in May 2024. The car was manufactured in July 2020 and has a cylinder capacity of 2700 cc. The company incurred insurance charges of $900 and freight charges of $1,800. Other incidental costs incurred up to Nakonde border post were $2,100.

The transportation cost from Nakonde to Zambia Construction Limited's premises was K5,800.

The exchange rate provided by the Bank of Zambia and approved by the Commissioner General at the time of importation of the vehicle was K22.50 per US$. However, the exchange rate quoted by most of the Commercial Banks was K22.40 per US$1.

Required:

(a) State three (3) advantages of the cash accounting scheme. (3 marks)

(b) Calculate the amount of VAT payable by Zambia Constructions Limited for the month of June 2024. You should indicate by the use of zero (0) for all items on which VAT is not chargeable or recoverable. (11 marks)

(c) Calculate the value for duty purposes of the BMW car and the total import taxes paid by Zambia Constructions Limited on the importation of the car. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) You are employed in the Tax department of a firm of Chartered Accountants which is preparing a training workshop for newly recruited trainee accountants. The Tax Manager has asked you to develop notes on the following topics:

(1) The importance of professional ethics in the provision of taxation services.

(2) Role and function of the Tax Appeals Tribunal.

Required:

Prepare notes to be used in the training workshop:

(i) Explain the importance of professional ethics for tax practitioners. (3 marks)

(ii) Explain how any four (4) fundamental principles of the IESBA's code of Ethics for Professional Accountants apply to the provision of taxation services. (8 marks)

(b) Edina Muchinshi, a sole trader engaged in farming, entered into the following capita transactions during the year ended 31 December 2024:

(1) She sold a second hand farm tractor for cash proceeds of K180,000. The farm tractor was acquired at a cost of K200,000 in 2021. On the date of sale, the tractor had an open market value of K185,000. The income tax value of the tractor on 1 January 2024 was nil.

(2) She sold a farm land for gross proceeds of K400,000. The farm was acquired in 2017 at a cost of K120,000. The market value of land was K380,000 on the date of sale as determined by the Property Valuation Department. She incurred K6,000 which she paid for valuation of land.

(3) She gifted a residential plot to her niece. The residential plot had an open market value of K160,000 on the date of transfer. The plot was acquired in 2020 at a cost of K70,000.

(4) She gifted a two-bedroomed house to her daughter. The house was determined to have an open market value of K520,000 on the date of transfer. This house was constructed in 2014 at a cost of K150,000.

(5) She sold her 5,000 equity shares she held in Mansa Ltd, a Zambian resident company, for cash proceeds of K17 per share. The nominal value of the shares is K1 each. The open market value was K20 per share on the date of transfer as determined using approved share valuation methods. The shares were acquired in 2016 at a cost of K5 per share.

(6) She sold her motor car for cash proceeds of K60,000. The motor car was acquired in 2018 at a cost of K80,000. The car had a market value of K50,000 on the date of sale.

Required:

Explain the property transfer tax implications arising from the transfer of each of the above assets during the year ended 31 December 2024. Your answer should include a computation on property transfer tax paid on each transaction. (9 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.4 TAXATION: SUGGESTED SOLUTIONS

SOLUTION ONE

(a) ALLOCATION OF TAX LOSS

	Total	Elena	Selena	Melania
	K	K	K	K
Salaries	405,000	210,000	195,000	-
Balance (5:4)	(607,500)	(337,500)	(270,000)	-
Tax losses b/f at 1 Jan 2024	(202,500)	(127,500)	(75,000)	-

(b) COMPUTATION OF CAPITAL ALLOWANCES

	K
Printers	
Wear and tear allowance	
(K65,000 x 25%)	16,250
Computers	
Wear and tear allowance	
(K900,000 x 25%)	225,000
Construction equipment	
Wear and tear allowance	
(K1,650,000 x 25%)	412,500
Administration offices	
Wear and tear allowance	
(K1,800,000 - K600,000) x 2%	24,000
	677,750

(c) COMPUTATION OF TAX ADJUSTED PROFIT

	K	K
Profit as per accounts		735,200
Add:		
Partner's salaries	595,000	
NAPSA penalties	45,600	
Luwi's excessive salary (K168,000 - K114,000)	54,000	
Personal legal advice	65,000	
Gifts of dairies to customers (K18,000/K300) x K200	12,000	
Entertaining partners	16,500	
Employee loans written off	26,500	
Office printers	65,000	
Utility expenses on partner's residence (K45,000 x 1/3)	15,000	
Goods for personal use (K29,750 x 15/85)	5,250	
		899,850
		1,635,050
Less:		
Decrease in general provisional	12,300	
Capital allowances	677,750	
		(690,050)
Tax adjusted profit		945,000

(d) ALLOCATION OF TAXABLE PROFIT

	Total	Elena	Selina	Melania
1.01.2024 - 30.04.2024	K	K	K	K
Salaries (210,000/K195,000) x 4/12	135000	70,000	65,000	0
Balance(5:4)	180,000	100,000	80,000	0
Profit:K945,000 x 4/12	315,000	170,000	145,000	0
1.05.2024 - 31.12.2024				
Salaries				
(K264,000/K228,000/K198,000) x 8/12	460,000	176,000	152,000	132,000
Balance (5:4:1)	170,000	85,000	68,000	17,000
Profit (K945,000 x 8/12)	630,000	261,000	220,000	149,000
Total allocations	945,000	431,000	365,000	149,000
Less capital allowances on:				
Elena's car				
(K1,240,000 x 20%) x 56,000/80,000	(173,600)	(173,600)		-
Selena's car				-
(K1,320,000 x 20%) x 56,000/80,000	(184,800)		(184,800)	-
Motor running expenses				
Elena's car				
(K39,000 x 56,000/80,000)	(27,300)	(27,300)	-	-
Selena's car (K36,000 x 56,000/80,000	(25,200)		(25,200)	
Taxable income before loss relief	534,100	230,100	155,000	149,000
Less loss relief	(202,500)	(127,500)	(75,000)	
Final Taxable profits	331,600	102,600	80,000	149,000

(e) PERSONAL INCOME TAX COMPUTATIONS FOR

	Elena	Selina	Melania
	K	K	K
Taxable profits	102,600	80,000	149,000
Income Tax			
On first K61,200	0	0	0
On next K24,000 x 20%	4,800		4,800
On balance for Selena			
(K80,000 - K61,200) x20%		3,760	
On balance for Elena	5,220		
(K102,600 - K61,200 - K24,000) x 30%			
On next K25,200 x 30% - Melania			7,560
On Balance for Melania			14,282
(K149,000 - K110,400) x 37%	10,020	3,760	26642

SOLUTION TWO

(a) COPUTATION OF CONTRACT GRAUITY

(405,000 x 5 years) x 35% =708,750

The gratuity is exempt from tax being a pension benefit.

(b) BENJAMIN PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

Emoluments from employment	K	K
Basic salary (K405,000 x 8/12)		270,000
Transport allowance (K8,438 x 8/12)		5,625
Housing allowance (K42,000 x 8/12)		28,000
General purpose allowance (K52,650 x 8/12)		35,100
Accrued leave		11,850
Gratuity		0
Refund of medical bills		0
Security guard's allowance (K1,950 x 8)		15,600
Telephone bills (K850 x 8)		6,800
General maintenance expenses (K1,500 x 8)		12,000
Less allowable deductions:		384,975
Professional subscription		(34,975)
		350,000
Other income		
Consultancy fees (K15,725 x 100/85)	18,500	
Royalties (K22,100 x 100/85)	26,000	
		44,500
Taxable income		394,500
Computation		
First K61,200 @0%		0
Next K24,000 @20%		4,800
Next K25,200 @30%		7,560
Excess (K394,500 – K110,400) @37%		105,117
Income tax liability		117,477
Less:		
Income tax paid under PAYE	43,692	
WHT – Consultancy fees (K18,500 x 15%)	2,775	
WHT – Royalties (K26,000 x 15%)	3,900	
		(50,367)
Income tax payable		67,110

(c) The due date of payment of PAYE is the 10^{th} day following the end of the month in which the PAYE was deducted.

If PAYE is paid late then:

(1) A penalty of 5% of the tax paid late per month or part thereof will arise.

(2) Interest at the BOZ discount rate plus 2% of the tax paid late will arise.

SOLUTION THREE

(a)

(i) COMPUTATION OF FINAL TAXABLE PROFITS FROM MANUFACTURING

	K
Profit before capital allowances	11,400,500
Less	
Capital allowances on buildings (W)	(462,000)
Capital allowances on IPM	(1,250,000)
Final taxable profit	9,688,500

WORKINGS

COMPUTATION OF THE QUALIFYING COST FOR IBA PURPOSES

	K
Total cost	16,500,000
Less cost of land	(6,000,000)
	10,500,000
10% of K10,500,000	1,050,000

The total cost of the non-qualifying part, comprising the general administration offices of K2,100,000 is more than K1,050,000. Therefore, they will be classified as commercial buildings and not as industrial buildings.

COMPUTATION OF ALLOWANCES ON BUILDINGS

	Allowance K
Staff canteen	
Wear and tear allowance	
(K1,200,000 x 5%)	60,000
Factory	
Wear and tear allowance	
(K7,200,000 x 5%)	360,000
General administration offices	
Wear and tear allowance	
(K2,100,000 x 2%)	42,000
Total allowances	462,000

(ii) COMPUTATION OF FINAL TAXABLE PROFITS FROM MANUFACTURING

	K
Profit before capital allowances	14,760,400
Add Net balancing charge (W)	1,020,000
Final taxable profit	15,780,400

COMPUTATION OF CAPITAL ALLOWANCES

	K	K
Dip tanks		

Wear and tear allowance		
(K980,000 x 100%)		980,000
Farm dwellings		
Wear and tear allowance		
(Restricted to K100,000 x 100%) x 4		400,000
Storage facilities		
Wear and tear allowance		
(Restricted to K1,500,000 x 100%)		1,500,000
Irrigation equipment		
ITV b/f	0	
Proceeds (restricted to cost)	(3,900,000)	
Balancing charge	(3,900,000)	(3,900,000)
Net balancing charge		(1,020,000)

(b) CHISAMBA FARMS LTD
COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K
Non-farming income	
Taxable Profits from manufacturing	9,688,500
Investment income	
GRZ bond interest (K527,000 x 100/85)	620,000
Total non- farming income	10,308,500
Taxable profits from farming	15,780,400
Total taxable income	26,088,900
Company income tax on non-farming income	
(K10,308,500 x 30%)	3,092,550
Company income tax on farming income	1,578,040
Tax liability	4,670,590
Less tax already paid	
Provisional income tax	(4,470,600)
WHT on GRZ bond interest (K620,000 x 15%)	(93,000)
	106,990

SOLUTION FOUR

(a) Advantages of the Cash Accounting scheme

1. VAT is only payable if the customers have made payments.
2. It is easy to prepare the VAT return as the cash book can be used to do so.
3. Bad debt relief occurs automatically since no VAT is payable if customers have not made payments.

(b) ZAMBIA CONSTRUCTIONS LIMITED

COMPUTATION OF VAT PAYABLE FOR THE MONTH OF JUNE 2024

Output VAT	K	K
Standard rated sales (K1,540,000 x 60% x 16%)		147,840
Sale of office furniture (K52,200 x 4/29)		7,200
		155,040
Input VAT		
Standard rated purchases		
(K398,000 – K159,700) x 16%	38,128	
Telephone expenses	0	
Petrol	0	
Entertaining customers	0	
Advertising & marketing (K69,600 x 4/29) x 70%	6,720	
General overheads (K92,800 x 4/29) x 70%	8960	
Bad debt relief	0	
Toyota land cruiser car	0	
Tata truck (K348,000 x 4/29) x 30%	14,400	
		(68,208)
VAT payable		86,832

(c) Computation of import taxes on the importation of BMW car

	$
Cost	12,000
Insurance charges	900
Freight charges	1,800
Other incidental costs	2,100
VDP in US$	16,800
Exchange rate	x K22.50
VDP in ZMW	378,000

	Value of the vehicle	Import taxes
	K	K
Customs value	378,000	
Customs duty (specific)	18,049	18,049
	396,049	
Excise duty (specific)	23,463	23,463
	419,512	
Import VAT @16%	67,122	67,122
Value of the vehicle	486,634	
Total import taxes		108,634

SOLUTION FIVE

(a) Professional ethics

(i) The following are the reasons why the professional ethics are important for tax practitioners:

1. Professional codes of ethics 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 the 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.

(ii) Fundamental Principles of the IESBA's code of Ethics for Professional Accountants

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 competence and due care

Members shall maintain professional knowledge and skill at a level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and shall act diligently and in accordance with applicable technical and professional standards when providing professional services.

This means that members engaged in providing tax services shall maintain professional competence and take due care in the performance of their work. To achieve this, members shall remain continuously aware of developments in the tax profession and tax legislation to ensure that they have the requisite knowledge related to such developments, including an awareness of relevant national pronouncements and other relevant statutory requirements and regulations.

Confidentiality

Members shall respect the confidentiality of information acquired as a result of professional and business relationships. They should therefore, not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties.

A member who acquires confidential information during the course of performing professional tax services for a client shall not use or disclose any such information without proper and specific authority, unless there is a legal or professional right or duty to disclose such information.

Professional behavior

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.

(b) The following are the property transfer tax implications:

1. Transfer of tractor falls outside the scope of property transfer tax because movable assets are classified as chattels. Therefore, Edina will not be required to pay property transfer tax on the transfer of the farm tractor.
2. She will be required to pay property transfer tax on the transfer of farm land as land meets the definition of property in accordance with the Property Transfer Tax Act. Property transfer tax is charged at the rate of 5% of the realized value. The realized value is whichever is higher between actual proceeds received and the open market value. In this case, the realized value is K400,000. The PTT payable is: K400,000 x 5% = K20,000.
3. She will be required to pay property transfer tax on the transfer of a residential plot to her niece. This is so because a niece does not meet qualify to be a member of the immediate family. The realized value is, therefore, the higher of actual proceeds received and the open market value. In this case the realized value is K160,000. The PTT payable is: K160,000 x 5% = K8,000.
4. Where a property is transferred to a member of the immediate family, the realized value of that transfer shall be the actual consideration received. Where no consideration is received, the transfer is deemed to have a realized value of nil and, therefore, no PTT is payable. Edina will, therefore, not be required to pay property transfer tax on the transfer of the house to her daughter.
5. Edina will be required to pay property transfer tax on the transfer of shares as these shares are not listed on the Lusaka Securities Exchange. The realized value is the higher

of nominal value and actual consideration received or open market value. The realized value is, therefore, K20 per share. The PTT payable is: 5,000 shares x K20 x 5% = K5,000.

6. Transfer of movable assets fall outside the scope of property transfer tax. Edina will not, therefore, be required to pay property transfer tax on the transfer of her motor car.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 13 SEPTEMBER 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

BMK Ltd has identified an opportunity in the Cement industry in Zambia and decided to set up a plant to produce 50kg bags of cement in Zambia under the brand name "Zambezi" cement. This product has performed very well in the marketing trials carried out by the Research and Development division of the company.

The following information regarding the investment has been prepared by the Finance Manager:

- Initial investment (Plant cost) = K50 million.
- Working capital = K5 million.
- Selling price per bag (current price terms) = K50
- Variable cost per bag (current price term) = K25
- Fixed operating cost per year (current year terms) =K5 million.
- Annual Demand (current year terms) = 500,000 bags.

The table below represents the forecast increases for the next five (5) years.

Year	1	2	3	4	5
Selling price	15%	18%	20%	15%	17%
Variable cost	10%	15%	15%	12%	13%
Fixed operating cost	10%	15%	15%	20%	18%
Annual Demand	10%	14%	16%	15%	14%

The initial investment plant is depreciated on a straight line basis with a residual value of K5 million at the end of year five (5). Prior discussions with the Zambia Revenue Authority confirm approval for allowable capital allowance rate on the above investment at the rate of 20% per annum. The corporate tax rate for the company in the country is 30%.

The company is considering financing the investment as follows:

1. 250,000 of K0.50 ordinary shares each having a market value of K5.20 Cum div. The current dividend, which is due to be paid shortly, is K0.20 per share. The dividend has grown steadily in the past at a compound annual rate of 5% and is generally expected to continue doing so indefinitely.
2. 200,000 K1 irredeemable 4% preference shares, each having a current market value of K0.50 ex-div.
3. K500,000, 10% debenture loan, redeemable in ten (10) years at par. The current market value is K110 ex-int.

Required:

(a) Calculate the weighted average cost of capital to be used in the evaluation of the project. (10 marks)

(b) Evaluate the proposed investment using the Net Present Value method. (20 marks)

(c) Evaluate the proposed investment using the Internal Rate of Return method. (6 marks)

(d) Explain two (2) advantages and two (2) disadvantages of using the Net Present Value method. (4 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

The predicted net cash flows of GILB Ltd for its five (5) year planning horizon are:

Year	Free cash flows
	K'm
1	1.6
2	2.1
3	2.5
4	3.75
5	5.1

The cash flows are expected to grow at a constant annual rate of 6% after year five (5). The company has K357,143 ordinary shares issued at a par value of K1 with a market share price of K28. The firm has just paid a dividend of 26.24 ngwee per share and five (5) years ago the firm had paid a dividend of 15 ngwee per share. The firm has a 10% bond amounting to K4 million issued at a par value of K1,000 with five (5) years to maturity currently trading at a market price of K1,095.

Ignore taxation.

Required:

(a) Calculate the weighted average cost of capital for GILB Ltd. (11 marks)

(b) Estimate the value per share of GILB Ltd based on the free cash flows. (9 marks)

[Total: 20 Marks]

QUESTION THREE

Sweetaid Ltd has been in operation for the last eight years. The company is all equity financed with 6 million ordinary shares with a par value of K5 each. The Managing Director made an observation during a board meeting that "Even though our company is all equity financed, it is always better for our company to use debt finance since lower cost of debt results in higher earnings per share". The current market price per share of Sweetaid Ltd is K8.40, which is in line with the price/earnings (P/E) ratio in the industry of 6.00. The company has been consistent in paying a dividend of K1.25 per share during the last five (5) years of its operations, and indications are that the current level of operating income can be maintained in the foreseeable future. Taxation has been at a rate of 30%.

The management of Sweetaid Ltd is contemplating the implementation of a new project which requires K10 million. Since no internal sources of funds are available, management is to decide on two alternative sources of finance.

Alternative A

To raise the K10 million through a rights issue. Management is of the option that a price of K6.25 per share would be fair.

Alternative B

To obtain the K10 million through a loan and interest is to be paid at the rate of 12% per annum on the total amount borrowed.

The project is expected to increase annual operating income by K5.6 million in the foreseeable future. Irrespective of the alternative selected in financing the new project, corporate tax is expected to remain at 30%.

Required:

(a) Analyse the current level of earnings per share (EPS) and the operating income of the company. (3 marks)

(b) If Alternative A is selected, compute the number of shares in the rights issue and the theoretical ex-rights price. (3 marks)

(c) Calculate the expected earnings per share (EPS) for each alternative, and advise Sweetaid Ltd on which alternative to accept. (6 marks)

(d) Comment on the observation made by the Managing Director. (2 marks)

(e) Explain three (3) factors that can influence the dividend policy of Sweetaid Ltd. (6 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

PAS Ltd, an unquoted company, has made a cash requirement forecast for next year amounting to K2 million. The cash is expected to be used constantly throughout the year. PAS Ltd has investments in excess of this amount which are earning an annual return of 10.5%. The company earns interest of 6.1% on their current account bank balance. The cost of selling investments is K150 per transaction. The management of PAS Ltd expects to sell K200,000 of investments each time a transaction is made. PAS Ltd is also considering valuing the company using the P/E ratio as opposed to cash flow based.

Required:

(a) Evaluate the total annual cost to the company of selling investments each time. (6 marks)

(b) Evaluate the optimal economic quantity of cash to transfer each time in order to minimise costs. (3 marks)

(c) Calculate the annual total cost to the company of selling investments each time based on the EOQ. (6 marks)

(d) Discuss the problems related to using the P/E ratios of quoted companies to value unquoted companies. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

The Treasury Department of LCM Ltd is preparing financial plans for the financial year 2024. Annual credit sales revenue is projected to be K500 million while the cost of sales is expected to be K260 million. Its current assets are composed of inventory and trade receivables, while its current liabilities comprise of trade payables and bank overdraft. The following targets have been set:

Financial ratio	**Target**
Receivable turnover days	90 days
Payables turnover days	30 days
Cash operating cycle	120 days
Current ratio	1.1 times

The company's long-term capital consists of only owners' equity. The composition and size of long- term capital is expected to remain the same for the financial year 2024. The opportunity cost of equity capital is 20%, and the interest rate on the bank overdraft is 18%.

Required:

(a) Analyse the amount of bank overdraft the company will need in the financial year 2024. (10 marks)

(b) Calculate the net working capital of the company for the financial year 2024. (2 marks)

(c) Evaluate the cost of financing working capital. (4 marks)

(d) Explain the working capital financing policy that LCM Ltd is employing. (4 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) Weighted average cost of capital

Cost of Equity

Current share price = K5.20 - K0.20

= K5.00

Cost of Equity (Ke) = K0.20 (1.05) / K5.00 + 0.05

= **9.2%**

Cost of preference share

Cost of preference (Kp) = 0.04/0.50

= **8%**

Cost of debt

Years	Narration	Cash flows	DC@5%	PV	DC@10%	PV
0	Market value	(110)	1.000	(110)	1.000	(110)
1 – 10	Interest 10 (1 – 0.3)	7.5	7.722	57.9	6.146	46.1
10	Redemption value	100	0.614	61.4	0.386	38.6
			NPV =	**9.3**	NPV =	**(25.3)**

IRR = 5% + 9.3/ (9.3 + 25.3) * (10% - 5%)

= **6.3%**

Therefore, the cost of debt (Kd) = 6.3%

Market values

Ve = 250,000 shares X K5.00 = 1,250,000

Vp = 200,000 Shares X K0.50 = 100,000

Vd = 110/100 x K500,000 = 550,000

Total market value **1,900,000**

WACC = [9.2% X 1,250,000/1,900,000] +[8% x 100,000/1,900,000] + [5.8% x 550,000/1,900,000]

WACC = 6.05 + 0.42 + 1.7

WACC = 8.17%

Therefore, cost of capital = **8%**

(b) Forecasting of variable for the next 5 years

year	Current year basis	1	2	3	4	5
Selling price	50	57.5	67.85	81.42	93.63	109.5
Variable cost	25	27.5	31.63	36.37	40.73	46
Fixed operating cost	5,000,000	5,500,000	6,325,000	7,273,750	8,728,500	10,299,630
Annual demand	500,000	550,000	627,000	727,320	836,418	953,517

The initial investment is depreciated 20% per annum and on straight line basis with a scrap value 5 million and the tax rate for allowable capital allowance is 25%.

Years	0	1	2	3	4	5
	K	K	K	K	K	K
Sales		31,625,000	42,541,950	59,218,394	78,313,817	104,410,112
Variable cost		(15,125,000)	(19,832,010)	(26,452,628)	(34,067,305)	(43,861,782)
Contribution		16,500,000	22,709,940	32,765,766	44,246,512	60,548,330
Fixed costs		(5,500,000)	(6,325,000)	(7,273,750)	(8,728,750)	(10,299,630)
Depreciation		(9,000,000)	(9,000,000)	(9,000,000)	(9,000,000)	(9,000,000)
PBT		2,000,000	7,384,940	16,492,016	26,517,762	41,248,700
Tax @30%		(600,000)	(2,215,482)	(4,947,605)	(7,955,329)	(12,374,610)
PAT		1,400,000	5,169,458	11,544,411	18,562,433	28,874,090
Add back Dep		9,000,000	9,000,000	9,000,000	9,000,000	9,000,000
Operating cashflow		10,400,000	14,169,458	20,544,411	27,562,433	37,874,090
Initial cost	(50,000,000)					
Working capital	(5,000,000)					5,000,000
Scrap value						5,000,000
Net cashflows	(55,000,000)	10,400,000	14,169,458	20,544,411	27,562,433	47,874,090
DC@8%	1.000	0.926	0.857	0.793	0.735	0.681
Present value	(55,000,000)	9,630,400	12,143,226	16,291,718	20,258,388	32,602,255
NPV	35,925,987					

Decision:

The NPV for the project is positive and therefore the project should be undertaken.

(c) Internal rate of return (IRR)

Years	0	1	2	3	4	5
Net cashflows	(55,000,000)	10,400,000	14,169,458	20,544,411	27,562,433	47,874,090
DC@15%	1.000	0.870	0.756	0.658	0.572	0.497
PV	(55,000,000)	9,048,000	10,712,110	13,518,222	15,765,712	23,793,423
NPV	17,837,476					

IRR = 8% + 35,925,987 / 35,925,987 – 17,837,476 X (15% - 8%)

= **22.0%**

Decision:

The project is financially viable because the IRR calculated is more than the cost of capital.

(d) Advantages of NPV

- It considers the time value of money
- It is an absolute measure of return
- It is based on cash flows not profits
- It should lead to the maximization of shareholders wealth

Disadvantages of NPV

- Not easily explained to managers
- Requires that the cost of capital is known
- It is relatively complex

SOLUTION TWO

(a) Cost of capital

Cost of equity = $\frac{D(1+g)}{P_o} + g$

$= \frac{0.2624(1+0.15)}{28} + 0.15$

$= 16\%$

Dividend in 5 years ago $\times$ (1 + g)4 = Current Dividend

$= \frac{26.24}{15}$

= 1.749

$1 + g = \sqrt[4]{1.749} = 1.15$

$g = 0.15$, ie 15%

Period	Detail	Cash flow	Discount@10%	PV	Discount@5%	PV
0	MV	- 1,095	1.000	- 1,095	1.000	- 1,095
1-5.	CF	100	3.791	379	4.329	433
5	Redeem	1,000	0.621	621	0.784	784
		NPV		**- 95**		**122**
Cost of debt = 5% + 122/122+95 (10%-5%)						
Cost of debt = 7.81%						

Market Values:

		%
Equity = 357,143x K28	= K10,000,004	70
Debt = (1,095/1,000) x 4,000,000	= K4,380,000	30
Total	**14,380,004**	**100**

WACC = (16% x 0.7) + (7.81% x 0.3) =13.5% round off to 14%

(b) **Company Valuation**

Year	1	2	3	4	5
	K'm	K'm	K'm	K'm	K'm
Cash flow	1.6	2.1	2.5	3.75	5.1
Discount@14%	0.877	0.769	0.675	0.592	0.519
Present Value	1.4032	1.6149	1.6875	2.22	2.6469
Total PV Yr 1 - 5	9.5725				

PV after year 5 5.1(1.06)/0.14-0.06)

67.575

Total Value of company (K9.5725m+K67.575m) = K77.1475m

	Km
Total Value	77.1475
Less: Debt	4.38
Equity	72.7675
Value per share	**203.75**

SOLUTION THREE

(a) Earnings per share = Market share price/ P/E ratio

= 8.4/6

= K1.4

Operating income is the earnings before interest and tax

0.7x = 6,000,000 X 1.4

0.7x = 8,400,000

x = K8,400/0.7

= K12,000,000

(b) Number of shares = 10,000,000/6.25

= 1,600,000 shares

Theoretical Ex- rights price = [(6,000,000 x 8.4) + (1, 600,000 x 6.25)]/7,600,000

= (50,400,000 + 10,000,000)/7,600,000

= **K7.95**

(c)

	Alternative A	**Alternative B**
	K000	K000
Current level of EBIT	12,000	12,000
New project	5,600	5,600
Operation income	17,600	17,600
Less interest	-	12% x 10,000,000 1,200
Net profit before tax	17,600	16,400
Less: tax @ 30%	5,280	4,920
Profit after tax	**12,320**	**11,480**
Earnings per share	= 12,320/7600	= 11,480/6,000
	= K1.621	= K1.913

It is better to finance using debt finance since it results in lower costs and hence higher earnings per share.

(d) The statement is true when the operating income is high. Under such circumstances EPS will increase as a result of using debt finance. However, if the level of operating income is low, debt finance will be expensive since interest has to be paid. The EPS for a geared company under such circumstances may be even negative.

(e) Before developing a particular dividend policy, a company must consider the following:

1. Legal position in relation to dividends
   - Many countries will place legal restriction on the amount of dividend that can be paid out relative to a company's earnings.
2. Profitability
   - Profit is obviously an essential requirement for dividends. All other things being equal, the more stable the profit the greater the proportion that can be safely paid out as dividends.
3. Inflation
   - In period of inflation, paying out dividends based on historic cost profits can lead to erosion of the operating capacity of the business.
4. Growth
   - Rapidly growing companies commonly pay very low dividends, the bulk of earnings being retained to finance expansion.
5. Control
   - The use of internally generated funds does not alter ownership or control. This can be advantageous particularly in family-owned firms.
6. liquidity
   - Sufficient liquid funds need to be available to pay the dividends.
7. other sources of finance

   If a firm has limited access to other sources of funds retained earning become a very important source of finance dividend will therefore tend to be small.

SOLUTION FOUR

(a) Current Total Costs

Order costs	(K2m/0.2) x 150	1,500
Interest lost on investments	(K2m+K0.2)/2 x 10.5%	115,500
Interest earned on bank balance	(K0.2/2) x 6.1%	- 6,100
		110,900

(b)

$$EOQ = \sqrt{\frac{2 \times D \times S}{H}}$$

= [(2 x 2,000,000 x 150)/0.105-0.061)] ^1/2

= K116,774.84

(c) Total costs based on EOQ

Order costs	(K2m/0.12) x 150	2,569
Interest lost on investments	(K2m+K0.12)/2 x 10.5%	111,131
Interest earned on bank balance	(K0.1/2) x 6.1%	- 3,562
		110,138

Conclusion: Cheaper to base it on EOQ.

(d) Problems with using P/E ratio

Using the P/E ratio of quoted companies to value unquoted companies may be problematic.

1. Finding a quoted company with a similar range of activities may be difficult. Quoted companies are often diversified
2. A single year's P/E ratio may not be a good basis, if earnings are volatile, or the quoted company's share price is at an abnormal level, due for example to the expectation of a takeover bid
3. If a P/E ratio trend is used, then historical data will be being used to value how the unquoted company will do in the future.
4. The quoted company may have a different capital structure to the unquoted company

SOLUTION FIVE

(a) Computation of the amount of bank overdraft in the ensuing year.

Cash operating cycle = Inventory days + Receivables days – Payables days

120 days = Inventory days + 90 days – 30 days

Inventory days = 60 days

Inventory = 60/365 x K260, 000,000 = K42, 739,726

Trade receivables = 90/365 x K500, 000,000 =K123, 287,671

Current assets = Inventory + Trade receivables

Current assets = K42,739,726 + K123,287,671 = K166,027,397

Trade payables = 30/365 x K260, 000,000 = K21, 369,863

Current ratio = current assets/ current liabilities

1.1 = K166,027,397/Current liabilities

Current liabilities = K166,027,397/1.1 = K150,933,997

Current liabilities = trade payables + bank overdraft

K150, 933,997 = K21, 369,863 + Bank overdraft

Bank overdraft = K150,933,997 – K21,369,863

=K129,564,134

(b) Computation of the net working capital for ensuing financial year.

Net working capital = current assets – current liabilities

Net working capital = K166,027,397 – K150,933,997 = K15,093,400

(c) Computation of the cost of financing working capital.

Working capital is financed with current liabilities and long-term capital. As there is no information for determining the cost of supplier credit, the cost of the short-term finance is considered as the cost of the bank overdraft:

Cost of Short-term finance = 18% x K129,564,134 = K23,321,544

The cost of financing net working capital with long-term capital represents the cost of long-term finance = 20% x K15,093,400 = K3,018,680

Cost of financing working capital = K23,321,544 + K3,018,680

=K26, 340,224

(d) Identification of the working capital financing policy being employed.

Working capital financing policy refers to decisions concerning how investments in current assets are financed. There are varied types of financing policies employed across firms.

The various financing policies may be categorized into three: the conservative financing policy, the aggressive financing policy, and the maturity matching policy.

The conservative working capital financing policy involves the extensive use of long-term capital in financing working capital. The aggressive financing policy involves the extensive reliance on short-term spontaneous debt and other short-term financing sources in financing investments in working capital. The maturity matching policy involves the financing of working capital with funds whose maturities match the maturities of the respective current asset being financed.

For its total current assets worth K166,027,397, LCM ltd has K150,933,997 in short-term financing and K15,093,400 in long-term financing. Thus, LCM ltd is financing over 90% of its investments in current assets with short-term financing. This suggests that LCM is probably employing an aggressive working capital financing policy.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.6 STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 11 SEPTEMBER 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 POSITION FOR JAVA FOODS LIMITED.

Java Foods was founded in 2012 by Monica Musonda, with the vision of manufacturing nutritious food products using locally sourced raw materials at an affordable price. Java Foods currently markets and distributes fortified instant noodles, cereals and other related food products in Zambia to both the formal and informal traders.

After a successful career in law, Monica moved back to her native country Zambia. Her last position was for the manufacturing conglomerate in Nigeria, where she witnessed first-hand the impact local manufacturing had on an economy. She moved back to Zambia with the aim of setting up her own company, with the view of creating impact especially around local production of affordable nutritious foods. Her vision was to create jobs, empowering Zambians with food technology and manufacturing skills and creating Zambian brands. She realized the huge potential Zambia has in agriculture. The past few years Zambia had consistently recorded bumper harvest in crop production and has become a net exporter of maize, soybeans and wheat. Despite bumper harvests, very little is processed in Zambia and continues to import over 70% of its food. She felt there was an opportunity to do something and she started Java Foods in 2012.

Java Foods first product was a fortified instant noodle brand – eeZee Instant Noodles. The rationale around starting with a noodle brand was; to take advantage of Government position to have more Zambian products in formal retail, changing demographics and consumption patterns with busier lives. Java Foods knew people were looking for convenient, and affordable meal options. Wheat yields in Zambia were increasing on a year on year basis but wheat flour was only being processed for bread and confectionary products. Java Foods saw an opportunity to create another product using locally grown wheat.

Due to the lack of information on market size and product acceptability, Java Foods decided to enter into a contract of packaging with a leading manufacturer in Asia who would manufacture fortified noodles under the eeZee Instant Noodles brand name. The business concept was to grow the brand and demand for the product through an import model prior to local production. Java Foods imported packages for two (2) years before it decided to bring production of instant noodles to Zambia.

Java Foods now also manufactures Super Cereal, a fortified instant porridge made from maize and soya beans sourced from local farmers. Java Foods has also recently introduced Premium

Spices and Seasonings to the Zambian market under the brand names Maharaja Premium Spices, curry powders, pastes and eeZee Beef and Chicken Stew Mix. Source: https://java-foods.com

Required:

(a) Use an appropriate business analysis model to analyze the strategic position of Java Foods Limited. (20 marks)

(b) Demonstrate how SWOT can be used to guide business strategy formulation at Java Foods Limited. (4 marks)

(c) Discuss a generic competitive strategy that Java Foods has adopted highlighting the key elements of such a strategy. (10 marks)

(d) Java Foods pursued an import model prior to local production in the initial stages. Discuss this business concept from a strategic perspective. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this Section.

Attempt any THREE (3) questions.

QUESTION TWO

(a) Chapamo Corporation, a publicly traded company, has been facing challenges with the alignment of interests between its Shareholders and Executives. Shareholders are concerned that the executives might prioritize their own interests over those of the company, leading to potential conflicts of interest and suboptimal decision-making.

Required:

Advise the shareholders of Chapamo Corporation three (3) ways of how the alignment of interests and the agency problem may be dealt with. (6 marks)

(b) The development of integrated reporting (IR) reflects the increasing awareness of the impact business have on their environment.

Required:

Analyze the six (6) categories of capital as suggested by the integrated reporting (IR) framework. (12 marks)

(c) Mention two (2) areas that must be considered in conducting an effective appraisal of the board. (2 marks)

[Total: 20 Marks]

QUESTION THREE

Konkola Copper Mines Limited (KCM), the largest copper mine in Zambia based in Chingola and Chililabobwe and owned by Vendatta Resources Limited of India have had a torrid time managing the firm. At some point the Patriotic Front (PF) government repossessed it but the new government of United Party of National Development (UPND) has since given back the ownership. Vendatta Resources have a lot of risks at hand as it takes back the company for the second time both locally and internationally as it has to take into consideration of what has taken place in time it lost control, before that and in the international copper market.

Required:

(a) Recommend the two (2) functions of a risk register that KCM should maintain. (2 marks)

(b) Evaluate the TARA model that is commonly used to describe the options for managing risk in an organisation like KCM. (8 marks)

(c) Using the proposition of Michael Porter's generic five (5) forces model, evaluate the advantageous impact of using cost leadership strategy arising from each of the five (5) forces on the industrial participation of KCM in both local and international market. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Mary's food and spices business has been booming until recently when the sales declined lamentably few customers frequent the place compared to the previous months. She is under pressure to pay her suppliers in foreign currency for goods that are imported due to the high exchange rate. She laments that it has become very difficult to satisfy her diverse customers because of less money in circulation and poor performance from her staff especially after losing the only trained member to another relative who has opened a new company. Peter a close friend asked if she knew other ways of improving her products and doing business, she simply nodded and said it was hard for her. He further encouraged her to improve her managerial skills, recruit trained people and to always read the signs of the time in order to respond to the challenges in the business world more appropriately.

Required:

(a) Identify four (4) limiting factors in Mary's business. (8 marks)

(b) Suggest three (3) ways that would help this organization to be cost efficient. (3 marks)

(c) Explain to Mary the three (3) generic strategies and how they can be used to improve her business. (9 marks)

[Total: 20 Marks]

QUESTION FIVE

The Ministry of Lands is part of Government that deals with land issues and in many cases work in liaison with other Ministries and all local Government Councils. Councils also work with traditional leaders, that is the chiefs. All land is held in the name of the office of the President of the republic on behalf of the people of Zambia. All Zambians are entitled to the ownership of the land. Both the chiefs overseeing the land on behalf their subjects and local councils that process legal documents play a part in land administration on behalf of the Ministry of Lands who are responsible for the issuance of Certificates of title to any land in the Republic of Zambia. Both the citizens and businesses are required to obtain such documents on which residential and commercial buildings may be erected. Good land administration should be seen to be open and transparent and wrongly done may lead to various problems in the nation.

Required:

(a) One aspect of ethical problems concerns payments by individuals and companies to Government officials who have power to help. In this case, **appraise any four (4) common ethical problems** that may occur at the Ministry. (12 marks)

(b) Companies and organizations are expected to act responsibly in the social and ethical environment. Many organizations pursue a variety of social and ethical objectives. Recommend any two (2) ethical stakeholders' examples of such objectives that is expected of operations at the Ministry of lands. (2 marks)

(c) As an accountant at the Ministry of Lands, describe any three (3) ethical safeguards to threats to accountants' jobs in their workplace. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.6 STRATEGIC BUSINESS ANALYSIS SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **SWOT Analysis for Java Foods**:

Strengths:

1. **Local Sourcing**: Java Foods emphasizes using locally sourced raw materials, taking advantage of Zambia's agriculture potential and contributing to the local economy.
2. **Diverse Product Range**: The Company has a diverse product portfolio, including fortified instant noodles, cereals, and seasonings, catering to different consumer preferences and market segments.
3. **Founder's Expertise**: Monica Musonda's background in law and her experience in a manufacturing conglomerate provide valuable insights and skills to lead a food manufacturing business.
4. **Market Demand**: The Company tapped into the growing demand for convenient, affordable, and nutritious food products, aligning with changing demographics and consumption patterns in urban areas.
5. **Social Impact:** Java Foods has a strong social impact focus, creating jobs, empowering Zambians with food technology and manufacturing skills, and contributing to local brand development.

Weaknesses:

1. **Dependency on Imports**: The initial strategy of importing products for six years before local production might have created a dependency on external manufacturers and exposed the company to foreign exchange fluctuations and international supply chain risks.
2. **Limited Information:** The lack of market size and product acceptability information might have led to challenges in strategic planning and decision-making.

Opportunities:

1. **Local Production**: Bringing the production of instant noodles to Zambia opens up opportunities for cost optimization, better control over the supply chain, and aligning with the government's push for more locally produced goods.
2. **Diversification:** The introduction of new products such as fortified instant porridge and premium spices provides opportunities for diversification, capturing different segments of the market.
3. **Agricultural Potential**: Given Zambia's consistent bumper crops and its position as a net exporter of key agricultural products, there are opportunities for Java Foods to expand its product range further, using locally sourced ingredients.

Threats:

1. **Competition:** The food industry is highly competitive, and Java Foods may face challenges from both local and international competitors.

2. **Economic Factors**: Economic downturns or fluctuations can impact consumer spending, potentially affecting sales of premium or convenience food products.
3. **Regulatory Environment**: Changes in regulations related to food manufacturing, import/export policies, or health standards can pose threats to the company's operations.
4. **Supply Chain Risks**: Dependence on suppliers for raw materials and external manufacturers for the production process exposes Java Foods to supply chain risks, including disruptions and quality control issues.

Note:

Java Foods has significant strengths in its commitment to local sourcing, diverse product range, and founder's expertise.

(b) **SWOT can be used to guide business strategy formulation at Java Foods Limited in the following way:**

1. **Match strengths with market opportunities**:

   Strengths that do not match any available opportunity are of limited use while opportunities which do not have any matching strengths are of little immediate value.

2. **Conversion:**

   This requires the development of strategies that will convert weaknesses into strengths in order to take advantage of some particular opportunity, or converting threats into opportunities which can then be matched by existing strengths.

(c) **Java Foods has adopted a Differentiation strategy**:

Based on the provided information, Java Foods has adopted a "Differentiation Strategy" as a generic competitive strategy.

A Differentiation Strategy involves offering unique and distinctive products or services that are valued by customers.

Here is how Java Foods aligns with the key elements of a Differentiation Strategy:

- **Local Sourcing and Social Impact:**

  The emphasis on using locally sourced raw materials aligns with a differentiation strategy by highlighting the uniqueness of the company's products. This commitment not only supports local farmers and the economy but also contributes to the social impact, creating a positive image among socially conscious consumers.

- **Innovation:**

  The introduction of new products such as fortified instant porridge and premium spices indicates a commitment to innovation. By continuously innovating and introducing new products, Java Foods aims to stay ahead of the competition and meet the evolving preferences of consumers.

- **Branding and Marketing:**

The company's focus on creating impact, job creation, and empowerment is likely emphasized in its branding and marketing efforts. These unique selling propositions contribute to the differentiation of Java Foods in the market.

- **Quality and Nutritional Value:**

  Java Foods positions its products as convenient, affordable, and nutritious. This focus on quality and nutritional value adds to the perceived uniqueness of its offerings, attracting consumers looking for healthier and locally sourced options.

(d) **Java Foods pursued an import model prior to local production in the initial stages. The business concept was strategic due to the following reasons**:

1. Due to lack of information on market size & product acceptability, Java Foods decided to enter into a contract packaging agreement with a leading manufacturer in Asia.
2. The business concept was to grow the brand and demand for the product.
3. For easy market entry in the fast-moving consumer market which is very competitive.

SOLUTION TWO

(a) How to deal with alignment of interests and the agency problem.

1. **Profit-related / economic value added pay**: pay or bonuses related to the size of profits or economic value-added.
2. **Rewarding managers with shares**: This might happen when a private company 'goes public' and managers are invited to subscribe for shares in the company at an attractive offer price. Managers become joint owner-managers.
3. **Executive share option plan (ESOPs):** In a share option scheme selected employees are given a number of share options, each of which gives the holder the right after a certain date to subscribe for shares in the company at a fixed price.

(b) **Six (6) categories of capital as suggested by the integrated reporting (IR) framework are:**

1. **Financial:** Funds available for use in production or service provision, obtained through financing or generated through operations.
2. **Manufactured:** Manufactured physical objects used in production or service provision; including buildings, equipment and infructure.
3. **Human:** Skills, experience and motivation to innovate. Ability to understand and implement organization's strategy.
4. **Intellectual:** Intangible assets providing competitive advantage; Patents, copyrights, software and organization systems.
5. **Natural:** Inputs to goods and services, and natural environment on which an organization's activities have an impact; land, water, minerals and forests.
6. **Social:** The institutions and relationships established within and between and within each community, stakeholder group and network.

(c) **Two (2) areas that must be considered in conducting an effective appraisal of the board are:**

1. Review of the board's systems (conduct of meetings, work of committees, quality of written documents)
2. Performance measurement in terms of standards it has established, financial criteria and non-financial criteria.
3. Assessment of the board's role in the organisation (dealing with problems, communicating with stakeholders)

SOLUTION THREE

(a) A risk Register

1. lists and prioritizes the main risks an organization faces, and
2. is used as the basis for decision-making on how to deal with risks

(b) Risk management is the act of managing anything or situation that threatens an organisation's ability to achieve its objectives and goals. Having understood the risk facing the organisation the next step is to decide what can be done to reduce the risk. The TARA model is commonly used to describe the options for managing the risk that include

1. **Transfer** – Insure risk or implement contingency plans. Reduction of severity of risk will minimize insurance premiums.
2. **Avoid or Abandon** – take immediate action, eg changing major suppliers or abandoning activity.
3. **Reduce or control** – Take some action, eg enhance control systems to detect problems or contingency plans to reduce impact.
4. Accept – Risks are not significant. Keep under view, but costs of dealing with the risks unlikely to be worth the benefits.

(c) The advantageous impact of using cost leadership strategy arising from each the five forces on the industrial participation a firm are:

1. **New Entrants** – Economies of scale raise entry barriers
2. **Substitutes** – Firm is not so vulnerable as its less cost- effective competitors to the threat of substitutes
3. **Customers** – customers cannot drive down prices further than the next most efficient competitor.
4. **Suppliers** – Flexibility to deal with costs increases
5. **Industry rivalry** – Firms remain profitable when rivals go under through excessive price competition.

SOLUTION FOUR

(a) The following are limiting factors in Mary's business:

1. Lack of money
2. Lack of adequately trained staff
3. Lack of managerial knowledge about finances and overseas markets
4. Limited number of key personnel, such as sales people with technical knowledge
5. A poor system of strategic intelligence
6. A restricted distribution network

(b) The suggestion would be that the organization acquire both the possession and efficient use of resources and ability to manage costs.

1. To avoid importing what can be obtained locally to reduce costs- exchange rates
2. Sending more employees for training
3. She should respond to the signs of times and refresh her managerial skills.

(c) The following are the three (3) generic strategies and how they can help Mary improve her business:

Cost leadership

1. Set up production facilities to obtain economies of scale (grow, produce her own foods and spices)
2. Use of latest technology and exploit the learning curve effect through production of more items than her competitors
3. Minimize overhead costs
4. Get favorable access to sources of supply

Differentiation - division of products into three (3)

1. Break through- offer at a lowest price more than your competitors
2. Improved products – offer better quality more than your competitor
3. Competitive products – offer a more attractive compromise than your rivals
4. Build a brand image
5. Give the product special features to make it stand out
6. Exploit other activities of the value chain after sale service.

Focus (niche)

1. Use a cost focus strategy- aim to be a cost leader for a particular segment
2. Use differentiation focus strategy- pursue differentiation strategy for a chosen segment luxury goods suppliers are the prime exponents of such a strategy

SOLUTION FIVE

(a) The common ethical problems that may occur at the ministry would include the following:

1. **Extortion** – This is in a situation where officials may threaten companies and individual applicants with complete disclosure of their operations or activities unless suitable payments are made.
2. **Bribery**. This is payment demanded for the services to which the company or applicant is not legally entitled.
3. Grease money. Multinational companies are sometimes unable to obtain services to which they are legally entitled because of deliberate by local officials working for the ministry. Cash payments to 'the rightful people' may be requested to oil the machinery of bureaucracy.
4. **Gifts.** In instances, there is a culture in which gifts are regarded as an essential part of civilized negotiations, even in circumstances where in the eyes of other cultures may seem ethically dubious. Manager of such western cultures operating in such environments may feel an obligation to adopt the local culture.
5. **Conflict of interest**. A conflict of interest in business refers to a situation in which an individual's interests' conflict with the interest of the ministry, in which one is employed. For example, an officer would like to sell some pieces of land at some higher amounts for oneself within the area where the ministry is advertising to Zambian only but has foreign or richer and politically connected persons having much more money to offer.

(b) The examples of ethical stakeholders' objectives that is expected of operations at the Ministry of lands include;

1. Employees should have, a minimum wage, job security, conditions of service, job satisfaction, and a healthy and safe workplace;
2. Customers may be regarded as entitled to receive a safe product of good quality at a reasonable price.
3. Suppliers may be offered regular orders and timely payment in return for reliable delivery and good service.
4. Society as a whole need the organisation to control pollution an use of sustainable resources, corporate social responsibility and not to produce undesirable goods.

(c) The ethical safeguards to threats to accountants' jobs in their workplace in business include: -

1. The ministry's oversight systems;
2. The civil service ethics and conduct programs
3. Recruitment procedures
4. Strong internal controls
5. Appropriate disciplinary processes;
6. Leadership that stresses ethics;

7. Policies and procedures that promote and monitor employee performance
8. Timely Communication of the employer's policies and procedures to all employees;
9. Training and education of employees;
10. Whistleblowing provisions; and; Consultation

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1 ADVANCED FINANCIAL REPORTING

MONDAY 9 SEPTEMBER 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)

You are the group accountant of Peace Plc. The following draft statements of financial position relate to Peace Plc, Love Plc and Joy Plc as at 30 September 2024 were as follows:

	Peace Plc	**Love Plc**	**Joy Plc**
Assets	K'000	K'000	K'000
Non-current assets:			
Investment property	50,000	Nil	Nil
Property, plant and equipment	489,000	370,000	162,000
Investments	423,000	Nil	Nil
	962,000	370,000	162,000
Current assets:			
Inventories	120,000	175,000	160,000
Trade receivables	90,000	66,000	55,000
Cash and cash equivalents	15,000	12,000	10,000
	225,000	253,000	225,000
Total assets	1,187,000	623,000	387,000
Equity and liabilities			
Equity			
Share capital (K1)	140,000	100,000	80,000
Retained earnings	588,000	210,000	90,000
Other components of equity	250,000	10,000	Nil
Total equity	978,000	320,000	170,000
Non-current liabilities:			
Provisions	1,250	Nil	Nil
Long-term borrowings	82,750	90,000	48,000
Deferred tax	45,000	28,000	30,000
Total non-current liabilities	129,000	118,000	78,000
Current liabilities:			
Trade and other payables	60,000	150,000	130,000
Short-term borrowings	20,000	35,000	9,000
Total current liabilities	80,000	185,000	139,000
Total equity and liabilities	1,187,000	623,000	387,000

1. On 1 October 2023, Peace acquired 75% of equity shares in Joy by means of a cash payment of K140 million. The purchase agreement provided for an additional payment on 31 October 2027 to the former holders of the acquired shares. The amount of this additional payment is dependent on the financial performance of Joy in the four (4) year period from 1 October 2023 to 30 September 2027. On 1 October 2023, the fair value of this additional payment was estimated to be K20 million. This estimate was revised to K24 million on 30 September 2024. Peace has not made any entries in its draft financial statements to record this potential additional payment.

   On 1 October 2023, the fair values of the net assets of Joy were the same as their carrying amounts with the exception of some land which had a carrying amount of K60 million and a fair value of K80 million. In the consolidated financial statements, the fair value adjustment will be regarded as a temporary difference for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%.

   The Directors of Peace used the fair value method when measuring the non-controlling interest in Joy in the consolidated statement of financial position. On 1 October 2023, the individual financial statements of Joy showed a balance on retained earnings of K75 million and the fair value of each share in Joy was K2.30.

2. The salaried employees of Peace Plc are entitled to 25 days paid holiday each year. The entitlement accrues evenly over the year and unused holiday may be carried forward for one year. The holiday year is the same as the financial year. At 30 September 2024, Peace has 1, 800 salaried employees and the average unused holiday entitlement is 3 days per employee. About 5% of the leave days accrued in any one year expires without benefit to employees. There are 255 working days in the year and the total annual salary cost is K38 million. No adjustment has been made in the financial statements for the unused holiday and there was no opening accrual required for holiday entitlement.

3. On 1 October 2023, Peace completed the construction of a non-current asset with an estimated useful life of twenty (20) years. The costs of construction were recognised in property, plant and equipment and depreciated appropriately. Peace has a legal obligation to restore the site on which the non-current asset is located on 30 September 2043. The estimated cost of this restoration work, at 30 September 2043 prices, is K25 million. The Directors of Peace have made a provision of K1.25 million (1/20 x K25 million) in the draft statement of financial position at 30 September 2024. An appropriate annual discount rate to use in any relevant calculations is 6% and at this rate the present value of K1 payable in 20 years is 31.2 ngwee.

4. On 1 October 2021, Peace acquired 80% of the equity shares in Love by means of a share exchange of two (2) shares in Peace for every four (4) shares acquired in Love. On 1 October 2021, the market value of Peace share was K7. Peace incurred directly attributable due diligence costs of K3 million on acquisition of Love. The directors of Peace included these acquisition costs in the carrying amount of the investment in Love in the draft statement of financial position of Peace. There has been no change to the carrying amount of this investment in Peace's own statement of financial position since 1 October 2021. On the acquisition date, the individual financial statements of Love showed the retained earnings K150 million and other components of equity K5 million. The directors of Peace carried out a fair value exercise to measure the identifiable assets and liabilities of Love at 1 October 2021. The following matters emerged:

(a) Property having a carrying amount of K200 million had an estimated fair value of K240 million. The buildings component of the property amounted to 75% and had an estimated useful life of 30 years at 1 October 2021.

(b) On 1 October 2021, the notes to the financial statements of Love disclosed a contingent liability. On 1 October 2021, the fair value of this contingent liability was reliably measured at K6 million. The contingency was resolved in the year ended 30 September 2022 and no payments were required to be made by Love in respect of this contingent liability.

(c) Plant and equipment required a fair value uplift K20 million and the estimated remaining useful life of this plant at 1 October 2021 was four (4) years.

The Directors of Peace used the proportion of net assets method when measuring the non-controlling interest in Love in the consolidated statement of financial position. In the consolidated financial statements, the fair value adjustments will be regarded as temporary differences for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%.

5. Included in the property plant and equipment of Peace plc is a property that was acquired on 1 October 2020 at a cost of K700 million. The property is subject to revaluations in accordance with the revaluation model under IAS 16 Property Plant and Equipment. Its total useful economic life is estimated at 100 years. At 30 September 2023, the property was revalued to a fair value of K640 million. The property is yet to be revalued at 30 September 2024 to its fair value of K670 million.

6. On 30 September 2024, the directors of Peace carried out an impairment review and concluded that the recoverable amount of the net assets of Love at that date was K400 million.

7. The investment property in the books of Peace represents an office facility that was completed on 1 October 2022 at the cost of K35 million. The useful economic life of the facility was estimated at twenty (20) years. On 1 October 2022, Peace began to rent this property out to Love under a lease agreement. Peace group values its investment property using the fair value model under IAS 40 Investment Properties and its owner-occupied properties using the cost model under IAS 16 Property, Plant and Equipment.

Required:

Prepare the consolidated statement of financial position of Peace at 30 September 2024.

(40 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt ANY THREE (3) questions.

QUESTION TWO

Njeka Plc is a manufacturing entity based in Zambia.

The directors of Njeka Plc (Njeka) require advice on the accounting treatment of a number of transactions in finalising the preparation of financial statements for the year to 31 December 2024. They have asked you to advise on the accounting treatment of the following transactions:

Transaction 1.

On 1 October 2024, Njeka sold an item of plant to a third party for cash proceeds amounting to K10.29 million but immediately leased it back from the new owner for a lease term of eight (8) years. Njeka's incremental borrowing cost is 11%. Njeka is required to pay a rental of K2 million per annum in arrears on 30 September each year with the initial payment on 30 September 2025.

The plant had been acquired on 1 January 2020 at a cost of K30 million. On 1 January 2020, Njeka had estimated the total useful economic life of the plant as ten (10) years and it has been depreciated on a straight line basis with a nil residual value. The plant's remaining useful economic life has not changed as at its date of disposal. (6 marks)

Transaction 2.

The directors entered a lease contract renting a multi floor building from Lambwe Plc (Lambwe) commencing 1 January 2024 for a term of four (4) years. A refundable deposit of K4 million was paid by Njeka to Lambwe on 1 January 2024. This deposit will be repaid by Lambwe to Njeka at end of the lease term. A market return of 10% per annum would arise if this amount was invested by Njeka over the four (4) years.

The lease contract obliges Njeka to pay an annual rent of K6 million for the first two (2) years and K5 million thereafter. All rentals are due at the beginning of each year of the lease (i.e 1 January). The interest rate implicit in the lease is 11%.

The building was modified by Njeka at inception of the lease in order to put it in a useable condition at a cost of K10 milion. The lease agreement requires that these modifications must be reversed at end of the lease term so that the property is returned to Lambwe in its original state. Njeka has estimated the cost of reversing these modifications at the end of the lease term at K11 million. Njeka's cost of capital is 12%. (10 marks)

Transaction 3.

Njeka let out one floor of the property in transaction 2 above under a sub-lease with a term of two years commencing 1 September 2024 charging a rental of K2.4 million per annum receivable in advance (ie on 1 september each year).

Njeka accounts for investment properties in the same way as owner occupied properties (ie Cost model under IAS 40 Investment properties). (4 marks)

Required:
Advise the Directors of Njeka Plc on the accounting treatment of transactions 1, 2 and 3 above, highlighting amounts that must be reported in the company's financial statements for the year to 31 December 2024 in accordance with applicable international accounting standards.

[Total 20 Marks]

QUESTION THREE

(a) **Twatasha Plc**

Twatasha Plc introduced a pension scheme on 31 January 2024 as one of its strategies to promote retention of its employees. However, the scheme became operational on 1 April 2024 immediately after Twatasha Plc had made a contribution of K900,000. Twatasha Plc has guaranteed pension benefits which employees will get at retirement age. Further, all the employees were eligible including those who were due for retirement in 2024.

The following information relates to the pension plan for the year to 31 December 2024:

(i) The yield on high quality corporate bonds at 1 April 2024 and 31 December 2024 were 10% and 15% respectively.

(ii) Pension benefits of K100,000 were paid on 30 September 2024.

(iii) Fair value of pension assets was K920,000 on 31 December 2024.

(iv) Present value of pension obligations amounted to K1,400,000 on 31 December 2024. Upon the scheme becoming operational on 1 April 2024, it was established that accrued employee pension benefits relating to their services prior to that date amounted to K1,200,000.

(v) Current service costs were equal to K120,000.

The Directors of Twatasha Plc need your advice on the accounting treatment of the scheme in their financial statement for the year to 31 December 2024.

Required:

Advise the Directors of Twatasha Plc on how the pension scheme should be treated in the financial statements of the company for the year to 31 December 2024. (10 marks)

(b) On 31 December 2022, Twalumba Ltd purchased K10 million 5% bonds in Zikomo Ltd at par value. The bonds are repayable on 31 December 2025 and the original effective rate of interest is 8%. Twalumba Ltd's business model is to collect the contractual cash flows over the life of the asset. At 31 December 2022, the bonds were considered to be low risk and as a result, the twelve (12) month expected credit losses are expected to be K10,000. On 31 December 2023, Zikomo Ltd paid the coupon interest, however, at that date the risks associated with the bonds were deemed to have increased significantly.

The present value of the cash shortfall for the year ended 31 December 2024 were estimated to be K462,963 and the probability of default is 3%. On 31 December 2023, it is also anticipated that no further coupon payments would be received during the year ended 31 December 2025 and only a portion of the nominal value of the bonds would be repaid. The present value of the bonds was assessed to be K6,858,710 with a 5% likelihood of default in the year ended 31 December 2025.

Required:
Calculate and discuss the financial reporting treatment of the bonds in the financial statements of Twalumba Ltd as of 31 December 2022 and for the year ended 31 December 2023, including any impairment losses. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Bonimotor Ltd is a consumer electronics company based in Lusaka, which has faced a challenging year due to increased competition and the impact of Cholera. Bonimotor Ltd has a year end of 31 December 2024 and the unaudited draft financial statements reported an operating loss. Additionally, debt covenant limits based on gearing are close to being breached by Bonimotor Ltd and the company has reached its overdraft limit. The following occurred during the year:

(i) On 1 January 2024, the Finance Director and the CEO paid K3 million cash each in exchange for preference shares from Bonimotor Ltd which provide cumulative dividends of 7% per annum. These preference shares can be either converted into a fixed number of ordinary shares in three years' time, or redeemed at par on the same date, at the choice of the preference shareholders. The Finance Director has suggested to the Accountant that the preference shares should be classified as equity because the conversion is into a fixed number of ordinary shares on a fixed date ('fixed for fixed') and conversion is certain (given the current market value of the ordinary shares). (5 marks)

(ii) Bonimotor Ltd has included a deferred tax asset in its statement of financial position, based on losses incurred in the previous two (2) years. The Finance Director has asked the Accountant to include the deferred tax asset in full. The Finance Director has suggested this on the basis that Bonimotor Ltd will return to profitability once its funding issues are resolved. (5 marks)

Required:
Discuss appropriate accounting treatments which Bonimotor Ltd should adopt for the issues identified in i) and ii) and their impact on gearing as at 31 December 2024.

(b) **Mushota Plc** is both a wholesaler and retailer of hardware products based in Kawambwa. It was formed twenty (20) years ago. The Management of the company has started implementing growth strategy of the company by investing in other companies, both direct and indirect competitors. The company made the following investments:

(i) **Investment in Chama Limited**
Mushota Plc acquired 16% of the equity shares in Chama Limited for a cash consideration of K120,000 on 1 January 2024. Mushota Plc incurred legal costs of

K7,000 to complete the purchase of the shares. Mushota Plc intends to sell the shares when their value is at least K120,000.

During the year to 31 December 2024, Chama Plc made profit after tax of K10,000 and dividends of K8,000 were paid. The 16% investment in Chama Plc had a fair value of K132,000 as at 31 December 2024. (5 marks)

(ii) **Investment in Sashi Plc**
On 1 January 2024, Mushota Plc acquired 12% of the equity shares in Sashi Plc for a cash consideration of K90,000 when the fair value of net assets of Sashi stood at K600,000. The shareholding entitled Mushota Plc to two (2) seats on the board of directors and to participating in the financial and operating decisions and policies of Sashi Plc. During the year to 31 December 2024, Sashi Plc made profit after tax of K30,000 and paid out dividends of K10,000. (5 marks)

The management of Mushota Plc need your advise on the accounting treatment of investments above in their consolidated financial statements.

Required:
Advise the management of Mushota Plc how the above investments should be treated in their consolidated financial statements for the year 31 December 2024.

[Total: 20 Marks]

QUESTION FIVE

The Managing Partner has asked you, on behalf of a shareholder, to prepare a report on the financial and business position of Bonitech, a listed entity. There has been adverse press comment on the 'aggressive management of earnings' by Bonitech and criticism of the management. Information about Bonitech has been gathered by the partner and this is set out below:

Bonitech provides internet-based electronic hosting, delivery and marketing services. Bonitech was formed in 2020 with the Board promising to take the entity into the top 15% of listed entities within five (5) years. Management are highly motivated and are compensated in part via share/stock options. Management work in a pressurised environment. Bonitech makes use of different corporate entities in order to finance its business. Bonitech has borrowed K40 million from twenty different Micro Finances which are owned by a bank, which itself owns twenty-five per cent (25%) of the shares of Bonitech. Bonitech has deposited K35 million with the Micro Finances with the net balance being shown as a current liability. The management of Bonitech say that the Micro Finances are not under their control and that because each amount borrowed is individually immaterial there is no need to disclose the relationship in the financial statements. Additionally, it appears that in previous years a common practice was for Bonitech to invoice the same Micro Finances in the final week of the financial year for services and reverse the invoices once Bonitech had filed its financial statements.

Financial statement information extracted from the published accounts for the years ended 31 January 2024 and 2023.

Extracts from statement of financial positions

	2024	***2023***
	K' million	**K' million**
Assets:		
Non-current assets:		

Property	10	8
Plant and equipment	40	30
Intangibles	20	12
	70	50
Current assets	230	240
Total assets	**300**	**290**
Equity and Liabilities		
Equity		
Share capital – K1 equity shares	30	30
Reserves – Revaluation reserve	30	20
Retained earnings	10	60
Total equity	70	110
Liabilities		
Non-current liabilities	50	40
Current liabilities	180	140
Total equity and Liabilities	**300**	**290**

Extracts from statement of profit or loss

Revenue	160	200
Profit before interest and tax	30	95
Profit/(loss) before tax	(10)	40

Other information

(i) Number of employees	150	250
Number of days after year-end to publication of financial statements	65	25

(ii) The non-current assets have been revalued by one of the Directors of Bonitech who holds no recognised professional qualification and has used estimated realisable value as the basis of valuation. The plant and equipment is of a highly specialised nature and is constructed by Bonitech itself and is mainly computer hardware. The intangible assets are the data purchase and data capture costs of internally developed databases and are capitalised as development expenditure and written off over four (4) years.

(iii) In the year to 31 January 2023, a six (6) year bond was issued by Bonitech with a par value of K40 million for K42 million. The excess over par value was recognised in profit or loss. In the year to 31 January 2024, a further six (6)-year bond with a par value of K10 million was issued for K11 million and accounted for in the same manner. The investors may request redemption after three (3) years or if the working capital ratio falls below 1.3. The bonds bear interest at 5% per annum and are redeemable at par.

(iv) Revenue represents the invoiced amount of goods sold and services provided and work undertaken during the year on contracts.

(v) Bonitech has published Interim financial statements for the four months to 31 May 2024 showing profit before tax to be K20 million, long-term liabilities reduced to K10 million, and the working capital ratio as being 1.5.

Required:

Prepare a report for the managing partner on the business and financial position of Bonitech, setting out the implications of the financial and other information outlined above. (20 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 3.1 ADVANCED FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

1 Consolidated statement of financial position of Peace at 30 September 2024

Assets		**K'000**
Non-current assets:		
Investment property (50,000-35,000 -15,000)	0	
Property, plant and equipment (489,000 + 370,000 + 162,000) + [(40,000 (W1) – 3,000 (W1)) + (20,000 (W1) – 15,000 (W1)) + 20,000 (W2) + (7,800 – 390) (W8) +36, 600 (w10) +31,500 (12)]	1,158,510	
Goodwill (W3)		72,120
Current assets:		1,230,630
Inventories (120,000 + 175,000 + 160,000)		455,000
Trade receivables (90,000 + 66,000 + 55,000)		211,000
Cash and cash equivalents (15,000 + 12,000 + 10,000)		37,000
		703,000
Total assets		
Equity and liabilities		**1,933,630**
Equity attributable to equity holders of the parent		
Share capital		140,000
Retained earnings (W6)		646,317
Other components of equity (W7)		254,000
		1,040,317
Non-controlling interest (W5)		120,470
Total equity		1,160,787
Non-current liabilities:		
Provision (7,800 + 468 (W8))		8,268
Long-term borrowings (82,750 + 90,000 + 48,000)		220,750
Deferred consideration (20,000 + 4,000)		24,000
Deferred tax (W9)		115,400
Total non-current liabilities		368,418
Current liabilities:		
Trade and other payables (60,000 + 150,000 + 130,000 + 425 w11)		340,425
Short-term borrowings (20,000 + 35,000 + 9,000)		64,000
Total current liabilities		404,425
Total equity and liabilities		**1,933,630**

WORKINGS – ALL NUMBERS IN K'000 UNLESS OTHERWISE STATED:

Working 1 – Net assets table – Love plc:

	1 October 2021 K'000	30 September 2024 K'000
Share capital	100,000	100,000
Retained earnings:		
Per accounts of Love	150,000	210,000
Fair value adjustments:		
Property (240,000 – 200,000)	40,000	40,000
Extra depreciation due to buildings uplift ((40,000 x 75%) x 3/30)		(3,000)
Plant and equipment (fair value uplift)	20,000	20,000
Extra depreciation due to plant and equipment uplift (20,000 x ¾)		(15,000)
Contingent liability	(6,000)	Nil
Other components of equity	5,000	10,000
Deferred tax on fair value adjustments:		
Date of acquisition (20% x 54,000 (see above))	(10,800)	
Year end (20% x 42,000 (see above))		(8,400)
Net assets for the consolidation	298,200	353,600

The post-acquisition increase in net assets is 55,400 (298,200– 353,600).
5,000 of this increase is due to changes in other components of equity and the remaining 50,400 to changes in retained earnings.

Working 2 – Net assets table – Joy plc:

	1 October 2021 K'000	30 September 2024 K'000
Share capital	80,000	80,000
Retained earnings:	75,000	90,000
Land adjustment (80,000 – 60,000)	20,000	20,000
Deferred tax on fair value adjustment (20% x 20,000)	(4,000)	(4,000)
Net assets for the consolidation	171,000	186,000

The post-acquisition increase in net assets is 15,000 (186,000 – 171,000).

Working 3 – Goodwill on consolidation

	Love	Joy
	K'000	**K'000**
Costs of investment:		
Shares issued to acquire Love (40,000 x K7·00)	280,000	
Cash paid to acquire shares in Joy		140,000
Contingent consideration re: Joy acquisition		20,000
Non-controlling interests at date of acquisition:		
Love – 20% x 298,200 (W1)	59,640	
Joy – 20,000 x K2·30		46,000
Net assets at date of acquisition (W1/W2)	(298,200)	(171,000)
Goodwill before impairment	41,440	35,000
Impairment of Love goodwill (W4)	(4,320)	Nil
	37,120	35,000

The total goodwill is 72,120 (37,120 + 35,000).

Working 4 – Impairment of Love plc goodwill

	K'000
Net assets of Love as per working 1	353,600
Grossed up goodwill on acquisition (100/80 x 41,440)	51,800
	405,400
Recoverable amount of Love as a CGU	(400,000)
So gross impairment equals	5,400
80% thereof equals	4,320

Working 5 – Non-controlling interest

	Love plc	Joy plc
	K'000	K'000
At date of acquisition (W3)	59,640	46,000
Share of post-acquisition increase in net assets per workings 1 and 2:		
Love – 20% x 55,400 (W1)	11,080	
Joy – 25% x 15,000 (W2)		3,750
	70,720	49,750

The total NCI is 120,470 (70,720 + 49,750).

Working 6 – Retained earnings	K'000
Peace	588,000
Fair value gain (w10)	36, 600
Employee benefits (w11)	(425)
Adjustment for acquisition costs	(3,000)
Adjustment for increase in contingent consideration re: Joy (24,000 – 20,000)	(4,000)
Adjustment for restoration provision (W8)	392
Love (80% x 50,400 (W1))	40,320
Joy (75% x (15,000 (W2))	11,250
Impairment of Love goodwill (W4)	(4,320)
Net effect on reclassification of investment property (w12)	(18,500)
	646,317

Working 7 – Other components of equity	K'000
Peace – per own financial statements	250,000
Love (80% x 5,000 (W1)	4,000
	254,000

Working 8 – Adjustment re: restoration provision	K'000
Originally required provision (25,000 x 0·312)	7,800
One year's unwinding of discount (7,800 x 6%)	(468)
One year's depreciation of capitalised cost (7,800 x 1/20)	(390)
Original provision incorrectly made	1,250
So retained earnings adjustment equals	392

Working 9 – Deferred tax	K'000
As per question (45,000 +28,000 +30,000)	103,000
On fair value adjustments in Love (W1)	8,400
On fair value adjustments in Joy (W2)	4,000
	115,400

Working 10. Revaluation of Peace plc's PPE at 30.9.2024:

FV at 30.9.2024	670	
Carrying amount at 30.9.2024 (640 - (640÷97X1)	(633.4)	36.6

Revaluation gain on A plc's property:	
Cost model carrying amount (700X (96÷100)	672
FV at revaluation	670
Whole gain is within cost model carrying amount.	
Therefore the whole gain must be reported in P/L/ RE	36.6

Working 11 Holiday pay accrual

IAS 19 *Employee Benefits* classifies this type of holiday pay as a short-term accumulating paid absence as any unused entitlement may be carried forward and utilised in the following year. The obligation arises as the employees render services that entitle them to future paid absences. The obligation exists even if the employees are not entitled to a cash payment (non-vesting). This is consistent with the definition of a liability given in the *Conceptual Framework.* The company has a present obligation, as it needs to provide a paid absence, as a result of past events, as the employee has already undertaken employment and accumulated the benefit from which an outflow of resources is expected. Making payments to employees in respect of absences is considered to be an outflow of benefits.
The measurement of the obligation is affected by Peace's estimate of possible leavers (5%). IAS 19 requires that an accrual be made by Peace for holiday entitlement carried forward as the current period's entitlement has not been used in full at 30 September 2024. A corresponding increase in the wages and salaries expense will also be recorded in this case retained earnings). The current liability is calculated as follows:
Number of days c/fwd: 1,800 x 3 x 95% = 5,130 days
Number of working days: 1,800 x 255 = 459,000
Accrual = (5,130/ 459, 000) X K38m = K0.425m.

Working 12

PPE: Reclassification of Investment property (35,000 -3,500)	**31,500**
Retained earnings:	
Reversal of fair value gain on investment property (50,000 -35,000)	(15,000)
Depreciation on property (as owner occupied, (35,000 /20 x 2)	(3,500)
	(18,500)

SOLUTION TWO

Transaction 1.

This is a sale and lease back transaction. Accounting for the transaction will depend on whether the sale has commercial substance in accordance with IFRS 15 Revenue from Contracts with Customers. At the date, the asset has a remaining useful life of 5 years, 3 month compared with a lease term of 8 years. This indicates that Njeka has not transferred substantially all economic benefits and risks relating to ownership of the asset. Njeka must therefore not derecognise the asset. The amount received as disposal proceeds must therefore be accounted for as a loan. The loan is repayable with interest over the lease term.

Amounts to report in Njeka's FS for the y/e 31.12.2024 will be as follows:

Loan liability and finance cost:

		K'm
Initial loan liability at 1.10.2024		10.29
Finance cost to charge in PL for Y/e 31.12.2024	10.29*11%*3/12	0.28
Loan liability to report in SFP at 31.12.2024		10.57

Plant:

		K'm
Plant carrying amount b/d at 1.1.2024	(30-30/10*4)	18
Depreciation charge in PL for y/e 31.12.2024	18/6	-3
Carrying amount to report in SFP at 31.12.2024		15

Transaction 2.

Njeka must capitalise the lease recognising a lease liability and a right of use asset (ROUA) in accordance with IFRS 16 Leases. The refundable deposit must be recognised as a receivable (financial) in accordance with IFRS 9 Financial Instruments.

The lease liability will initially be measure at the PV of the future MLPs discounted at the interest rate implicit in the lease. Subsequently, the lease liability will be measured at amortised cost with finance costs charged in PL. Amounts to report in respect of the lease liability will be as follows:

Amounts in respect of the lease lianbilities		
Initial lease liability at 1.1.2024	6*(1.11^-1)+5*(1.11^-2+1.11^-3)	13.12
Finance cost to charge in PL for y/e 31.12.2024	11%*13.12	1.44
Lease liability to report in SFP at 31.12.2024		14.56
Current portion of total liability		6.00
Non Current portion of total liability	(balance)	8.56

The receivable in respect of the refundable deposit must initially be measured at fair value in accordance with IFRS 9. In this case, fair value will be the PV of the amount refundable discounted at the current market return on 1.1.2024. Any difference between the fair value of the receivable and the amount paid is a loss on recognition of the receivable and must be included as part of the cost of the ROUA. Amounts to report in FS for the y/e 31.12.2024 in respect of the receivable are as follows:

Amounts in respect of the refundable deposit		
Cash paid		4.00
Loss in initial recognition to include in ROUA	(balance)	-1.27
Initial receivable at 1.1.2024	(4*1.1^-4)	2.73
Finance income on receivable to report in PL for y/e 31.12.2024	10%*2.73	0.27
Carrying amount of receivable to report in the SFP at 31.12.2024		3.01

The ROUA must initially be measured at the aggregate of cash amounts incurred at inception of the lease, initial lease liability and any decommissioning provision. Subsequently, the ROUA must be amortised over the lease term or useful economic life of the leased asset, whichever is the shorter. Amounts to report in the FS for the y/e 31.12.2024 in respect of the lease are as follows:

Amounts in respect ot the ROUA		
		K'm
Cash incurred at 1.1.2024:		
- loss on refundable deposit		1.27
- initial advance rental		6.00
- modifications to property		10.00
Initial lease liability		13.12
Provision for reversal of modifications	11*1.12^-4	6.99
Initial ROUA at 1.1.2024		37.38
Amortisation charge to report in PL for y/e 31.12.2024	37.38/4	-9.35
Carrying amount to report in SFP at 31.12.2024		28.04

A provision liability must be recognised at 1.1.2024 in respect of the costs to reverse the modifications to the leased property at end of the lease term in accoradnce with IAS 37 Provisions, Contigent Liabilities and Contingent Assets. The provision must be measured at the PV of the estimated cost. Subsequently, the unwinding of the discount will be reported within finance costs in PL. Amounts to report in FS for the y/e 31.12.2024 in respect of the provision for decommissioning the lease are as follows:

Amounts in respect of provision for reversal of modifications

Initial provision at 1.1.2024	11*1.12^-4	6.99
Finance cost to charge in PL for y/e 31.12.2024	6.99*12%	0.84
Carrying amount to report in SFP at 31.12.2024		7.83

Transaction 3.

The sub lease of the property will primarily be accounted for in accordance with requirements of IFRS 16 Leases for lessors. Accounting by lessors will depend on the type of lease, that is, whether finance or operating lease.

Njeka's sublease is an operating lease as it does not transfer substantially all economic benefits relating to the asset under lease. The lease term of 2 years is a small proportion of the useful life of the asset (the main lease term) of 4 years. Njeka must therefore account for the operating lease by:

- Continuing to account for the asset under lease (ROUA) as owned by Njeka
- Recognising the total MLPs receivable from the sub tenant as income in PL on a straight line basis over the 2 years lease term..

Amounts to report in the FS for the y/e 31.12.2024 in respect of the sub lease will be as follows:

Amounts in respect of sub lease

		K'm
Rent received on 1.9.2024		2.40
Rental income to report in PL for the year to 31.12.2024	2.4/12*4	0.8
Deferred income liability to report in SFP at 31.12.2024		1.60

SOLUTION THREE

(a) The pension plan introduced by Twatasha Plc will be accounted for in accordance with IAS 19 'Employee Benefits'. The scheme will be treated as a defined benefit plan. This is because Twatasha Plc has guaranteed pension benefits employees will receive at retirement. Its obligation is therefore not limited to pension to contributions to the plan.

Twatasha Plc will recognise a net liability of K480,000 **W4** under non-current liabilities in its statement of financial position as at 31 December 2024. It will also recognise a net pension expense of K1,342,500 **W3** and net actuarial loss of K37,500 **W1&W2** (55 - 92.5) in its statement of profit or loss and other comprehensive income for the year ended 31 December 2024.

Workings

W1 Pension Plan Assets

	K'000
Opening balance	0
Cash Contribution paid	900.00
Benefits paid	(100.00)
Interest (10% x 900 x6/12) +(10%x800x3/12)	65.00
Actuarial gain (bal.fig)	55.00
Fair value at 31 December 2024	920.00

W2 Plan Obligations

	K'000
Opening balance	**0**
Past service cost	1,200.00
Interest (10% x 1,200 x 6/12) +(10% x K1,100 x 3/12)	87.50
Current service cost	120.00
Benefits paid	(100.00)
Actuarial loss (bal.fig)	92.50
Present value at 31 December 2024	1,400.00

W3 Net pension expense

	K'000
Past Service Cost	1,200.00
Current service cost	120.00
Net Interest expense (87.5 – 65)	22.50
Net expense in P/L	**1,342.50**

W4 Net pension obligation

	K'000
Present value at 31 December 2024	1,400.00
Fair value at 31 December 2024	(920.00)
Net Liability	480.00

(b) The business model of Twalumba Ltd is to collect the contractual cash flows of the bonds over the life of the asset, the bonds should be measured at amortised cost. All financial assets including amortised cost assets should initially be recognised at fair value. This would be equal to the K10 million paid on acquisition of the bonds. **IFRS 9 Financial Instruments** requires entities to adopt an expected value approach to the consideration of impairment losses on financial assets.

On acquisition, the bonds are considered low risk and are not credit impaired. The bonds would be classified as a **stage one** financial asset as of 31 December 2022. This implies that Twalumba Ltd should create an expected credit loss equal to *12 months expected credit los*ses. It is important to appreciate that the 12-month expected credit loss is not the lifetime expected credit loss which an entity will incur which it predicts will default in the next 12 months. The 12-month expected credit loss is defined as a portion of the lifetime expected credit losses which represent the expected credit losses which result from a default within the next 12 months. In effect, the proportion of the lifetime expected credit losses which are expected should a default occur within 12 months are weighted by the probability of a default occurring.

Twalumba Ltd should therefore recognise a default allowance of K10,000 as at 31 December 2022. This will be expensed **to profit or loss** and a separate allowance created rather than offset against the K10,000,000 bonds. The allowance is, however, netted off the K10,000,000 bond in the statement of financial position of Twalumba Ltd as at 31 December 2022. The carrying amount of the bonds in the statement of financial position at 31 December 2022 will be K9·99 million (K10 million – K10,000). As the bonds are to be measured at amortised cost, the effective rate of interest of 8% will be included in profit or loss and added to the bonds. This is calculated on the initial K10,000,000 and is not affected by the loss allowance of K10,000. The coupon interest of K500,000 (K10,000,000 x 5%) is deducted from the carrying amount of the bonds. This implies that the bonds would have a carrying amount of K10,300,000 at 31 December 2023 before considering the impairment allowance.

Amortised cost table 31 December 2023

Bal b/fwd	**Interest rate 8%**	**Coupon rate 5%**	**Bal c/fwd**
K10,000,000	K800,000	K500,000	K10,300,000

At 31 December 2023, there has been a significant increase in credit risk. As no actual default has yet occurred, the bonds should be classified as a **stage two financial asset.** This implies that Twalumba Ltd should make an allowance to recognise ***the lifetime expected credit losses.*** This is defined as the expected credit losses (cash shortfalls) which result from all possible default events over the expected life of the bonds. An allowance is required equal to the present value of the expected loss in contractual cash flows as weighted by the probability of default. The expected default losses are discounted using the original effective rate of interest of 8%.

Date	Calculation of Cash flow loss	Present value of default
31 December 2024	3% x K462,963	K13,889
31 December 2025	5% x K6,858,710	K342,936
		K356,825

The expected loss allowance should be increased to K356,825 with an expense recorded in profit or loss of K346,825 (K356,825 – K10,000). The loss allowance is deducted directly from the bonds with future interest income recorded on the gross position. The carrying amount of the bonds on 31 December 2023 would be K9,943,175 (K10,300,000 – K356,825).

SOLUTION FOUR

(a)

(i) **IAS 32** defines an equity instrument as any contract which evidences a residual interest in the assets of an entity after deducting all of its liabilities. An equity instrument has no contractual obligation to deliver cash or another financial asset, or to exchange financial assets or financial liabilities under potentially unfavourable conditions. If settled by the issuer's own equity instruments, an equity instrument has no contractual obligation to deliver a variable number or is settled only by exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments. Preference shares which are required to be converted into a fixed number of ordinary shares on a fixed date should be ***classified as equity*** (this is known as the 'fixed for fixed' requirement to which the finance director refers).

However, a critical feature in differentiating a financial liability from an equity instrument is the existence of a contractual obligation of the issuer either to deliver cash or another financial asset to the holder, or to exchange financial assets or financial liabilities with the holder, under conditions which are potentially unfavourable to the issuer. In this case, Bonimotor Ltd has issued convertible redeemable preference shares – which makes little commercial sense from the company's perspective, as they offer the holder the benefit of conversion into ordinary shares if share prices rise, and the security of redemption (at the choice of the holder) if share prices fall.

IAS 32 notes that the substance of a financial instrument, rather than its legal form, governs its classification in the entity's statement of financial position. A preference share which provides for mandatory redemption for a fixed or determinable amount at a fixed or determinable future date or gives the holder the right to require the issuer to redeem the instrument at a particular date for a fixed or determinable amount **is a financial liability.** Since the preference shares offer the holder the choice of conversion into ordinary shares as well as redemption in two years' time, the terms of the financial instrument should be evaluated to determine whether it contains **both a liability and an equity component.** Such components are classified separately as compound financial instruments, recognising separately the components of a financial instrument which creates both a financial liability of the entity (a contractual arrangement to deliver cash or another financial asset) and an equity instrument (a call option granting the holder the right, for a specified period of time, to convert it into a fixed number of ordinary shares of the entity).

As per **IFRS 9 Financial Instruments**, when the initial carrying amount of a compound financial instrument is allocated to its equity and liability components, the equity component is assigned the residual amount after deducting from the fair value of the instrument as a whole the amount separately determined for the liability component. Bonimotor ltd would measure the fair value of the consideration in respect of the liability component based on the fair value of a similar liability without any associated equity conversion option. The equity component is assigned the residual amount. Gearing would decrease if the draft financial statements had included the preference shares within equity: the correction would increase non-current debt (the present value of the future obligations) and decrease equity.

(ii) In accordance with ***IAS 12: Income Taxes***, a deferred tax asset shall be recognised for the carry-forward of unused tax losses to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilised. However, the existence of unused tax losses is strong evidence that future taxable profit may not be available. Therefore, when an entity has a history of recent losses, the entity recognises a deferred tax asset arising from unused tax losses only to the extent that it has convincing evidence that sufficient taxable profit will be available against which the unused tax losses can be utilised. In such circumstances, the amount of the deferred tax asset and the nature of the evidence supporting its recognition must be disclosed.

The directors of Bonimotor Ltd should consider whether it is probable that Bonimotor Ltd will have taxable profits before the unused tax losses or unused tax credits expire, whether the unused tax losses result from identifiable causes which are unlikely to recur; and whether tax planning opportunities are available to the entity which will create taxable profit in the period in which the unused tax losses or unused tax credits can be utilised. To the extent that it is not probable that taxable profit will be available against which the unused tax losses or unused tax credits can be utilised, the deferred tax asset should not be recognised. However, the impact on the financial statements is that the removal of a deferred tax asset would reduce net assets, and equity and increase gearing.

(b) **Investment in Chama Limited**

The treatment of investment in consolidated financial statements will depend on whether acquisition of 16% in Chama Limited gives Mushota Plc no significant influence; significant influence; joint control or control in the company. Acquiring equity shareholding of less than 20% in another entity is presumed not to result in significant influence unless there is information to the contrary. The investment in Chama Limited will be treated as trade investment classified as a fair value through profit or loss asset in consolidated financial statements as they are held for the sole purpose of selling and there no information to suggest Mushota Plc has significant influence in Chama Limited. The investment will initially be recognised at fair value of K120,000, excluding legal costs of K7,000. The investment will be re-measured to K132,000, its fair value at 31 December 2024, and shown under non-current assets. The difference between fair value at 31 December 2024 and 1 January 2024 of K12,000 (132,000 – 120,000) and dividends received of K1,280 (16% x 8,000) will be taken to statement of profit or loss for the year ended 31 December 2024 as other income. While legal costs of K7,000 will be charged as an expense to statement of profit or loss for the year ended 31 December 2024. The treatment is in accordance with IFRS 9 *'Financial Instruments: Recognition and Measurement'*.

Investment in Sashi Plc

Mushota Plc's acquisition of 12% equity interests in the shares of Sashi Plc is presumed not to give rise to significant influence as it is less than 20%. IAS 28 *'Investments in Associates and Joint Ventures'* states that where an entity holds 20% or more of the voting power (directly or through subsidiaries) on an investee, it will be presumed the investor has significant influence unless it can be clearly demonstrated that this is not the case. If the holding is less than 20%, the entity will be presumed not to have significant influence unless such influence can be clearly demonstrated. There is therefore need to look at the rights which come acquiring 12% in Sashi Plc. Mushota Plc has two seats on the board of directors and is able to participate in the financial and operating decisions of Sashi Plc. These provide evidence of existence of significant influence in accordance with IAS 28. Sashi Plc should therefore be treated as an associate in the consolidated financial statements of Mushota Plc and accounted for using the Equity Method. Sashi Plc will be shown in the consolidated statement of financial position as at 31 December 2024 under current assets with an amount of K92,400. Group share of profit after tax of K4,500 will be credited to consolidated statement of profit or loss for the year ended 31 December 2024. Further, share of retained profit for the year of K2,400 (K3,600 – K1,200) will be credited to consolidated retained earnings in consolidated statement of financial position as at 31 December 2024.

Investment in Associate - Sashi Plc

	K'000
Cost of investment	90.00
Share of profit after tax 12% x 30	3.60
Share of dividends 12% x 10	(1.20)
	92.40

SOLUTION FIVE

Report on the business and financial position of Bonitech

To: Shareholder

From: Consultant

Date: Date of examinations

Subject: Implications of the financial and other information relating to Bonitech Business and financial environment

Bonitech is operating in a sector which is experiencing the effects of businesses taking a more pessimistic view of the economic future and as a result there has been curtailed spending by entities on equipment, software and marketing services. Thus any investment decision must be made in the context of a sector that is suffering an economic slowdown.

The management of Bonitech work in a pressurised environment. The Board has promised to take Bonitech into the top 15% of entities within five years and thus the management will be under pressure to achieve this goal. Management will be pushed hard to meet what might be seen as overly optimistic targets. Additionally, there are debt covenants tied to financial ratios (the bond holders can demand repayment if the working capital ratio falls below 1.3) and with their own compensation tied in part to these share/stock options and thus performance, management may put all staff under pressure. This environment may create an incentive to adopt accounting practices that meet the expectations of the directors and the capital markets, or to move beyond normally acceptable accounting practices. Possible examples of this are set out in the following discussion.

Bonitech makes use the Micro Finances as special purpose vehicles (SPV)/special purpose entities (SPE). Transactions with SPV/SPEs are often intended to shift assets/liabilities off the statement of financial position and require special attention because of the often complex accounting and disclosure rules which apply. Bonitech has borrowed K40 million from twenty different Micro Finances and has deposited the majority of the borrowings with those Micro Finances in order that only the net amount of K5 million is shown in the financial statements. The use of such transactions poses a potential risk to an investor in Bonitech as there are issues concerning the reasons why management uses such vehicles and the nature of the accounting treatment of these transactions. In this case it could be argued that the Micro Finances are subsidiaries of Bonitech rather than subsidiaries of the bank in which case the offset of the gross asset and liability could be achieved through a consolidation adjustment. The arrangements need to be carefully examined as it is important to determine whether they are subsidiaries of Bonitech or the bank.

Reference will need to be made to IFRS 3 *Business combinations* and the *Framework for the preparation and presentation of financial statements*. There will be a need to determine whether the bank is exposed to the potential loss of K5 million (K40 million – K35 million) indicating that it is the economic as well as the legal owner of the finance houses. There is a potential, therefore, for an additional K35 million of loans to be shown on the statement of financial position of Bonitech, if the bank is in fact the owner of the Micro Finances and if the transaction does not meet the criteria for offset in IAS 32 *Financial instruments: presentation*.

Also, the bank owns 25% of the shares of Bonitech and may be deemed a 'related party' under IAS 24 *Related party disclosures*. This heightens the risk of improper accounting and the possibility that the economic substance of the transaction may be other than its legal form, or that the transactions lack substance. Further, management's assertion that each individual transaction with the Micro Finances is immaterial is not a valid one. Transactions of this nature should be looked at collectively and not individually.

Finally, it seems that these Micro Finances have also been used to boost earnings as invoices have been issued to them before the year-end that were then reversed once Bonitech had filed its financial statements. The management of Bonitech appear to be using dubious practices in order to massage the figures in the financial statements.

The property, plant and equipment have been valued by one of the directors of Bonitech. IAS 16 *Property, plant and equipment* gives guidance on who should perform valuations by saying that the value should be determined by 'appraisal normally undertaken by professionally qualified valuers' and the director is not a qualified valuer. This fact places doubt on the values placed on the property, plant and equipment. The plant and equipment is of a specialised nature and is, therefore, difficult to value, especially as it has been constructed by Bonitech itself. It could be argued that the director is perhaps the best person to value such assets. However, the lack of independence in the process and the lack of compliance with IAS 16 increases the risk of reliance upon the figures for property, plant and equipment. Additionally, IAS 16 states that the fair value of land and buildings and plant and equipment is usually market value, not an estimate of realisable value. Further where there is no evidence of market value for plant and equipment because of its specialised nature (as is the case in this instance), then they may need to be valued at depreciated replacement cost.

Assets other than properties are easily valued and therefore there is suspicion as to the underlying reasons for the valuation of plant and equipment and the authenticity of the figures for property, plant and equipment. The revaluation reserve has increased by K10 million during the year.

IAS 38 *Intangible assets* sets out the criteria that should be met in order to recognize an internally generated intangible asset. As regards development costs, Bonitech is required to demonstrate that the intangible asset will generate net cash inflows in excess of the cash outflows and cost can be measured reliably. Also development costs recognised as an asset are subject to an impairment test under IAS 36 *Impairment of assets*. The criteria to recognise these costs used by Bonitech will need to be scrutinised but it appears at first sight that these costs should have been written off. Bonitech is likely to be sensitive to negative changes in economic conditions and thus a liquidity crisis can quickly develop. The 'investor put bond' might appear to be accounted for incorrectly under IFRS 9 *Financial instruments* which requires such instruments to be accounted for at amortised cost.

Bonitech should recognise the finance credits (K2 million 2022, K1 million 2023) over the shortest period that the investor can require redemption, which at first sight would appear to be three years, but as the investors can require redemption if the working capital ratio falls below 1.3, it could be argued that the current accounting treatment is correct. Such financial instruments do not fit easily with IFRS 9 which may be the reason why management chose this form of instrument. Generally, the bond should be recognised at the amount that would be paid if the holder of the bond exercised his right. Currently the working capital ratio is 230 ÷ 180, i.e. 1.28, which means that the debt covenant is broken. Bonitech may be put under pressure to repay the bonds.

There are negative trends that affect the viability of Bonitech. These include the off statement of financial position transactions, operating losses, worsening liquidity, potential loan defaults (bonds), and increasing reliance on external financing as evidenced by the increase in the long term liabilities and gearing. These risk factors need to be evaluated in the light of any management plans to mitigate the existing condition and events. These trends are evidenced in the ratios calculated in the appendix.

The revenue is recognised on invoicing but when they invoice remains a mystery. This crucial omission removes any real value from the information as they could invoice before the services are performed. Similarly, the policy used for work undertaken on contracts is vague.

The use of Interim information is fraught with difficulties. Interim information can mislead investors if it obscures the true IFRS results. Such information is not always drawn up in accordance with IFRS and if there is no reconciliation to IFRS, the information should be viewed with scepticism. Bonitech may be using the Interim information to change their image of a loss making entity with debt problems to one with a healthy profit with no debt problems. Omissions of important information may have occurred and without clear and comprehensible explanations of any omissions, the Interim statements are meaningless.

Conclusion

There are many potential problems and issues that need to be resolved. The figures reported in the Interim financial statements indicate a tremendous turn around in Bonitechs' financial position and as such should be viewed with a high degree of scepticism. There has been a dramatic reduction (250 in 2023 to 150 in 2024) in the employees' numbers that might have internal control implications and the publication lag regarding the financial statements has increased (65 days in 2024 from 25 days in 2023) dramatically with the inference that there have been problems finalising those statements. There appears to be an attempt by the directors to enhance the performance of Bonitech and there are business cultural issues regarding the management of Bonitech that need addressing. Bonitech is potentially insolvent as there are K35 million of loans not recorded in the statement of financial position and the bond holders will almost certainly require redemption of their loans within the short term. The working capital ratio is deteriorating. The gearing ratio has increased without accounting for the loans not recognised in the statement of financial position and the figures for revenue, property, plant and equipment and inventory are all potentially inaccurate. Finally, the directors have published Interim information in an attempt to increase confidence in Bonitech. Given the nature of the problems outlined above, and the inconsistency of the Interim information with expectations, it would be difficult to recommend any form of investment in Bonitech.

Signed

Appendix

	2024	*2023*
Working capital ratio	1.28	1.71
Gearing ratio		
Non-current Liabilities /(Equity + Non-current Liabilities)	0.42	0.27

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 12 SEPTEMBER 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

Supaloaf Plc. is a company that is in the confectionary industry and supplies a number of leading supermarkets with bread and other products. The company was established twenty (20) years ago and has been using the same bakery equipment during this period. Due to increase in demand for its products, the company has been operating for twenty four (24) hours but is still under pressure to meet demand.

Two (2) years ago, management of Supaloaf Plc. recommended to the board that the company should get a long term loan of $1.5 million to enable the company replace the old bakery equipment with state of the art automated equipment. The Board of Directors approved the request and a loan was secured. The new bakery equipment arrived and was installed during the year 2023 and test runs were successfully completed resulting in the company switching production to the new equipment. At a board meeting held on 30 September 2023, a board resolution was passed to sell off the old bakery equipment immediately. A potential customer was identified and negotiations are in progress. It is hoped that the sale will be concluded and finalized within a one (1) year period.

Your firm Chris & Mike Chartered Accountants has been auditor of Supaloaf Plc. for the last ten (10) years and Chris has been Engagement Partner during this period. The audit fee from Supaloaf Plc contributes significantly to Chris's personal income in the firm. The planning of the audit for the financial year ended 31 March 2024 is underway. The company underwent restructuring during the year resulting in the laying off of staff. Management requested your firm to help in the recruitment of the Chief Accountant to replace the one that left during restructuring. Furthermore, your firm has a procedural manual giving guidance on the approach to auditing followed by your firm. The manual was last updated five (5) years ago and most of the systems have since changed due to increased computerization by most of the firm's clients. Currently there is no Quality control Manual used by Chris & Mike and all quality issues are the responsibility of the Engagement Partners. The firm does not have policies and procedures in place to ensure that staff comply with the ethical requirements for accountants.

At the planning stage of the audit, materiality for the financial statements as a whole was set at K8,000. During the course of the audit, the Audit Senior was concerned that the level of exceptions was higher than originally expected. It was evident that the internal controls were not effective in helping detect and prevent fraud and error. He suggested to the audit team that there should be a change in the approach to the audit as a result.

The draft financial statements are awaiting determination of the pension liability after realizing that the amount provided falls below the amount required using the defined benefit scheme in use. The company does not have the skills to determine this amount and it has requested that your firm enters into a non-audit service engagement and computes the amount to speed up the finalization of the financial statements. Furthermore, Supaloaf Plc. underwent a tax audit by the Revenue Authority. It is alleged that the company understated its revenue by a total amount of K5.5 million in the last three (3) years resulting in penalties of K1.2 million. The company is disputing the understatement of revenue and the penalties. The company is requesting the legal services department of your firm to represent it at the hearing by the Tax Tribunal in two (2) weeks.

The company provided the audit team with the draft financial statements. Included in the figure for property, plant & equipment is the depreciated value for the old bakery equipment. Full annual depreciation for the current year has been provided on the old bakery equipment.

The following figures relate to the old bakery equipment about to be sold:

	K000
Carrying amount included in property, plant & equipment	4,500
Fair value of the bakery per expert valuation	5,340
Expected costs to sell to be incurred	1,850

You are the Audit Manager on the audit of Supaloaf Plc. and you recently attended an exit meeting with management at which the following matters were discussed:

1. There is a matter concerning litigation against the company by some former employees for which a provision of K12 million has been made in the financial statements in the year under review. The case has been going on for the last five (5) years and you have indicated that this matter will be included in the audit report. Management is concerned that you are considering modifying the audit opinion on account of a matter that has been disclosed and accounted for correctly in the financial statements.
2. There is material uncertainty with regards the ability of the company as a going concern. Management has agreed to make the necessary disclosures in the financial statements and you have indicated that this will also be included in the audit report to which management has no objection.
3. The audit team obtained sufficient appropriate audit evidence. However, there is a matter of concern regarding the treatment of an amount of K1.2 million spent on repairing old bakery equipment during the year. This amount was capitalized but the audit team was of the view that the amount is of a revenue nature and should have been charged to profit or loss. Management declined the request to amend the financial statements. In the view of the Audit Senior, the amount is not pervasive to the financial statements and the impact of the miss-classification will not affect decisions made by the users of financial statements.
4. There were no key audit matters to report on in this period.

The Engagement Partner requested you to recommend an appropriate opinion considering the above matters and to draft extracts of the audit report.

Required:

(a) Discuss the four (4) firm's ethical issues that should be considered at the planning stage of the audit of the financial statements of Supaloaf Plc. and suggest suitable safeguards to each matter. (6 marks)

(b) Evaluate the quality control systems in Chris and Mike Chartered Accountants and suggest improvements where necessary. (6 marks)

(c) (i) Explain the use of the materiality figure computed at the planning stage of the audit in the conduct of the financial statements of Supaloaf Plc. (2 marks)

(ii) Discuss the audit team's response to materiality considering the comment by the Audit Senior. (4 marks)

(d) (i) Discuss the audit matters to consider in planning the audit of held for sale non-current assets of Supaloaf Plc. (2 marks)

(ii) Suggest four (4) substantive audit procedures to perform on held for sale non-current assets of Supaloaf Plc. (8 marks)

(iii) Suggest a suitable audit opinion for the audit of the financial statements of Supaloaf Plc. considering the matters discussed in the exit meeting with management. (4 marks)

(iv) Draft relevant extracts of the auditor's report using the opinion suggested in (iii) above and other relevant information in the scenario. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

(a) Your firm of Chartered Accountants is auditor of the financial statements of Kariba Plc. You are Audit Senior and concluding the audit of the financial statements for the year ended 31 March 2024. This is the first year that your firm will audit the financial statements of Kariba Plc. following the former auditor's decision not to seek re-election.

During the substantive audit stage of the audit, there were a number of issues that were communicated to those charged with governance in accordance with ISA 260 *Communication with those charged with governance.* One (1) of the major issues that was communicated was in relation to material uncertainty with regards the ability of the company as a going concern. The company has had negative cash flows for the past three (3) years and has failed to raise additional financing from the bank. The liquidity problem has been compounded by a legal case against the company by a group of twenty (20) former employees who sued for unlawful dismissal and are claiming damages. Kariba Plc recognized a provision of K2.6 million as compensation and details have been included in note (4) of the financial statements. The uncorrected misstatements amount to K23, 000 against a materiality level of K53, 000.

Management of Kariba Plc. provided the audit team with the documents containing the audited financial statements. included in these documents is a report of the directors which gives an overview of the performance of the company with a ten(10) year summary showing figures that do not agree with the figures in the audited financial statements for those years. Management corrected the information in the ten (10) year summary when you brought it to their attention. The material uncertainty with regards going concern that exists in Kariba Plc. has been adequately disclosed in the notes to the financial statements of Kariba Plc.

The Audit Manager requested you to summarize the matters that should be included in the audit report for the financial statements of Kariba Plc. using the information above.

Required:

Describe the matters to be included in the audit report taking into consideration the information in the scenario. (6 marks)

(b) Intimpi Agriculture Ltd is a company that has been involved in ranching and beef processing for the past five (5) years. The company has three (3) breeds of animals that it rears and its major customers include a chain store that runs butcheries in its shops. The company also sells live animals to farmers involved in ranching.

Following incentives given by the government to encourage farmers to go into citrus fruit growing and processing, the company decided to diversify into this industry and they put up a 20 hectare orchard of oranges. This is the first year of harvesting oranges from the orchard and the company added value by processing the fruits into a pure orange juice which it will sell through the same chain stores it supplies beef. At the end of the current year, the company has inventory of finished processed products and picked unprocessed fruits.

Your firm of chartered accountants has been nominated to be auditor of Intimpi Agriculture Ltd. This is after the company put the offer of audit services to tender. The previous auditors did not seek re-election which prompted the company to put the services to tender. This will be the first audit client of your firm in the agriculture industry.

In the event that nomination is accepted, you will be the Senior Auditor on this audit. You will be required to conduct among other procedures, substantive procedures on the beef animals and the orchard, picked fruits and processed fruits. Inventory is a material figure in the financial statements of Intimpi Agriculture Ltd and you will need to obtain sufficient appropriate evidence on the inventory valuation.

Required:

(i) Describe four (4) audit risks at the planning stage of the audit of the financial statements Intimpi Agriculture Ltd for the year ended 31 March 2024 and suggest suitable responses. (8 marks)

(ii) Describe three (3) audit procedures each that should be performed in the audit of the bearer plants and processed fruit juice in the audit of the financial statements of Intimpi Agriculture Ltd. (6 marks)

[Total: 20 Marks]

QUESTION THREE

Your firm of auditors is auditor of Liquid Communications Plc. and you are Audit Senior on the audit of the financial statements for the year ended 30 June 2024.

The terms of the assurance engagement are that the firm should provide assurance services on the financial statements of Liquid Communications Plc. The Finance Director informed you that the shareholders of Liquid Communications Plc. would like assurance on the risk assessment systems of the company. He would like you to confirm whether your firm could provide this service and an explanation of what it entails.

The audit of the financial statements of Liquid Communications Plc. is in its final stage and you are considering the opinion that should be issued. A review of the audit working papers highlighted the following matters that are important in arriving at an appropriate audit opinion:

1. There was a disagreement on the accounting treatment of derivatives that Liquid Communications Plc. is involved in. The amount involved is material and the financial statements would be misleading if the disagreement is not resolved. Your view is that unless the financial statements are amended, an adverse audit opinion will be appropriate. You agreed with the Engagement Partner that the proposed adverse opinion should be issued and that you should communicate this to management of Liquid Communications Plc. When you informed the Finance Director about the intended audit opinion, he responded to you that if you went ahead to issue an adverse opinion the company will have no alternative but to terminate the agreement for audit services.

2. During the performance of substantive audit procedures on transactions in the profit or loss account, analytical procedures revealed a significant increase in the operating expenses during the year. A review of the minutes of the management and board

meetings revealed that there were discussions about possible penalties to Liquid Communications Plc for not complying with the regulations of the industry regulator. There was no disclosure of non-compliance with regulations by management but the audit team strongly feels that the company did not comply with regulations during the year.

3. A review of the work done on tangible non-current assets shows that no work was done on assets of Liquid Communications Plc which are impaired. It is clear that unless an impairment review is done the financial statements will be misstated. This matter was discussed with management of Liquid Communications Plc that agreed to carry out an impairment review and to amend the financial statements as necessary.

Required:

(a) Describe four (4) audit procedures that should be conducted on the impairment review of the tangible non-current assets that will be undertaken by management. (8 marks)

(b) Discuss the action that should be taken concerning the suspected non-compliance with laws and regulations by Liquid Communications Plc. (2 marks)

(c) (i) Discuss the objective of the engagement to provide assurance on the risk

Assessment systems of Liquid Communications Plc considering stakeholders in the company. (4 marks)

(ii) Advise on the action that should be taken in view of the disagreement with the Finance Director of Liquid Communications Plc. on the proposed audit opinion. (6 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

(a) You are an Audit Manager in your firm of chartered accountants. You are in charge of two (2) audits whose year-end is 31 December 2023.

You are reviewing the working papers for two (2) of your firm's audit clients and the following information relates to them:

Masuku Ltd:
The audit team was unable to obtain audit evidence on the value of inventory amounting to K1.5 million at the period end. The valuation documents related to this inventory were destroyed in a fire and the only evidence the audit team obtained are written representations from management.

The total assets and revenue of Masuku Ltd were K8m and K15m respectively at the period end.

Mbula Ltd:
Mbula Ltd is a company in the transportation industry involved in the transportation of petroleum bulk liquid products. The fleet of bulk fuel trucks is very old and the company faces frequent truck breakdowns resulting in delays in delivering products to customers. Furthermore, in the recent past the company experienced a series of traffic accidents involving the company fleet with a number resulting in fatalities. This resulted in most of the major clients of Mbula Ltd cancelling their transportation agreements with the company resulting in serious liquidity problems for the company.

The shareholders of Mbula Ltd feel that the company is no longer sustainable and have resolved to go into voluntary liquidation. After discussions between the audit team and management, it was suggested that the financial statements of Mbula Ltd be prepared on the alternative break up basis of accounting which was agreed by management. The audit team obtained sufficient appropriate audit evidence in the audit of the financial statements prepared on the alternative basis.

Required:

Suggest, with justification, suitable audit opinions for the two (2) audit clients of your firm. (6 marks)

(b) Lima Plc. is a manufacturing company that manufactures a range of agricultural equipment for small scale farmers in the country. The company was established five (5) years ago following government's desire to diversify the country from mining to farming.

In an effort to boost the supply of agricultural equipment the government gave excise duty exemption on imports of raw materials and components used in the manufacture of agricultural equipment. The government further levied high taxes on the importation of agricultural equipment for a period of five (5) years in order to protect the manufacturers of agricultural equipment such as Lima Plc.

The profitability of Lima Plc. declined in the last two (2) years and this is attributed largely to reduced sales due to economic pressures affecting the country. This has resulted in serious liquidity problems for the company resulting in it defaulting in the repayment of the US$2.5 million loan obtained from the development bank. The loan is repayable in dollars and the depreciation of the local currency has adversely impacted the company's operations. In the current year, the company experienced an increase in customer complaints on a brand of ripper manufactured by the company. This is attributed to a defective component used in manufacturing imported from the Far East. This has resulted in an increase in customer complaints and some customers switching suppliers. In an effort to increase revenue and also reduce pressure from customers the company has in the current year extended credit to its customers who purchase goods above a set amount. This extension of credit has led to an increase in revenue in the current year of 10% compared to the previous year.

The government has been holding talks with the Chinese government on how trade between the two (2) countries could be enhanced. The government would like to penetrate the Chinese market for the supply of grain particularly maize and soya beans. The discussions resulted in the removal of trading barriers between the two (2) countries. In his presentation of the budget for the coming year, the Minister of Finance proposed a removal of the import duties on imports of agricultural equipment. The rebate on exercise duty will be ending at the end of the current year.

Your firm of chartered accountants is auditor of Lima Plc. and the audit of the financial statements for the year ended 31 December 2023 is at the planning stage. The audit team recorded the internal control systems of Lima Plc. and conducted tests of controls whose results show that the internal controls are not effective in helping to prevent and detect fraud and errors. The results of the tests of controls confirm the audit team's assessment that the control environment in Lima Plc. is poor. A major weakness in the internal control system of Lima Plc. is the fact that authorizations by responsible officials were not given despite the procedures requiring such authorization. Credit was extended to customers without any authorization of the Credit Control Manager who is required to authorize credit upon vetting per company procedure.

Required:

(i) Describe four (4) audit risks that should be considered at the planning stage of the audit of the financial statements of Lima Plc. (6 marks)

(ii) Suggest a suitable approach to the audit of the financial statements of Lima Plc. based on the results of tests of controls at the planning stage of the audit. (4 marks)

(iii) Draft suitable extracts of the management letter using the main headings for a management letter using an internal control weakness in Lima Plc. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

You are Audit Manager in Choice Chartered Accountants. The Managing Partner is responsible for assignment of work to Engagement Partners. The Engagement Partners are responsible for the audits under their supervision and are responsible for the assignment of audit team members and for ensuring that audits of a required standard are performed which will form the basis of the audit opinion. All staff is subjected to annual staff appraisals and remuneration of staff is based on satisfactory performance. Training needs are identified during staff appraisals and training is organized by the training department of the firm in the first quarter of each year. Currently, audit team members rely on previous year working papers in deciding the approach and the work to be done in the current audit. A review of the recent staff appraisals conducted showed that a majority of staff are not familiar with the fundamental principles for accountants and the lack of a code of ethics by Choice Chartered Accountants appears to be the main reason for this.

You are responsible for client acceptance and continuance. In the current year, you are considering continuing with the audit engagement of Kingpin Ltd. one of your firm's audit clients. You have completed the continuance client checklist and you have no reason not to continue with the engagement. You formally wrote to Kingpin Ltd. informing them of your decision to continue as auditors. The Chief Financial Officer was very happy and committed to pay for a three (3) day holiday for you, your wife and the rest of the audit team to be assigned at a leading hotel in Livingstone.

The following information relates to Kingpin Ltd. whose audit for the year ended 31 December 2023 is about to commence.

Kingpin Ltd. is a company that is in the manufacturing industry and it is involved in the manufacture of books and other forms of stationary. The company has been, until recently, the major supplier of stationary to most of the stationary shops across the country. It was resolved that Kingpin Ltd should have it shares listed on the Lusaka Securities Exchange and that Choice Chartered Accountants be engaged to underwrite the issue of the shares in order to speed up the raising of the much needed working capital for the company. Furthermore, as a short term financing arrangement Choice Chartered Accountants was requested to give a short term loan to Kingpin Ltd which will be repaid when the audit fee for the current audit will be paid.

Kingpin Ltd. is a subsidiary of a foreign company whose Head Office is in South Africa. The company has in the recent past faced stiff competition from a company recently established and which imports finished products from the Far East and selling at lower prices than those of Kingpin Ltd. The company does not want to cease manufacturing and start to import finished goods on account that it is still servicing a five (5) year loan it obtained from its bank.

Kingpin Ltd. imports its raw materials from India and they are subject to high import duties. Zambia which is a member of COMESA enjoys the benefits of a free trade area within the region whereby imports from member countries are not subjected to import duties. At a board meeting attended by Chiengi, the Chief Accountant of Kingpin Ltd., it was resolved that the company imports all its raw materials from its parent company in South Africa. The parent company does not have the capacity to supply the raw material requirements of Kingpin Plc. It was resolved that the Head Office should procure the materials on behalf of Kingpin Ltd. from India and re-export them to Kingpin Ltd in Zambia which will benefit from free tariffs. South Africa and India have a trade agreement of no duties between themselves.

During the current year, Kingpin Ltd imported materials worth US$1.5 million from its Head Office and the country of origin was stated as South Africa on all the import documents. One (1) of the conditions for enjoying the free trade area is that the importing company should use local transporters to transport its goods. Kingpin Ltd. called for tenders from reputable transporters to be engaged to transport its raw materials from South Africa. The award was subject to a tender committee to which Chiengi, the Chief Accountant of Kingpin Ltd is a member. A transport company in which Chiengi's wife has shares tendered for the offer of transport services.

Required:

(a) (i) Describe the elements of the assurance engagement with Kingpin Ltd. (5 marks)

(ii) Discuss five (5) the ethical matters in the operations and audit of the financial statements of Kingpin Ltd. (5 marks)

(b) Evaluate the quality control systems in Choice Chartered Accountants against the provisions of ISQC 1 *Quality control for firms that perform audits and reviews of financial statements and other assurance and related services engagements.* (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.2: ADVANCED AUDIT AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Ethical issues and related safeguards:

	Ethical matters	Safeguards
1	Chris, the Engagement Partner has been in charge of the audit of the financial statements of Supaloaf Plc. for the past ten years. This means that he has had a long association with this client and this could result in a familiarity threat. Furthermore, Chris has received significant income from this assignment which creates a self-interest both of which could impact his objectivity.	The firm should adopt a policy to rotate audit staff. It is recommended that at the level of Engagement Partner one should not remain Engagement Partner of the same client for a period of more than seven years. The Engagement Partner should be replaced on the audit of Supaloaf Plc.
2	Chris has receives significant income from this assignment which creates a self-interest both of which could impact his objectivity.	Quality control reviews of the work should be undertaken by staff that have not been involved with the audit of Supaloaf Plc.
3	The request by the management of Supaloaf Plc. for the firm to help recruit a Chief Accountant creates a self-interest threat. The firm will by recruiting the Chief Accountant be taking a management role.	The firm should not take on a management role. The firm should end on shortlisting candidates and let management do the final selection of the person to employ.
4	Determination of pension liability by the firm will result in a self-review threat. The amount is material to the financial statements.	In view of the fact that the amount is material, this should not be done by the firm. The firm should decline the request.
5	The request by management that the firm represents the company in a hearing with the Tax Tribunal may impact the objectivity of the firm and it creates an advocacy threat.	The firm should use a different team not involved in the assurance engagement to defend the company at the hearing. In addition quality control reviews may be appropriate by a person not involved in the audit.
6	The firm does not have ethical guidelines to guide staff on the need to ensure adherence to fundamental ethical principles at all time and also the action to take in the event of an ethical dilemma.	The firm should put in place guidelines on compliance with ethical principles by its staff.

(b) Evaluation of quality control systems:

	Matter of concern	Suggested improvement

1	The firm does not have a senior person at the firm level responsible for quality control.	The firm should appoint a senior person with knowledge of the requirements of ISQC 1 *Quality control for Firms that perform audits and reviews of financial statements and other assurance and related services engagements*.
2	The firm's procedural manual of auditing has not been updated since it was first issued. There have been changes in the interim period and most of the provisions are out of date.	The procedural manual should be updated on a regular basis to ensure current developments in auditing are included.
3	The firm does not have a code of ethics that should be followed by staff. Audit staff face different ethical dilemmas in the course of their work and lack of ethical guidelines will result in unethical behavior.	The firm should have a code of ethics and procedures to ensure that ethical values are complied with.
4	The firm does not have a Quality Control manual which should guide staff on matters related to quality control work as provided in the relevant auditing standards.	The firm should introduce a quality control manual which should be made available to all staff.

(c)

(i) The use of the materiality figure computed at the planning stage of the audit:

1. The materiality figure is used in determining the sample sizes when extracting samples for testing.
2. This is the amount that is used to determine the amount that could impact on decisions made by users of the financial statements. For example an amount will be material and could result in a misstatement of the financial statements if it is near or above the materiality figure.
3. The materiality figure is used when assessing the uncorrected misstatements at the time of concluding the audit and arriving an audit opinion.

(ii) Response to materiality considering risk:

The fact that the risk assessment during the audit suggests that the risk levels are different from the initial assessment at the planning stage suggest a need to revise the materiality figures.

At the planning stage there was one materiality figure that was computed and planned to be used throughout the audit for the financial statements as a whole. Now that the risk level for the financial statements as a whole and that for receivables are different the following actions should be taken by the audit team:

- In view of the increased risk level as a result of ineffective internal controls discovered during the audit, the materiality level should be revised and set at a lower figure than the one set at the planning stage.

- With regards receivables which have a much higher risk of material misstatement, a separate materiality amount should be set which will be lower than the materiality level for the financial statements as a whole.
- In view of the weak internal controls observed during the audit, the audit team should consider a substantive audit approach and increase the sample sizes for testing. No reliance should be placed on internal controls.

(d)

(i) Matters to consider in the audit of assets held for sale:

The auditors will be concerned about whether the accounting for assets held for sale have been correctly accounted for according to the provisions of IFRS *5 Non-current assets held for sale and discontinued operations.* Specifically:

- Whether they have been presented separately in the statement of financial position and
- Whether the said assets qualify to be considered as assets held for sale.
- 3. Whether management has complied with the relevant accounting standards including that no depreciation should be calculated for assets held for sale.

(ii) Substantive audit procedures held for sale non-current assets:

1. Confirm that the assets referred to qualify to be considered as held for sale non-current assets by evaluating against the criteria in IFRS 5
2. Confirm the valuation is in accordance with IFRS 5 and assess the determination of fair value.
3. Confirm that the assets have not been depreciated in the current year from the date of reclassification and
4. Confirm that assets separately presented in accordance with the provisions of IFRS 5
5. Inquire from management in the determination of fair values used in the impairment review for reasonableness.

(iii) Suggested opinion and draft audit report:

In deciding on the opinion that should be made from the audit of the financial statements of Supaloaf Plc, the following will be considered as explained:

Matter 1

The outcome of the legal case involving employees that have sued Supaloaf Plc will only be determined by the courts. In this case a provision of K12 million has been made in the financial statements and this is the best estimate of the likely outcome of the case. Furthermore, the matter has been adequately disclosed in the note to the financial statements. This matter will not result in the modification of the opinion but because of the significance of the matter, it may be included in the emphasis of matter paragraph of the audit report.

Matter 2

The existence of material uncertainty with regards going concern arising from a matter adequately disclosed in the financial statements will not result in the modification of the audit opinion.

The material uncertainty will be explained in the relevant paragraph Material Uncertainty Related to Going Concern

Matter 3

The fact that this matter has led to a disagreement with management suggests that the matter is material and will have an impact on the opinion of the auditors. Going by the view of the Audit Senior that the matter is not pervasive a qualified audit opinion will be appropriate.

Matter 4

The fact that there are no key audit matters to report on does not affect the consideration in determining an appropriate audit opinion.

Conclusion:

The opinion that should be issues is a qualified opinion and the disclosures of the other two matters made according to the explanation made for each one.

(iv) In view of the aforesaid, the suggested audit opinion is a qualified opinion and this is shown in the draft below:

Extracts of audit report

Qualified opinion

Except for the matter described in the basis for opinion paragraph, the financial statements of Supaloaf Plc. show a true and fair view as at 31 March 2024.

Basis of Qualified opinion

There is an amount of K1.2 million that should have been expensed and not capitalized as is the case. Even though the matter is material, it does not impact decisions made by users of the financial statements and so a qualified opinion has been reached.

Key audit matters paragraph

There were no key audit mattes to report on.

Material Uncertainty Related to Going Concern

We refer you to note 4 in the financial statements. This shows that the company has serious liquidity problems which cast significant doubt about the ability of the company as a going concern giving rise to the existence of a material uncertainty. The cash flow forecast prepared shows that liquidity issues are a short term problem which will be overcome in the next twelve months.

Emphasis of Matter

We refer to note 2 of the financial statements in relation to a court case by former employees of Supaloaf Plc. The provision made in the financial statements has been appropriately determined. This is not a modification of the opinion.

SOLUTION TWO

(a) Matters that should be included in the audit report:

1. Key Audit Matters – the audit team communicated a number of issues to those charged with governance during the audit. Since Kariba is a listed company, it is required to have a Key Audit Matters paragraph in the audit report.
2. The audit team should determine the significant matters to include in this paragraph and in the event that there are no matters, the KAM paragraph should be included clearly stating that there are no key audit matters to report on.
3. Since this is the first time that the firm will be auditing the financial statements of Karina Plc. it means the previous year financial statements were audited by different auditors. This is an example of a matter that could be included in the other matter paragraph of the audit report. This will be to inform users of the financial statements that the prior year financial statements were audited by different auditors.
4. The existence of material uncertainty regarding the ability of Kariba Plc. as a going concern should be included in the audit report. This should be clearly explained and included in a separate paragraph titled Material Uncertainty Related to Going Concern.
5. The litigation against Kariba Plc. by former employees is a matter that the auditors may wish to bring to the attention of the users of the financial statements. A provision for this has been made and accounted for with full disclosure in the financial statements. The auditors may wish to emphasize this matter and this can be done through the use of the emphasis of matter paragraph where reference will be made to the note in the financial statements clearly stating that this inclusion is not a modification of the opinion.
6. The responsibilities for other information in the financial statements will be explained in the other information paragraph of the audit report.

(b)

(i) Audit risks in the audit of Intimpi Ltd:

	Audit risk	Response
1	Valuation of inventory – Intimpi Agriculture Ltd is in an industry that is specialized. It may be that the firm does not have the skills required to value inventory and work in progress.	The firm will need to consider the use of auditor experts to value inventory of Intimpi Ltd.
2	This is the first time that the firm will be auditing a client in the agricultural industry. The detection risk is high in that material misstatements may not be detected.	Consideration of training and close supervision of the work done. Quality control reviews would be helpful to reduce detection risk.
3	Being the first year that the firm will be auditing Intimpi Agricultural Ltd means that they were audited by different auditors in the past. There is a risk that opening balances	Need to perform specific audit procedures on the opening balances. Being alert during

	could be misstated causing a misstatement foo the current year financial statements.	the current year audit to establish any evidence supporting the opening balances.
4	The nature of the business that the company is involved in particular food processing is highly regulated. There is a risk that the company may not be compliant with some laws and regulations. There is a risk that provisions may be understated by not making provisions for penalties.	Emphasize to the audit team to maintain professional skepticism and look out for any evidence of non-compliance with laws and regulations.
5	There is a risk that the accounting for biological assets, bearer plants and processed products may not have been done in accordance with the relevant accounting standards.	Assign staff who have experience in auditing this area and also have quality control reviews to be conducted by staff not involved in the audit.

(ii) **Audit procedures for bearer plants**:

1. Inquire from management on the basis for the valuation of bearer plants and confirm it is in line with relevant accounting standards.
2. Ensure that the valuation of the bearer plants is done in accordance with the provisions of IAS 16 *Property, plant and equipment.*
3. Physically inspect the orchard to confirm existence. May require using the services of an expert in doing this.

Audit procedures for processed fruits:

1. Inquire from management the basis for valuing the processed fruit juice and confirm it is in line with relevant accounting standards.
2. Ensure that the processed fruit juice accounted for in line with the provisions of IAS 2 *Inventories* and is valued at the lower of cost and net realizable value.
3. Attend inventory count to determine the valuation of the fruit juice to confirm can be relied upon for the inventory valuation.

SOLUTION THREE

(a) Audit procedures on impairment of tangible non-current assets:

1. Obtain from management the calculation of the value in use for the assets tested for impairment.
2. Re-perform the calculations for value in use for arithmetical accuracy.
3. Confirm that the cost or income from the disposal of the asset at the end of the useful life has been included in the computation for value in use.
4. Inquire from management on how fair values were determined.
5. Where there is a market for the asset confirm that the fair value is reasonable considering the market prices.
6. Confirm that the accounting for the impairment losses is correctly accounted for in the general ledger.

(b) Action that should be taken on suspected of non-compliance with laws & regulations:

ISA 250 *Consideration of laws and regulations in an audit of financial statements* provides guidance in the event that the auditors come across a suspected non-compliance with laws and regulation.

In the audit of the financial statements of Liquid Communications Plc. The auditors should:

- Obtain details of the matter and get a full understanding of it and the circumstances in which it has occurred and
- Obtain further information to enable an evaluation of the possible impact on the financial statements to be made.

After considering the above matters the auditors will decide on the nature and extent of further audit procedures that should be undertaken.

(c)

(i) Scope & objective of assurance on risk assessment:

The scope of the assurance on the risk assessment systems of Liquid Communications Plc. is to assess the risk assessment systems of the company and giving assurance to interested parties.

Risk assessment is considered important in most organizations and it is from the risk assessment that suitable controls are put in place. The shareholders are interested in how management manages risk and in most cases they consider risk and risk systems in making investment decisions.

(ii) Action on disagreement with opinion:

The opinion that is issued should be based on the evidence that has been obtained and it does not necessarily be the opinion that the client expected. In this case the Finance Director has threatened to terminate the offer of audit services.

The Audit Senior should proceed as follows:

- To discuss the matter with the Chief Executive Officer of the company and explain to him the consequences of the disagreement with the audit opinion based on evidence gathered.
- If the meeting with the CEO does not help the Audit Senior should consider meeting the Audit Committee if one is in place and seek its indulgence in resolving the disagreement.
- The Audit Senior should communicate the matter with the senior people in the firm namely the Audit Manager and the Engagement Partner. The meeting with the Audit Committee should possibly be attended by the senior firm staff.
- If the client still disagrees, the firm should go ahead and issue an adverse opinion and consider resigning. The auditors will be able to attend the annual general meeting at which their term of office should have ended and could speak at this meeting on matters that concern them such as those leading to resignation.
- The audit team may need to reconsider the integrity of management and reassess the written representations obtained and any other evidence.
- The firm may consider resigning from engagement is the disagreement is considered serious and could strain the relationship with management.

SOLUTION FOUR

(a) Suggested opinion:

The matters to consider in arriving at an appropriate opinion in each case are the materiality of the matter to the financial statements and the pervasiveness of the matter to decisions made by users of the financial statements.

Masuku Ltd:

The value of inventory is material to both total assets and revenue as follows:

K1.5m/K8m = 19%

K1.5m / K15m = 10%

In view of the fact that shareholders and prospective shareholders consider the company profitability in making investment decisions means that the misstatement is pervasive to the users of the financial statements. The misstatement of the inventory figure has a direct effect on the reported profit.

Suggested opinion:
In view of the fact that the misstatement is both material and pervasive to the financial statements, an adverse audit opinion will be appropriate.

Mbula Ltd:

It is clear that Mbula Ltd is not a going concern and management has correctly prepared the financial statements on a break up basis.

Suggested opinion:
In view of the fact that the auditors have obtained sufficient appropriate audit evidence and the financial statements have been prepared on the correct basis, the audit opinion shall be unmodified.

(b)

(i) Audit risks in the audit of Lima Plc.:

1. The fact that the company is a listed public interest company there is a risk that the company may not comply with some listing requirements. This could result in penalties being levied on the company which could lead in misstatements of the financial statements through understated provisions. Further, serious non-compliance may result in the company being de-listed bringing into doubt its ability to continued impacting the basis of the preparation of the financial statements.
2. Serious liquidity problems that Lima Plc. is facing could have an effect on the ability of the company to pay its debts as they fall due. This could have going concern implications on the company impacting on the basis of preparing the financial statements.
3. The failure of Lima Plc. to repay the loan which is due for repayment has an impact on the company of its ability to continue operating. The bank may enforce the security. The basis of preparation of the financial statements should be considered.
4. The returns of the defective component which is replaced by Lima Plc. requires that at the period end the company makes a provision for replacement of the parts because

this meets the requirements of IAS 37. Here is a risk that provisions may be understated resulting in an over statement of the reported profit.

5. The extension of credit to customers in order to boost sales could result in an increase in irrecoverable debts. The receivables amount may be overstated resulting in an overstatement of profit as a result of allowances for receivables which may be understated.
6. Poor and non-effective internal controls could result in material misstatements not being prevented and detected resulting in a misstatements of the financial statements.
7. In view of the fact that Lima Plc. is in the manufacturing industry it is most likely that it is subject to rules and regulations that it should comply with. For example the rules regarding safety and related labor laws. There is a risk that the company may not be compliant with some of these laws and regulations and this could impact penalties which may be misstated in the financial statements.
8. There is an audit risk that the financial statements may be misstated on account of incorrect accounting for exchange differences when retranslating the dollar denominated loan in the financial statements.

(ii) Suitable approach to the audit of the financial statements of Lima Plc.:

The results of the tests of controls done by the audit team agree with the conclusion of the internal audit department that internal controls are not effective in Lima Plc.

The impact on the audit of non-effective controls is that the audit team will not rely on the internal controls in determining the nature and extent of further audit procedures to be conducted. The audit team shall follow a substantive audit approach to auditing as a result.

This means that all the evidence which will form the basis of the opinion will come from substantive tests. In order to reduce audit risk to acceptable levels this means the audit team will test larger samples than would have been tested had the results of the tests of controls shown that the controls were operating as expected.

(iii) Draft management letter to Lima Plc.:

Observations:

Credit was extended to accounts receivables without credit vetting and authorization by a responsible official.

Implication of the weakness:

Extending credit to receivables without credit vetting may result in receivables being irrecoverable resulting in losses for the business.

Recommendations:

Credit should only be extended to receivables that go through vetting and all credit should be authorized in writing by a responsible official of Lima Plc.

Response of management:

We agree with the recommendation and this will be implemented and all credit extension will be authorized.

Or could have used:

Observations:

There is no segregation of duties in the finance department with the same person responsible for receiving and banking funds and also preparing the bank reconciliation.

Implication of the weakness:

Fraud can easily be committed when there is no segregation of duties. Further, it will be difficult to detect internal control weaknesses.

Recommendations:

There should be segregation of duties between the person who receives and handles cash and also performs bank reconciliations.

Response of management:

We agree with the recommendations and segregation of duties will be put in place.

SOLUTION FIVE

(a)

(i) Elements of the assurance engagement with Kingpin Ltd:

Three party relationship:

The engagement is a three party relationship. The three parties are Choice Chartered Accountants the auditors, the management of Kingpin Ltd and the shareholders who are the interested parties.

Subject matter:

The subject matter of the engagement is the financial statements for the year ended31 December 2023 which are the subject of the audit.

Criteria:

This is the basis upon which the financial statements are prepared. This relates to the appropriate financial reporting framework used by management and the international financial reporting standards upon which the financial statements should be prepared.

Evidence:

This is the sufficient appropriate audit evidence which will be gathered during the audit by the audit team.

Report:

This is the outcome of the audit in which the opinion is contained and reported to the shareholders.

(ii) Ethical matters in the audit of Kudu Ltd.:

	Ethical matters in the scenario
1	The offer for a three(3) day holiday to the person responsible of client acceptance and the rest of the audit borders on matters of integrity on the part of the one responsible for client acceptance and self-interest on the part of the rest of the audit team. Receiving gratification on accepting a client shows lack of integrity. For the audit team an offer of a three day holiday will impact the objectivity of the audit team in conducting the audit.
2	Chiengi the Chief Accountant of Kingpin Plc. was part of the resolution to import materials from RSA knowing that the country of origin is India. Chiengi knows that it is fraudulent to show that the materials originate from RSA and shows lack of integrity.
3	The fact that Chiengi is a member of the tender committee to award a transport company where a company his wife has shares in has also submitted a bid creates a conflict of interest to Chiengi. He will not be objective and he has a self-interest threat.
4	Underwriting the shares of Kingpin Ltd will result in a self-interest threat on the part of the firm that provides assurance to the same company. Objectivity in dealing with this company will be impaired.
5	Request for a short term loan by Kingpin Ltd creates a self-interest threat on the part of the assurance provider. The objectivity of the assurance firm and the audit team will be impacted by the loan that the firm will give Kingpin Ltd.

6	The lack of ethical code of conduct by Choice Chartered Accountant is breach of ethical guidelines by the firm. Ethical guidelines are applicable to the firm as much as they apply to staff who work for the firm.

(b) Evaluation of quality control systems in Choice Chartered Accountants:

	Matter of quality control	Explanation
1	Firm leadership for quality control.	While the Managing Partner of Choice Chartered Accountants assigns jobs to the Partners and other audit team members, it would appear the firm does not have a quality control champion who should be familiar with the provisions of ICQC 1 and as required by this standard.
2	Lack of ethical code of conduct	The firm does not have a code of ethics in place contrary to the provisions of quality control requirements at the firm level. In order to conduct quality audits, Choice Chartered Accountants should have a code of ethics similar to the fundamental principles which all staff should comply with.
3	Client acceptance procedures.	The firm is compliant with regards acceptance and continuance of client relationships. There is someone responsible for this and they are required to complete a checklist which will form a basis of accepting a client or continue with the engagement.
4	Human Resources	The firm conducts annual staff appraisals at which training needs are identified and training arranged in response. This is in order to ensure that the staff have the necessary skills and competences to conduct quality audits and is in compliance with the provisions of ISQC1 regarding human resources in practice firms.
5	Engagement performance	The requirement of ISQC 1 on engagement performance requires that practice firms should have in place standard engagement procedures that should be available to all staff which should be followed in the conduct of carrying audits. Choice Chartered Accountants does not have a procedural manual and audit staff depend on previous year audit working appears to plan for new audits.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4: ADVANCED TAXATION

THURSDAY 12 SEPTEMBER 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 K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged above 5 years	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc	22,561	29,329	18,049	23,463

SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463

	Aged 2 to 5 years		**Aged above 5 years**	
Motor vehicles for the transport of goods - with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs				
GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,697	13,302	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	33,766	14,632	26,531	11,497
Panel Vans				
GVW not exceeding 1.0 tonne	13,353	5,786	7,630	3,061
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	13,907	10,662	6,413	4,916
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	15,453	11,847	7,726	5,923
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	9,272	7,108
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,462	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:

Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty

Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:

Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. **Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:

Percentage of Value for Duty Purposes	15%

Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u> – (COMPULSORY)

You should assume that today date is 15 December 2023 and that the taxation rules applicable to the tax year 2024 apply throughout.

Chibwe wishes to commence in business on 1 January 2024 running a retail trade. He wishes to involve his son Kabwe in running the business. Chibwe is not sure whether from a taxation point of view it will be beneficial to take on Kabwe as a partner and run the business as a partnership or form a limited company and run the company together with Kabwe as full-time working Directors. The business is expected to produce an annual turnover of K4,800,000 whether it is run as a partnership or as a company.

Chibwe will use his own private Toyota Fortuner SUV (2,700 cc) which he acquired a year ago at cost of K1,800,000 for both private and business purposes, whether the business is run as a partnership or as a company, whilst Kabwe will be provided with a Ford Ranger Double cab van (3,200cc), which will be acquired by the business on 10 January 2024 at a cost of K1,500,000 for both business and private use. Private mileage will be 40% of the total mileage done in each motor vehicle by each individual.

Partnership

Under this option Chibwe will involve Kabwe in running the business as a partner. Chibwe will draw an annual partner's salary of K355,000 and Kabwe's annual partnership salary will be K340,000. Motor car running expenses of K60,000 per year will be incurred by each individual on each motor vehicle and these will be paid out of business profits.

The net profit as per accounts is expected to be K1,550,000, before deducting motor car running expenses and payments to Chibwe and Kabwe. The balance of any profits or losses will be shared equally between Chibwe and Kabwe.

National Pension Scheme Authority (NAPSA) contributions will not be payable under this option.

Company

If the business is run as a company, the company will be called Mabwe Ltd. Chibwe and Kabwe will be the only shareholders and full-time working Directors in the company.

Chibwe will draw a gross annual amount of K355,000 either as a gross salary or as a gross dividend. Kabwe will draw a gross annual amount of K340,000 either as a gross salary or as a gross dividend. Motor car running expenses of K60,000 per year will be incurred by each individual on each motor vehicle and these will be paid by the company.

NAPSA contributions will be payable where applicable by both the Directors and Mabwe Ltd at the rate of 5% of each individual's gross earnings.

The net profit as per accounts is expected to be K1,550,000 before deducting any NAPSA contributions, motor car running expenses and payments to Chibwe and Kabwe.

NAPSA Earnings threshold

The NAPSA earnings threshold for the year ending 31 December 2024 is K357,792 per annum.

Required:

(a) Calculate the amounts of income tax payable by Chibwe and Kabwe for the tax year 2024, assuming that the business is run as a partnership. (9 marks)

(b) Assuming the business is run as a limited company and Chibwe and Kabwe each draw gross emoluments of K355,000 and K340,000 respectively compute:

  (i) The income tax and NAPSA contributions payable by Chibwe and Kabwe for the tax year 2024. (7 marks)

  (ii) The income tax payable by Mabwe Ltd for the tax year 2024. (6 marks)

(c) Assuming the business is run as a limited company and that Chibwe and Kabwe each draw gross dividends of K355,000 and K340,000 respectively, compute:

  (i) the NAPSA contributions, withholding tax and income tax payable by Chibwe and Kabwe for the tax year 2024. (5 marks)

  (ii) The income tax payable by Mabwe Ltd for the tax year 2024. (5 marks)

(d) Advise Chibwe and Kabwe as to whether they should run their proposed business as a:

  (i) Partnership
  (ii) Limited company with Chibwe and Kabwe drawing annual director's salaries of K355,000 and K340,000 respectively
  (iii) Limited company with Chibwe and Kabwe each drawing gross dividends K355,000 and K340,000.

Your answer should be supported by appropriate computations of net income arising under each of the above three (3) options after deduction of all the relevant statutory payments arising under each option. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section. Attempt any three (3) questions.

<u>QUESTION TWO</u>

IBS Bank plc is a Zambian resident financial institution which is listed on the Lusaka Securities Exchange. For the year ended 31 December 2024, the bank generated a profit before tax of K761,400,000.

This profit figure was arrived at after taking into account the following items:

(1) Interest expense comprising interest arising on customer deposits amounting to K586,400,000, interest on loans from other banks of K543,500,000 and interest on subordinate debt of K455,600,000.

(2) Fee and commission income arising from letters of credit commissions of K67,209,000, fees on over-the counter withdrawals of K7,500,000, account maintenance fees of K75,700,200, point of sale commissions of K16,500,000, ATM Card issuer fees of K5,600,000, commissions on backdrafts of K1,465,300 and net commission on electronic cash transfers of K65,800,000.

(3) Non-interest income which included profit from sale of shares amounting to K1,560,000, income from letting of property of K16,500,000, realised trading gains amounting to K1,855,000, unrealised trading gains of K588,000, and consultancy fees amounting to K7,990,000 (net).

(4) Credit impaired loans and receivables of K18,400,000 and loan losses previous written off subsequently recovered amounting to K865,000.

(5) Non- interest expenses which included depreciation charges of K1,420,000, Bank of Zambia supervisory fees of K435,000, internet service charges of K4,665,400, security expenses of K8,750,000, donations to unapproved orphanages of K1,650,000 employees' salaries of K461,400,000, NAPSA penalties of K1,124,000, customer refreshments of K1,722,000, entertainment expenditure for the company's directors of K595,000, branch and ATM rental expenses of K4,260,100 and other allowable business expenses of K15,700,800.

Additional information

(1) The total withholding tax deducted at source from the gross interest income was K149,865,000 for the year ended 31 December 2024.

(2) On 1 January 2024, all assets qualifying for capital allowances were written down to zero. During the year ended 31 December 2024, the company incurred the following expenditure:

	K
Constructed of new buildings for new branches	25,500,000
Installation new CCTV security equipment	2,400,000
Purchase and installation of Automated Teller Machines	7,500,000
Purchase of office equipment	1,340,000

(3) The Directors of IBS Bank are planning to introduce an employee share option scheme. They have heard that there are tax benefits for both the company and employees if a share option scheme run by an employer is approved for tax purposes. The Directors wish to know the conditions to be met for a share option scheme to be approved for taxation purposes.

Required:

(a) Calculate the company income tax payable by IBS Bank plc for the tax year 2024. (12 marks)

(b) Advise the directors of IBS Bank of:

(i) The procedure the company must follow to have the share option scheme to be approved for tax purposes. (3 marks)

(ii) Tax benefits for both the employer and its employees of having the scheme approved for tax purposes. (5 marks)

[Total: 20 Marks]

QUESTION THREE

TT Mining Ltd is a Zambian resident company engaged in mining. The company is a 75% owned subsidiary of a foreign multinational company engaged in mining. The following is an extract of the statement of profit or loss of TT Mining for the year ended 31 December 2024:

	K'million	K'million
Gross profit		4,223
Other income (note 1)		31
Total income		4,254
Less: Expenses		
Depreciation	150	
Interest expense	723	
Mineral royalty tax	332	
Environmental expenses (note 2)	587	
Operating expenses (note 3)	2,040	
Total expenses		(3,832)
Profit before tax		422

Note 1 - Other income

This comprises net dividends from a Zambian company. Withholding tax was deducted and paid at source.

Note 2 - Environmental expenses

These included fines for breach of environmental regulations of K400 million and environmental restoration expenses K187 million.

Note 3 - Operating expenses

This comprises depreciation charges of K150 million, amortisation charges of K105 million, electricity and water expenses of K525 million, telephone bills of K280 million, PAYE Penalties amounting K65 million, advertising expenses of K140 million, construction of hospital in a local council township of K100 million and mineral exploration costs of K675 million.

Note 4: Implements, plant and machinery

At 1 January 2024, the company held excavation equipment which was acquired from Europe a year ago and paid for in US dollars at an original cost equivalent to K450 million. During the year ended 31 December 2024, the company installed street lights in the mining township at a cost of K180 million and acquired a mining equipment at a cost of K455 million.

Note 5: unrelieved loss brought forward

On 1 January 2024, the company had a loss brought forward of K20 million. This loss was incurred in the year ended 31 December 2022.

Note 6: Indexation formula

The indexation formula for capital allowances and mining losses where applicable is provided below:

$$1+\frac{(R_2 - R_1)}{R_1}$$

Note 7: Exchange rates

The following exchange rates have been provided by the bank of Zambia and approved by the Commissioner General.

Year ended	K/USD
31 December 2023	24.50
31 December 2024	27.50

Note 8: Mineral Royalty

Mineral royalty paid during the year ended 31 December 2024 amounted to K148 million. This mineral royalty has been properly accounted for within cost of sales for the year ended 31 December 2024.

Required:

(a) Explain the tax treatment of hedging income and losses for mining companies. (4 marks)

(b) Compute the income tax payable by TT Mining Zambia Plc. for the tax year 2024. (16 marks)

[Total: 20 Marks]

QUESTION FOUR

FruitPlus is a VAT registered Zambian resident company engaged in manufacturing. The company holds 80% of the issued equity shares of PWP a company resident in a foreign country. PWP is a company engaged in ICT consultancy services. You have been provided with the following information:

Financial results of FruitPlus

The following is the extract of the statement of profit or loss of FruitPlus for the year ended 31 December 2024:

	Notes	K
Gross profit		77,901,700
Operating expenses	(1)	(48,200,900)
Finance cost	(2)	(8,600,000)
Profit before tax		21,100,800
Income tax expense (provisional income tax paid)		(4,300,000)
Profit for the year		16,800,800

The following additional information is available:

(1) Included in operating expenses are installation fees of K4,810,000 paid by FruitPlus to PWP for installation of a new automated production system. The figure of K4,810,000 represents the open market fair value of such services PW charges to other unconnected partries. PWP does not have a tax paying agent in Zambia. Also included in opearating expenses are depreciation charges of K1,690,000 and amortization of K221,400. The remaining balance represents revenue allowable expenses.

(2) Finance cost comprises interest paid on loans K7,682,000 and interest paid under a hire purchase agreement of K918,000. The loans are from institutions not related to FruitPlus.

(3) Fruitplus received dividends from PWP amounting to K1,632,000 net of withholding tax deducted at the rate of 32%in the country in which PWP is resident. These dividends have not been included in computing the profit figure in the statement of profit or loss extract shown above.

(4) Capital allowances claimable by FruitPlus for the year ended 31 December 2024 have been agreed to be K1,402,000.

Finance Director

The Finance Director of FruitPlus is Mervis Mfuwe whose basic salary is K814,000 per annum. She is also entitled to a housing allowance of K5,800 per month. Income tax deducted under the pay as you earn system amounted to K207,141 during the year ended 31 December 2024.

Mervis holds 4% of the issued equity shares of PWP from which she received dividends amounting to K81,600 net of withholding tax deducted in the country in which PWP is resident. Withholding tax on dividends is charged at a rate of 32% in that country.

The only other Zambian income received during the year was interest on treasury bills amounting to K44,200 (net). Withholding tax had been paid at source.

Double taxation convention

There is no double taxation convention between Zambia and the country in which PWP is resident. Credit is available against Zambian income tax for any foreign tax suffered on income received from that country.

Required:

(a) Advise the directors of FruitPlus of the Value Added Tax implications arising from engaging PWP to install the automated production system. (4 marks)

(b) Calculate the amount of company income tax payable by FruitPlus for the tax year 2024. (9 marks)

(c) Calculate the amount of income tax payable by Mervis Mfuwe for the tax year 2024. (7 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

You are employed in CPM Associates, a Tax Practice and you are dealing with the tax affairs of CSD Ltd a new client of the firm. The company has just received a notice from the Zambia Revenue Authority for a tax audit which will be conducted soon on the affairs of the company and the directors have asked your firm to help the company prepare for the audit.

The following issues have come to your attention, whilst performing your work on this assignment:

(1) For the previous tax year 2023, the company estimated the provisional taxable profit to be K2,560,000. Provisional income tax was computed correctly and paid on the relevant due dates. The actual taxable profits for the tax year 2023 was K8,680,000. The directors have informed you that due to the liquidity problems the company experienced for part of the current year, the final balance of company income tax payable relating to the previous tax year, was only paid on 10 October 2024, when the self-assessment income tax return in respect of that year was also submitted.

(2) The company finished construction of commercial property at the end of the previous tax year. The property was let out to a number of clients from 1 January 2024. The gross rental income received from the properties for the month of January 2024 was K1,200,000. However, the directors where not sure of the tax treatment of the rental income and only paid the tax relating to the income on 31 March 2024, when they also submitted the relevant return. Tax on the rental income received by the company in the remaining months of the year was paid on the appropriate due dates and the related returns were also submitted on the appropriate due dates.

You should assume that the Bank of Zambia discount rate is 12.5% per annum, where applicable and that the tax rates for the tax year 2024 apply throughout.

Required:

(a) Explain four (4) objectives a quality tax audit of the affairs of CSD Ltd should achieve. (4 marks)

(b) Advise the directors of the company's exposure to interest and penalties on late payment of tax and submission of returns in relation to issues (1) and (2) above.
(16 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4: TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) COMPUTATION OF TAX ADJUSTED PROFIT

	K	K
Net profit as per accounts		1,550,000
Less		
Motor running expenses		
(K60,000 x 60%) x 2		(72,000)
Capital allowances on Ford Ranger		
(K1,500,000 x 20%) x 60%		(180,000)
Tax adjusted profit		1,298,000

ALLOCATION OF PROFITS AND COMPUTATION OF TAXABLE PROFITS

	Total	Chibwe	Kabwe
	K	K	K
Salaries	695,000	355,000	340,000
Balance 1: 1	603,000	301500	301500
Total	1,298,000	656,500	641,500
Less Capital allowances on Fortuner			
(K1,800,000 x 20%) x 60%	(216,000)	(216,000)	
	1,082,000	440,500	641,500
Income Tax			
On first K110,400		12,360	12,360
On excess (K330,100/K531,100) x			
37%		122,137	196,507
Income Tax Payable		134,497	208,867

(b)

(i) PERSONAL INCOME TAX COMPUTATIONS FOR

	Chibwe	Kabwe
	K	K
Salaries	355,000	340,000
Add Payment of Motor running expenses	60,000	---------
Gross earnings	415,000	340,000
Less:		
Motor car expenses (K60,000 x 60%)	(36,000)	
Less Capital allowances on Toyota Fortuner		
(K1,800,000 x 20%) x 60%	(216,000)	---------
	163,000	340,000
Income Tax		
On first K110,400	12,360	12,360

On excess (K52,600/K229,600) x 37%	19,62	84,952
Income Tax Payable	31,822	97,312
Employee's NAPSA contributions		
K357,792/K340,000 x 5%	17,890	17,000

NOTE:
Motor running expenses of K60,000 in relation to the business Ford Ranger vehicle provided to Kabwe, will not constitute taxable emoluments, and therefore will not attract any personal income tax as the vehicle will constitute a personal to holder motor vehicle, since it will be owned by the company.

(ii) MABWE LTD

COMPUTATION OF TAXABLE PROFIT AND COMPANY INCOME TAX PAYABLE

	K	K
Net profit		1,550,000
Add Personal to holder motor car benefit		
On Ford Ranger		48,000
		1,598,000
Less		
Director's emoluments for:		
- Chibwe	355,000	
- Kabwe	340,000	
		(695,000)
Motor car running expenses		
(K60,000 x 2)		(120,000)
Employer's NAPSA contributions for:		
- Chibwe (K357,792 x 5%)	17,890	
- Kabwe (K340,000 x 5%)	17,000	
		(34,890)
Capital allowances		
On Ford Ranger (K1,500,000 x 20%)		(300,000)
Final Taxable profit		448,110
Company income tax (K448,110 x 30%)		134,433

(c)

(i) NAPSA, Withholding Tax and Income Tax payable

1. Employee NAPSA contributions will not be payable by either Chibwe or Kabwe on the K355,000 and K340,000 respectively to be drawn as dividends because dividends are not earnings for the purposes of NAPSA contributions.
2. However, the motoring expenses to be paid in respect of Chibwe's private Toyota Fortuner will constitute emoluments and will attract employee's NAPSA contributions which will amount to:

   5% x K60,000 = K3,000.

3. Motor running expenses in relation to the business Ford Ranger vehicle provided to Kabwe, will not constitute taxable emoluments, and therefore will not attract employee's NAPSA contributions as the vehicle will constitute a personal to holder motor vehicle.
4. Withholding tax, which will be a final tax will be charged and deducted from the dividends paid to Chibwe and Kabwe of K355,000 and K340,000 respectively and therefore personal income will not be paid by either Chibwe or Kabwe on the dividends.
5. The amount of the withholding tax to be deducted from the dividends will be:

	K
Chibwe (K355,000 x 15%)	53,250
Kabwe (K340,000 x 15%)	51,000
Total withholding tax	104,250

6. However, the motoring expenses to be paid in respect of Chibwe's private Toyota Fortuner will constitute emoluments and will attract personal income tax. But since the amount of K60,000 is below the tax-free threshold of K61,200, the amount of K60,000 will be taxed at 0%.
7. Motor running expenses in relation to the business Ford Ranger vehicle provided to Kabwe, will not constitute taxable emoluments, and therefore will not attract any personal income tax as the vehicle will constitute a personal to holder motor vehicle.

(ii) MABWE LTD

COMPUTATION OF TAXABLE PROFIT AND COMPANY INCOME TAX PAYABLE

	K
Net profit	1,550,000
Add Personal to holder motor car benefit	
On Ford Ranger	48,000
	1,598,000
Less	
Motor car running expenses	
(K60,000 x 2)	(120,000)
Employer's NAPSA	
(K60,000 x 5%)	(3,000)
Capital allowances	
On Ford Ranger (K1,500,000 x 20%)	(300,000)
Final Taxable profit	1,175,000
Company income tax (K1,175,000 x 30%)	352,500

(d) COMPUTATION OF NET INCOME UNDER EACH OPTION

		Company drawing	
	Partnership	Emoluments	Dividends
	K	K	K
Net profit	1,550,000	1,550,000	1,550,000
Less			
Personal Income Tax for			
Chibwe	(134,497)	(31,822)	
Kabwe	(208,867)	(97,312)	
Employee's NAPSA		(34,890)	(3,000)
Employer's NAPSA		(34,890)	(3,000)
Withholding Tax			(104,250)
Company income tax		(134,433)	(352,500)
Net income	1,206,636	1,216,653	1,087,250

The business should be run as a limited company with profits being drawn as gross emoluments as this option gives the highest net income.

SOLUTION TWO

(a) COMPUTATION OF TAXABLE PROFIT AND INCOME TAX PAYABLE BY IBS BANK

	K'000	K'000
Profit before income tax		761,400
Add		
Depreciation	1,420	
Donations to unapproved orphanages	1,650	
NAPSA penalties	1,124	
Customer refreshments	1,722	
		5,916
		767,316
Less		
Profit on sale of listed shares	1,560	
Rental income	16,500	
Unrealised forex gains	588	
Consultancy fees	7,990	
Capital allowances	3,320	
		(29,958)
		737,358
Add:		
Consultancy fees (K7.99m x 100/85)		9,400
Taxable income		746,758
Company income tax (K746,758 x 30%)		224,027
Less tax already paid		
WHT on Consultancy fees (K9,400,000 x 15%)		(1,410)
WHT on Interest income		(149,865)
Income Tax refundable		72,752

WORKINGS

COMPUTTATION OF CAPITAL ALLOWANCES

	K'000
Buildings for new branches	
(K25,500 x 2%)	510
CCTV security equipment (K2,400 x 25%)	600
Automated Teller Machines (K7,500 x 25%)	1,875
Purchase of office equipment (K1,340 x 25%)	335
	3,320

(b) The procedures and tax benefits of operating approved share option schemes are as follows:

(i) Procedure for approval of share option scheme

1. The company must prepare the scheme rules and constitution which shall govern the scheme whilst referring to the conditions which the Commissioner General considers in approving a scheme.
2. An application for approval of a share option scheme must be made in writing to the Commissioner General, accompanied by a copy of the instrument constituting the scheme and the rules of the scheme.
3. Upon receipt of the application, the Commissioner General will assess the scheme to determine whether it has met the conditions for approval and if so will communicate to the company in writing that the scheme has been approved. Where the scheme has not met the conditions he will still communicate to the company in writing to this effect. The company may later re-apply.

(ii) Tax benefits for the employer:

1. The costs incurred in setting up and operating the scheme are tax deductible.
2. There is no property transfer tax on the shares transferred under the scheme.
3. The income of the scheme is not chargeable to income tax

To the participating employees:

There is no tax on any income the employee generates from such a scheme. Specifically:

1. There is no Income Tax charge when the share options are granted at an exercise price that is less than the market value of the shares at the time the shares are granted and exercised.
2. There is no property transfer tax charged on the subsequent transfer of shares under an approved share option scheme.

SOLUTION THREE

(a) Hedging income is treated as a separate source of income from the mining operations being carried on and is taxable separately using the mining tax rate of 30%.

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 10 years as it is still treated as a loss from mining.

(b) TT MINING COMPUPATTION OF TAXABLE PROFIT

	K'million	K'million
Profit before tax		422
Add:		
PAYE penalties	65	
Amortization	105	
Depreciation	150	
Construction of hospital in a mining township	100	
Fines for breach of regulations	400	
		820
		1,242
Less		
Capital allowances	228	
Dividends	31	
		(259)
Taxable mining income		983
Add: Disallowed interest		135
		1,118
Less loss relief		(22)
Final taxable profit		1,096
Company income tax (K1,096 million x 30%)		328.80

Workings

(1) Capital allowances

	K'million
Excavation equipment	
(K450 million x 20% = K90 million x [1 – (K27.5 – K24.5)/K24.5]	101
Mining equipment (K455 million x 20%)	91
Street lights (K180 million x 20%)	36
	228

(2) Tax EBITDA and disallowed interest

	K'million
Adjusted mining profit	983

Add:	
Interest expense	723
Depreciation	150
Amortization	105
Tax EBITDA	1,961

Interest expense	723
Allowable interest (K1,961 million x 30%)	(588)
Disallowed interest	135

(3) Loss relief

	K'million
Indexed loss: K20 million x [1 – (K27.5 – K24.5)/K24.5]	22
Loss relief	(22)
Balance carried forward	Nil

The loss to be relieved is restricted to 50% of the taxable mining profits. i.e., K1,118 million x 50% = K559 million. Therefore, the whole loss will be relieved since it is less than 50% of the taxable mining profits.

SOLUTION FOUR

(a) Fruitplus engaged PWP, a foreign based entity to provide installation services. The company will be deemed to have imported services and therefore, liable to account for and pay reverse VAT.

Reverse VAT is the transfer of liability to account for and pay VAT on imported services from the person making the supply to the person receiving the supply. A service is considered imported if it is performed or undertaken in Zambia; and if it is utilized in Zambia regardless of where it is performed.

Reverse VAT is payable where the non-resident supplier has not appointed a tax paying agent in Zambia to account for and pay VAT.

PWP has not appointed a tax paying agent in Zambia, therefore Fruitplus will be required to account for VAT on the fees paid to its subsidiary and pay this VAT to ZRA. The amount of reverse VAT payable is: K4,810,000 x 16% = K769,600.

Fruitplus will not be able to claim Reverse VAT paid as input VAT because it is not recoverable when computing the VAT payable. This could have been avoided if PWP had appointed a tax paying agent in Zambia.

(b) COMPUTATION OF TAXABLE INCOME AND COMPANY INCOME TAX PAYABLE BY FRUITPLUS FOR THE TAX YEAR 2024

	K	K
Profit before tax		21,100,800
Add:		
Depreciation	1,690,000	
Amortization	221,400	
		1,911,400
		23,012,200
Less:		
Capital allowances		(1,402,000)
Adjusted business profits before interest		21,610,200
Disallowed interest		Nil
Taxable business profits		21,610,200
Add:		
Dividend from foreign sources		
(K1,632,000 x 100/68)		2,400,000
Total taxable income		24,010,200
Company income tax @30%		7,203,060
Less:		
Provisional income tax paid		(4,300,000)
Double taxation relief – dividends		(720,000)
Income tax payable		2,183,060

WORKINGS

(1) COMPUTATION OF TAX EBITDA & DISALLOWED INTEREST

	K
Adjusted business profits	21,610,200
Add: Dividends (K1,632,000 x 100/68)	2,400,000
	24,010,200
Depreciation	1,690,000
Amortization	221,400
Finance costs	8,600,000
	34,521,600
Total interest costs	8,600,000
Allowable interest (K34,521,600 x 30%)	10,356,480
Disallowed interest	Nil

(2) Double taxation relief;

This is the lower of:

	K
Foreign tax paid: K2,400,000 x 32% =	768,000
Zambian tax: K2,400,000 x 30% =	720,000

The double taxation relief is K720,000 which is the lower of foreign tax paid

(c) MERVIS

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2024

	K
Zambian income	
Basic salary	814,000
Housing (K5,800 x 12)	69,600
	883,600
Foreign income	
Dividends (K81,600 x 100/68)	120,000
Total taxable income	1,003,600
Income Tax	
First K110,400	12,360
Excess (K1,003,600 – K110,400) x 37%	330,484
Income tax liability	342,844
Less:	

Pay as you earn	(207,141)
Double taxation relief	(38,400)
Income tax payable	97,303

Workings

Double taxation relief

Foreign tax paid: K120,000 x 32% =	38,400

Zambian tax

$$\frac{\text{Gross foreign income}}{\text{Total assessable income}} \times \text{Zambian tax charge}$$

$$\frac{K120{,}000}{[K1{,}003{,}600 + (K44{,}200 \times 100/85)]} \times [K342{,}844 + (K44{,}200 \times 15/85)]$$

$$\frac{K120{,}000}{K1{,}055{,}600} \times K350{,}644$$

= K39,861

The double taxation relief is K38,400 which is the lower of Zambian income tax

SOLUTION FIVE

(a) A quality tax audit of the affairs of CSD Ltd should be able to achieve the following tax audit objectives:

1. provide assurance that CSD Ltd's accounts and records will be reviewed in sufficient depth to reach a supportable conclusion regarding all items of a material tax consequences.
2. ensure that appropriate income tests will be performed where necessary to ensure the proper and complete reporting of income by CSD Ltd regardless of the source.
3. provide assurance that CSD Ltd's responsibilities regarding the filing of all tax returns have been ascertained.
4. Ensure that the conclusions reached are by the tax auditor on the audit of CSD Ltd are expressed and documented in sufficient details to enable the reader to comprehend the process whereby such a conclusion was reached.

(b) The company's exposure to penalties and interest on overdue taxes on late payment and submission of return in respect of the balance of income tax payable for the previous year is as follows:

1. The balance of income tax payable for the tax year 2023 is K1,836,000 [(K8,680,000 – K2,560,000) x30%]

   The balance of income tax payable could alternatively have been computed as follows:

	K
Actual tax payable (K8,680,000 x 30%)	2,604,000
Less provisional income tax (K2,560,000 x 30%)	(768,000)
Final balance of company income tax payable	1,836,000

2. The above balance of income tax payable was paid on 10 October 2024 and was therefore delayed by 3 months and 19 days (i.e.,111 days) from its due date of 21 June 2024.

   The penalty for late payment of tax is:

   = 5% x K1,836,000 (W1) x 4
   = K 367,200

3. Interest will be charged on the overdue tax at the BOZ rate plus 2%. The applicable rate will therefore be 12.25% + 2% = 14.25% per annum
4. The amount of interest arising will be:

   14.25% x K 1,836,000 x 111/365
   =K79,564

5. Under estimation penalty

   Where the amount of provisional income tax paid is less than the actual total income tax for the tax year by at least one third, then an additional penalty at the rate of 25% of the underpaid income tax will arise.

   1/3 of the actual amount of tax payable for the tax year 2023 of K2,604,000 (W1) is: 1/3 x K2,604,000 = K868,000

   Total provisional income tax paid of K768,000 (W1) was less than 1/3 of the actual income tax payable. Therefore, an additional penalty will arise on underpayment of tax. The amount of the additional penalty will be:

   (K2,604,000– K768,000) x 25% = K459,000

6. The self-assessment income tax return for the tax year 2023

   This return should have been filed by 21 June 2024. When filed on 10 October 2024, it was delayed by 3 months and 19 days.

   The penalty is chargeable for companies at the rate of K600 (2,000 penalty units) per month or part thereof and will amount to:

   K600 x 4 = K2,400 (i.e. 2,000 penalty units x 4= 8,000 penalty units)

RENTAL INCOME

1. The rental income tax was paid late by 1 month and 17 days (i.e. 46 days) as it should have been paid by 14th February 2024 but was paid on 31 March 2024
2. A penalty of 5% of the tax due per month or part thereof will arise and this will amount to:
   5% x K 144,294 (W) x 2 = K14,429

   WORKING
   COMPUATION OF RENTAL INCOME TAX PAYABLE FOR THE MONTH OF JANUARY 2024

	K
Gross monthly rental	1,200,000
Rental tax for the month of January 2024	
On first K1,000 x 0%	0
On next (K66,667 -K1,000) x 4%	2,627
On excess (K1,200,000 -66667) x 12.5%	141,667
Rental tax	144,294

3. The amount of interest chargeable therefore will be:

   (14.50% x K144,294) x 46/365 = **K2,637**

4. A penalty will arise on the late submission of the rental tax return as this was also submitted late 1 month and 17 days (i.e. 46 days) as it should have been submitted by 14th February 2024 but was submitted on 31 March 2024.
5. The late submission of Rental Tax returns attracts a penalty of 250 penalty units (K75.00) per month or part thereof during which such failure continues, and this will amount to:

   K75 x 2 = K150

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 10 SEPTEMBER 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)

Boona Opticians Ltd (BOL Ltd) is a company offering optical care services and optical supplies to its clients. It has operated with two (2) shareholders since its inception. The two (2) shareholders are full time Government employees. BOL Ltd aims to maximise shareholder returns.

The company is strategically located in most shopping malls around the capital city though it intends to expand its operations into other towns around the country. All outlets are managed by the lead opticians and offer similar services. The optical care service is competitive. The critical success factor is branding and customer satisfaction being key.

The company aims to provide the best service and high quality optical supplies. The supplies (including lenses and frames) are branded 'Boona'. The last three (3) performance reports indicate that the operating margin is declining. The Managing Director, Inchitekwa Mulenga, of BOL, is concerned and has therefore asked you as Management Accountant to carry out a benchmarking exercise to determine whether the downward trend in margins is an industry wide phenomenon.
Below is the financial data for BOL and Yinzin Opticians Limited (YOL), its main competitor.
Financial data for the year ended 31 December 2023:

	YOL	BOL
	K'm	K'm
Revenue	7.28	2.80
Cost of sales	1.20	0.40
Advertising costs	2.57	1.17
Other operating costs	2.07	1.00
Operating profit	1.44	0.23
Financing costs	0.25	0.00
Tax (35%)	0.62	0.09
Net income	0.57	0.14

The Yinzin Opticians brand is well known across the country. Recently YOL acquired two companies that were struggling. Its chief executive officer was quoted in the media as saying that the company will continue growing its presence through acquisitions.
Other key data:

	YOL	BOL
Number of employees	317	180
Customer satisfaction	unknown	49.78%
Operating profit (year ended 31 December 2022)	16.3%	14.00%

The lead optician places orders for optical supplies with different suppliers. These orders are based on customers' prescriptions and requirements. The supplies are delivered to BOL and inspected by the lead optician to verify the correctness of the orders. These orders are received in a space of two weeks. Most times the right deliveries are done and in good condition, though it takes BOL an average of three (3) weeks to notify its customers of their order receipt. Management would like to change this process to a more modern system to sustain and satisfy its customers.

Required:

(a) Explain the role of the Management Accountant in providing information to Boona Opticians Ltd. (10 marks)

(b) Calculate the following performance measures for both companies:

(i) Operating profit margin growth
(ii) Customer satisfaction
(iii) Revenue per employee

(8 marks)

(c) Evaluate whether these measures are appropriate and sufficient for this industry. (6 marks)

(d) Assess how Boona Opticians Ltd could improve the current process of ordering and receiving optical supplies by using business process reengineering (BPR). (16 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

Mukaka Foods Plc (MF Plc), a fluid milk processor (dairy), founded in 1978, grew through continuous acquisitions to become an industry leader. As part of MF Plc' post-acquisition strategy, it allowed each dairy to operate autonomously with little oversight.

MF Plc's executives decided to depart from their longstanding acquisition-autonomy strategy by establishing a vegetable division to boost group profits.

Pamela Moyo was named the first Chief Executive Officer (CEO) of the vegetable division and charged with increasing company profitability. She assembled a seasoned management team who quickly made operational and structural changes to improve the division's financial results. While their efforts improved financial results, Pamela wanted more. In addition to organic growth, her vision was to grow the division through the introduction of innovative new products.

One of these products, called Chicken Sensations (CS), is an innovative, nutritious and convenient frozen food product. The new product would consist of vegetables, coated seasoned pasta and chicken - all contained in a single bag. To prepare the meal, consumers would simply empty the contents from the bag into a bowl, add a teaspoon of water and microwave for 5 minutes.

Preliminary sales forecasts, machinery acquisitions and operating data were produced. The CS product was estimated to have a four (4) year product life before being overtaken by competitive products. The results for the first two (2) years have shown big losses. A very inquisitive non-executive director has questioned the progress on the CS investment.

The original project proposal showed an internal rate of return (IRR) of 22% and a positive net present value (NPV) of K1,018,000 at a cost of capital of 15%.

The IRR and the NPV were based on the following cash flows, sales revenues and costs.

Year	0	1	2	3	4	5
	K'000	K'000	K'000	K'000	K'000	K'000
Machinery	(4,760)					
Working capital		(572)	(402)	(826)	214	1,586
Sales		2,290	3,898	7,200	6,346	
Variable manufacturing costs		(1,144)	(1,752)	(3,520)	(2,986)	
Variable selling costs		(230)	(312)	(440)	(60)	

The operating statements, and figures from the budgets and strategic plans, show the following project results and forecasts results:

Year	1	2	3	4
Project Status	**Actual**	**Actual**	**Budget**	**Plan**
	K'000	K'000	K'000	K'000
Sales	2,050	4,140	6,800	6,000
Variable manufacturing costs	(1,140)	(1,860)	(2,720)	(2,760)
Manufacturing fixed costs	(300)	(496)	(680)	(780)

Depreciation	(740)	(740)	(740)	(740)
Variable selling costs	(260)	(360)	(340)	(120)
Fixed selling cost	(390)	(540)	(570)	(180)
Administration	(218)	(458)	(280)	(600)
Profit/(loss)	**(998)**	**(314)**	**1,070**	**820**
Return On Investment(ROI)	-	-	**43.2%**	**41.6%**

The following additional information is available:

- MF plc ignores taxation for project proposals and operating statements.
- Working capital consists entirely of trade receivables/trade payables offsetting inventory. For the first two (2) years' trade receivables have been at the projected 90 days.
- Capital expenditure incurred was as the original proposal.
- Fixed cost apportionment (manufacturing, sales, and administration) are on the same conventional bases in the budget and plan as in the actual results.
- ROI is calculated on the basis of an average of opening and closing capital employed each year.

Required:

(a) Analyse the actual performance of the new product CS investment in comparison with the initial budgeted figures and evaluate the extent to which the forecasts are in line with original expectations.
(Hint: Among other things in your analysis, calculate the revised NPV). (8 marks)

(b) Explain how the high projected ROI figures for the next two (2) years arise, and **evaluate** whether they reflect over-simplistic projections for the next two (2) years. There is need to calculate the ROI figures to support your explanation. (6 marks)

(c) Explain clearly why the original IRR figures cannot be compared with the ROI figures. (3 marks)

The sustainability of business activity is becoming a major concern to organisations like MF Plc which processes milk products and sells fast foods.

Required:

(d) Explain the goal of sustainable development and how can MF plc increase its competitive advantage by becoming a sustainable enterprise? (3 marks)

[Total: 20 marks]

QUESTION THREE

Lusaka Central Park (LCP) is a worldwide church with congregations in every country. LCP has recently taken over Kings Park School (KPS). LCP is known for good management of funds and all of its churches are profitable non-governmental organizations. The church has plans to improve the profitability of its business units and prides itself on its customer focus. The recently held board emphasized its call to remain relevant and focussed on making our communities appreciate God. The board clearly stated that all church business units around the world should focus on making sure our customers are happy with our services because that is our focus. "We give them what they want'. Since a church is not an expert in doing business, it continually conducts market and customer research and uses the results of these researches to inform both its operational and longer-term strategies of the Church.

KPS is well-established and has always traded profitably. It offers education to pupils from grades 1-12. The school is known for producing best results in the country. The report was given to parents for examinations classes for Grade seven, Grade Nine and grade Twelve. Parents were happy to note that out of 30 grade twelve pupils 15 obtained six points. KPS has dedicated team of teachers and learners are strictly guided on which materials to read and focus on.

KPS has never seen the need for market and customer research as it always achieves its targets and revenue estimates. Students consistently achieve passes above the national average in Zambia. KPS has always had the largest market share in the education sector even though new entrants continually enter the market. The latest entrant in the market is Palace School which has recorded good results. Palace School has launched a robust campaign. KPS has a good reputation and has not felt the need to invest significantly in marketing activities.

LCP has developed a sophisticated set of critical success factors which is integrated into its real-time information system. LCP's rationale for the take-over of KPS was to export its customer focus and control system, based on the Critical Success Factors, to KPS. LCP believed that this would transform KPSs performance and increase the wealth of LCP's shareholders.

An Extract of 2023 Management report for KPS was presented to the board as follows:

Grades	**1- 7**	**8 – 9**	**10 -12**
School Fees Revenue	K350,000	K220,000	K500,000
Variable Costs school Expenses	K104,800	K89,000	K 155,000
Fixed cost of rent specific to the grade	K50,000	K50,000	K70,000
Number of pupils	80	110	120
Pass Rate	88%	90%	96%
Number of pupils Palace School	85	100	108
Pass rate for Palace School (Competitor).	91%.	94%	75%

General Overheads costs were K250,000 and it is the policy of Kings Park to absorb overheads using school fees revenue.

Required:

(a) Calculate the relevant performance measures for KPS and comment on the performance measures. (8 marks)

(b) Suggest four (4) Critical Success Factors appropriate for KPS. (4 marks)

(c) Discuss two (2) key performance indicators to support **each** Critical Success Factor in part (b). (8 marks)

[Total: 20 Marks]

QUESTION FOUR

The Minister of Health in country X talked about Government's resolve to provide access to health for all people. He indicated the introduction of Medlink and digitization will result in access to health for all.

Medlink is a country wide project to connect all of the medical centres and hospitals to a national information system network for the health care service. There are about 100 medical centres country wide some of which operate in rural areas with no electricity and 30 hospitals including teaching hospitals and district hospitals within country X, all of which are funded by the Government and grants from cooperating partners. The Medlink project is being funded by the Government in collaboration with international Non-Governmental Organizations (NGOs).

A project team has been set up and the Medlink project commenced in January 2023. Until the Medlink project is complete, most information within the medical centres and hospitals is contained within manual paper-based systems and all data exchange is undertaken by means of physical collection, telephone, post or fax.

The Medlink project aims to provide a secure and dedicated information system network for all medical practitioners, Nurses and medical administrators in country X, in order for them to share and access healthcare information. The Medlink information system will include the following features:

1. Access to email facilities;
2. Medical centre and hospital appointment booking facilities;
3. Transmission of patient records electronically between medical centres and hospitals (from the patient databases held locally in each medical centre and hospital);
4. Automatic re-ordering facilities for drugs and medical supplies from external suppliers;
5. Access by medical centres and hospital authorised staff to online laboratory test results from hospital laboratory databases; and
6. Access to a centrally-maintained medical diagnosis system.

The Government has set the following objectives for the Medlink project:

1. To establish the technical requirements for each hospital and medical centre;
2. To ensure that local users have access to technical guidance and training;
3. To achieve a target of 70% of medical centres and 80% of hospitals connected to the Medlink information system and fully operational by July 2025;
4. To track and monitor the use of the Medlink information system by medical centres and hospitals; and
5. To track and monitor costs in order to stay within the budget set.

Each medical centre and hospital has been authorised to discuss terms of its forecast usage of the Medlink information system directly with the project team for its own hospital or medical centre. Usage is defined for each medical centre and hospital as the hardware and software requirements, which aspects of the Medlink information system it will utilise and the timing of connection.

Required:

(a) Evaluate how the features of the Medlink information system can assist in improving the services of the medical centres and hospitals in Country X. (10 marks)

(b) Recommend, with reasons, five (5) performance measures which could be used to assess whether the project objectives, as set by the Government of Country X, are being met. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

Recently Zampost has unveiled its mission statement which is "To be an innovative and highly successful Corporation which has market leadership in postal, courier, logistical and financial services through utilization of modern technologies as well as a competent and motivated workforce." Many stakeholders have welcomed this mission statement and coined it as 'timely' with the 'traditional postal box and key' approaching for postal services shifting to compete with instant messaging, emails and telefax among others. Therefore, companies like Zampost must innovative and diversify their operations for them to survive in this highly competitive environment. However, other stakeholders have pointed out that 'over diversification' could create problems for Zampost.

Required:

(a) Explain three (3) contributions that a modern strategic Management Accountant can play in the attainment of the mission of Zampost. (6 marks)

(b) Describe four (4) types of performance measures and actions that Zampost should consider to achieve its mission. (8 marks)

(c) Discuss three (3) control mechanisms that Zampost can implement to manage the problems of over diversification. (6 marks)

[Total: 20 Marks]

END OF PAPER

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Role of a management accountant**

The role of a management accountant includes preparing information on the following aspects.

To measure performance. Management accounting information can be used to analyse the performance of an organisation, and/or of the individual divisions, departments or products within the business. Performance reports provide feedback, most frequently in the form of a comparison between actual performance and budget.

To control. Performance reports are a crucial element in controlling an organisation.

To be able to control their business, managers need to know the following:

- what the business want to achieve (targets or standards, budgets)
- what the business is achieving (actual performance).

By comparing the actual achievements with targeted performance, and identifying variances, management can decide whether corrective action is needed, and then take the necessary action when required.

Much control information is of an accounting nature because costs, revenues, profits and asset values are major factors in how well or how badly an organisation performs.

To plan. Managers must plan, and they need information to do this. Much of the information they use is management accounting information.

To make decisions. Managers are faced with several types of decisions.

➢ **Strategic decisions** (which relate to the longer-term objectives of a business) require information that tends to relate to the organisation, is in summary form and is derived from both internal and external sources.

In addition, strategic decision making:

- Is medium to long term
- Involves high levels of uncertainty and risk (the future is unpredictable)
- Involves situations that may not recur
- Deals with complex issues

➢ **To make tactical and operational decisions**. This information is more detailed and more restricted in its sources as it relates to the short or medium term and it relates to a department, a product or a division rather than the organisation as a whole.

(b) **Performance measures**

(i) Operating profit margin growth (W.2)

YOL: 21%

BOL: (41%)

(ii) Customer satisfaction

It difficult to compare in the absence of sufficient data.

(iii) Revenue per employee

YOL: K7,280,000 / 317 = K22,965

BOL: K2, 800,000 / 180 =K15,556

Growth(W.2)

YOL: [(16.33 – 19.8) / 16.33] x 100 = 21%

BOL: [(14 – 8.2) / 14] x 100 = (41%)

YOL's operating margin has grown from 16.33% to 19.8% and BOL's has fallen from 14% to 8.2%.

Working:

YOL: [1.44 / 7.28] x 100 = 19.8%

BOL: [0.23 / 2.80] x 100 = 8.2%

(c) Evaluation of the appropriateness of the measures

(i) Operating margin growth

This is clearly worth measuring as it gives a good indication of the overall cost control. The focus on growth also presents a good indication as to the trend, which can help management determine the extent of both revenue and cost growth. In this case , it is clearly helpful to BOL as it highlights a dramatic decrease, evidencing the problems regarding the process for goods inwards and collection by customers.

(ii) Customer satisfaction

This is a key measure in the industry, but BOL does not have the information from YOL in this area, perhaps because it is not publicly available. There are two areas of interest in the measure- the first is that 49% does not seem high and the second is that it is not clear how the measurement is being undertaken. However, given the customer focus in the industry and the need for brand strength of G E Ltd, it is likely that one measure of customer satisfaction is not enough. BOL may also need to be aware of whether potential customers are aware of their brand, their likelihood to use BOL for their next purchase and their satisfaction with the speed of service. It does seem that the benchmarking measures suggested do not contain enough measures on customers satisfaction in an industry where brand strength of G E Ltd is clearly becoming more significant as a critical success factor.

(iii) Revenue per employee

This seems an arbitrary measure in this context as the split of staff in the company or the industry between administrative staff, professional qualified opticians and any other staff is not clear. The measure may offer a blunt indication of overall efficiency as lower revenue per employee may suggest that there are too many staff who are not able to generate revenue and that BOL may not be as effective in its administration as it could be. Revenue per optician would be a more effective measure and efficiency of the business could be measured through administration costs as a proportion of revenue generated.

Advertising speed is seen as increasingly crucial in establishing brand strength in this industry and a measure and benchmark of advertising speed would therefore seem to be appropriate.

(d) Business process reengineering (BPR)

This seeks to initiate dramatic, fundamental change rather than make improvements to an existing process. It starts from the premise of the basic question as to whether these activities need to be undertaken at all.

It is worth investigating, initially, if BOL can reduce the number of suppliers it deals with. It seems to have too large several suppliers which should be reduced to a small number of approved suppliers. It is also likely to be more beneficial to BOL if the staff responsible for initiating the order place the order. The opticians could do this on their own computer systems rather than taking the order to an administrator.

BOL could also re-engineer the current process by having more control about the delivery dates and times. BOL could allocate a specific time for all deliveries. BOL could ensure extra administration support, if necessary, for this time.

However, a more effective way of engineering the process would be for opticians to place the order directly with a small group of suppliers and for those suppliers to send the goods directly to customers. Even if this involved an initial cost to BOL, it would save money as BOL is currently spending time checking goods which are close to perfect based on its own inspection and are subject to very few complaints from customers. This would also remove the possibility of BOL losing goods, which must be damaging both in terms of its finances and in terms of customer satisfaction. This is responsible for the low customer satisfaction rating of 49%. The current process is certainly likely to be responsible, at least in part, for the low profit margin compared to YOL.

Re-engineering the process in this way may require a shift in culture for BOL. The company sounds as though it is quite hierarchical in nature, with orders being passed to administrators for processing and administrators being responsible for checking goods and advising customers. BPR traditionally flattens structures and means a shift from a hierarchical structure as any potential problems become the problems of the entire team and not of a certain department. Opticians may not be content to carry out tasks, which were traditionally seen as being administrative in nature, even though it would be saving BOL money over the course of the entire process.

SOLUTION TWO

(a) **Revised Calculations for CS Investment**

Year	**0**	**1**	**2**	**3**	**4**	**5**
Project Status		**Actual**	**Actual**	**Budget**		
		K'000	K'000	K'000	K'000	
Machinery	(4,760)					
Sales		2,050	4,140	6,800	6,000	
Variable manufacturing costs		(1,140)	(1,860)	(2,720)	(2,760)	
Variable selling costs		(260)	(360)	(340)	(120)	
Working capital		(512)	(524)	(664)	200	1,500
Net cashflow	(4,760)	138	1,396	3,076	3,320	1,500
DF@15%	1.0	0.870	0.756	0.658	0.572	0.497
PV	(4,760)	120	1,055	2,024	1,899	746

NPV =+ K1, 084

Advice/Evaluation

- **NPV**

  The CS project's NPV is positive and, therefore, on financial grounds, it should be accepted. The question of abandonment of the project could be asked but even without doing any NPV calculations, it is clear that current projections seem reasonable and will give a positive NPV over the remaining two years of the CS project. Furthermore, project abandonment should only consider future cash flows because past costs are sunk. And in this case, future cash flows in years three and four are very significant.

- **Sales Growth**

  The CS project had a slower start than projections in terms of sales. Sales were down in year 1 but were slightly better than plan in year 2. There is, therefore, a lower contribution than planned (K650, 000+K1, 920, 000= K2, 570, 000 compared with K916+K1, 834 = K2, 750, 000). The budget and plan for the first two years is scaled down to lower levels than in the initial budget, and this indicates that they are reasonable expectations.

- **Contributions**

  The overall contribution is now planned to be in excess of the initial budget. The first year's actual contribution was lower, both because of lower sales and a lower contribution margin on sales. Margins are projected to continue improving in the third year over and above the improvement in the second year. Whether that level of improvement, both in comparison to the actual margin in year 2 and in comparison to initial expectations, is realistic is questionable.

- **Conclusion**

  The project appears to have performed below expectations in the first year; possibly because of overestimating the ease with which new products like CS gain acceptance in the market. Despite this, however, it would appear that the CS project as a whole is a successful investment.

Workings

W.1 Contributions, Profit Margins and Working Capital

Year		**1**	**2**	**3**	**4**	**Total**
Project Status						
Contribution(K'000)	Actual/forecast	K650	K1,920	K3,740	K3,120	K9,430
	Original Budget	K916	K1,834	K3,240	K3,300	K9,290
Profit Margin	Actual/forecast	31%	46%	55%	52%	
	Original Budget	45%	47%	45%	52%	
Working capital(WC)						
(90/360) x Sales	(K'000)	(512)	(1,036)	(K1,700)	K1,500	0
Incremental WC	(K'000)	(512)	(524)	(664)	200	

Notes

1. Working capital levels are assumed to stay at 25% of sales in last two years of product CS.
2. Fixed costs have been excluded from the calculations because they are apportionments and, therefore, are not cash flows.

(b) **Explanation of How High Projected ROI Figures Arose plus Evaluation**

Year	**0**	**1**	**2**	**3**	**4**
		K'000	K'000	K'000	K'000
Contribution (part (a))(W.1)		650	1,920	3,740	3,120
Fixed manufacturing costs		(1,648)	(2,234)	(2,670)	(2,300)
Net Profit/(loss) (A)		(998)	(314)	1,070	820
Fixed Assets year –end	2,960	2,220	1,480	740	0
Working Capital year end		512	1,036	1,700	1,500
Total assets year end (B)	2,960	2,732	2,516	2,440	1,500
Total assets year beginning year(C)		2,960	2,732	2,516	2,440
Average assets(D = [B+C)÷2]		2,846	2,624	2,478	1,970

ROI (A÷D)		**(35.1%)**	**(12.0%)**	**43.2%**	**41.6%**
Profit Margin		31%	46%	55%	52%

The high ROI over the next two years arises because of two factors. Firstly, the straight line depreciation means that the fixed asset base is reduced by proportionately greater amounts as the CS project life progresses. In year 3, the high ROI figures result from high profits and a falling fixed asset base. In year 4, the ROI figures are high despite reduced profits because of the reduction in the average assets figures brought about by including fixed assets at net book value.

Secondly, the contribution margin is expected to increase compared to the first two years of product CS. The contribution does not start covering allocated fixed costs until year 3. Sales figures for year 3 may be less optimistic, but this could be due to product CS reaching the peak of its life cycle; and then dropping back again in year 4.

(c) **Explanation Why Original IRR Figures Cannot be Compared with ROI Figures**.

The IRR and the ROI figures cannot be compared directly because they are calculated on an entirely different basis.

The original IRR figure of 22% is calculated purely on cash flows and the rate of interest which, when used in the NPV calculation, would produce an NPV of zero.

In contrast, the ROI is calculated on the basis of accruals concept; including depreciation and an allocation of fixed costs. But these costs were not included in the calculation of NPV and IRR as they are not cash flows.

(d) **Goal of Sustainable Development**

Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development aims at concerted efforts towards building an inclusive, sustainable and resilient future for the people and planet. For example, by incorporating health plans into the planning of new communities it can be ensured that residents have easy access to health care and leisure facilities.

Firms which become sustainable enterprises may increase their competitive advantage. Sustainable enterprises continuously generate increasing value through application of sustainable practices in the entire base of activity: products and services, workforce, functions/processes, workplace, and management/governance.

The need for sustainable development requires organisations like MF Plc to incorporate economic prosperity, environmental quality and social equity into their strategy.

SOLUTION THREE

(a)

Grades	1to7	8 to9	10 to1	Total
School Fees Revenue	350,000	220,000	500,000	1,070,000
Variable Costs school Expenses	104,800	89,000	155,000	348,800
Fixed cost of rent specific to the grade	50,000	50,000	70,000	170,000
Absorbed Overheard	81,776	51,402	116,822	250,000
Total Cost	236,576	190,402	341,822	768,800
Profit	113,424	29,598	158,178	301,200

Pass Rate			
Kings Park School	88%	90%	96%
Palace Park School	91%	94%	75%
Difference	3%	4%	21%

Enrolments			
Kings Park School	80	110	120
Palace Park School	85	100	108
Difference	5	10	12

Comments

Grades 10-12 is generating more revenue for the school as such these should be well taken of to ensure numbers do not drop and parents are kept happy. The profits are good.

Profit again is high in grades 10-12 and 1-7. However looking at the revenue generated by grade 10-12, we can see that expenses for higher grades are equally higher as such profit is reduced. The school should be able to look at the expenses and should be managed to avoid making losses in future.

Pass rates – whereas the pass rate for both school is good, Kings Park is not doing well for grades 1-9 compared to the close competitors and are less by 3% and 4%. This is a close pass rate and Kings Park should consider starting to advertise seriously especially that the Palace school is advertising

Enrolments-Palace School is doing well in grades 1-7 but Kings Park is doing well in higher grades. Kings Park is already facing serious competition in the business

(b) Four critical success factors which would be appropriate for Kings Park are:

1. **Customer satisfaction** with courses and learning materials
2. **Employee satisfaction**
3. The **quality** of its teaching and materials
4. **Reputation** and **brand image**
5. **Results Performance**

(c) KPI's for each of the CSF's could be:

1. **Customer satisfaction**

   Student satisfaction rating- at the end of a course, or at the end of a module within a course, students could be asked to complete a questionnaire rating their satisfaction with various aspects of the course (for example, the knowledge levels of the staff, the quality of the supporting materials, and the approachability/ availability of the staff to ask them questions).

   If students are happy with the level of tuition they receive, they are more likely to book on subsequent courses with Kings Park than if they are dissatisfied with the courses. Similarly, they may share their experiences with their peers, in turn influencing their decision about where to book courses. Consequently, Kings Park needs to ensure that student satisfaction levels are maintained as high as possible, and it is important that Kings Park knows how its students (its customers) feel about the services it offers.

   Client retention- A number of the students attending the courses aimed at professional qualifications are likely to have been funded by their employers. If employers continue to send their students to Kings Park rather than one of its rivals in the market, this suggests they are happy with the level of tuition and service their students are receiving. The pass rates that students achieve are likely to be a significant influence on client satisfaction in this respect.

2. **Employee satisfaction**

   Staff turnover- The quality of Kings Park's teaching staff is crucial in maintaining customer satisfaction, so it is important for Kings Park to retain its best staff. Kings Park as been experiencing an increasing rate of employee turnover, and this could be indicative of dissatisfaction amongst the staff. The management at Kings Park should be keen to prevent this upward trend in staff turnover from increasing, making this an important measure to look at.

   Staff absenteeism- High levels of absence are likely to also indicate dissatisfaction among the staff. If absentees is rising, in conjunction with employee turnover, then there is a danger that the quality of service provided to students will suffer. For example, if an experienced lecturer phones in 'sick' at short notice, their classes may have to be taken by an inexperienced lecturer who is not such an expert in a subject, meaning the students could receive lower quality tuition.

3. **Quality of teaching and materials**

Market share- Kings Park currently has the largest market share in its sector, despite carrying out relatively little marketing activity, and despite new entrants continually entering the market. It will be important to monitor Kings Park s market share, because the share of the market that Kings Park can capture will have a direct impact on its revenues and consequently on the wealth of Lusaka Central Park's shareholders. Customers will only continue to use Kings Park if they feel it is providing courses and materials which are high quality, and also which offer value for money. If the market share starts to fall, it may be an indication Kings Park is not delivering this value for money to its customers.

Accreditations- Kings Park's courses will be accredited by academic and professional bodies. Kings Park has always concentrated on the quality of its courses and learning materials, so external accreditations will provide an independent corroboration of this quality. The quality of course tuition and learning materials, in turn, is likely to feed back into the level of customer satisfaction with Kings Park s courses.

4. **Reputation and brand image**

Brand reputation- Kings Park has never seen the need for market and customer research, and has always had a good reputation. However, given the continuing entrance of new competitors into the market, Kings Park needs to ensure that its brand reputation is maintained. This is important if Kings Park is to ensure potential customers will choose to come on its courses rather than going to one of its competitors.

Pass rates- Kings Park's students consistently achieve passes on a par with the national average. However, if some of Kings Park's rivals regularly achieve pass rates above the national average the competitors will be able to use this as a marketing message to try to win business away from Kings Park particularly in respect of the professional qualifications business. If students, or their employers, think that selecting one tuition provider in preference to another can affect their chances of passing their exam, they are likely to select the tuition provider with the highest pass rate.

SOLUTION FOUR

(a) **Administrative uses:**

- Patient notes, organisation and management
- Messages and emails instantly sent and received and copies kept
- Ease of transmission of records and files

Improvements to administrative services

- There will be significantly less time spent administering a computer-based system. Therefore more time can be spent on patient management and value adding activities such as patient care.
- There will be a reduction in the time spent on the telephone with no record kept of phone conversations and therefore less room for error in communication.
- There should be more timely and likely critical receipt of results and patient records. This will cut down on the time of worry for patients waiting for test results.
- Quicker and more accurate access to patients' medical records and medical history. This will enable doctors, especially in a medical emergency, to be aware of all factors and any special circumstances or allergies.
- Convenient and more reliable method to leave messages rather than phone or fax. Again this will give patients and staff more confidence in the communication process.
- Permanent record by email will allow for all recipients to receive the same message and therefore avoids the need for duplication and possible incorrect or inaccurate information. This is particularly critical in diagnosis and communication of results.
- Opportunity to send information to multiple recipients at once. Multiple recipients to receive the same message and therefore avoid the need for duplication and possible mis-communication. More efficient, less prone to human error and everyone concerned gets access to the transfer of the data.

Medical uses:

- Test results can be sent directly and immediately to doctors and patients, allowing for speedier medical response.
- Medical knowledge can be shared throughout Country Q through the use of databases and diagnostic systems, resulting in improved national healthcare. This can be extended to share medical knowledge, diagnosis and discoveries throughout many countries and Country X could benefit significantly from input from medical experts throughout the world.
- Best practice can be shared across the country.

Improvements to medical staff services

- The Medlink will enable access to up to date medical research and the latest information for diagnosis and treatment, leading to improved decision support and improved diagnostics and treatment.
- It should result in quicker delivery of test results to patients, meaning patients are more satisfied and receive treatment more responsively. This in turn will provide a better health care service for patients, especially if the patient attends more than one

medical centre or is repeatedly in hospital. The system would enable all health care professionals to access up to date information.

- There will be a greater ability to share medical knowledge via peer communication helping to increase and share medical knowledge. This should improve the confidence in diagnosis.
- The system will enable 'best practice' to be shared between medical centres and hospital doctors and administrative staff.
- It should lead to increased reliability of medical data held within the system.
- This system may assist in remote consultation, which may be necessary in Country X if patients have to travel long distances to see doctors

(b) *Possible performance measures :(Note candidates only have to present 5 performance measures)*

1. **Access and usage times of the system compared to original project plan for access and usage rates.**

   Regular measures of access and usage will be important measures. The Government will also be interested in the achievement of successful access and usage compared to the plan to ensure that the project is seen to be a success and not a waste of valuable resources.

2. **User satisfaction rates. This could be provided by regular questionnaires and feedback to the project team by the users and potentially the patients themselves.**

   Ultimately, the success of the system will be determined by the users themselves and whether they find the system beneficial and usable. Therefore it is vital to ensure that user satisfaction is monitored and reviewed regularly to ensure that the system continually meets the users' needs.

3. **Number of staff trained per hospital/ medical centre**

4. **Number of training days per member of staff.**

   The direct users of the Medlink information system will be most interested in training measures and usage and access measures, as their main concern will be with their ability to use the system effectively and how the usage of the system will affect their day-to-day workload. The Government will be interested in training courses (it will want to ensure that users will be accessing the system correctly, so as to avoid future maintenance and support costs)

5. **Comparison of administrative staff usage versus medical staff usage times.**

6. **Number of times doctor/ medical practitioners' access the diagnostic system**

   Measures of the actual usage of the system will provide valuable information to the Government of the Value For Money of the final system in operation. In particular, the medical diagnostic system is likely to be a highly expensive system to operate and maintain and therefore the Government will need to assess and monitor its usage to ensure that the resources are not being wasted or under used.

7. **Number of connections per month and in total - this could be in the form of staged targets set per month leading to 70% of medical centres and 80% of hospitals connected by July 2025.**

   As this is likely to be a highly political project and one which is very high profile, it is important for the government that the project is seen to be a success and, therefore, successful connections will demonstrate that public funds are not being wasted.

8. **Monthly cost per connection versus budget.**

   The Government will also be monitoring the overall cost of the project to ensure that it is economical and that the technology fund is not being wasted. Regular measures of connection progress and the cost of connections will be important measures.

SOLUTION FIVE

(a) The strategic management accountant could contribute to the attainment of the Zampost mission in the following way among others;

- Stakeholder engagements particularly customers and clients to ensure Zampost delivers the value to meet their needs
- Support the development of efficient and effective performance management system that promotes innovation and employee motivation. Such performance measures usually provide more non-financial factors which strategic management accountant should be able to design ways of gathering the appropriate information
- Strategic management accountant has knowledge of a vast amount of tools and techniques such as competitor analysis, environment screening, benchmarking, customer and business unit profitability analysis among others which would be important for Zampost to undertake accordingly.

(b)

- **Customer Satisfaction:** This performance measure is important for Zampost as without customers the company would fail to exist. Zampost has several customers to satisfy, particularly with the diverse business model, customer needs would be different. For example some customers would prefer on time and safe delivery of parcels from any part of the country, while others would prefer access to quick and cheap financial services. Zampost should promote a customer centric approach across all departments including Finance, IT or HR function will deal with customers (their co-workers in the operational departments) to whom they deliver services.
- **Internal Process Quality:** Zampost will have to make sure its services and products are to the expected standards and that they optimize the way these products or services are delivered. It does not matter whether it's Finance, IT, HR or a shared services function, all the departments have to ensure their processes are as efficient and effective as possible and deliver the quality their customers expect.
- **Employee Satisfaction:** With threats on the elimination of human jobs through the use of artificial intelligence and big data robots, employees are still the most important ingredients in any business particularly for Zampost which aims to have a motivated work force. It is a well-researched phenomenon that a company will not do well if their employees are not happy and this also applies to Zampost. Therefore, measures focused on improving employees' experience in the work place would be important to have a well-motivated and self-driven work force.
- **Financial Performance:** As Zampost pursues its mission, it is important that financial performance of the company is well managed and monitored. Therefore, Zampost should be put in place clear and realistic financial targets for its business units across each sector to drive revenue and profitability. Financial performance has been the main focus in many companies in the past but nowadays this is being balanced with non-financial measure for optimal company performance. Therefore, measures such as profit margin, liquidity targets, return on investment and many others still remain important for overall company performance.

(c) **Overextension of Resources**

One limitation of diversification can be overextension of a Zampost's resources. To run properly, every division of the courier, postal, logistics and financial services, no matter how large, will need enough resources to maintain its infrastructure and operations or it will begin to decline. Some controls could be focused on countering finance mismanagement, excessive ambition or simple greed, Zampost's directors seek to expand in too many directions at once, both old and new sectors of the company may suffer from lack of attention and insufficient resources. Therefore, there will be need to make sure to run conservative and optimistic sales forecasts to help estimate the resource needs.

Lack of Expertise

In an age of corporate takeovers, it's not uncommon to see a company expand into a field that's totally unrelated to its original operations. Therefore, Zampost, for example, should retain proper expertise from the original company or it may find itself in trouble.

The operations of different companies or business units sometimes require entirely different skill sets. If, Zampost executives are let go or leave voluntarily following diversification, the new executives may be in possession of an asset that they do not know how to manage. Zampost must therefore put in place controls to retain the skill and expertise in the company as required. This could be through competitive remunerations and conditions of service.

Insufficient Capital Resources

Businesses that diversify into realms that require added infrastructure, employee training and travel between widely separated areas run the risk of increasing their costs to the point where the value of the venture is compromised. Even the most profitable diversification involves increased costs and overhead. Therefore, Zampost must carefully analyze the numbers ad cost benefit analysis before moving into new business areas, to be sure they do not spend more than they stand to make. The safest areas into which a business can diversify are closely related to what it already does, so there is pre-existing expertise and infrastructure available.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 13 SEPTEMBER 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.

QUESTION ONE

Livingstone Motors Assemblers (LMA) is a listed company with divisions which assemble vehicles, tractors and batteries. Some of the components used in the production line are imported from other countries. About 60% of vehicles, tractors and batteries assembled are sold on the domestic market and the remainder exported to its subsidiaries in the neighboring countries. Over the last few years, LMA has used a mixture of equity and debt finance for its investments. However, it is about to make a new investment of K150 million in facilities to produce electric vehicles (EVs), which it proposes to finance solely by debt finance.

Project information

LMA's Chief Financial Officer (CFO) has prepared estimates of the post-tax cash flows for the project, using a four-year time horizon, together with the realisable value at the end of four years:

Year	**1**	**2**	**3**	**4**
	K'm	K'm	K'm	K'm
Post-tax operating cash flows	28.50	36.70	44.40	50.90
Realisable value				45.00

Working capital of K6 million, not included in the estimates above and funded from retained earnings, will also be required immediately for the project, rising by the predicted rate of inflation for each year. Any remaining working capital will be released in full at the end of the project.

Predicted rates of inflation are as follows:

Year	**1**	**2**	**3**	**4**
Rate	8%	6%	5%	4%

The CFO has proposed the following finance package for the new investment:

Funding Source	K'm
Bank loan interest , repayable in equal annual instalments over the project's life	70
Subsidized loan from a government loan scheme over the project's life on which interest is payable at 3.1% per year	80
	150

Issue costs of 3% of gross proceeds will be payable on the subsidized loan. No issue costs will be payable on the bank loan. Issue costs are not allowable for tax.

Financial information

Livingstone Motors Assemblers (LMA) pays tax at an annual rate of 30% on profits in the same year in which profits arise. LMA's asset beta is currently estimated at 1.14. The current return on the market is estimated at 11%. The current risk-free rate is 4% per year.

LMA's Chairman has noted that all of the company's debt, including the new debt, will be repayable within three to five (5) years. He is wondering whether the company needs to develop a longer term financing policy in broad terms and how flexible this policy should be.

Required:

(a) Evaluate the proposed project using the adjusted present value (APV) method of investment appraisal. (20 marks)

(b) Discuss the factors which may determine the long-term finance policy which LMA's board may adopt and the factors which may cause the policy to change. (10 marks)

(c) Explain the types of currency risks that LMA may be exposed to and the advantages of using interest rate swaps to manage interest rate risk. (10 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions

QUESTION TWO

ZIMCO Plc is listed on the Lusaka Stock Exchange (LuSE). The company's business involves the establishment of forest plantations and felling of Pine and Eucalyptus logs for timber. ZIMCO plc identifies wastelands including desert lands to plant trees.

The Chief Executive Officer of LuSE indicated that the directors of ZIMCO are interested in this mode of project financing on the stock market through green bonds and carbon credits.

Tree Plantation Project

ZIMCO plc Board recently approved the establishment of 1,500 hectares (Ha) of Pine plantations to support carbon dioxide sequestration. Sequestration is the act of separating and storing a harmful substance such as carbon dioxide in a way that keeps it safe. ZIMCO plc usually plants 1,300 Pine trees per Ha. Pine trees take about 25 years to mature before ZIMCO plc can fell the trees and replant. During the growth period, it has been determined that a single Pine tree can sequestrate about 0.1347 metric tons of carbon dioxide or 175.1 metric tons per Ha per year in the first year of planting increasing by 5% per year until the year of felling the trees for timber. The tree mortality is in the first year at 5%, thereafter the Pine trees would have a mortality rate of zero. Further, assume no loss is expected.

Multinational companies in the developed countries have expressed interest and agreed to purchase the carbon credits at an amount of $20 per metric ton per year. This amount will remain constant for the period of the growth of the trees until felling. ZIMCO plc's cost of capital is 22%, however, the carbon credit financing requires that the forests are sustainably managed and this is estimated to cost ZIMCO plc $2,150 per Ha per year. This cost amount is expected to remain constant throughout the growth and maturity of the Pine trees.

Required:

(a) Evaluate the sale of carbon credit project by ZIMCO plc. (12 marks)

(b) Discuss the appropriateness of the use of carbon credits as a source of finance compared to debt for ZIMCO Plc. (8 marks)

[Total: 20 Marks]

QUESTION THREE

ZCCM IH Plc holds shares in many companies across a diverse sector including mining. ZCCM IH Plc is a listed company that has a deliberate strategy of takeovers and mergers. The management of ZCCM IH Plc regularly looks for companies to takeover. Over the years, ZCCM IH plc has grown into a conglomerate with many unrelated business units within its structure thereby reducing the overall risk of the company and enhancing shareholder value. However, some of the takeovers and mergers have failed in the recent past and ZCCM IH Plc has had to sell off these business units at a loss. During the year to 31 December 2023, ZCCM IH plc has proposed a takeover bid for MCM Plc. MCM Plc is in the Diamond mining business and this will be the first of its kind within the ZCCM IH Plc group of companies. The shareholders of MCM Plc are prepared to sell at the right price. The Board chair of MCM Plc, commented during a media interview on the proposed takeover, at which he mentioned that the Board is quite sensitive on how this deal is approached and with a premium of at least 25%, we could accept the offer.

The relevant data has been collected regarding the proposed takeover:

	ZCCM IH plc	**MCM plc**
Number of equity shares in issue	20m	15m
Current share price	K4.5	K3

ZCCM IH plc has offered a share for share exchange of 1 ZCCM IH plc share for every two (2) MCM plc shares. Synergies with a Net Present Value of K8 million have been identified.

Required:

(a) Analyse the total gains or losses to the shareholders of ZCCM IH Plc and MCM Plc of the proposed merger. (7 marks)

(b) Calculate the maximum offer price that the shareholders of ZCCM IH Plc can accept and the premium offered to the shareholders of MCM Plc. (3 marks)

(c) Discuss the causes of failure of mergers and acquisitions and how the proposed merger with MCM Plc can be successful. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

FM Ltd an IT company based in the UK is due to remit declared dividend in October to AFM Plc a parent company located in South Africa. The dividend declared amounted to $399,999.98. FM Ltd is worried about the exposure to the foreign exchange risk if the pound sterling (£) weakens against the dollar ($). There is a proposal to hedge the exposure using the futures contract and the following information was obtained from the bank:

$/£ spot rate 1.8950 – 1.9001
One £ futures contract represents £12,500
December £ futures are priced at $1.8823
March £ futures are priced at $1.8874

Required:

(a) Illustrate how a futures market hedge would be carried out in October assuming the following:

(i) The $/£ spot turned out to be $1.7000 – $1.7020 and December £ futures were then priced at $1.7000. (7 marks)

(ii) The $/£ spot turned out to be $1.8900 – $1.8921 and December £ futures were then priced at $1.8900. (7 marks)

(b) Discuss whether in practice there is likely to be a perfect future hedge or not. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

The debt crisis has negatively impacted many companies including Batata Limited a shoe retailer, with stores selling mid-price shoes and accessories throughout Zambia. It sells its own-brand items, which are produced by small manufacturers located in South Africa, who work solely for Batata Ltd. The recent African sovereign debt crisis has affected a number of countries in the African Union (AU). Consequently, Batata has found trading conditions to be extremely difficult, putting pressure on profits and sales revenue.

The sovereign debt crisis has resulted in countries finding it increasingly difficult and expensive to issue government bonds to raise funds, with countries like Zambia defaulting on their debt. Two main reasons have been put forward to explain why the crisis took place: firstly, a number of countries continued to borrow excessive funds, because their expenditure exceeded taxation revenues; and secondly, a number of countries allocated significant sums of money to support subsidies on key economic drivers and infrastructure development among others.

In order to stop countries from defaulting on their debt obligations and being downgraded, the countries in the AU and the International Monetary Fund (IMF) established a fund to provide financial support to member states threatened by the risk of default, credit downgrades and excessive borrowing yields. Austerity measures were imposed on these countries in exchange for receiving financial support while those that have defaulted are subject to debt restructuring based on the G20 common framework.

The austerity measures have affected Batata Ltd negatively, and the years 2022 and 2023 have been particularly bad, with sales revenue declining by 35% and profits by 45% in 2022, and remaining at 2022 levels in 2023. Batata Ltd has observed that shoes retailers selling shoes at low prices and at high prices were not affected as badly as Batata Ltd or other mid-price retailers. Indeed, the retailers selling low-priced shoes had increased their profits, and retailers selling luxury, expensive shoes had maintained their profits over the last two (2) to three (3) years.

To improve profitability, Batata Ltd's board of directors expect to cut costs where possible. Significant fixed cost relate to quality control, which includes monitoring the working conditions of employees of Batata Ltd's shoe manufacturers, as part of its ethical commitment.

Required:

(a) Explain the role and aims of the International Monetary Fund (IMF) and discuss possible reasons the austerity measures imposed on the African Union (AU) countries might have affected Batata Ltd negatively. (10 marks)

(b) Discuss the reasons austerity measures might not have affected shoe retailers at the high and low price range, as much as the mid-price range retailers like Batata Ltd. (4 marks)

(c) Discuss the risks to Batata Ltd of reducing the costs relating to quality control and how the detrimental impact of such reductions in costs could be decreased. (6 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2 w_a w_b r_{ab} s_a s_b}$$

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

(a)

Year	0	1	2	3	4
	K'm	K'm	K'm	K'm	K'm
Post-tax operating cash flows		28.50	36.70	44.40	50.90
Investment	(150.00)				
Realisable value					45.00
Working capital (W1)	(6.00)	(0.48)	(0.39)	(0.34)	7.21
Cash flows	(156.00)	28.02	36.31	44.06	103.11
Discount factor 12% (W2)	1.000	0.893	0.797	0.712	0.636
Present value	(156.00)	25.02	28.94	31.37	65.58
Base case net present value	**(5.09)**				

Base case net present value is approximately (K5.09 million) and on this basis, the investment should be rejected.

Workings

Working capital

Year	0	1	2	3	4
	K'm	K'm	K'm	K'm	K'm
Working capital	6.00	6.48	6.87	7.21	7.50
Required/(released)	6.00	0.48	0.39	0.34	(7.21)

1. **Discount rate**

   Using asset beta

   All-equity financed discount rate = 4% + (11% – 4%) 1.14 = 12%

   Issue costs

   K80 million/0.97 = K82,474,227

   Issue costs = 3% x K82,474,227 = K2,474,227 There will be no issue costs for the bank loan.

2. **Tax shield on subsidised loan**

   Use PV of an annuity (PVA) years 1 to 4 at 8% (normal borrowing rate) K80m x 0.031 x 30% x 3.312 = K2,464,128

3. **Tax shield on bank loan**

Annual repayment = (K70m/PVA 8% Yr 1 – 4) = (K70m/3.312) = K21,135,266

Year	**1**	**2**	**3**	**4**
	K'000	K'000	K'000	K'000
Opening balance	70,000	54,465	37,687	19,567
Interest at 8%	5,600	4,357	3,015	1,565
Repayment	(21,135)	(21,135)	(21,135)	(21,135)
Closing balance	54,465	37,687	19,567	(3)
Year	**1**	**2**	**3**	**4**
	K'000	K'000	K'000	K'000
Interest cost	5,600	4,357	3,015	1,565
Tax relief at 30%	1,680	1,307	905	470
Discount factor 8%	0.926	0.857	0.794	0.735
Present value	1,556	1,120	719	345
Net present value	**3,740**			

4. **Subsidy benefit**

Benefit = K80m x (0.08 – 0.031) x 70% x 3.312 = K9,088,128

5. **Financing side effects**

Financing side effects	
	K'000
Issue costs (W3)	(2,474)
Tax shield on subsidised loan (W4)	2,464
Tax shield on bank loan (W5)	3,740
Subsidy benefit (W6)	9,088
Total benefit of financing side effects	12,818

Financing the project in this way would add around K12.82 million to the value of the project. The adjusted present value of the project is around K7.73 million and so the project should be accepted. Sensitivity analysis should be undertaken on all the significant variables. Further analysis may be needed, particularly of the assumptions which lie behind the post-tax cash flows, such as sales and the tax rate. The realisable value of K45 million may be questionable. On the other hand, the time horizon of four years seems low and analysis should be done of potential cash flows beyond that time.

(b) LMA's board can use various principles to determine its long-term finance mix. The directors may aim to follow consistent long-term policies, or they may have preferences which change as circumstances change.

Long-term policy factors

At present LMA is using a mix of finance, raising the question of whether the directors are aiming for an optimal level of gearing, or there is a level which they do not wish gearing to exceed. If the board wishes to maintain gearing at an optimal level, this is likely to be determined by a balance of risks and advantages. The main risks are not being able to maintain the required level of payment to finance providers, interest to debt providers or required level of dividend to shareholders. Advantages may include lower costs of debt, tax relief on finance costs as shown in the APV calculation or, on the other hand, not being legally required to pay dividends in a particular year.

Another issue is whether LMA's board has preferences about what source of finance should be used and in what order. One example of this is following the pecking order of retained earnings, then debt, then equity. The board may prefer this pecking order on the grounds that avoiding a new equity issue means that the composition of shareholdings is unchanged, or because retained earnings and longer-term debt are judged low risk, or because the market will assume that an equity issue is being made because directors want to take advantage of LMA's shares being over-priced. Other specific sources of finance may have benefits which attract the directors or drawbacks which deter them.

This investment highlights the aspect of whether the board prefers to match sources of finance with specific investments. Matching arguably gives greater flexibility and avoids committing LMA a long-term interest burden. However, to adopt this approach, the board will need assurance either that the investment will be able to meet finance costs and ultimately repayment burdens, or these can be met from surpluses from other operations.

Changing long-term financing policy

As well as deciding what financing mix or sources of finance they desire to use, the directors will also need to consider what factors would cause this decision to change.

A major change in the scope of the operations, with investment requirements being paramount, may cause a change in financing policy. Here the K150 million investment has been financed entirely by medium-term debt. LMA may have chosen solely to use debt if it has made a recent equity issue and does not feel it can make another one so soon afterwards. In addition, if LMA expands its manufacture of electric vehicles, it may decide to sell off its tractor or batteries divisions if they are performing less well. If part of the business is sold, the sale proceeds could help finance new investment in the vehicles division.

The board may also be flexible at times and take advantage of whatever source of finance seems to be offering the best terms for LMA. Here the board is taking advantage of loan finance being available at a low cost, thanks to the government loan scheme.

A change in the business or economic environment may also lead to the board rethinking how the company is financed. An economic recession, leading to falling share prices, may mean that the results of a share issue are uncertain. On the other hand, an increase in economic or business risk may mean that lenders are less likely to lend at acceptable rates or will impose greater restrictions. If the directors are risk-averse, they may not seek new finance during a recession but instead rely on retained earnings to finance any expansion.

(c) Types of Currency Risk and Interest Rate Swaps

Transaction risk: This relates to the gains or losses to be made when settlement takes place at some future date of a foreign currency denominated contract that has already been entered into. It arises due to credit importer and exports denominated in a foreign currency.

Translation exposure: This arises from the need to consolidate worldwide operations according to predetermined accounting rules. Assets, liabilities, revenues and expenses must be restated in home currency terms in order to be consolidated into group accounts. The depreciation of host currency will reduce value of consolidated assets and liabilities.

Economic exposure: This relates to the possibility that the value of the company (the present value of all future cash flow) will change due to unexpected changes in future exchange rates. The volatility of exchange rate will affect the magnitude and uncertainty of future cash flows.

An interest rate swap is an agreement whereby the parties agree to swap a floating stream of interest payments for a fixed stream of interest payments and via versa. There is no exchange of principal. A swap can be used to obtain cheaper finance. A swap should result in LMA being able to borrow what they want at a better rate under a swap arrangement, than borrowing it directly.

SOLUTION TWO

(a) The amount of financing raised is approximately equal to the net present value

Present value of costs

Annual costs: \$2,150 x 1,500 Ha = \$3,225,000

Cumulative discount factor for 25years cost of capital of 22%

$(1 - 1.22^{-25})/0.22 = 4.514$

PV of costs: 4.514 x \$3,225,000 = \$14,557,650

Present value of Revenue

Carbon dioxide sequestration per Ha = 175.1 x 95% (5% loss) = 166.345

Total per year 1,500 x 166.345 = 249,517.5

Revenue in year 1: 249,517.5 x \$20 = \$4,990,350

The increase in the rate of sequestration of 5% directly increases revenue

Since the increase is constant at 5% per year cumulative, the real cost of capital can be used to account for this increase

Cost of capital of 22% is a nominal rate, therefore the real rate would be 1.22/1.05 = 1.1619, therefore the real cost of capital is 16.19%

Cumulative discount factor for 16.19% for 25 years

$(1 – 1.1619^{25})/0.1619 = 6.032$

PV of revenue: 6.032 x \$4,990,350 = \$30,101,791

NPV: \$30,101,791 - \$14,557,650 = **\$15,544,141**

(b) The Government has provided enabling regulation and guidelines through the Ministry of Green Economy and Environment to support the use of carbon credits and other green finance. These guidelines include the three common terms of (1) environmental integrity, (2) ambition raising and (3) promotion of sustainable development. These cover and introduce the forms of cooperation on climate change mitigation and adaptation recognizes that Zambia may choose to pursue international cooperation to "promote sustainable development and environmental integrity". In this regard, this funding is backed and supported by international cooperation making it a cheap source of financing but with compliance requirements.

The finance raised by ZIMCO from selling carbon credits matches the long term nature of the company's business. Further, there is no regular cash flows of interest or repayments making this kind of finance appropriate for the cash flow management. The finance does not impact the profit as the forest sustainable costs could be offset against the sale of the carbon credits.

Unlike debt which carries financial risk, raising finance from the sale of carbon credits has no financial risk. Where a company faces challenges to comply with the requirements or guidelines to access the finance, the Government through the Ministry of Green Economy and Environment provides support.

There are existing accounting standards that provide for the treatment of carbon credits. For example, ZIMCO may determine that carbon credits held for use meet the definition of an intangible asset under IAS 38 Intangible Assets when it holds credits that have not yet been retired, thereby enhance the balance sheet value of the business.

SOLUTION THREE

(a) Firstly, estimate the share price after the merger for the combined group = combined value / number of shares.

Combined value = (20m x K4.50) + (15m x K3) + K8m = K143m

Number of shares after the merger in ZCCM IH plc = 20m + (1/2 x 15m = 7.5m) = 27.5m

Therefore, estimated post-merger share price = K143m / 27.5m = K5.2

As MCM plc have a 1 for 2 offer terms, the share price is adjusted by this factor = K5.2 x 1/2 = K2.6 (this will make it comparable with their current share price)

Therefore, loss for MCM plc shareholders = K2.6 – K3 = K0.4

Total loss to MCM plc shareholder = 0.4 x 15m shares = K6m

ZCCM IH plc shareholder gain = K5.2 – K4.5 = K0.7 per share x 20 = K14m gain

(b)

Combined value	K143m
Less value for ZCCM IH Plc	(K90m)
Maximum value for MCM	K53m

Share price implied by max value of MCM is K3.53 (K53/15)

Premium if this price is offered is 17.78% ((K3.53 – K3)/K3 X 100)

(c) A merger refers to a situation where two companies, due to several reasons, mutually agree and become a single company, while an acquisition is a situation when one company buys a majority or all the assets and shares of another company. If the company obtains more than 50% ownership of another company, then also it is considered as an acquisition. Therefore, Mergers and acquisitions require two companies to work in collaboration but the financial, strategic and overall impact of the events are different. Some of the reasons behind the failure of mergers and acquisition include:

1. Mislead value for investment – The investment on the assets may look good on papers, but practically they may not be the revenue generating areas after the closure of the deal.
2. Lack of clarity in the integration process – post-merger, the disintegration of factors like key employees, processes, important projects, policies, etc. lead to failure in the execution process.
3. Mismatch in the culture – If the M&A deal fails to devise a strong strategy focused on the difference in the cultural aspects of two companies, a low productivity in employees of both the companies is observed.

4. Poor communication – If the purpose behind the deal is unclear or is not communicated to the employees, a lack of synergy in teams is marked and expectations from the deal are not met.
5. External factors – External factors such as economic collapse and other environmental factors affect the performance of the deal.
6. Negotiation errors – The Company overpays the acquisition fees, which leads to financial losses and failures in future.

In order for to avoid failure in mergers and acquisitions (M&A) some of the following could be considered:

1. Recognize and adopt the mindset that any M&A effectively results in a new organization. Redevelop a start-up mindset and work ethic to ensure a complete and successful integration.
2. Communicate to each group of stakeholders the reasons behind the M&A and the value and associated costs it will bring to each group. Getting buy-in from everyone impacted is an important step toward optimizing benefits and minimizing costs, and leads to a more integrated outcome.
3. Integration ownership should be at the highest level. While it's smart to include all the key players, the president and/or CEO should drive the process and lead the group.
4. An integration plan must contemplate and include all facets of the respective businesses, operations, organizations and cultures; and should be measurable.
5. Assign individuals or teams (with a designated team leader) ownership of every item on the plan. The individual accountability that comes with ownership is critical to successfully executing an integration plan.
6. Develop tools to assess progress of the plan. It's the only way to ensure in an objective way whether necessary progress is being made.
7. Meet regularly and often to review and discuss progress and make tweaks or changes to the plan. Meetings with integration plan owners should occur weekly, and in some circumstances daily, and should focus on a review of measurable progress and a preview of next steps.
8. M&As are relationship-intensive; communication with all stakeholders, external and internal, should occur in some form or fashion at least once a month.
9. Bridging cultures into a common core and allowing a bit of each to survive is important. The best way to find commonalities to be embraced and differences respected is achieved through dedicated, purposeful time together both in and out of the office.
10. Get, and use, employee feedback. Use this as an additional information tool to assess integration progress and performance. You can never have too much information, and the thoughts and moods of employees are the pulse that every CEO and/or president should have his or her finger firmly on, particularly during times of great change and stress such as a M&A integration.

SOLUTION FOUR

(a)

(i) The FM Ltd subsidiary requires protection against a weakening £. As the $ strengthened to $1.7000 = £1 by October, it would have to pay ($399,999.98÷ 1.7000) £235,294 to clear the declared dividend obligation.

As can be seen from the calculations below, hedging with a futures contract means that any profit or loss on the underlying will be offset by any loss or profit made on the futures contract.

FM Ltd needs to determine the number of number of contracts as follows:

$$\frac{\$399{,}999.98}{\$/1.8823} = £212{,}506$$

$$\frac{£212{,}506}{£12{,}500} = 17 \text{ contracts}$$

Cash Market:			£
Payment to supplier	($399,999.98÷ 1.7000)		= £235,294
Futures Market:		$	
Now: SELL 17 contracts		1.8823	
In October: BUY 17 contracts		1.7000	
Gain per £		0.1823	

Total Gain $\left(17 \text{ contracts} \times £12{,}500 \times \frac{\$0.1823}{£1}\right) = \$38{,}738.75$

Covert to £: ($38,738.75÷ 1.7000)	=	(£22,788)
TOTAL COST		**£212,506**

(ii)

Cash Market			£
Payment to supplier	($399.999.98 ÷ 1.8900)		= £211,640
Futures Market		$	
Now: SELL 17 contracts		1.8823	
In October: BUY 17 contracts		1.8900	
Loss per £		0.0077	

Total Loss $\left(17 \text{ contracts} \times £12{,}500 \times \frac{\$0.0077}{£1}\right) = \$1{,}636.25$

Covert to £: ($1,636.25÷ 1.8900) =	£866
TOTAL COST	**£212,506**

(b) In practice, a perfect hedge is unlikely because of:

1. The "round sum" nature of futures contracts, which can only be bought or sold in whole numbers, and
2. Basis risk i.e. the possibility of variability in the prices of the two related securities in the hedging arrangement. For example, if changes in the price of the currency future do no perfectly match the change in the price of the underlying security then a profit or loss may occur on the hedge position. This potential variability in the outcome of a hedge is referred to as "basis risk".
3. Since this example had a precise round number of contracts and there was no basis risk, the total cost is the same whatever the actual exchange rate.

SOLUTION FIVE

(a) The following answer is indicative. Credit will be given for alternative, valid points.

The role of the IMF is to oversee the global financial systems, in particular to stabilise international exchange rates, help countries to achieve balance of payments and facilitate in the country's development through influencing the economic policies of the country in question. Where necessary, it offers temporary loans, from member states' deposits, to countries facing severe financial and economic difficulties. These temporary loans are often offered with different levels of conditions or austerity measures.

The IMF believes that in order to regain control of the balance of payments, the country should take action to reduce the level of demand for goods and services. To achieve this, the IMF often requires countries to adopt strict austerity measures such as reducing public spending and increased taxation, as conditions of the loan. It believes these conditions will help control the inflationary pressures on the economy, and reduce the demand for goods and services. As a result, this will help the country to move away from a position of a trade deficit and achieve control of its balance of payments.

However, these deflationary pressures may cause standards of living to fall and unemployment to rise. The IMF regards these as short-term hardships necessary to help countries sort out their balance of payment difficulties and international debt problems. The IMF has faced a number of criticisms for the conditions it has imposed, including the accusation that its policies impact more negatively on people with lower or mid-range incomes, hinder long-term development and growth, and possibly result in a continuous downward spiral of economic activity.

Batata Ltd trades throughout Africa and economic activity in these countries has been curtailed in the last few years due, initially, to the banking crisis, and then due to the austerity measures that governments have adopted. For retailers, this could pose two possible problems. First, with limited growth and higher taxes, people would have less money to spend. Secondly, increasing levels of unemployment would also limit disposable incomes. It is possible that customers may have curtailed their expenditure on shoes and shoes accessories in order to meet other needs.

Some companies may have to spend proportionally more on marketing and possibly offer more discounts and other customer incentives in order to stay competitive and to maintain market share. This additional cost would hit their profit levels negatively. From the details in the question, it is evident that in 2022 profits have reduced by more than the fall in sales revenue. This could be due to Batata Ltd being forced to spend more on activities such as marketing or it could be because it has found it difficult to reduce its cost base. More analysis is needed to determine the exact cause.

It seems that Batata Ltd is trying to address the problem of declining profitability by trimming its costs. In circumstances where sales revenues are declining, and it is not possible to stabilise or increase these, then cost structures may need to be altered in order to make reasonable profits.

(b) The low-price shoes retailers might have benefited from the austerity measures because of a switch by customers from mid-price shoes to low-price shoes. If, due to the austerity measures, people have less money to spend, and if, as stated above, austerity measures impact the mid-income and low-income earners more negatively, then it is possible that their buying preferences change from mid-price to low-price shoes. This would be especially true if there is limited brand loyalty and customers perceive that the low-price items are of a similar quality or provide a better value-for-money.

On the other hand, it is possible that brand loyalty is more significant with high-price shoes, making switching to mid-price shoes difficult. Customers who buy these shoes may prefer not to switch and would rather spend less elsewhere. It is also possible that the austerity measures did not affect the population who buy high-price shoes to the same extent as other groups of the population. Or it may be that this population group is more resilient to the austerity measures imposed by the government, especially if the assertion is true that the IMF conditions affect people who are in the low or mid income categories more than the people in the high income category.

(c) The obvious risk in reducing resources allocated to the quality control functions would be that some inspections would be reduced. This may result in defective goods being sold. The costs related to processing returns of defective goods may outweigh the savings made. Reduction in monitoring the working conditions of employees of the shoes suppliers may encourage them to retain their questionable employment practices. This may compromise the company's ethical stance and standards.

The less obvious, but more significant, risk is the impact that unethical labour practices and working conditions may have on the reputation of the company and its products. Potentially, lower quality and defective shoes could seriously harm the company's reputation and result in lower sales revenue over a long period of time. Once damaged, such reputation would be hard to rebuild. The damage in reputation of the company regarding its ethical stance could also be potentially disastrous.

Different stakeholder groups could react in negative ways, for example, customers may switch their custom, investors may sell their shares and the press may run negative campaigns against the company. The consequences of such damage could be long term and sometimes permanent.

Batata Ltd will need to review where and how resources are allocated in order to decrease or minimise the detrimental impact of a reduction in the quality control costs. For example, savings could be made by eliminating duplicated quality control processes or eliminating processes that are not necessary. Batata Ltd should also evaluate whether alternative, less resource intensive processes and procedures can be implemented without compromising the quality control and monitoring of working conditions. Experts should be used to undertake the assessment. Critical processes and procedures should be retained even

if they require significant resources. The risk of making errors in the assessment should be evaluated and discussed at a senior level to ensure that Batata Ltd is comfortable with undertaking the likely risk.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

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- (COMPULSORY)</u>

Zambezia runs a centralized form of government where funds are appropriated by parliament to government ministries and other recipients of public funds.

The Ministry of Health is the biggest recipient of government funding for use in the health sector. Funds are appropriated to the ministry on a monthly basis according to the budget estimates submitted to the Ministry of Finance. In 2021, the country faced a flu pandemic which spread very fast.

The government set up a task force headed by the Permanent Secretary in the Ministry of Health to deal with the matter. With the help of the local World Health Organization (WHO) representative, the task force recommended the immunization of the citizens through vaccination. The government of Zambezia allocated and released a total of Z K5 billion as an initial amount for mobilization and procurement of the vaccine. This money was appropriated for this specific purpose and a separate bank account, the emergency immunization account, was required to be opened. It was a requirement that all procurement of goods and services be done in accordance with the laid down government procurement systems. More funding would only be made on accounting in full for the funding earlier provided. The Ministry of Health was required to submit a weekly emergency fund utilization report to the Ministry of Finance.

The World Health Organization (WHO) country representative in Zambezia lobbied for additional funding to help in speeding up the immunization program and also for technical support of experts to be seconded to Zambezia. An amount of US$5million was allocated and released to Zambezia. The money was transferred into the local World Health Organization (WHO) bank account and the local representative was appointed Fund Manager for the use of the grant.

The grant conditions for the World Health Organization funding included the following:

1. The Ministry of Health was required to open two (2) separate bank accounts in which the funds would be transferred from the Local WHO representative's bank account. A dollar account to be used for the transfer of funds from WHO and a local currency account into which local currency funds will be maintained.
2. Funds to be released on an imprest basis by retiring in full the previous funding.
3. No bank charges allowed as an expense. All bank charges will be borne by the Ministry of Health.
4. The funding will support travel and lodging for the technical experts and local identified experts.
5. Funds may be used to procure vaccines. All procurement to be done in accordance with Centre for Disease Control (CDC) guidelines.

6. All personnel costs incurred require to be supported by time sheets approved by the Ministry of Health Permanent Secretary.

It was envisaged that in the first year of immunization the ministry would have achieved a 45% vaccination rate and that by the end of the program a 90% vaccination rate would have been achieved. All unspent funds require to be paid back to the Ministry of Finance and the local World Organization of Health representative.

You work for the Supreme Audit Institution (SAI) of Zambezia and you have been assigned to lead a team of auditors to perform a financial, compliance and value for money audits for the emergency immunization fund.

Required:

(a) Briefly describe three (3) tasks each that should be done in the following stages of the financial audit of the emergency vaccination fund from government and the World Health Organization.

(i) Planning (3 marks)

(ii) Conducting the audit (3 marks)

(iii) Reporting (4 marks)

(b) (i) Describe the matters that should be considered in the performance audit of the Emergency Immunization fund. (4 marks)

(ii) Describe two (2) audit procedures that should be performed in the performance audit of the emergency immunization fund conducting the value for many principles. (6 marks)

(c) (i) Describe the matters that should be considered in the compliance audit of the emergency immunization fund. (4 marks)

(ii) Describe four (4) audit procedures that should be performed in the compliance audit of the emergency immunization fund. (6 marks)

(d) (i) Describe the principle of transparency and accountability in the audit of the emergency immunization fund. (4 marks)

(ii) Distinguish transparency and accountability for the emergency vaccination fund and that of the Office of the Auditor General (OAG). (6 marks)

[Total: 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt any three (3) questions.

<u>QUESTION TWO</u>

The Office of the Auditor General (OAG) is the Supreme Audit Institution (SAI) of Kisumu a North African country. The office has been in existence for many years and most of the staff have been working for the institution for over ten (10) years. It is common for staff to be assigned to the same audits for a long time.

It is common practice in Kisumu to pay people in appreciation for any favor they do to them. Staff from the Office of the Auditor General (OAG) have been recipients of such payments and in line with the ethical guidelines of the office these are disclosed to the office. The Office of the Auditor General (OAG) of Kisumu has a policy that protects whistle blowers. Recently an officer in one (1) Government Ministry wrote directly to the Auditor General (AG) informing him of a scam involving high ranking government officials in which an estimated amount of $1.5million was misappropriated for personal gain. The Auditor General (AG) arranged for a meeting to meet the whistle blower. The Auditor General (AG) invited the controlling officer of the government ministry, in which the whistle blower works, to attend the meeting. The whistle blower was shocked to find the controlling officer in attendance and yet he was also implicated in the scam. The duo, the Auditor General (AG) and the controlling officer suggested to the whistle blower that this matter should not be blown out of proportion because of its sensitive nature and the involvement of high ranking officials and politicians. They offered to promote the whistle blower and promised to investigate the matter.

The matter was not investigated and three (3) months down the line an amount of $150 000 was deposited into the personal account of the whistle blower. He discovered that the money was paid by his employer and on inquiry, he was told that the money was for his personal use and was authorized by the controlling officer. The whistle blower decided to report the matter to the government department responsible for money laundering and demanded that a forensic investigation by independent people should be conducted failure to which he would report the matter to higher authorities.

Required:

(a) Describe four (4) matters in the above scenario and suggest suitable responses to each matter. (8 marks)

(b) Explain the powers of the Supreme Audit Institution (SAI) of Kisumu. (4 marks)

(c) (i) Discuss the possible expected outcome of the forensic investigation to be conducted. (2 marks)

(ii) Describe any four (4) stages that the Office of the Auditor General (OAG) will follow in the forensic investigation of the alleged theft of public funds in Kisumu. (6 marks)

[Total: 20 Marks]

QUESTION THREE

The Ministry of Game and Tourism is responsible for all game management areas in the country as well as game conservation. The Game Conservation Board is a department within the Ministry of Game and Tourism. Annually, the ministry submits the following year's budget estimates to the Ministry of Finance. The Ministry of Finance is responsible for the country's annual budget and in conjunction with controlling officers who submit budget proposals may make necessary amendments with respect to the whole government operations.

The Ministry of Game and Tourism received its approved budget for the year 2023. The covering letter from the Ministry of Finance emphasized on need for fiscal discipline by all custodians of public funds and a requirement to operate within the approved budget. In the event that there is justification for overspending this will only be done with the written authorization of ministry's Permanent Secretary.

The Game Conservation Board is regulated by an act of parliament which regulates tourism, game management, policies and regulations of the Ministry of Game and Tourism.

The following financial regulations extracted from the policy guidelines issued by the Ministry of Game and Tourism should be complied by the ministry and all departments under it.

1. All procurement must comply with the regulations for public procurement and specifically that tender procedures should be followed for purchases above K1.5 million.
2. Procurement below the tender limit shall require three (3) quotations from three (3) suppliers or co ntractors on the list of approved suppliers/contractors.
3. No overspending or misapplication of funds is allowed except with the written authority of the ministry's Permanent Secretary who is the controlling officer.
4. Departments are required to prepare and submit monthly financial statements to the Permanent Secretary without which further funding is withheld.
5. The issue of hunting licenses should be in accordance with the guidelines by the Ministry of Tourism and only in the hunting period between April and August each year.
6. No hunting licenses should be given for hunting endangered species of large cats.

During the current year, the Game Management Board faced serious liquidity problems on account of reduced tourist visits. The impact of Covid-19 is still being felt by the tourism sector. The department spent funds meant for operations to pay salaries and wages for three (3) months. A review of the monthly financial returns to the Ministry of Game and Tourism does not show that funds meant for operations were used to pay salaries and wages. The budget line for operations is not overspent.

You work for the Office of the Auditor General (OAG) and you are planning a compliance audit of the operations of the Game Management Board.

Required:

(a) Illustrate the application of any four (4) requirements to the compliance audit planning process of the Game Management Board operations. (8 marks)

(b) Describe the sources of the criteria that should be used in the compliance audit of the Game Management Board. (4 marks)

(c) Describe four (4) audit procedures that should be performed in the compliance audit of Game Management Board using information in the scenario. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

In a busy town of Kitwe, Zambia, the Social Cash Transfer (SCT) Programme has become a lifeline for many households since its inception in 2003. Kitwe, serving as a provincial center, witnessed a transformative phase in the November-December 2023 payment cycle as the Ministry of Community Development and Social Services (MCDSS) rolled out the electronic payment model through the ZISPIS payment gateway.

In the heart of Kitwe, a diverse community of beneficiaries eagerly gathered at a designated payment center. The town, known for its vibrant markets and dynamic atmosphere, became the epicenter for the urban payment model trial. The electronic payment gateway seamlessly integrated with Payment Service Providers (PSP), promising a more efficient and secure disbursement process.

As the beneficiaries queued up, each carrying the hope of financial relief, the ZISPIS payment gateway demonstrated its prowess in modernizing the end-to-end process of the SCT Programme. The urban model marked a significant departure from the traditional and rural methods, introducing a technological edge that showcased the commitment of Ministry of Community Development and Social Services to innovation.

Local officials, community leaders, and Ministry representatives observed the proceedings with keen interest, recognizing the potential of the electronic payment model to further streamline the SCT Programme nationwide. The electronic system provided transparency, accountability, and a faster delivery mechanism, ensuring that the cash grant reached the deserving households in a timely manner.

At the same time, in the serene district of Namwala, another provincial center, a similar scene unfolded. Namwala served as another testing ground for the electronic payment gateway. The success observed in Kitwe reaffirmed the Ministry's vision of a nationwide migration to digital payments, marking a milestone in the SCT Programme's evolution.

The analysis of the November-December 2023 payment cycle showcased not only the effective implementation of the electronic payment model but also the positive impact on beneficiaries. The ZISPIS payment gateway, with its integration of facial recognition and GPS tracking, ensured the accurate identification and delivery of funds, mitigating the risks of fraud and double-dipping.

The community in Kitwe and Namwala celebrated the shift towards a more technologically advanced and efficient SCT Programme. The success of the electronic payment model in these centers set the stage for its expansion to other regions, promising a brighter future for the many households across Zambia benefiting from the Social Cash Transfer Programme.

You have been appointed as Audit Supervisor for the audit of the Social Cash Transfer and you have to address the following

Required:

(a) Describe any four (4) specific audit actions (scope) you need to take to assess the operational efficiency and effectiveness of the SCT program in Kitwe and Namwala. (8 marks)

(b) Describe the audit procedures to be conducted to address any assessed risk of fraud. (5 marks)

(c) Evaluate the safeguards implemented within the ZISPIS payment gateway to ensure the prevention and detection of fraudulent activities which you might need to test. (4 marks)

(d) Suggest recommendations for further enhancing security and accountability within the SCT Programme. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

In the busy financial landscape of Zambia, the Financial Intelligence Centre (the Centre) is tirelessly working to fulfill its mission of ensuring a stable financial system resilient to financial crimes. One day, a series of interconnected suspicious transactions reports flood the Centre's database, catching the attention of the analysts.

Reports from various reporting entities indicate a sophisticated money laundering network operating within the country. Transactions involve multiple accounts, both domestic and international, making it a challenging puzzle for the investigators. The suspected network appears to be funneling illicit funds through a web of seemingly legitimate transactions and entities.

The Centre, committed to its values of integrity, transparency, and excellence, initiates a thorough analysis of the suspicious transactions. The analysts meticulously examine financial patterns, transaction volumes, and the network's involvement with various sectors. As they delve deeper, the complexity of the money laundering scheme becomes apparent.

Recognizing the need for collaboration, the Centre reaches out to foreign designated authorities through established agreements. The international cooperation allows for the exchange of crucial information, enhancing the scope of the investigation. The Centre's courage to do the right thing even in the face of danger is evident as they unravel the intricate layers of the money laundering network.

In line with their mission, the Centre disseminates pertinent information to law enforcement agencies, providing them with actionable intelligence to further investigate and prosecute those involved. The analysts continue to work closely with local and international counterparts, sharing insights and expertise to dismantle the criminal network.

To uphold transparency and public trust, the Centre issues a public advisory, informing the citizens and reporting entities about the ongoing investigation. Simultaneously, they emphasize the measures being taken to detect, prevent, and deter money laundering within the financial system.

As the investigation progresses, the Centre's values of honesty and accountability guide every step. Updates are provided to the public and stakeholders, ensuring transparency in the process. The Centre's commitment to excellence drives the investigators to explore every lead diligently, leaving no stone unturned in their pursuit of justice.

In the end, the collaborative efforts yield results. The money laundering network is exposed, and the individuals involved are apprehended. The success of this operation not only reinforces the Centre's role as a pivotal player in combating financial crimes but also serves as a testament to the values that guide its actions - integrity, transparency, honesty, excellence, courage, confidentiality, impartiality, and accountability.

You are a lead auditor assigned to perform annual audits at the Financial Intelligence Centre.

Required:

(a) Explain and justify any four (4) types of audit you might undertake at the Financial Intelligence Centre. (12 marks)

(b) Explain the relevance of conducting an Information Technology Audit at the Financial Intelligence Centre. (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Work to be performed at each of the following stages:

(i) Planning stage:

At the planning stage of the audit of the emergency vaccination fund the following will be done by the public sector auditors:

1. Gain a clear understanding of the funding and the conditions attached to it.
2. Gain an understanding of the reporting requirements in terms of the accounting for the funds.
3. Determine the audit risk that there could be misstatements and respond to the risks identified.
4. Design the audit plan detailing the audit procedures that will be conducted at the next stage of the audit.
5. Identification of the audit team members to conduct the audit considering the skills and competences require do the work.

(ii) Conducting the audit stage:

This is the stage of gathering audit evidence and obtain sufficient appropriate audit evidence and the following will be done in this stage:

1. Conduct audit procedures to gather the necessary evidence.
2. Discuss with those responsible any findings from the audit work done.
3. Evaluate the evidence obtained against the criteria and come up with findings which will from basis for conclusion.

(iii) Reporting stage:

This is the stage where the conclusion of the audit work done is communicated to the responsible parties and the following work will be done at this stage:

1. Discuss final conclusion with management and seek their response.
2. Discuss conclusion with those charged with governance and seek their acceptance.
3. Prepare report giving background, work done and conclusion based on work done.
4. Submit report for approval to the AG and circulate as required.

(b)

(i) Matters to consider in the performance audit:

1. The inputs required in terms of resources human, financial and material resources for the program.
2. The costs of resources and materials required for the program.
3. Details of the objectives of the program and actual outcome after the program.

4. The use of the resources to ensure no wastage.

The above matters should be considered in planning the performance audit in order to address the elements of performance audit of economy, efficiency and effectiveness.

(ii) Audit work in the performance audit:

The audit work that will require to be done in a performance audit of the immunization program will be in relation with the three elements of value for money as follows:

Economy – is best price paid for materials?

- Evaluate whether the vaccines have been procured at the best price compared to other sources but without compromising on quality.
- Confirm if there was competitive bidding for the supply of vaccines and not single sourced where higher prices could be paid.

Efficiency – Comparison of output and input

- Verify whether the numbers of people vaccinated in the period match with the vaccines acquired and used and establish whether the same number could have been vaccinated using fewer vaccines.
- Verify whether the costs of running the program could have been lower by making maximum use of resources.
- Verify whether the same output in terms of immunization could have been achieved using less human and other resources.

Effectiveness – Achieving the intended objectives of the program

- Determine the objective of the immunization program at the beginning in terms of numbers of people that should be vaccinated.
- Obtain details of actual immunizations on a monthly and annual basis and compare with the target vaccinations.
- Compare the actual vaccinations during the whole program and compare with the program targets.

(c)

(i) Matters to consider in the compliance audit:

The following information should be considered in for the compliance audit of the immunization program because the criteria will be derived from this information.

1. Details of government procurement systems
2. Centre for Disease Control procurement systems
3. Conditions for the grant received from the World Health Organization
4. Conditions for the funding from the Ministry of Health

(ii) Audit procedures in the compliance audit:

- Verify and confirm that the funds received from the Ministry of Health are kept in a separate bank account as required by the Ministry.
- Verify that all procurement is done in accordance with the government procurement system by following a sample of procurement and confirming done in accordance with the said system.
- Verify and confirm that weekly emergency fund utilization reports were prepared and submitted to the ministry.
- Confirm separate bank accounts maintained for the WHO funding – Inspect bank statements to confirm this
- Verify that no bank charges borne by the WHO funds because disallowable per conditions.
- Verify that procurement of vaccines done in accordance with CDC guidelines
- For a sample of personnel costs confirm time sheets were completed as required.

(d)

(i) Transparency & accountability – emergency vaccination fund

The emergency vaccination program was funded by public funds and donor funds from the World Health Organization. As a custodian of public funds the program is require to be transparent and accountable on how the funds were used.

Transparency refers to openness on how the funds meant for immunization have been spent. This includes maintaining accountability reports that can be subject to independently checked and assurance given by the public sector auditors.

Accountability refers to the requirement that those entrusted with the management of the funds for the immunization program should be held accountable in how they have used those funds. Funds should be used following prudent financial management systems.

(ii) Transparency and accountability in the SAI & audited entities:

Transparency and accountability in the use of public funds for the immunization program relates to those that administer these funds and run the program. They are required to abide by the two principles of transparency and accountability.

Guidance for transparency and accountability in the SAI is given by ISSAI 20: Principles of Transparency and Accountability.

The SAI is a recipient and user of public funds and is required to be transparent and accountable in the manner in which it uses these public funds.

Accountability:

This refers to the SAI being accountable for meeting its legal obligations with regards to audits, its performance and the efficiency with which it uses resources appropriated to it.

Transparency:

This refers to timely, reliable, clear and relevant public reporting by the SAI on it activities and financial management and include its obligation to make public reports on its findings.

SOLUTION TWO

(a) Ethical matters in the Supreme Audit Institution of Kisumu:

	Ethical matters	Suitable response:
1	Staff being assigned to the same assignments for long periods of time results in familiarity threats which negatively impacts the objectivity of the public sector auditors.	The Supreme Audit Institution should put in place measures that audit staff are rotated to avoid familiarity.
2	The receiving of gifts from audited entities creates a self-interest threat. This will impact the objectivity of the auditors. Unless gifts are clearly insignificant that should be declined and it does not matter that they are reported at the office.	The Office of the Auditor General should put in place a code of ethics which should among other provisions provide for non-acceptance of gifts by staff of the Office of the Auditor General.
3	The invitation by the Auditor General (AG) of the controlling officer of the ministry the whistle blower works for to attend the meeting was against the ethical principle of confidentiality. It was too early to inform the ministry before any investigations were conducted.	Any further investigation of this matter should be led by independent investigators and the Auditor General (AG) has a conflict of interest and should not be involved in the investigation.
4	The suggestion that the matter should not be blown out of proportion because of sensitivity and the people involved show lack of integrity on the people suggesting so.	The Auditor General and the controlling officer should act in the public interest and not attempt the save the interests of a few people.

(b) Powers of the Supreme Audit Institution of Kisumu that should be included in the constitution:

1. Power to conduct investigations of any fraud in the public sector.
2. Power to recommend for prosecution those found to be misappropriating public funds for personal gain.
3. Power to conduct audits of all recipients of public funds.
4. Power to certify the accounts of public accounts.

(c)

(i) Possible outcome of the forensic investigation:

The loss of an amount of $1.5m appears to be a fraudulent act. The likely outcome of the forensic investigation may be litigation against the perpetrators of the fraud. Through the investigation it should be possible to confirm:

- Whether the fraud actually occurred. At the moment it is an allegation made by a whistle blower.

- To quantify the amounts involved and possibly
- The identity of the people who were involved.
- Consideration of recommending legal action and prosecution of culprits to responsible agencies.

(ii) Forensic investigation of matter reported by whistle blower:

D**efining the scope & objectives**:
This is the stage where the investigating team will define the scope of the investigation to be conducted and consider matters such as the period that will be covered by the investigation as well as the expected outcome of the investigation.

Understanding the allegation:
At this stage the investigating team will wish to gain an understanding of what happened and how it happened. This will be done through discussions with management and others within the organization. The investigators will require to gain knowledge of the operations of the ministry concerned.

Securing & safeguarding information:
In this stage the investigators will want to safeguard the financial and other information that may be relevant to the investigation. This will be done by restricting access by suspects and include safeguarding of electronic information by for example denying access to emails of suspects.

Inspection of information & documents:
This is the stage where the investigation gets underway by the investigators inspecting and evaluating any relevant documentation and information with a view to gather evidence.

Interviewing staff & other third parties:
Arising from the preliminary investigations the investigators will in this stage interview organizational staff as part of gathering evidence. These interviews will be of people who may assist in giving information and also the suspects involved.

Drawing conclusions:
This is the stage that the investigators evaluate the evidence obtained and conclude on the findings.

Producing the report:
This is the stage of reporting on the findings of the investigations to appropriate authorities.

SOLUTION THREE

(a) Application of requirements of planning compliance auditing:

1. **Defining the subject matter:**

   This involves the definition of the matter that will be subject to the compliance audit. In planning the compliance audit of the operations of the Game Management Board it will be necessary to define precisely from among many operations will be subject to the compliance audit. For example it may be that the matter subject to audit could be compliance by the board of regulations and laws regulating it.

2. **Defining the audit criteria:**

   This is the basis upon which the actual performance will be compared. The public sector auditors will esquire to determine this and communicate with the management of Game Management Board. The criteria may be drawn from the act of parliament regulating tourism and game management and the policy guidelines issued by the Ministry of Game and Tourism.

3. **Materiality determination:**

   Materiality is important in conducting a compliance audit. This is the determination of amounts/factors that may influence decisions of interested parties in the operations of the Game Management Board.

   Materiality could be based on an amount such as misstatements in the figures in the financial statements of Game Management Board or the impact of exceptions in the operations to the interested parties.

4. **Understanding the operations of the Game Management Board:**

   This involves gaining an understanding of the operations of the Game Management Board and the internal controls that may be relevant to compliance auditing. Through this understanding the public sector auditors will identify the risky of non-compliance or material misstatement in the subject matter information. This will involve inquiries of management and others in the board and relevant ministry.

5. **Develop the audit plan:**

   Having gained an understanding of the entity, the public sector auditor will develop the audit plan which will specify the compliance audit work that will be done and the assignment of work to audit team members.

(b) Sources and criteria for the compliance audit of the Game Management Board:

The criteria to be used in the planned compliance audit of the operations of the Game Management Board could be drawn from the relevant act of parliament applicable and the policies and guidelines issued by the responsible ministry.

The criteria could include:

- The approved budget against which expenditure will be compared.

- Details of public procurement system for government which are supplied to be complied with.
- Any matters contained in the act of parliament such as issue of game licenses to individuals for hunting in game management areas.

(c) Audit procedures – Game Management Board compliance audit:

1. Review the actual expenditure of the board against individual budget lines and confirm not overspent.
2. For budget lines that are overspent, confirm authorization of the Permanent Secretary was sought.
3. For procurements above K1.5 million, review minutes of a tender committee to confirm award given as required.
4. For procurements below K1.5m inspect a sample of such procurement and confirm supported by three quotations as required.
5. Review the number of hunting licenses issued in the period and confirm issued during hunting period and not in excess of set limits by law.
6. Obtain details of animals for which hunting licenses were issued and that these do not include endangered species.

SOLUTION FOUR

(a) **Specific audit actions (scope) to assess the operational efficiency and effectiveness of the SCT program in Kitwe and Namwala**

- Document Review: Examine documents related to the planning, implementation, and monitoring of the electronic payment model, including guidelines, reports, and stakeholder communications.
- Observation: Observe the payment process at designated centers in Kitwe and Namwala during the November-December 2023 payment cycle. Evaluate the flow of activities, adherence to guidelines, and engagement of beneficiaries.
- Interviews: Conduct interviews with beneficiaries, local officials, community leaders, and MCDSS representatives to gather qualitative feedback on the efficiency, transparency, and effectiveness of the electronic payment model.
- Data Analysis: Analyze data related to disbursement times, accuracy in beneficiary identification, and any reported issues or discrepancies. Assess the success of the electronic payment model in achieving its objectives.
- Compliance Check: Verify the compliance of the electronic payment model with relevant regulations and ethical standards.

(b) **Audit procedures to be conducted to address any assessed risk of fraud**

- Visiting locations where beneficiaries are receiving their cash payments.
- Conducting interviews with beneficiaries and other community members outside the program.
- Reviewing and confirming contract terms with third parties e.g. PSPs to ensure that terms contained therein are being complied with
- Inspect and compare manual registers with system generated registers
- Review reports submitted by program officers at district level.

(c) **Procedures and Safeguards Implemented within the ZISPIS Payment Gateway**

- **Facial Recognition Technology:** The ZISPIS payment gateway incorporates facial recognition technology to verify the identity of beneficiaries during payment transactions. This technology compares the live image of the beneficiary with the stored biometric data to ensure accurate identification and prevent identity theft.
- **GPS Tracking:** GPS tracking is utilized to validate the location of beneficiaries during the payment process. This helps in ensuring that funds are disbursed only to eligible recipients who are present at designated payment centers, thereby reducing the risk of unauthorized access to beneficiary accounts.
- **Encryption and Secure Authentication:** The payment gateway employs strong encryption protocols and secure authentication mechanisms to safeguard beneficiary data and transactional information. This ensures that sensitive data remains protected from unauthorized access and manipulation.

- **Transaction Monitoring and Auditing:** The ZISPIS payment gateway continuously monitors payment transactions for any suspicious activities or anomalies. Additionally, regular audits are conducted to review transaction logs, detect any irregularities, and ensure compliance with established procedures and regulations.
- **Two-Factor Authentication:** Beneficiaries are required to undergo two-factor authentication, which typically involves a combination of biometric authentication (e.g., fingerprint or facial recognition) and PIN verification. This multi-layered authentication process enhances security and reduces the likelihood of fraudulent access to beneficiary accounts.

The implementation of these procedures and safeguards within the ZISPIS payment gateway has contributed significantly to safeguarding the integrity of the electronic payment system for the SCT Programme in Kitwe, Zambia. The use of facial recognition technology, GPS tracking, encryption, secure authentication, and transaction monitoring has enhanced the overall security posture of the payment gateway, reducing the risk of identity theft, misappropriation of funds, and unauthorized access to beneficiary accounts.

(d) **Recommendations for Further Enhancement of security & accountability in SCT program:**

- **Continuous Monitoring and Evaluation:** Regular monitoring and evaluation of the effectiveness of existing safeguards should be conducted to identify any weaknesses or areas for improvement. This can help in refining existing procedures and implementing additional security measures as needed.
- **Capacity Building and Training:** Providing training and capacity-building initiatives for staff members involved in the administration and management of the SCT Programme can enhance their awareness and understanding of fraud risks and prevention strategies. This can empower them to effectively detect and respond to fraudulent activities.
- **Enhanced Data Protection Measures:** Strengthening data protection measures, such as implementing advanced encryption techniques and data anonymization methods, can further safeguard beneficiary data and mitigate the risk of unauthorized access or data breaches.
- **Public Awareness Campaigns:** Launching public awareness campaigns to educate beneficiaries about cybersecurity best practices, such as safeguarding personal information and avoiding phishing scams, can help in reducing the vulnerability of beneficiaries to fraudulent activities.
- **Collaboration with Law Enforcement Agencies:** Establishing collaboration mechanisms with law enforcement agencies to investigate and prosecute cases of fraud or financial misconduct can serve as a deterrent against fraudulent activities within the SCT Programme.

By implementing these recommendations, the SCT Programme can further enhance security and accountability within the electronic payment system, ensuring the efficient and transparent delivery of cash transfers to eligible beneficiaries while minimizing the risk of fraudulent activities.

SOLUTION FIVE

(a) **Types of audits that might be conducted at the FIC**:

1. Compliance Audit:
   - Verify that the FIC is operating in accordance with the Financial Intelligence Centre Act, No. 46 of 2010, and any other relevant legislation.
   - Ensure that the FIC is adhering to the established policies, procedures, and regulations governing its operations.
2. Financial Audit:
   - Examine the financial statements of the FIC to ensure accuracy, completeness, and compliance with accounting standards.
   - Verify that financial resources are used efficiently and in accordance with the allocated budget.
3. Information Systems Audit:
   - Review the security and integrity of the FIC's information systems, ensuring the confidentiality of sensitive financial intelligence data.
   - Evaluate the effectiveness of the FIC's IT controls to prevent unauthorized access and data breaches.
4. Performance Audit:
   - Assess the performance of the FIC in achieving its mission and vision.
   - Assess the FIC's effectiveness in achieving its objectives and providing recommendations for enhancing its impact on combating financial crimes.
   - Evaluate the impact of the FIC's activities on combating money laundering, terrorist financing, and other serious offenses.

(b) The relevance of Information Technology (IT) audits at the Financial Intelligence Centre (FIC) in Zambia is significant for several reasons, considering the nature of the organization and the sensitive data it handles.

Below are some key points:

1. Data Security and Confidentiality:
   FIC deals with financial information and sensitive data related to money laundering and financial crimes. IT audits help ensure that data is secure, confidential, and protected from unauthorized access.
2. Compliance and Regulatory Requirements:
   FIC, like any financial institution, is subject to various regulations and compliance standards. IT audits can assess whether the organization's IT systems adhere to these regulations, ensuring that it operates within the legal framework.
3. Risk Management:
   IT audits help identify and assess risks related to information technology. This includes risks associated with data breaches, system failures, and cyber threats. By understanding these risks, FIC can implement effective risk management strategies.

4. System Reliability and Availability:
   FIC relies on IT systems for its day-to-day operations. IT audits can evaluate the reliability and availability of these systems to ensure that they are operational when needed, minimizing downtime and disruption.
5. Fraud Prevention:
   IT audits can help in detecting and preventing fraud by assessing the effectiveness of controls within the IT systems. This is crucial for an organization like FIC, which plays a role in preventing and investigating financial crimes.
6. Data Integrity:
   Ensuring the accuracy and integrity of financial data is essential for FIC. IT audits can verify the effectiveness of data management processes, reducing the risk of errors or manipulation.
7. Incident Response and Disaster Recovery:
   FIC needs to have robust incident response and disaster recovery plans in place. IT audits can evaluate these plans to ensure that the organization can effectively respond to and recover from IT-related incidents or disasters.
8. Technology Upgrades and Innovations:
   IT audits can assess whether FIC's technology infrastructure is up-to-date and aligned with industry best practices. This ensures that the organization can take advantage of technological innovations and stay ahead of potential security threats.
9. Budget Optimization:
   IT audits can help identify areas where cost savings or optimizations can be made without compromising security or compliance. This is important for efficient resource allocation.

In summary, IT audits at FIC in Zambia are relevant for maintaining the integrity, security, and compliance of its IT systems, ultimately supporting its mission of combating financial crimes and ensuring a stable financial environment.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 13 SEPTEMBER 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)

Budget deficits are one of the major financial challenges encountered by Municipalities, and are mainly attributed to increased overheads such as emoluments and reduced incomes in relation to expenditure.

Legacy pressures such as unremitted statutory obligations have compounded creating funding gaps requiring additional savings and changes to services.

Some councils have historically been underfunded by government, and have no choice but to change their budget processes to improve their sources of funding. Councils have to re-organize their operations to raise income, not just from existing sources, but with new and innovative ways.

Budgets in Public Service Organisations (PSO) often assume substantial savings, that are however, deemed high risk and not achievable.

Some exceptional PSOs with budget surpluses use reserves to balance budgets, but prefer not to not use these buffers to manage in-year spending. Innovative PSOs work on a spend-to-save basis, by prioritizing capital expenditure proposals that can provide long-term savings.

Required:

(a) In terms of financial planning of public services, discuss with examples:

(i) Why the development of medium and longer - term financial plans is important;

(ii) The key assumptions for sources of income and types of expenditure you would expect to see in medium and longer - term forecasting, and

(iii) The benefits and problems associated with medium and longer - term financial planning.

(10 marks)

(b) Discuss the differences between incremental budgeting and zero-based budgeting, and evaluate the appropriateness of these methods for at least two (2) different public sector organisations. (10 marks)

(c) There is a continuing debate around the value of building reserves, and whether this represents prudent financial management, or is an inappropriate use of scarce resources. Reliance on reserves by councils has also been criticized.

Discuss the following:

(i) How councils are determining and managing suitable reserve levels, and

(ii) Where they can innovate and make best use of reserves, and assets to help them maintain their financial resilience. (10 marks)

(d) The main purpose of the economic case in project management is to demonstrate that the spending proposal optimises value for money (for public services as a whole, rather than the individual organisation). It explains how this is achieved by identifying and appraising a wide range of realistic and achievable options, in terms of how well they meet the spending objectives and critical success factors agreed for the scheme; and subjecting a reduced number of options, to a cost benefit analysis (CBA).

Required:

Explain the following elements of the economic case and their justification:

(i) Critical Success Factors, (2 marks)

(ii) Economic appraisals of costs and benefits with Cost Benefit Analysis (CBA) (2 marks)

(iii) Risk assessment, (2 marks)

(iv) Sensitivity analysis, and (2 marks)

(v) The selection of the preferred option or choice. (2 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

The municipality of Mongu is facing a complex financial landscape, raising concerns about public sector financial risk.

Mongu is a mid-sized town with a fast growing population of 200,000, relying heavily on property taxes and state grants to fund its public services, including education, public safety, and infrastructure development. Over the past few years, the local economy has been experiencing slow growth, leading to stagnant property values and a decrease in local tax revenues.

Additionally, the central government, facing its budgetary challenges, has hinted at potential reductions in grants to local municipalities. Mongu is also grappling with an aging infrastructure, requiring substantial investments in maintenance and upgrades.

To complicate matters further, the municipality recently issued bonds to finance a major water treatment plant project, a critical infrastructure initiative aimed at addressing environmental concerns and ensuring a sustainable water supply for the growing population. However, construction delays and unexpected cost overruns have put a strain on the budget, and the repayment of the bonds is becoming a concern.

Furthermore, there is growing pressure from the community for increased public services, particularly in the areas of healthcare and affordable housing, further stretching the limited financial resources of the municipality.

As the newly appointed Financial Analyst for the municipality, you are tasked with assessing and managing these risks to ensure the stability and sustainability of public finances.

Required:

As the Financial Analyst of Mongu Municipal Council:

(a) Assess the current financial position of Mongu Municipal Council. (2 marks)

(b) Appraise the various financial risks faced by Mongu Municipal Council. (9 marks)

(c) Develop a comprehensive risk management strategy that addresses short-term financial challenges and lays the foundation for long-term fiscal sustainability. (9 marks)

[Total: 20 Marks]

QUESTION THREE

The Government of a developing country is considering investing in a new public infrastructure project. The project involves building a modern transportation system aimed at improving connectivity across the major cities. The estimated initial cost of the project is K500 million. The government expects the project to have a useful life of 20 years.

The annual expected cash inflows from the transportation system are projected to be K80 million. However, the Government anticipates an annual maintenance cost of K10 million. Additionally, there will be a one-time cost of K50 million at the end of the 10th year for a major upgrade to ensure the system remains efficient.

The Government uses a discount rate of 8% to evaluate public projects.

Note: Assume all cash flows occur at the end of each year, and round off your answers to two decimal places if necessary.

Required:

(a) Evaluate the transportation project using the Net Present Value (NPV). (4 marks)

(b) Appraise the project using the Internal Rate of Return (IRR) and explain its significance. (4 marks)

(c) Compute the Payback Period for the project. (2 marks)

(d) Discuss five advantages of the NPV method of investment appraisal. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Growth in Government spending has continued to outpace growth in receipts, with a budget deficit expected in 2024.

The broad terms of a nation's 'debt' or 'deficit' are regularly referred to by governments, media and the public at large. They can sometimes cause confusion when used interchangeably.

(a) Explain the following terms and discuss their relationships with national interest rates and economic growth:

(i) National debt

(ii) Current budget deficit

(iii) Sustainable deficit

(10 marks)

(b) A country's budget should accurately reflect the government's policy priorities, but it can also be argued that the budget should be the policy driver.

Discuss how the relationship between budget setting and policy making must be balanced to enable realistic and deliverable policies. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

The Government of a Country spends huge amount of money annually on programmes aimed at reducing development disparities between citizens. Each year, the Office of the Auditor General reveals financial irregularities which include unaccounted for revenue, irregular payments, undelivered goods and services and procurement related fraud. It has however been noted that most Auditors rely on a desk review audit which is not able to unearth additional ineligible expenditure. Further asset recovery, has proved to be a challenge for the government who are determined to fight corruption. The country is ranked as the most corrupt country according to the recent corruption perception index. The government has put up interventions to fight corruption which its citizens do not seem to adhere to.

Required:

(a) Explain the role of External Audit in countering fraud. (2 marks)

(b) Discuss the expected questions the external auditors might ask of management, and the likely evidence that would be collected, when auditors are testing the effectiveness of the Public Service Organization's counter fraud arrangements. (10 marks)

(c) Discuss the factors Government should consider when coming up with a strategy to ensure the messaging to tackle corruption is aligned to the corruption policy and what the message should aim to achieve. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1-T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))}\beta_e\right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad F_0 = S_0 x \frac{(1+i_c)}{(1+i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

(i) A good medium-term financial plan / strategy should act as the organisation's map that plots the route ahead by focusing on policies and priorities in an organised, coherent and systematic manner. It should not seek simply to give provisional budget figures, but rather provide an insight into business trends.

It is important to:

- Give clear direction and assurance that the strategy is affordable
- Identify potential problems before they arise
- Provide opportunity for scenario planning and development of contingency plans
- Flexibility to accommodate changes in the environment through the planning period

(ii) Clearly the longer the planning assumption, the greater the extent to which they will be high level forecasts built on a number of significant assumptions. The uncertainties around leaving the EU and the economic and fiscal pressures resulting from the Covid19 Pandemic (in relation to both central government spending and local government spending) could influence all other assumptions simply because it is hard to predict the impact until more facts are known.

When forecasting, the significant key assumptions will include:

- The main sources of income:
- Central government settlement
- Fees and charges
- Business rates and growth
- Council tax income
- Commercial income opportunities
- Key spending assumptions:
- Salary adjustments
- Consumer price inflation
- Cost of supplies and services on expected demand for services
- Known future commitments/liabilities.

There will be degrees of uncertainty in forecasting both income and expenditure streams into the distance. Nevertheless, by making informed decisions on the main elements, the likely level of affordability limits for service planning can be derived.

Further refinements to forecasts can be achieved through sensitivity analysis, which can enhance the quality of financial information for the betterment of front line services.

(iii) Benefits of developing a MTFS are:

- Clear framework of planned expenditure to support decisions made already and to inform future decisions

- Transparent tracking of adjustments year on year
- Increased predictability of funds available, which can force clarity around criteria for spending in the short and medium term

Problems with MTFS may be:

- Figures included for later years might be considered as entitlement to budgets by managers
- Assumptions made might turn out to be wrong because of unexpected changes in service demand, the economy, political changes to central policy, or within the organisation itself.

A good MTFS relies on the skill and knowledge of the finance managers developing it, reliable information from the organisation's teams and realistic forecasting.

(b) In the recent past, the majority of public sector bodies use an <u>incremental approach</u> to budget setting. It is considered straightforward to explain and understand, and quick to implement.

Incremental budgeting involves taking the budget for the previous year (or period) and changing it by known factors such as inflation and known grant income. The incremental approach is especially applicable for local authorities because:

- central government restrictions apply in increasing local taxation income (unless a local referendum supports increases in Council Tax)
- central government grants are paid annually
- there are restrictions on the ways in which other income sources can be exploited, e.g. caps on fees and charges, or nationally set charges for things like planning application fees and gaming licenses
- a range of statutory services must be delivered every year so:
  - There is often good knowledge of demand e.g. how many households require refuse collection
  - The changes from year to year are minimal.

As the governments around the world implement their plans to re-organise the finances in the wake of the economic impact of the global pandemic, annual budgeting at a government level might be common in the next few years.

Annual budgets are used to closely monitor the adherence to the budget. In public sector organisations there is much less (if any) scope for increasing charges during the financial year to balance extra expenditure, as:

- The income in the form of grants are fixed for the year, and are therefore a finite amount of money;
- Public sector bodies must report annually on their out-turn (actual expenditure) compared to the set and approved budget;
- Any fees or charges are also set annually in line with the budget process.

Zero based budgeting is as its name suggests, starting from zero rather than a previous year's budget amount. It involves reviewing and estimating what goods and services are required for the year to deliver the required level of services. These estimates should reflect the plans of the organisation.

Zero based budgeting could be applied successfully to central government services such as police services. Rather than increase the budget incrementally each year, starting afresh

with a proper evaluation of the actual needs over the short term could reveal many areas where activities are no longer required.
In time of financial uncertainty, there is even more substance to the arguments for using zero-based budgeting in the public sector as it encourages:

- Critical evaluation of which services must be delivered;
- Hard thinking about which traditional services may no longer be required or can be delivered in a
- Different way that costs less;
- Re-thinking the real cost of services and being innovative about how to pay for them.

(c)

(i) Managing reserves is a key activity for financial managers in all types of organisations. Making decisions or recommendations regarding when and if to hold reserves (and where to invest them), and when to spend, are especially important when formulating strategies to cope with volatile funding.

A number of high profile articles have been written in recent years about the level of cash reserves being held by public service organisations – particularly local authorities.

There are differing views on reserves and the levels being maintained by organisations. Prudent financial managers will argue that building reserves is critical to ensuring financial resilience is possible in times of austerity or unforeseen crisis.

Finance managers will ear-mark reserves and ring-fence them for specific projects set aside monies to cope with a crisis and undertake clever investment to generate income from interest wherever possible.

(ii) Organisations should also be investigating where investment in assets or projects should be undertaken to generate revenue income going forward.

Finance managers are responsible for ensuring 'appropriate' levels of reserves, and particularly in local government for producing a budget that is balanced and affordable during the year – i.e. through income generated and use of reserves.

Requirement to take a long-term view – reserves can be used as one-off. They are not a sustainable source of income.

Need to allow for contingencies such as unexpected demand for services. Maybe be as a result of a natural disaster, epidemic, or some other crisis.

Important to have the skill to identify what level of reserves is prudent, but not so cautious that the keeping of reserves reduces service provision to an unacceptable level. Having the financial skills to get the balance right is critical.

Investment in revenue-generating assets such as:

- Hotels
- Business parks and similar

May be appropriate when borrowing costs are cheap, but this must be done within prudent borrowing rules. The risks of owning (and sometimes operating) these assets bring other problems and associated costs. Especially if there is a gap in skills for managing these types of properties.

Risks need to be appropriately managed and mitigated to prevent loss of assets or reserves.

Look at building on the resilient income streams, especially in light of the impact of the global pandemic, where income streams that were previously considered relatively safe and reliable, have either completely evaporated, or heavily reduced or delayed. (Such as car parking, leisure income)

(d) The economic case should include the following:

Element	**Why**
critical success factors (the attributes essential to the successful delivery of the scheme, against which the available options are assessed)	So that the reasons for doing the project can be clearly established. Identifying the criteria by which success can be measured – Did we get what we wanted?
Economic appraisals of costs and benefits with (CBA)	To fully understand the comparative costs, and identify the benefits
Risk assessment	To ensure the risks are properly documented so they can be appropriately managed
Sensitivity analysis	To establish the impact of changing some of the variables, so the variables with the most impact can be managed where possible
The preferred option	To give a clear indication of the best option based on all the analysis above to support a decision.

SOLUTION TWO

(a) **Financial Position Assessment:**

Mulundwe's property tax revenues are currently low due to the stagnation in economic growth, and potential reductions in state grants may adversely affect its financial position further. The debt burden created by issuing bonds for the water treatment plant is another challenge faced by the municipality.

(b) **Identification and Assessment of Financial Risks:**

Revenue Volatility:

Its revenues are volatile due to the potential reduction in grants, reduction in property rates revenue due to the stagnant property values. There is a reduction in other local tax revenues due to the reduction in economic growth. The municipality should consider diversifying its revenue streams, such as exploring public-private partnerships (PPPs) for municipal services or introducing new fees for specific services otherwise it may fail to provide the public goods and services required for the local population.

Debt Sustainability:

Mulundwe risks default its interest payments on bonds. This is due to a reduction in revenues. Mulundwe should engage in negotiations with lenders to explore refinancing options, potentially extending the repayment period for the bonds to ease immediate financial burden

Increased Service Demands:

Due to the fast growing population there is expected to be an increase in demand for public services. Management of the municipality should conduct a cost-benefit analysis of proposed new services to ensure fiscal responsibility.

Explore partnerships with non-profit organizations and community groups to share the burden of providing additional services.

(c) **Comprehensive Risk Management Strategy:**

Revenue Diversification:

Investigate opportunities for expanding the local tax base by encouraging business growth and attracting new industries to Mulundwe.

Explore innovative funding mechanisms, such as impact fees for new developments or a local sales tax.

Cost-Cutting Measures:

Conduct a comprehensive review of all operational expenses, identifying areas for potential cost savings without compromising essential services.

Implement efficiency measures, such as technology upgrades and process optimization, to streamline municipal operations.

Water Treatment Plant Project Management:

Collaborate with project stakeholders to identify solutions for cost overruns, potentially renegotiating contracts or seeking additional funding sources.

Implement strict project management protocols to minimize further delays and control additional expenses..

By implementing this comprehensive solution, Mulundwe can navigate its current financial challenges, foster fiscal sustainability, and maintain the delivery of essential public services to its residents.

SOLUTION THREE

Given Data:

Initial cost of the project = K500 million

Useful life of the project = 20 years

Annual expected cash inflows = K80 million

Annual maintenance cost = K10 million

One-time upgrade cost at the end of the 10th year = K50 million

Discount rate = 8%

(a) **Net Present Value (NPV)**

Annuity factor 20years@t 8% = 9.8182

Discount factor year 10years @ 8% = 0.463

NPV = {(K80M - K10M) = 70 X 9.8182 = K687.274 - K500M - K50M X 0.463

NPV = K164.124

Calculating this sum gives a positive NPV which entails that the project is worth undertaking. Government should therefore undertake the project

(b) **Internal Rate of Return (IRR)**

The IRR is the discount rate that makes the NPV of the project equal to zero.

Annuity factor 20years at 12% per annum= 7.4694

NPV @ 12% = 70 m x 7.4694 = K522.858 – 500- 50 X 0.322

NPV (0.292)

IRR is approximately 12% as the resultant NPV almost zero

8% + 164.124/(164.124+0.292) x 4% =11.9% approx. 12%

Solving for IRR gives the rate at which the project breaks even.

The IRR is higher than the cost of capital 8% hence the project should be undertaken.

(c) **Payback Period**

The payback period is the time it takes for the initial investment to be recovered.

500/70 =7.14years

The target payback period is not given for comparison therefore no recommendation can be given.

(d) **Advantages of NPV method of appraisal**

1. Consideration of Time Value of Money:

NPV takes into account the time value of money by discounting future cash flows to their present value. This ensures a more accurate representation of the project's profitability in today's terms, reflecting the opportunity cost of capital.

2. Considers the Entire Cash Flow Stream:

   NPV considers all cash flows over the project's life, including both inflows and outflows. This comprehensive approach provides a holistic view of the project's profitability, helping in better decision-making.

3. Objective Measure of Profitability:

   NPV provides a clear numeric value that represents the net benefit of the investment. This objectivity allows for easy comparison with other investment opportunities and helps in identifying the most financially attractive projects.

4. Alignment with Shareholder Wealth Maximization:

   The NPV method is consistent with the goal of maximizing shareholder wealth. Investments with positive NPVs are expected to increase the overall value of the firm, making it a suitable criterion for decision-making.

5. Flexibility in Discount Rate Application:

   NPV allows for the application of different discount rates for different periods or cash flow components, accommodating variations in risk and uncertainty over time.

SOLUTION FOUR

(a) The national debt refers to the amount of money owed by the government. This is the debt that has been built up over many years by many governments and is the accumulation of the annual budget deficits, plus any years where there were budget surpluses.

The current budget deficit, or surplus, is the difference between the government's everyday expenses and its revenues; in other words, between what it spends and what it receives in taxes and any other income in a given year.

Sustainable deficit is where the deficit (or surplus) does not increase the stock of debt as a percentage of Gross Domestic Product (GDP).

The important factor to consider here is that it is the relationship between the rate of growth in the economy, the interest rate the government pays on its stock of debt, and the gross domestic product, has been crucial in the debate during a period when deficits are not sustainable.

The policy options in this situation are:

- To increase growth
- To reduce debt or
- To reduce interest rates.

There is therefore an argument to increase debt to stimulate growth, which in turn generates additional tax revenue and reduces welfare payments. The counter argument is that when debt is too high it creates higher interest rates and crowds out the private sector.

(b) The budget preparation process is a powerful tool for achieving policy coherence. The budget is both an instrument of economic and financial management and an implicit policy statement, as it sets relative levels of spending for different programmes and activities. Policy decision - making is complex and involves different factors inside and outside the government. It is a mistake to attempt to combine all the procedures of policy formulation and the budget process itself.

However, a coherent relationship needs to be established between the policy-making agenda, which should take into account economic and fiscal realities and the budget, which should accurately reflect the government's policy priorities.

The budget process should both take into account policies already formulated and be the main instrument to make them explicit and 'operational'. However, policy proposals should be developed and reviewed outside of the pressured environment of the budget process itself. Making policy through the annual budget would give undue prominence to short-term issues, rather than longer-term, strategic issues, since the policy debate would be invariably dominated by immediate financial considerations.

An overall strategic framework should underpin the formulation of sectoral policies, provided that it is a genuine and concrete strategy, based on a thorough analysis.

Within this framework, line ministries and agencies should prepare their own strategic plans that include:

- Their mandate, consistent with statutory requirements
- A set of desired policy goals (outcomes and objectives)
- The broad approaches to achieving these policy goals
- A description of the concrete policy measures that will be used to achieve these goals
- A broad cost estimate.

Expenditure programmes and performance plans can be derived for these strategic plans, once the allocation of resources between different sectors has been determined.

This strategic planning is not a static or occasional event, but a dynamic and inclusive process. If done well it is continuous and provides the basis for the day-to-day operations of the organisations that manage the different expenditure programmes.

Unfortunately, in many cases, this exercise degenerates into bureaucracy, where a long-term perspective, unrealistic assumptions and logical frameworks are used a substitute for clear thinking about realistic policy options and instruments. A good practical rule for preparing and evaluating a strategic framework is to keep it simple.

To ensure that policy - making is not just creating a 'wish-list', the link between policy and the budget process is essential and at least two clear rules should be established:

- The resource implications of a policy change should be identified, before a policy decision is taken. Any entity proposing new policies should quantify their effects on public expenditure including both the impact on its own spending and on the spending of other government departments.
- The ministry of finance (through the Secretary to the Treasury) should be consulted in good time about all proposals involving expenditure before they are reviewed by ministers (or a ministerial committee) and certainly before any public announcements are made.

SOLUTION FIVE

(a) Auditors in the public sector and private sector both perform a regulatory role in accordance with relevant laws. Auditors are not responsible for preventing fraud, but should, construct testing that is alert to identifying the potential for fraud and corruption, and pursue questions and evidence gathering that identifies actual fraudulent or corrupt behaviours.

(b)

External auditor questions for testing effectiveness of counter fraud measures	Potential evidence to demonstrate effectiveness
What are management's processes in relation to: • Undertaking an assessment of the risk that the financial statements may be materially misstated due to fraud or error (including the nature, extent and frequency of these assessments) • Identifying and responding to risks of fraud in the organisation, including any specific risks of fraud which management have identified or that have been brought to its attention, or classes of transactions, account balances, or disclosure for which a risk of fraud is likely to exist • Communicating to employees its view on business practice and ethical behaviour (for example by updating, communicating and monitoring against the codes of conduct)	Management review process of past incidents to inform risk scoring Counter fraud reporting arrangements and records Evidence of action taken by management and referrals to police or other investigators Evidence of reported incidents Evidence of changes to procedures to tighten controls and reduce risk of repeat Examples of presentations and documented updates / bulletins to staff Evidence of staff attending training / awareness sessions Record keeping of breaches of code of conduct, including remedial activity or sanctions against Employees in breach. Number of records of reported fraud concern, with analysis of year on Year trends. Results of staff survey about knowledge of counter fraud policy
Encouraging employees to report their concerns about fraud • Communicating to the Authority and the Audit Committee the processes for identifying and responding to fraud or error	and staff confidence in reporting a suspected incident Evidence of audit committee members attendance at training on processes
What are Management's views about whether there are areas within the organisation that are at risk of fraud?	Management meeting minutes evidencing these risks being discussed

	Risk register
Is management satisfied that internal controls to prevent and detect fraud, including segregation of duties, exist and work effectively?	Annual declaration on risk management arrangements and internal control framework (or similar) might be in place. Job descriptions for specific roles Observation of internal controls might be undertaken independently, internal audit reports may provide assurance.
Does Management have knowledge of any actual or suspected instances of fraud?	Evidence via direct questioning to management. This may be face to face or via a questionnaire
Are there any deficiencies in internal control?	Internal audit reports and recommendations should help identify weaknesses.
re you aware of any instances where controls have been overridden?	Evidence via direct questioning to management. This may be face to face or via a questionnaire. Internal audit reports may identify Weaknesses.
Is there any organisational or management pressure to meet financial or operating targets?	Evidence via direct questioning to management. This may be face to face or via a questionnaire. Performance criteria and performance related pay policies
Are there any particular areas of the accounts that are more susceptible to false entries or omissions or other forms of manipulation? Are management aware of any manipulation having occurred?	Evidence via direct questioning to management. This may be face to face or via a questionnaire.
How does management gain assurance that all relevant laws and regulations have been complied with? Have there been any instances of non-compliance during the period of account?	Evidence of training, and processes followed by legal team to ensure compliance – committee report template may have a 'legal implications' section. Evidence of the scrutiny process of decision reports prior to publishing, for example, some organisations require sign-off from the CFO and the Head of Legal (or equivalent) of all committee reports before they are sent to Members for a decision.

	Evidence of non-compliance by recording the incident and the relevant legislation.
Are there any actual or potential litigation or claims that would affect the financial statements?	Evidence via direct questioning to management.
How does management satisfy itself that it is appropriate to adopt the going concern basis in preparing the financial statements?	Review of minutes of meetings after the financial year-end to see if any material incidents have occurred that might affect the financial statements, or the financial stability of the organisation

(c)

What needs to be considered	**What needs to be achieved**
What are the leadership goals? What are the needs and interests of the stakeholders in this instance? How well do leaders believe they are doing in the eyes of stakeholders?	Ensure that all messages align with previous communications.
What are the perceptions concerns or demands of stakeholders?	Consider the status of existing stakeholders
What happened: facts, figures, locations, and times?	Objective and non-ambiguous messages, and above all clear and truthful
What is being done to correct or alleviate the situation?	Explain in clear terms and in plain language.
How did the organisation attempt to mitigate or prevent risk or injury, to solve the problem or to prevent the problem in the future?	Demonstrate organisational accountability such as processes, procedures, safeguards, best practice or commitments.
What are the relevant issues in the bigger environment? Is something similar happening elsewhere? Was this something you caused to happen or as a result of external forces? Is there a track record of problems in this area?	Outline the context of the communication, and as necessary remind people of what relevant activity has gone on before.
What is the level of risk or severity? Could it trigger other issues? Is it of concern to a number of stakeholders?	Properly analyse the potential for risk, manage it and plan contingencies.
What are the opportunities for or impacts on people, the environment or overall reputation?	Identify the potential impacts, and work on damage limitation if necessary.
Who needs to be communicated with and in what order?	Prioritise, preserve and create or maintain stakeholder relationships.

When should you communicate? What is the opposition doing? Should there be an official embargo?	Earn trust through a timely response.
What do stakeholders need to know? How much can you share and with whom? How will they respond?	Anticipate and prepare.
Who thinks differently? How will the detractors respond? Is there common ground to be found?	Acknowledge differing views.
How should the message be aligned to the strategy?	Remind stakeholders what was promised and why they should care.
Who are the subject matter experts? Who has credibility with stakeholders? Should you include the views of a third party to add credibility?	Use experts in the presentation or to contribute to it and ensure that they are credible

END OF SUGGESTED SOLUTIONS