CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 13 DECEMBER 2021

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

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 of the following formulae may be used to calculate a trader's net profit for the year?

A. Opening capital – Drawings + Capital introduced – Closing capital
B. Closing capital – Drawings + Capital introduced – Opening capital
C. Closing capital + Drawings – Capital introduced – Opening capital
D. Opening Capital + Drawings – Capital introduced - Closing capital

(2 marks)

1.2 Daniel, a sole trader, sold goods with a list price of K1,100 for cash. He allowed the customer 15% trade discount.

Which of the following journal entries correctly records this transaction?

A. Dr Cash K935, Cr Sales K935
B. Dr Cash K1,100, Cr Sales K935, Cr Discount allowed K165
C. Dr Cash K1,100, Cr Sales K1,100
D. Dr Sales K935, Cr Cash K935

(2 marks)

1.3 The following information was extracted from the books of Mr. Lungu for the month of May 2020:

(i) The bank balance in the cashbook, before taking into account the following items, was K12,500.
(ii) Bank charges of K2,100 on the bank statement have not been entered in the cashbook.
(iii) Cheques amounting to K32,700 have been correctly entered in the cashbook but have not been presented for payment.
(iv) Cheques amounting to K20,000 have been entered correctly on the debit side of the cash book but have not yet been cleared by the bank.

Calculate the balance as shown on the bank statement as at 31 May 2020.

A. K2,300 overdrawn
B. K23,100 credit balance
C. K2,300 credit balance
D. K23,100 overdrawn

(2 marks)

1.4 On 1 May 2020, the carrying value of Property, Plant & Equipment amounted to K112,500. During the year ended 30 April 2021 plant with a carrying value of K8,000 was sold for K6,000. Depreciation charged in the statement of profit or loss amounted to K22,100. The carrying value of Property, Plant and Equipment as at 30 April 2021 amounted to K120,850.

How much would appear in the statement of cash flows as cash paid to acquire additional Property, Plant & Equipment?

A. K36,450
B. K21,750
C. K32,450
D. K38,450 (2 marks)

1.5 On 1 January 2020, a club had subscription owed by members amounting to K10,050 and subscription received in advance amounting to K2,400. During the year ended 31 December 2020 the club received annual subscription amounting to K41,200. The subscription owed by members and subscription received in advance as at 31 December 2020 amounted to K7,300 and K3,000 respectively.

How much is the total subscription to be included in the statement of income and expenditure for the year ended 31 December 2020?

A. K37,850
B. K44,550
C. K41,200
D. K45,500 (2 marks)

1.6 Which of the following books of original entry is used to record the correction of errors?

A. Suspense Account
B. Trial Balance
C. General Journal
D. Purchases Day Book

(2 marks)

1.7 Zulu and Tembo are partners sharing profits and losses in the ratio 2:1 respectively. Interest on drawings is charged at 10% per annum. During the year to 31 December 2020, drawings by the partners were; Zulu K40,000 and Tembo K50,000. These drawings were made in equal installments on 1 January 2020 and 1 July 2020. The partnership profit for the year was K171,500.

Calculate the total amount of interest on drawings that was charged on the partners for the year ended 31 December 2020.

A. K6,750
B. K9,000
C. K4,000
D. K5,000

(2 marks)

1.8 At 1 July 2019 a company had an allowance for receivables of K30,000. At 30 June 2020 the company's trade receivables were K760,000 and it was decided to write off balances totaling K31,000 and to adjust the allowance for receivables to the equivalent of 5% of the remaining receivables based on past experience.

What total figure should appear in the company's statement of profit or loss for the year ended 30 June 2020 as receivables expenses.

A. K38,000
B. K37,450
C. K36,450
D. K39,000

(2 marks)

1.9 Which of the following is the board responsible for development of International Financial Reporting Standards:

A. International Financial Reporting Interpretation Committee (IFRIC)
B. International Financial Reporting Standards Advisory Council (IFRSAC)
C. International Accounting Standards Board (IASB)
D. International Accounting Standards Committee (IASC) Foundation

(2 marks)

1.10 A business had revenue amounting to K500,000 during the year ended 31 March 2020. Opening and closing inventory amounted to K40,000 and K55,000 respectively. The business charges a mark-up of 25% on all its sales.

How much were the purchases for the year ended 31 March 2020?

A. K390,000
B. K415,000
C. K385,000
D. K360,000

(2 marks)

[Total: 20 Marks]

SECTION B

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

QUESTION TWO – (COMPULSORY)

(a) The following is an extract from A & B Limited's statement of profit or loss for the year ended 31 March 2020, the statement of financial position as at that date and the comparative statement of financial position as at 31 March 2019:

Statement of profit or loss for the year ended 31 March 2020

	K'000
Profit before interest & tax	23,200
Finance costs	(8,600)
Profit before tax	14,600
Income tax expense	(4,380)
Profit for the year	10,220

Statement of Financial Position as at 31 March

	2020	2019
Assets	K'000	K'000
Non-current Assets		
Property, Plant & Equipment	67,300	51,670
Current Assets		
Inventory	21,200	17,010
Receivables	14,600	15,220
Cash & Cash equivalents	8,340	Nil
Total Assets	111,440	83,900
Equity & Liabilities		
Equity		
Equity shares of K1 each	40,000	32,000
Share premium	2,500	1,600
Revaluation reserve	5,000	Nil
Retained earnings	22,630	18,410
	70,130	52,010
Non-current Liabilities		
6% Loan notes	20,000	8,000
Deferred tax	3,200	4,000
Current Liabilities		
Payables	15,200	9,280
Taxation	2,910	3,000
Bank Overdraft	Nil	7,610
Total Equity & Liabilities	111,440	83,900

The following additional information is relevant:

1. An item of plant with a carrying value of K7,200 was sold during the year for K6,000. The profit or loss on disposal is included in cost of sales.
2. Depreciation expense amounted to K8,020 for the year ended 31 March 2020. This figure is included in cost of sales.
3. A & B Limited revalued properties to fair value during the year ended 31 March 2020.
4. The company paid dividends on ordinary shares during the year.

Required:

Prepare the statement of cash flows using the indirect method in accordance with IAS 7 Statement of Cash flows. (16 marks)

(b) The IASB's Conceptual Framework defines an asset as "a present economic resource controlled by the entity as a result of past events". In accounting for property, plant & equipment the provisions of IAS 16 are applied.

Required:

(i) Explain how IAS 16 defines property, plant & equipment. (2 marks)
(ii) Explain the recognition criteria of property, plant & equipment. (2 marks)

[Total: 20 Marks]

QUESTION THREE

The trial balance below was extracted from the ledger of Mukapasa Ltd as at 31 December 2021.

	K'000	K' 000
Return inwards	100,000	
Share premium		20,000
Ordinary Share Capital		80,000
10% Preference Share Capital		50,000
9% Loan notes		60,000
General Reserve		46,400
Retained Earnings (1 January 2021)		15,300
Furniture & Equipment at cost	26,800	
Land and Building (Land K20, 000, 000)	220,000	
Plant & Machinery at cost	85,000	
Motor vehicle at cost	45,000	
Accumulated depreciation – Building		30,000
Accumulated depreciation – Plant & Machinery		17,000
Accumulated depreciation – Motor vehicle		18,000
Accumulated depreciation – Furniture & Equipment		8,040
Inventories, 1 January 2021	24,000	
Accounts Receivable	242,000	
Allowance on Receivables		4,840
Accounts Payable		200,000

VAT payable		1,460
Cash and Bank Balance	86,200	
Revenue		1, 848,800
Purchases	1, 440,075	
Carriage Inwards	16,200	
Salaries & Wages	56,600	
Rent & Rates	21,600	
Insurance	8,700	
Office Expenses	18,300	
Irrecoverable Receivables	1,060	
Printing and Stationery	1,720	
Electricity & Water	4,500	
Interest Income		495
Repairs and Maintenance	2,580	
	2,400,335	2,400,335

The following additional information are provided:

1. Carriage outwards bill to the value of K1,000,000 remained unpaid on 31 December, 2021. The invoice was received on 2 January 2022, before the approval of the 2021 financial statements.
2. Allowance is to be made for depreciation on the non-current assets on straight line method at the following rates:

a)	Building	3%
b)	Plant & Machinery	20%
c)	Motor vehicle	20%
d)	Furniture & Fittings	10%

3. The value of land is to be revalued downwards to K15,000,000.
4. The following payments were made in advance:
   Rent K4,320,000
   Insurance K1,740,000
5. 10% preference shares met the definition of equity as per conceptual framework.
6. Allowance on receivables is to be adjusted so that it is 3% of trade receivables.
7. Provision is to be made for audit fees of K3,600,000.
8. Directors' fees of K4,500,000 were due at the year end.
9. The cost of closing inventories at 31 December 2021 was K43,740,543. However due to market recession the net realisable value of the goods is K37,430,000.
10. One quarter of the loan will be repaid to the bank on 31 December, 2022.
11. The year's preference dividends and ordinary dividends amounting to K5,000,000 and K6,000,000 respectively were proposed on 31 December, 2021.
12. Current year income tax charge is K9,630,000. Deferred tax must be ignored.

Required:

(a) Mukapasa Ltd's Statement of Profit or Loss account for the year end 31 December, 2021. (10 marks)

(b) Mukapasa Ltd's Statement of Financial Position as at 31 December, 2021. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Mufuzi is a sole trader whose business is part of the distribution chain of electrical appliances with stores in most parts of Lusaka. Mufuzi has employed youths in his family circles to help with operations in his chain of stores.

As part of his preparation of financial statements for the year ended 30 June 2021, Mufuzi has requested for a bank statement from its bankers for its current account and the document has revealed a discrepancy between Mufuzi's bank ledger account and its bank statement. The bank statement shows a balance of K253,500 credit, which does not agree with its bank ledger account.

The following discoveries are the reasons for the difference:

(i) Cheques received from customers totaling K48,000 entered in the bank ledger account do not appear on the bank statement on 30 June 2021.

(ii) The bank made an error by wrongly crediting Mufuzi's account with another customer's cheque valued at K33,000.

(iii) A cheque payment to Mufuzi's supplier amounting to K47,500 was posted on the wrong side of Mufuzi's bank ledger account.

(iv) A cheque of K15,700 recently received by Mufuzi from one of its customers was dishonoured by the bank but no entry has yet been made by Mufuzi.

(v) Mufuzi maintains a deposit account with the same bankers. On 30 June 2021, the deposit account earned interest amounting to K6,300 which Mufuzi requested that it be credited to its current account. This, the bank has done but Mufuzi has not recorded yet.

(vi) Mufuzi has a standing order for payment of insurance premium of K12,000 monthly. The standing order for June has gone through at the bank but not yet recorded by Mufuzi.

(vii) Mufuzi rents out properties to various clients. A number of clients made rental payment via automated bank transfer to Mufuzi's account. The amount transferred totaled K79,800 but Mufuzi posted this to a wrong side of its bank ledger account as K78,900.

(viii) Bank charges of K6,900 appearing on the bank statement were posted to the wrong side of Mufuzi's bank ledger account.

(xi) Cheques totaling K88,900 made to various suppliers on 28 June 2021 had not been presented for payment to the bank.

(x) The bank made another error in which a cheque payment of K8,800 by Mufuzi to one of its suppliers was debited twice to the bank statement.

Required:

(a) Explain the importance of carrying out bank reconciliations. (4 marks)

(b) Prepare an amended Cash book for Mufuzi as at 30 June 2021. (11 marks)

(c) Prepare a statement that reconciles a bank statement balance to the amended cash book balance. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Beatrice Musonda, is a sole trader with a small business located at kawayawaya market.

The trial balance extracted as at 30 June 2021 did not balance. The credits exceeded the debits by K3,275 and the difference was entered in a suspense account. A detailed examination of the books was undertaken and the following matters were uncovered by the trainee accountant:

1. Purchases returns of K19,350 had been credited to sales returns as K11,175, and the corresponding entry was correctly entered.
2. A casting error was discovered in the sales returns day book and as a result, the posting to the ledger was understated by K1,600.
3. An amount of K245 cash received from a customer was debited to the customer's account and credited to the cash account.
4. The cash at hand balance of K5,350 as at 30 June 2021 was omitted from the trial balance in error.
5. Building repairs of K4,300 were undertaken during the month ended 30 June 2021, the amount was paid by cheque. The entry was correctly treated in the bank account but K1,800 was credited to building.
6. On 1 January 2020, rent for the year ended 31 December 2020 of K 22,500 was paid and accounted for correctly. Beatrice Musonda's landlord has indicated that rent for 2021 will increase to K 30,000 but no invoice has been received. Beatrice Musonda however, has not paid any rent for 2021 and has made no accounting entry for it because he has not received an invoice from the landlord.

7. A credit sale of K12,500 (excluding value added tax) was recorded by debiting sales with K12,500 and crediting receivable with K12,500. The rate of VAT is 16%.

Required:

(i) Prepare journal entries with appropriate narrations necessary to correct the above errors. (9 marks)

(ii) Prepare the Suspense account. (2 marks)

(b) The IASB Framework for the Preparation and Presentation of Financial Statements serves as a guide to resolving accounting issues that are not addressed directly in a standard.

Required:

(i) Explain the objective of general purpose financial reporting (3 marks)

(ii) State and explain the two (2) fundamental qualitative characteristics. (4 marks)

(iii) Distinguish between Equity and Liability. (2 marks)

[Total: 20 Marks]

<u>QUESTION SIX</u>

(a) (i) Differentiate between an *Accounting concept* and an *Accounting policy, and* give two (2) examples for each. (4 marks)

(ii) Identify and explain, the *basic accounting principle* which requires prepayments to be included in final accounts. (2 marks)

(iii) Explain the purpose of *depreciation charge* in the statement of profit or loss. (2 marks)

(b) A newly qualified Accountant has prepared draft accounts for a client for the year ended September 2021, but has not dealt with the adjustments for accrued expenses, prepaid expenses, irrecoverable debts, allowance for receivables and depreciation.

Below is the statement of financial position prepared by the newly qualified Accountant.

Draft statement of financial position as at 30 September 2021

Assets:		
Non-Current assets	K	K
Plant and Machinery (Cost)	875,000	
Accumulated Depreciation (at 1 October 2020)	(427,000)	
		448,000
Current Assets		
Inventory	211,695	
Trade receivables	747,055	
Cash and bank balance	31,400	990,150
		1,438,150
Capital and Liabilities		
Proprietor's capital		1,005,350
Current Liabilities		
Trade payables		432,800
		1,438,150

The newly qualified Accountant has given the following information about the remaining adjustments:

1. The last fixed bill paid for electricity covered three months period to 31 July 2021. The bill was K34,350.
2. Rent of K142,500 for six months to December 2021 was paid in March 2021.
3. Depreciation is to be provided at a rate of 20% per annum on reducing balance method.
4. The trade receivables figure of K747,055 in the draft account is stated after deducting allowance for doubtful debts of K39,500 from the total receivable balance of K786, 555.
5. The trade receivable balance of K786,555 includes a balance of K3,300 which has been outstanding for 10 months. The client has decided to write this balance off his books.

6. The policy of the client is to allow for receivables on the basis of the length of time the debt has been outstanding. The aged analysis of trade receivables as at 30 September 2021 and the required allowance is shown below:

Age of Debt		Balance	Allowance required
		K	
0-30 days	First	626,375	Nil
31-60 days	Next	136,000	20% of balances
Over 60 days	Next	24,180	75% of balances
		786,555	

Required:

Calculate the correct balances as at 30 September 2021 for each of the following:

(i) Accrued expenses (1 mark)
(ii) Prepaid expenses (1 mark)
(iii) Allowance for receivables (2 marks)
(iv) Accumulated Depreciation (2 marks)
(v) Prepare a revised statement of financial position as at 30 September 2021. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA1.1 FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) Statement of cash flows for the year ended 31 March 2020

Cash flows from operating activities	K'000	K'000	
Profit before tax			14,600
Adjustments:			
Depreciation		8,020	
Loss on disposal (7,200 – 6,000)			1,200
Finance costs		8,600	
Profit before working capital changes			32,420
Increase in inventory (21,200 – 17,010)			(4,190)
Decrease in receivables (14,600 – 15,220)		620	
Increase in payables (15,200 – 9,280)			5,920
Cash from operations		34,770	
Interest paid		(8,600)	
Tax paid (w2)		(5,270)	
Net cash from operating activities		20,900	
Cash flows from investing activities			
Purchase of property, plant & equipment (w1)	(25,850)		
Proceeds from sale of plant	6,000		
Net cash used in investing activities		(19,850)	
Cash flows from financing activities			
Proceeds from issue of shares			
(40,000 – 32,000) + (2,500 – 1,600)	8,900		
Proceeds from issue of loan notes			
(20,000 – 8,000)	12,000		
Dividends paid (w 3)	(6,000)		
Net cash from financing activities			14,900
Increase in cash & cash equivalents during the year		15,950	
Cash & cash equivalents @ beginning			(7,610)
Cash & cash equivalents @ end			8,340

Workings

1. Property, plant & equipment

K		K	
Balance b/f	51,670	Disposal	7,200
Revaluation	5,000	Depreciation	8,020
Additions (bal fig)	25,850	Balance c/f	67,300
	82,520		82,520

2. Taxation

K	K		
Tax paid (bal fig)	5,270	Balance b/f: Deferred tax	4,000
Balance c/f: Deferred tax	3,200	Current tax	3,000
Current tax	2,910	Income tax expense	4,380
	11,380		11,380

3. Retained earnings

K	K		
Dividends paid (bal fig)	6,000	Balance b/f	18,410
Balance c/f	22,630	Profits for the year	10,220
	28,630		28,630

(b) Property, plant & Equipment

(i) IAS 16 defines property, plant & equipment as tangible assets that are:

1. Held by an entity for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
2. Expected to be used during more than one period (12 months).

(ii) An item of property, plant & equipment should be recognised when:

1. It is probable that future economic benefits associated with the asset will flow to the entity.
2. The cost of the asset to the entity can be measured reliably.

SOLUTION THREE

Mukapasa Ltd

a) Statement of profit or loss for the year ended 31st December 2021

	K'000	K'000
Revenue (1, 848, 800 - 100, 000)		1, 748, 800 Cost
Of Sales w1		(1, 442,845)
Gross Profit		305,955
Other income		495
		306,450
Salaries And Wages	56,600	
Rent And Rates(21600-4320)	17,280	
Insurance(8700-1740)	6,960	
Office Expense	18,300	
Bad Debt	1,060	
Printing And Stationery	1,720	
Electricity	4,500	
Repairs And Maintenance	2,580	
Depreciation (W2)	34,680	
Finance Cost:		
Interest On Loan Notes	5,400	
Revaluation loss	5,000	
Provision For Bad Debt	2,420	
Audit Fees	3,600	
Carriage outwards	1,000	
Directors Fees	4,500	
		(165,600)
Profit before Tax		140,850
Taxation		(9,630)
Profit for the year		131,220

(b)

Statement of Financial Position as At 31/12/2021		K'000
Non-Current Assets	W2	264,080
Current Assets		
Trade Receivables(242,000-7,260)		234,740
Other Receivables & Prepayments	W3	6,060
Inventories		37,430
Cash And Bank Balance		86,200
Total Assets		628,510
Equity and Liabilities		
Equity		
Ordinary Shares		80, 000
Share premium		20, 000

10% Preference Shares	50,000
General Reserves	46,400
Retain Earnings (15, 300 +131, 220)	146,520
	342,920
Non-current liabilities	
9% loan note	45,000
Current Liabilities	
9% loan note (1/4 x 60, 000)	15,000
Trade Payables	200,000
VAT payable	1, 460
Other Payables And Accrual W4	14,500
Taxation	9,630
Total equity and liabilities	628,510

Workings

W 1 Cost Of Sales	K'000
Opening Inventories	24,000
Add Purchases	1, 440,075
Carriage Inwards	16,200
	1, 480,275
Less Closing Inventories	(37,430)
Cost Of Sales	1, 442,845

W 2 Non-Current Assets

			Plant And	Motor	Furniture &	
	Land	Building	Machinery	Vehicle	Equipment	Total
	K'000	K'000	K'000	K'000	K'000	K'000
Cost						
At 1/1/20	20,000	200,000	85,000	45,000	26,800	376,800
Additions	-	-	-	-	-	-
At 31/12/20	20,000	200,000	85,000	45,000	26,800	376,800
Depreciation						
At 1/1/21		30,000	17,000	18,000	8,040	73,040
Revaluation loss	(5, 000)					(5, 000)
Charge For The Year		6,000	17,000	9,000	2,680	34,680
At 31/12/21	-	36,000	34,000	27,000	10,720	107,720
Depreciation Rate		3%	20%	20%	10%	
Carrying amount						
At 31/12/2021	15,000	164,000	51,000	18,000	16,080	264,080
At 31/12/2020	20,000	170,000	68,000	27,000	18,760	

W 3 Other Receivables

	K'000
Rent Prepaid	4,320
Prepaid Insurance	1,740
	6,060

W 4 Other Payables and Accrual	K'000
Audit Fees	3,600
Loan Notes	5,400
Directors Fees	4,500
Carriage outwards	1,000
	14,500

Note: For theory questions, exact wordings NOT required.

SOLUTION FOUR

a) The importance of carrying out a bank reconciliation include:
   - It helps in the identification of errors committed by either the business or the bank.
   - It informs the business of potential charges executed by the bank for either the service rendered through account transactions or interest on overdrafts.
   - The process informs the business of the timing differences arising from cheques issued but not yet presented

b) Amended cash book

	'K'		'K'
Balance b/f bal fig)	159,900	Mispost (47500 x 2)	95,000
Mispost	78,900	Dishonoured cheque	15,700
Deposite a/c interest	6,300	insurance	12,000
Correct entry	79,800	bank charges	13,800
		Balance c/d	188,400
	324,900		324,900
Balance b/d	188,400		

c) Bank Reconciliation statement for Mufuzi for the year ended 30 June 2021

	'K'	
Balance per bank statement	253,500	
Add: uncredited cheques		48,000
Less: Bank error – wrong credit		(33,000)
Less unpresented cheques	(88,900)	
Add error – wrong debiting	8,800	
Balance per amended bank lg account		188,400

SOLUTION FIVE

a)

(i) Journal Entries

Beatrice Musonda DR CR

		K	K
1	Sales Returns	11,175	
	Suspense	8,175	
	Purchases		19,350
	Being purchase returns posted to sales returns in error		
2	Sales returns	1,600	
	Receivable		1,600
	Being the book of original entry undercast		
3	Cash	490	
	Receivable		490
	Being cash received from a customer treated as cash payment		
4	Cash	5,350	
	Suspense		5,350
	Being cash balance omitted from the trial balance		
5	Buildings	1,800	
	Repairs	4,300	
	Suspense		6,100
	Being correction of error of principle		
6	Rent	15,000	
	Rent accrual		15,000
	Being correction of error of omission		
	Receivable	12,500	
	Sales		12,500
7	Receivable	14,500	
	Sales		12,500
	VAT		2,000
	Being the correction of error of VAT omitted		

(ii)

Suspense Account

	K		K
Sales Returns	8,175	Cash	5,350
Balance	3,275	Repairs	6,100
	11,450		11,450

b)

(i)

Chapter 1 of the conceptual framework notes that objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions relating to providing resources to the entity. This is identified as information about the entity's economic resources and the claims against the reporting entity as well as information about the effects of transactions and other events that change a reporting entity's economic resources and claims. The chapter newly stresses that information can also help users to assess management's stewardship of the entity's economic resources.

(ii) The TWO fundamental qualitative characteristics are:

- relevance; and
- faithful representation

Relevance

Information must be relevant to the decision-making needs of users. Information is relevant if it can be used for predictive and/or confirmatory purposes.

- It has *predictive value* if it helps users to predict what might happen in the future.
- It has *confirmatory value* if it helps users to confirm the assessments and predictions they have made in the past. Only information that is material can be relevant.

Faithful representation

To be useful, financial information must not only represent relevant phenomena, but it must also faithfully represent the phenomena that it purports to represent in both words and numbers.

A perfectly faithful representation would have three characteristics. It would be:

- complete;
- neutral; and
- free from error.

(iii) Equity is the residual interest in the assets of the entity after deducting all its liabilities, While Liability is a present obligation of the entity to transfer an economic resource as a result of past events.

SOLUTION SIX

a)

i) Accounting concepts are basic rules that guide preparers of financial statements ON how to make entries and assist users to check whether the financial statements have been properly prepared (examples: accruals concept, prudence concept, double entry etc.) , while

Accounting policies; are the specific accounting bases judged by business enterprises to be the most appropriate to their circumstances and adopted by them for the purpose of preparing their financial statements. Examples: valuation of inventories (FIFO or Average cost, Revaluation model under IAS 16 property, plant and equipment etc.)

ii) The accruals or matching concept requires that the revenue earned in a period is matched with the expenses incurred in earning that profit. Therefore if a payment includes a prepayment for the following period, this must be excluded from expenses in the statement of profit or loss. In other words, costs are recognised on the basis of the period covered by those costs, not by the timing of the payment.

iii) Depreciation is a way of charging for the use of an asset in earning the current period's profits. It spreads the cost of a non-current assets over its useful life. This is an example of accrual or matching concept.

b)

i) Accrued Expenses

Electricity (2/3 *34,350) = 22,900

ii) Prepayment

Rent (3/6 *142,500) = 71,250

iii) Allowance for receivables

	Balance		Allowance required
	K		K
31-60 days	136,000 *20%		27,200
Over 60 days	24,180		
Irrecoverable debt	(3,300)		
	20,880	* 75%	15,660
Allowance required			42,860
Existing allowance			39,500
Increase in allowance			3,360

iv) Accumulated Depreciation

Balance as at October 2020 427,000

Charge for the year (448,000* 20%)		89,600
		516,600

v) Statement of financial position

	K	K
Non-Current Assets		875,000
Plant and Machinery (cost)		(516,600)
		358,400
Current Assets		
Inventory	211,695	
Trade receivables (WK 1)	740,395	
Prepaid rent (a ii)	71,250	
Cash and bank balance	31,400	1,054,740
		1,413,140
Capital (WK 2)		957,440
Current Liabilities		
Trade payables	432,800	
Accruals (c i)	22,900	455,700
		1,413,140

Workings

	K	K
Trade receivables		
Receivables		747,055
Irrecoverable debt		(3,300)
Increase in allowance		(3,360)
		740,395
Capital		
Capital b/f		1,005,350
Less:		
Accrued Electricity	22,900	

Irrecoverable debt	3,300	
Depreciation Charge	89,600	
Increase in allowance	3,360	(119,160)
		886,190
Add Prepaid rent		71,250
		957,440

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2: BUSINESS STATISTICS

WEDNESDAY, 15 DECEMBER 2021

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/statistical formulae book MUST be provided.
Request for one if not given by the Invigilators.

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

SECTION A

Attempt all the ten sub-questions in this Section.

QUESTION ONE - (MULTIPLE CHOICE)

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

A. Descriptive statistics
B. Inferential statistics
C. Analytical statistics
D. All of the above

(2 marks)

1.2 A Parcel's Delivery company estimates the probabilities for the number of days required to successfully deliver parcels to individual ordering products within the country.

Time (days)	1	2	3	4	5
Probability of delivering parcel	0.06	0.21	0.34	0.30	0.09

The probability that a randomly chosen parcel will take less than 3 days to deliver is:

A. 0.27
B. 0.34
C. 0.21
D. 0.61

(2 marks)

1.3 Time series analysis involves prediction of future event using past data. Which of the following is not a component of time series?

A. Seasonal Variation
B. Cyclical variation
C. Regular variation
D. Irregular variation

(2 marks)

1.4 Which one of the following variables is not categorical?

A. Age of a person.
B. Gender of a person: male or female.
C. Choice on a test item: true or false.
D. Marital status of a person (single, married, divorced, other)

(2 marks)

1.5 If a normal distribution with $\mu = 200$, have $P(X > 225) = 0.1587$, then $P(X < 175)$ equal to:

A. 0.8413
B. 0.3413
C. 0.5000
D. 0.1587

(2 marks)

1.6 The measure of dispersion which has only two observations is called:

A. Standard deviation
B. Mean deviation
C. Quartile deviation
D. Range

(2 marks)

1.7 What name is given to a table with all possible values of a random variable and its corresponding probabilities?

A. Probability Mass Function
B. Probability Density Function
C. Cumulative Distribution Function
D. Probability Distribution

(2 marks)

1.8 Which of the following is an alternative expression for qualitative variables?

A. Variance
B. Categorical
C. quantitative
D. Numerical

(2 marks)

1.9 The median of a class frequency distribution is found graphically with the help of:

A. Histogram
B. Frequency curve
C. Frequency polygon
D. Ogive

(2 marks)

1.10 Two events are mutually exclusive if?

A. They are exclusively connected
B. They cannot occur together
C. They can occur together
D. They exclusively include mutuality

(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.

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

(a) Data were collected from a survey of 150 students in a college canteen. Their daily expenditure on mid-day meals is summarized in the table below:

Daily Expenditure (K)	Frequency
[15 – 20]	11
[20 – 25]	28
[25 – 30]	38
[30 – 35]	34
[35 – 40]	27
[40 – 50]	12

Required:

Calculate:

(a) the average daily expenditure. (2 marks)
(b) the median daily expenditure. (3 marks)
(c) the Modal daily expenditure. (3 marks)
(d) the standard deviation. (4 marks)

(b) Cartons of milk from a particular supermarket are advertised as containing 1 litre, but in fact the volume of the contents is normally distributed with a mean of 1012 ml and a standard deviation of 5 ml.

(i) Find the probability that a randomly chosen carton contains more than 1010 ml. (3 marks)

(ii) In a batch of 1000 cartons, estimate the number of cartons that contain less than the advertised volume of milk. (5 marks)

[Total: 20 Marks]

QUESTION THREE

Due to the impact of Covid-19 in Zambia, a survey was conducted to find out the current relationship between household annual incomes (in thousands of kwacha) and food expenditure in a small town. The results from seven (7) households are as shown below;

Income (X)	Food expenditure (Y)
54	15
80	25
35	12
60	16
30	10
55	15
65	18

Required:

(a) Plot the scatter plot of the data in the table above on relationship between income and food expenditure. (3 marks)

(b) Write down the least square regression line suitable for this data. (11 marks)

(c) State the income if the household expenditure (in thousand kwacha) is K40 (2 marks)

(d) Calculate the correlation coefficient on relationship between income and food expenditure and interpret the result correctly. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

The following information has been supplied by the sales department (sales are in units)

Year	Quarter			
	1	2	3	4
2015	110	135	137	112
2016	114	138	140	117
2017	120	141	143	117
2018	119	142		

Required:

(a) Calculate a four moving quarterly moving average of the above series; (9 marks)

(b) Calculate the sales corrected for seasonal movements by using the multiplicative model. (3 marks)

(c) Plot the actual sales and the sales corrected for seasonal movements on a single graph. (5 marks)

(d) Comment on your findings in part (c) above. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) The table below is the distribution of students in Monga, Cupa and Koni colleges:

	Colleges		
Gender	Monga	Cupa	Koni
Male	50	75	45
Female	80	50	55

Required:

Calculate the probabilities of selecting:

(i) a female student (3 marks)

(ii) a Cupa college male student (3 marks)

(iii) a female student, given that she's from Koni college (4 marks)

(iv) a student from Monga college, given that he's a male. (4 marks)

(b) The distribution of prices of the five (5) items is given as follows:

K8, K10, K7, K9, K6

Required:

(i) Calculate the skewness of the distribution. (4 marks)

(ii) Comment on the result of part (i). (2 marks)

[Total: 20 Marks]

QUESTION SIX

(a) The independent probabilities that the three (3) sections, A, B and C, of a costing department will encounter a computer error are 0.1, 0.2 and 0.3 respectively.

Required:

Calculate the probability that there will be:

(i) at least one computer error encountered by the costing department next week (4 marks)

(ii) One and only one computer error encountered by the costing department next week. (4 marks)

(b) The weekly sales of a product are found to be normally distributed with mean 1000 and standard deviation 200.

Required:

Find the probability that weekly sales are:

(i) Less than 700 (3 marks)

(ii) Between 800 and 1250 (6 marks)

(iii) More than 1400 (3 marks)

[Total: 20 Marks]

END OF PAPER

CA1.2: BUSINESS STATISTICS SUGGESTED SOLUTION

SOLUTION ONE

1.1 A

1.2 A

1.3 C

1.4 A

1.5 D

1.6 D

1.7 D

1.8 B

1.9 D

1.10 B

SOLUTION TWO

(a)

Stock Prices	Mid-point X	Number of Stocks f	Cumulative	(f)(x)	$f(x-\bar{x})^2$
[15 – 20[	17.5	11	11	192.5	1765.82
[20 – 25[	22.5	28	39	630	1647.21
[25 – 30[	27.5	38	77	1045	270.9
[30 – 35[	32.5	34	111	1105	184.58
[35 – 40[	37.5	27	138	1012.5	1450.68
[40 – 50]	45	12	150	540	2639.15
TOTAL		150		4525	7958.34

i. The mean: $\frac{1}{n}\sum fx = \frac{1}{150}(4525)=30.17$

ii. To find the median, first locate the median class which is the class that fall on the mid of the values of cumulative frequency, then find the lower limit of the median class and the class width, and calculate using the formula

$$median = l_k + \frac{w}{n_k}(\frac{n}{2} - cf_{k-1}). \quad k = 3$$

$$25 + \frac{5}{77}\left(\frac{150}{2} - 39\right) = 37.34$$

iii. Modal price

$$\mathrm{Mo} = \mathrm{L_k} + \omega\left(\frac{\mathrm{d_1}}{\mathrm{d_1} + \mathrm{d_2}}\right) \quad , \quad \mathrm{k} = 3$$

$$\mathrm{Mo} = 25 + 5\left(\frac{10}{10+4}\right) = 28.57$$

Note:

$$\mathrm{d_1} = \mathrm{n_k} - \mathrm{n_{k-1}} = 38 - 28 = 10$$

$$\mathrm{d_2} = \mathrm{n_k} - \mathrm{n_{k+1}} = 38 - 34 = 4$$

iv. Standard deviation

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

$$\boldsymbol{s} = \sqrt{\frac{7958.34}{\mathbf{150 - 1}}} = \mathbf{7.31}$$

(b)

i. $Z = \frac{X-1012}{5}$

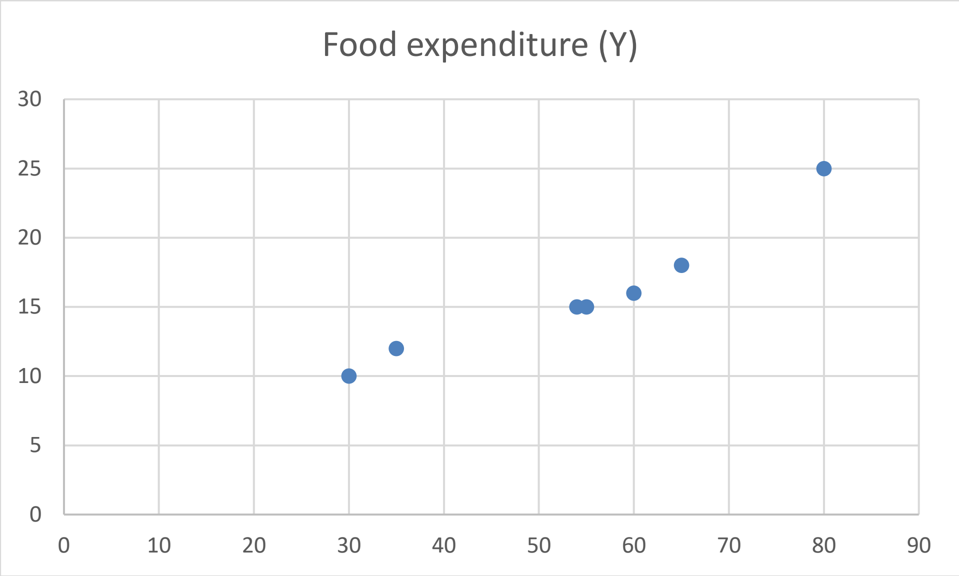
$$P\left[\frac{X-1012}{5} > \frac{1010-1012}{5}\right]$$
$$= P[Z > -0.4]$$
$$= 0.6554$$

ii.

$$P\left[\frac{X-1000}{5} < \frac{1000-1012}{5}\right]$$
$$= P[Z < -2.4]$$
$$= 1 - 0.9918 = 0.0082$$
$$1000 \times 0.0082 = 8.2 \approx 8$$

SOLUTION THREE

(a) The scatter plot is as follows:



(b)

x	y	x^2	y^2	xy
54	15	2916	225	810
80	25	6400	625	2000
35	12	1225	144	420
60	16	3600	256	960
30	10	900	100	300
55	15	3025	225	825
65	18	4225	324	1170
$\sum x = 379$	$\sum y = 111$	$\sum x^2 = 22291$	$\sum y^2 = 1899$	$\sum xy = 6485$

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

$$= \frac{6485 - \frac{(379)(111)}{7}}{22291 - \frac{(379)^2}{7}}$$

$$= \frac{475.14}{1770.86}$$

$$\approx 0.27$$

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

$$= \frac{111}{7} - (0.27)\left(\frac{379}{7}\right)$$

≈ 1.33

Therefore the required answer is $\hat{y} = 1.33 + 0.27x$

Note: Award marks for correct use of their sums in the expressions for a and b.

$$\hat{y} = 1.33 + 0.27x$$

(c) The income for the household

$40 = 1.33 + 0.27(x)$
$x = (40 - 1.33)/0.27$
$x = K143.22$

(d) coefficient of determination = $\boldsymbol{r^2}$

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

$$= \frac{7(6485)-(379)(111)}{\sqrt{[7(22291)-379^2][7(1899)-111^2]}}$$

$$= \boldsymbol{\frac{3326}{3471.15} = 0.9581}$$

Coefficient of determination $\boldsymbol{r^2 = 0.9581^2}$

$$r^2 = 0.92$$

SOLUTION FOUR

(a)

Quarters (t)	Sales (y)	Four Moving total	Quarterly moving average $(\hat{y})$
1	110		
2	135		
		494	
3	137		124
		498	
4	112		124.875
		501	
5	114		125.625
		504	
6	138		125.625
		509	
7	140		128
		515	
8	117		129.125
		518	
9	120		129.875
		521	
10	141		130.25
		521	
11	143		130.125
		520	
12	117		130.125
		521	
13	119		
14	142		

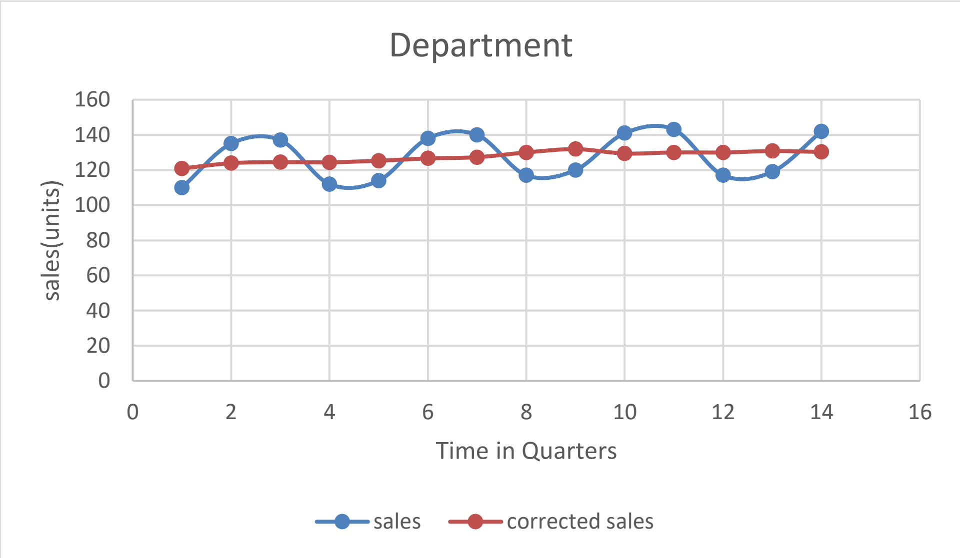
(b)

The sales corrected for seasonal movements

Quarters	Sales	Seasonal indices	Corrected sales
1	110	0.91	120.9
2	135	1.09	123.9
3	137	1.10	124.5
4	112	0.90	124.4
5	114	0.91	125.3
6	138	1.09	126.6
7	140	1.10	127.3
8	117	0.90	130.0
9	120	0.91	131.9
10	141	1.09	129.4
11	143	1.10	130.0

12	117	0.90	130.0
13	119	0.91	130.8
14	142	1.09	130.3

(c)



(d)

Both sales and corrected seasonal movement show a steady increase. Seasonal patterns are well marked and continue throughout the whole period. Adjustments to seasonal variations were very small, leading to the conclusion that there were very little residual variations other than random factors.

SOLUTION FIVE

(a)

(i). $P(F) = \frac{185}{355} = \frac{37}{71}$

(ii) $P(CMM) = \frac{75}{355} = \frac{15}{79}$

(iii) $P(F|Koni) = \frac{55}{100} = \frac{11}{20}$

(iv) $P(\ Monga|Male) = \frac{50}{170} = \frac{5}{17}$

(b) (i)

$$S_k = \frac{3(\bar{x} - M_d)}{\sigma}$$

$$\bar{x} = \frac{(\sum x)}{n} = \frac{40}{5} = 8$$

$$\sigma = \sqrt{\frac{\sum x^2}{n} - \bar{x}^2}$$

$$\sigma = \sqrt{\frac{330}{5} - 8^2}$$

$$\sigma = 1.41$$

(ii) Median:

K6, K7, K8, K9, K10

$$Median = 8$$

$S_k = \frac{3(8-8)}{1.41} = 0$

The distribution of the data is symmetrical.

SOLUTION SIX

(a) Let A, B and C be the respect costing departments, then $P(A) = 0.1, P(B) = 0.2,$ and $P(C) = 0.3$

(i) The required probability is $1 - P(none) = 1 - (,9)(.8)(.7) = 1 - 0.504 = 0.496$

(ii) Probability of one and only one computer error is $P(A) \times P(\bar{B}\ ) \times P(\bar{C}) + P(\bar{A}) \times P(B) \times P(\bar{C}) + P(\bar{A}) \times P(\bar{B}) \times P(C)$

$= (0.1)(0.8)(0.7) + (0.9)(0.2).7) + (0.9)(0.8)(0.3) = 0.056 + 0.126 + 0.216 = 0.398$

(b) $\mu = 1000,$ $\sigma = 200$ are given. Then,

(i) $P\left(Z < \frac{700-1000}{200}\right) = P(Z < -1.5) = 0.5 - 0.4332 = 0.0668$

(ii) $P\left(\frac{800-1000}{200} < Z < \frac{1250-1000}{200}\right) = P(-1 < Z < 1.25) = 0.3413 + 0.3944 = 0.7357$

(iii) $P\left(Z > \frac{1400-1000}{200}\right) = P(Z > 2) = 0.5 - 0.4772 = 0.0228$

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA1.3: BUSINESS ECONOMICS

TUESDAY, 14 DECEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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   Section A: Ten (10) compulsory multiple choice questions.
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   Plus Four (4) scenario questions. Attempt any Three (3) questions.

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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 The problem of scarcity in economics:

A. Exists only in economies which rely on the market mechanism.
B. Could be eliminated if we force prices to fall.
C. Means that there are shortages of some goods.
D. Exists because there are insufficient resources to satisfy human wants.

(2 marks)

1.2 Which of the following events would shift the demand curve for good X to the right?

A. An increase in the price of Good X.
B. An increase in the price of a substitute good.
C. An increase in the price of a complementary good.
D. An increase in the cost of labour.

(2 marks)

1.3 If the cross–price elasticity of demand between goods X and Y is positive then:

A. X and Y are complements.
B. X and Y are substitutes.
C. The demand for X and Y are both price elastic.
D. The demand for X and Y are both price inelastic.

(2 marks)

1.4 Which of the following statements is FALSE?

A. In monopolistic competition, supernormal profits cannot be made in the long run.
B. First degree price discrimination would allow the monopolist to produce the socially efficient level of output.
C. Collusion may occur between firms in oligopolistic competition.
D. A firm in perfect competition faces a perfectly inelastic demand curve.

(2 marks)

1.5 Suppose that the Bank of Zambia decides to sell government bonds on the open market. This will result in:

A. The money supply increasing, interest rates decreasing, and investment increasing.
B. The money supply decreasing, interest rates decreasing, and investment increasing.
C. The money supply decreasing, interest rates increasing, and investment increasing.
D. The money supply decreasing, interest rates increasing, and investment decreasing.

(2 marks)

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

A. Unemployment.
B. Inflation.
C. A fiscal budget deficit.
D. Stagflation. (2 marks)

1.7 The labor force is made up of:

A. Those employed.
B. Those unemployed and not looking for work.
C. Those unemployed and looking for work.
D. Both A and C. (2 marks)

1.8 If the simple multiplier is 4 and there is a K10 billion increase in investment spending, then equilibrium income will _____ and the marginal propensity to spend equals ____.

A. decrease by K40 billion; 0.75
B. decrease by K10 billion; 0.25
C. increase by K40 billion; 0.75
D. increase by K10 billion; 0.25

(2 marks)

1.9 Which of the following would NOT be included in the current account of a country's balance of payments?

A. The purchase of shares in a Zambian company by foreign investors.
B. Property income from abroad.
C. Transfer payments
D. Exports of services. (2 marks)

1.10 Which of the following is least likely to lead to an increase in long run economic growth?

A. An increase in the money supply.
B. An increase in capital investment expenditure.
C. An increase in education expenditure.
D. An increase in research and development expenditure.

(2 marks)

[Total: 20 Marks]

SECTION B

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

QUESTION TWO - (COMPULSORY)

In order to maximize profits or shareholder wealth, Managers must use the information that they have relating to demand and costs in order to determine strategy regarding price and output, and other variables. However, managers must also be aware of the type of market structure in which they operate, as this has important implications for strategy. This applies both to short-run decision-making and to long-run decisions on changing capacity or entering new markets.

It is useful to start by explaining the characteristics of markets and different types of market structure, with a general examination of the relationships between structure, conduct and performance. The four main types of market structure are then discussed and analyzed in terms of their strategic implications.

Required:

(a) With the aid of well-labelled diagrams, explain each of the following short-run equilibrium positions of a firm operating under a Perfectly Competitive Market Structure.

- (i) A firm earning supernormal profit (4 marks)
- (ii) A firm incurring an economic loss (4 marks)
- (iii) A firm making normal profit (4 marks)

(b) Using well labelled diagrams, distinguish between the demand and supply facing an individual firm and the demand and supply facing the industry under Perfect Competition.

(4 marks)

(c) Explain any two (2) reasons why the Zambian Government put price floors on some agricultural products like maize, wheat, and soya beans: (4 marks)

[Total: 20 Marks]

QUESTION THREE

The role of the market in allocating resources differs vastly among countries. In command economies, resources are allocated by central government planning. In the free market economies there is virtually no government regulation of the consumption, production and exchange of goods. In between lies the mixed economy, where market forces play a significant role but the government intervenes extensively. Most economies rely heavily on markets and prices to allocate resources between competing uses. The interplay of demand and supply determines the quantity produced of a given good or service and the price at which it is bought and sold. Markets determine prices that ensure that the quantity supplied is equal to the quantity demanded.

Required:

(a) Draw supply and demand curves, showing the equilibrium price and quantity. Label the diagram. (4 marks)

(b) Explain the terms excess demand and excess supply. (4 marks)

(c) Show, by drawing new curves, the effect of the following on the equilibrium point:

- (i) Consumer's income increases (assuming it's a normal good). (3 marks)
- (ii) The price of a substitute good rises. (3 marks)

(d) Outline any three (3) reasons for Government intervention in the economy.

(6 marks)

[Total: 20 Marks]

QUESTION FOUR

Zambia's annual real Gross Domestic Product (GDP) growth rate between 2000 and 2014, averaged 6.8%. The GDP growth rate slowed to 3.1% per annum between 2015 and 2019, mainly attributed to falling copper prices and declines in agricultural output and hydro-electric power generation due to droughts. In 2019, economic growth declined significantly, from 4% (2018) to 1.4%. The services sector remained the country's key driver of growth, growing by 3.5% in 2019, but primary and secondary sectors decreased significantly.

The COVID-19 (Coronavirus) pandemic has exacerbated Zambia's macroeconomic vulnerabilities. The country is Africa's second largest copper producer; depressed commodity markets have pushed copper prices down by about 14% through May 2020. Domestically, increased number of COVID-19 cases and related social distancing measures could overwhelm the health system and result in massive business and job losses, especially in the urban informal sector. (World Bank group, 2020)

Required:

(a) Define the term 'Economic Growth'. (2 marks)

(b) Outline any four (4) sources of economic growth for a nation. (8 marks)

(c) Explain any two (2) economic problems experienced as a result of Covid-19 pandemic. (4 marks)

(d) Explain the state in which Zambia's economy would be if there is continued decline in economic growth. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Mr Banda is a young entrepreneur engaged in tomato farming on a 1 acre piece of land in Lusaka West. Mr Banda practices modern agricultural techniques to maximize the yields from the use of the scarce resources of land and labour. To achieve this goal he has learnt to rely on statistics. He therefore collects data on the value of output (Total Product) for each land-labour combination. With this information, he is able to calculate Marginal Product of Labour and the Average Product of Labour. Armed with these figures, Mr Banda is able to make important production decisions like how many employees to hire so as to achieve his goals.

The table below shows data he collected during his last project:

Labour Force (L)	Capital (K)	Total Product (TP)
1	20	20
2	20	54
3	20	81
4	20	104
5	20	125
6	20	138
7	20	147
8	20	152
9	20	153
10	20	150

Required:

(a) Complete the table by calculating the Marginal Product of Labour (MP_L) and Average Product of Labour (AP_L) (5 marks)

(b) Using a range of -20, 0, 20, 40,..........180 on the Y-axis and 1, 2, 3 ....10 on the X-axis for labour, Sketch the graph for TP, MP_L and AP_L (6 marks)

(c) From the graph, explain the relationship between MP_L and AP_L curves. (3 marks)

(d) How many workers should Mr Banda hire in order to achieve his goal? (2 marks)

(e) Using the scenario given above, explain the Law of Diminishing Marginal Product. (4 marks)

[Total: 20 Marks]

QUESTION SIX

Zambia is open to foreign trade, which accounts for 75.7% of the country's GDP (World Bank, 2018). Zambia's trade policy aims at diversifying her economy through privatization programs and the expansion of its export base. The country is a member of COMESA and has signed Interim Economic Partnership Agreements (Interim EPAs) with the European Commission. The country became a member of the WTO in 1995. Certain products such as crude oil, medical supplies and fertilizers are exempt from import duties. The country mainly exports copper and other minerals (about three-quarters of total exports), while petroleum products, copper, machinery and transport equipment are the main imported products.

Required:

(a) List any four (4) benefits that Zambia enjoys by being open to foreign trade. (4 marks)

(b) Outline any three (3) benefits for member countries of COMESA. (6 marks)

(c) Explain why certain products, such as, crude oil and medical supplies are exempted from import duties. (4 marks)

(d) What justification can you give for trade protection? (6 marks)

[Total: 20 Marks]

END OF PAPER

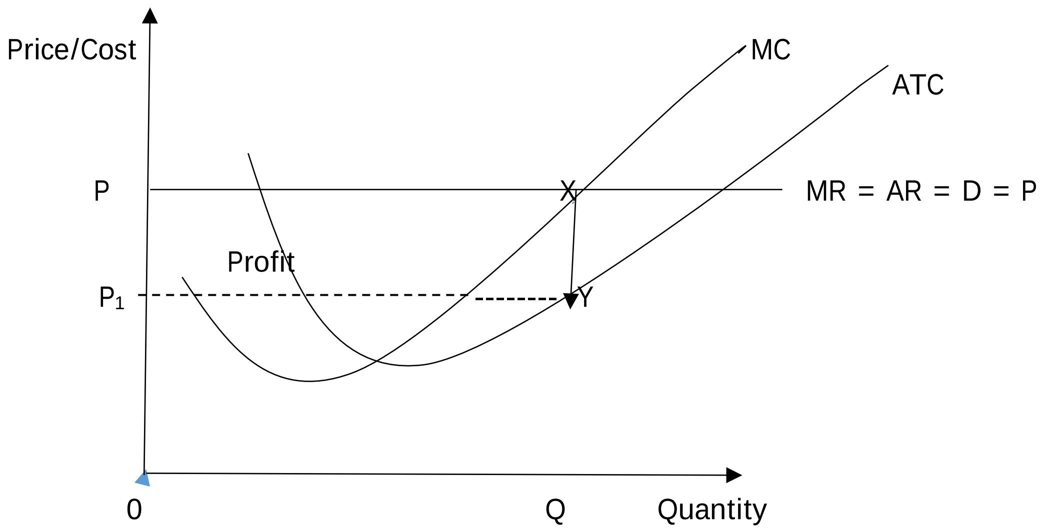
CA 1.3 BUSINESS ECONOMICS SUGGESTED SOLUTIONS

SOLUTION ONE

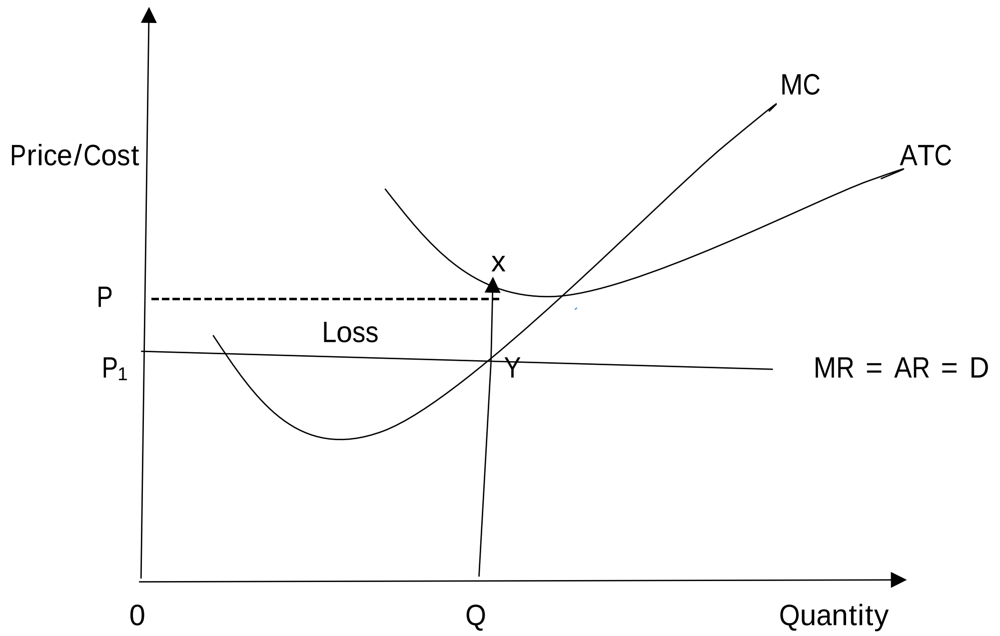
1.1 D
1.2 B
1.3 B
1.4 D
1.5 D
1.6 B
1.7 D
1.8 C
1.9 A
1.10 A

SOLUTION TWO

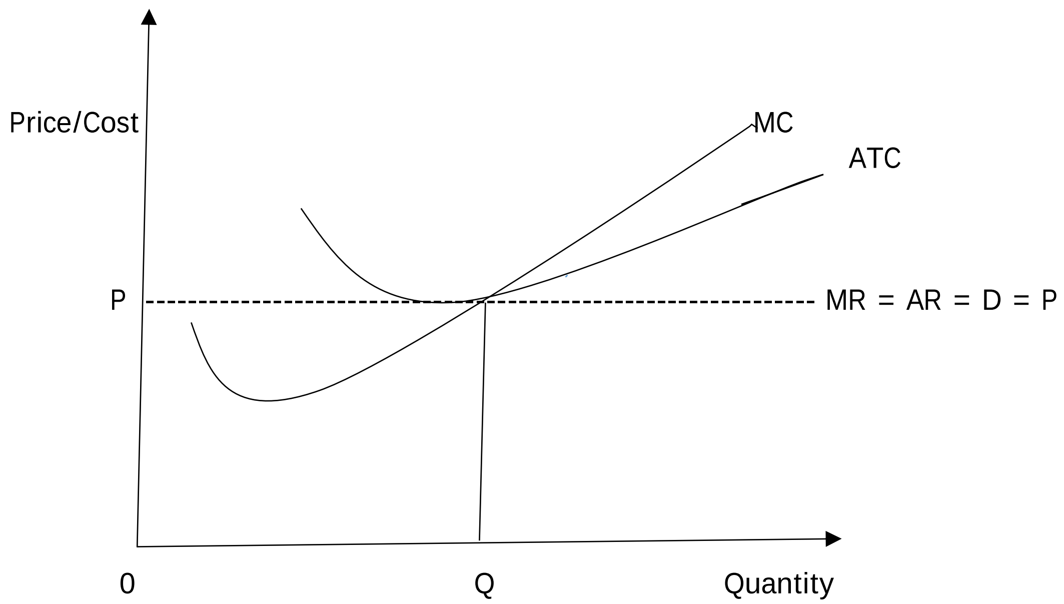
a) To illustrate profit maximization we need the ATC curve, the marginal cost curve and the marginal revenue curves
   i) For a perfectly competitive firm, profit is maximized at point where MR = MC = P. The marginal cost curve intersects the ATC curve at a minimum point. To show graphically the total profit, a line is extended from X to Y to touch the ATC curve. Total profit is the area $PXYP_1$. For a company maximizing profit this can be shown as follows:



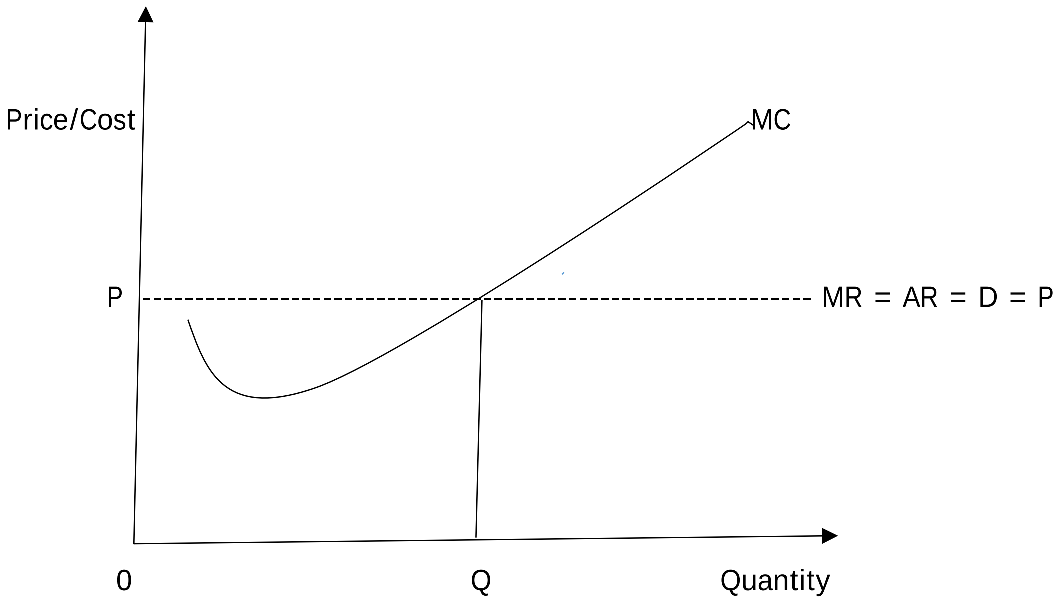
ii) A firm incurring an economic loss will minimize the loss by producing at a point where MR = MC = P. This occurs at point Y. From this point, a line is extended upwards to touch the ATC curve at X. Total loss is represented by the area $PXYP_1$ as shown below:



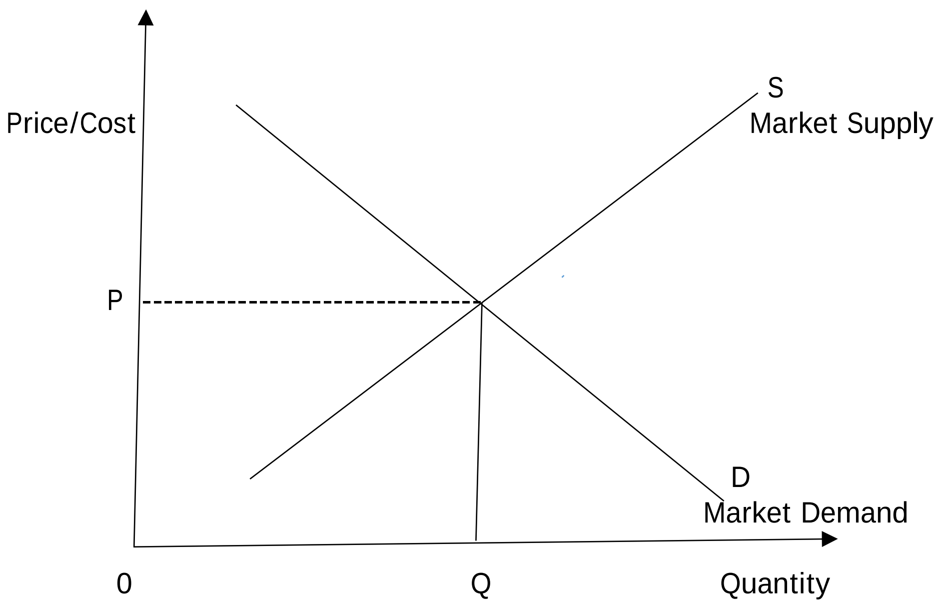
iii) Firm making normal profit, MC = MR = ATC = AR =D. That is, the MC, ATC and MR all intersect at the same point. This occurs due to freedom of entry and exit in a perfectly competitive market structure.



b) The demand curve facing an individual firm is a horizontal straight-line which is perfectly elastic. This is because firm operating in this market structure are price-takers and have absolutely no influence whatsoever over the price. Meanwhile, the supply curve is that portion of the MC curve above the price line as shown below:



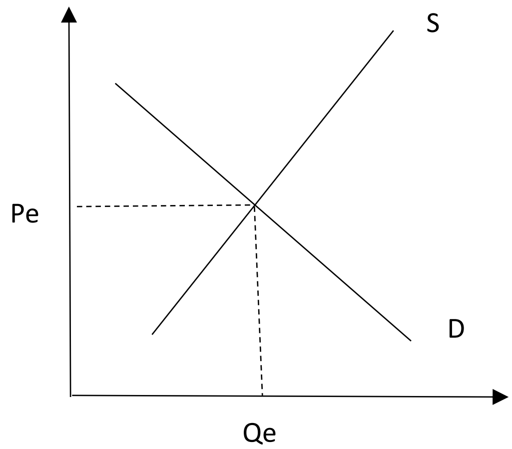
For the industry as whole, the demand curve is downward sloped to the right in line with the law of demand which states that, 'the lower the price the higher the quantity demanded and vice versa'. Meanwhile, the market supply curve is upward sloping to the right in line with the law of supply, which states that, 'the higher the price, the higher the quantity supplied and vice versa' as shown below:



c) A price floor is a government-mandated price that exists above the market's equilibrium price; price floors result in a surplus of production. Government may intervene in pricing certain agricultural products for the following reasons:
    - To stabilize farmer incomes and encourage farmers to continue farming whether there are bumper crops or droughts
    - To provide a steadier flow of agricultural products at relatively stable prices
    - To stabilize the amount of income that households need to spend on food.

SOLUTION THREE

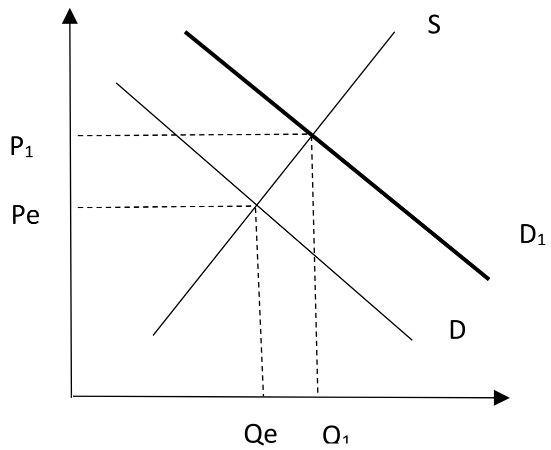
a)



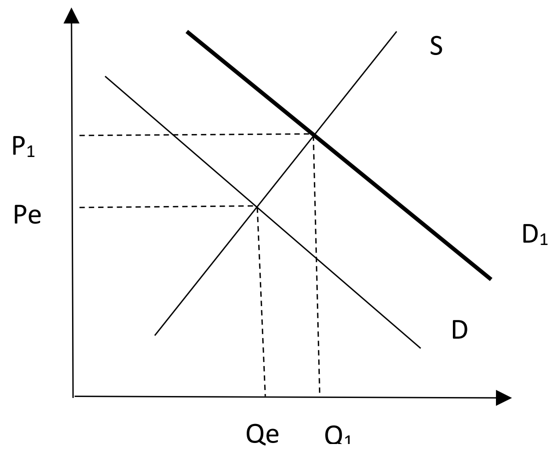
b) Excess demand and supply

- Excess supply is the situation where the price is above its equilibrium price. The quantity supplied by the producers is higher than the quantity demanded by the consumers.
- Excess demand is the situation where the price is below its equilibrium price. The quantity supplied is lower than the quantity demanded by the consumers.

c)



Consumers' incomes rise



price of substitute good rises

i) Assuming we are dealing with a normal good, when consumer's incomes rise, the demand for the good in question will increase. This will shift the demand curve to the right. This will lead to a higher equilibrium price and quantity (P_1, Q_1).

ii) When the price of a substitute good rises, all things being equal, the demand for the good in question will increasing, because it is now relatively cheaper than the substitute good. This will shift the demand curve to the right. This will lead to a higher equilibrium price and quantity (P1, Q1).

d) Reasons for government intervention

- To correct for market failures; Governments intervene in markets to address inefficiency. In an optimally efficient market, resources are perfectly allocated to those that need them in the amounts they need. In inefficient markets that is not the case; some may have too much of a resource while others do not have enough. Inefficiency can take many different forms. The government tries to combat these inequities through regulation, taxation, and subsidies.

- To achieve a more equitable distribution of income and wealth; Governments intervene in markets to promote general economic fairness. Government often try, through taxation and welfare programs, to reallocate financial resources from the wealthy to those that are most in need. Intervention may also include putting in place employment laws to protect certain segments of the population.
- To improve the performance of the economy; Governments intervene to minimize the damage caused by naturally occurring economic events. Recessions and inflation are part of the natural business cycle but can have a devastating effect on citizens. In these cases, governments intervene through subsidies and manipulation of the money supply to minimize the harsh impact of economic forces on its constituents.

SOLUTION FOUR

a) Economic Growth is the long-term expansion of the productive potential of the economy.
b) Sources of Economic Growth

Natural Resources:
The important resources here are arable land, oil and gas, forests, water, and mineral resources. More land and raw materials should lead to an outward shift of PPF and thus an increase in potential growth. However, quantity of natural factors such as land and raw materials like metals and oil could be small and even absent in some countries and the quantity cannot be easily increased. Fortunately, a country can still enjoy economic growth with modest natural resources provided it could obtain them efficiently from abroad; i.e. through trade.

Human Resources:
Labour inputs consist of quantities of workers and of the skills of the work force. The bigger the population, larger is the labour force and further out is the PPF. However, the quantity of labour alone is not enough to guarantee economic growth. What is more important is that quality of the labour force, the human capital. Human capital is the attributes of an individual that contribute productively to economic activities. Human capital could refer to educational attainments, training and skills, entrepreneurship, and creativity. Human capital can be improved through formal education for children, vocational training, retraining, life-long adult education programme, better nutrition that improve mental concentration, better sanitation that reduces illness and thus absenteeism from school and improved basic healthcare that reduces preventable diseases.

Physical Capital
Physical capitals include factories, machineries, shops, malls, offices and motor vehicles. Cetera Paribus, higher savings rate can help to finance more physical capital investment. This productive investment would help move the PPF outward, thus economic growth.

The quality of physical capital can be improved by Research and Development, access to foreign technology and know-how, and improved vocational training.

Technological change

Technological change denotes changes in the processes of production or introduction of new products or services. Process inventions that have greatly increased productivity were the steam engine, the generation of electricity, the internal-combustion engine, the wide-body jet, the photocopier machine, and the fax machine. Fundamental product inventions include the telephone, the radio, the airplane, the phonograph, the television and the DVD player.

c) Problems as a result of Covid-19

- The closing down of the Victoria Falls, the country's main tourist attracting site, resulted in a slump in tourism, forcing the government to reopen it.
- The education, transport, catering and accommodation sectors were impacted particularly hard compared to others, with 85 percent of organizations working in the education sector reported to be completely closed
- The free-fall of the Kwacha, firstly, because of what is happening in China and elsewhere, in terms of reduced demand and the low price of copper, and its effect on the growth prospects on several larger economies. A substantial portion of our copper exports [usually] goes to China.

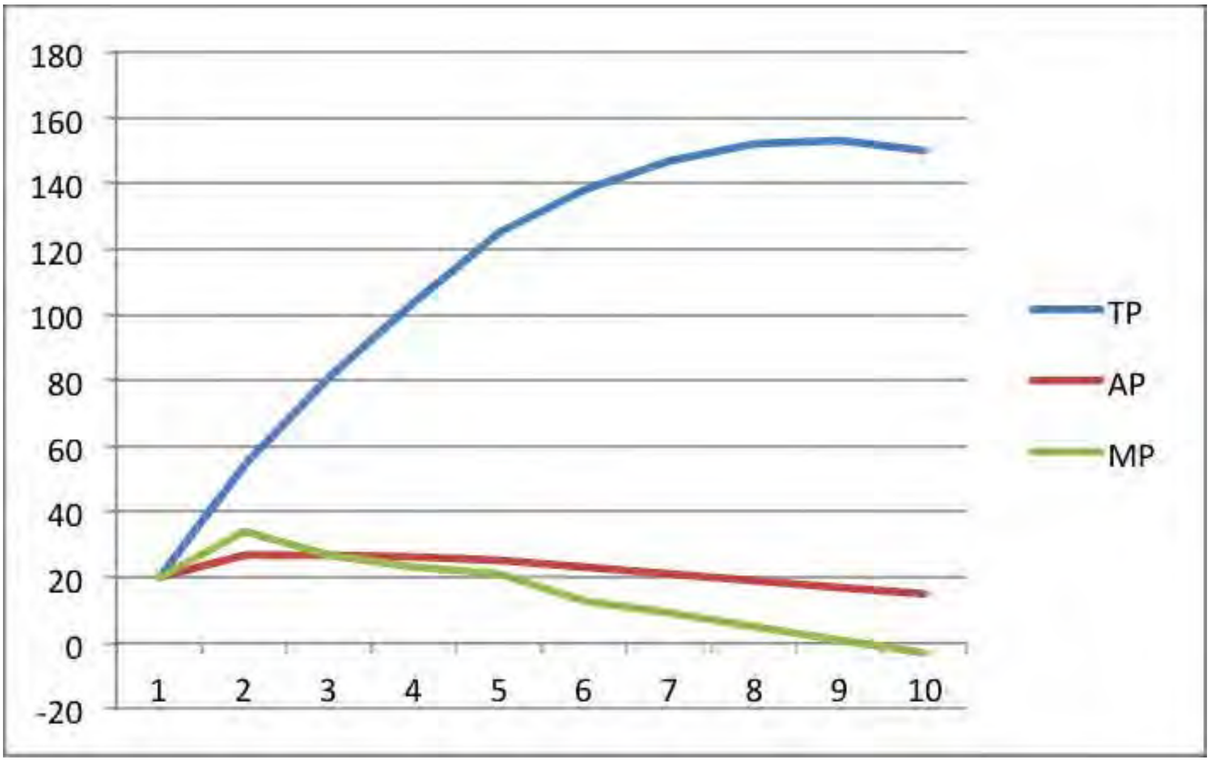
d) If Zambia continues to record a decline in economic growth, it would lead the economy into a recession. Recurring periods of negative growth are one of the most commonly used measures to determine whether an economy is experiencing a recession or depression.

SOLUTION FIVE

a) Table

Labour Force (L)	Capital (K)	Total Product (TP)	Average Product (AP)	Marginal Product (MP)	
1	20	20	20	0	
2	20	54	27	34	
3	20	81	27	27	
4	20	104	26	23	
5	20	125	25	21	
6	20	138	23	13	
7	20	147	21	9	
8	20	152	19	5	
9	20	153	17	1	
10	20	150	15	-3	

b)



c) The relationship is that they both start low but rise as more and more of workers are hired before falling continuously again
d) 9 workers
e) The Law of Diminishing marginal Product states that as more and more of workers are added to the fixed factor (1 acre of land), the marginal product of labour must eventually decline or diminish.

SOLUTION SIX

a) Benefits of foreign trade

- Greater Variety of Goods Available for Consumption:
- Efficient Allocation and Better Utilization of Resources:
- Promotes Efficiency in Production:
- More Employment:
- Consumption at Cheaper Cost:
- Reduces Trade Fluctuations:
- Utilization of Surplus Produce:

b) Benefits of COMESA

COMESA offers its members and partners a wide range of benefits which include:

- A wider, harmonised and more competitive market
- Greater industrial productivity and competitiveness
- Increased agricultural production and food security
- A more rational exploitation of natural resources
- More harmonised monetary, banking and financial policies
- More reliable transport and communications infrastructure

c) Why are goods exempted

- To promote industrial growth
- On moral grounds, when goods are damaged.
- To make goods such as medical supplies affordable because they are essential

d) Justification for trade protection

- Externalities and market failure: Protectionism can be used to internalize the social costs of de-merit goods. Or to correct for wider environmental market failures.
- Protection of jobs in home industries and an improvement in a country's balance of payments on the current account.
- Protection of strategic industries: A government may wish to protect employment in strategic industries, although value judgments are involved in determining what constitutes a strategic sector.
- Anti-dumping duties: Dumping is a type of predatory pricing behaviour and a form of price discrimination. Goods are dumped when they are sold for export at less than their normal value.
- Fledging industry argument: Certain industries possess a possible comparative advantage but have not yet exploited enough economies of scale. Short-term protection allows the infant industry to develop its advantage at which point protection could be relaxed, leaving an industry to trade more freely on the international market.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY, 17 DECEMBR 2021

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 of the following is not a stage of the law-making process?

A. First (1st) reading.

B. Second (2nd) reading.

C. Submissions stage.

D. Committee stage. (2 marks)

1.2 Which of the four (4) below does not form part of the misrepresentation classifications?

A. Negligent Misrepresentation.

B. Non-operative Mistake.

C. Fraudulent Misrepresentation.

D. Innocent Misrepresentation. (2 marks)

1.3 There are numerous remedies for breach of contract available for a Buyer under the Sale of Goods Act, which one of the following is not?

A. Recovery of the price.

B. Damages for non-delivery.

C. Exercising a lien over the Goods.

D. The right to reject the Good. (2 marks)

1.4 In terms of *section 23* and the *2nd schedule* to the *Employment Code Act*, three of the following must form part of a written contract, except one.

A. The place of origin of the Employee.

B. Marital status of the Employee.

C. The name of the Employer and the Employee.

D. Any other particulars necessary for identification purposes. (2 marks)

1.5 Three (3) of the following form part of the types of authority akin to an Agent, save for one. Identify it.

A. Direct Authority.
B. Express Authority.
C. Apparent Authority.
D. Implied Authority (2 marks)

1.6 Which one of the following does not constitute a Defense under the Law of Torts?
A. Illegality.
B. Necessity.
C. Self-help.
D. Consent. (2 marks)

1.7 Three (3) of the four (4) below are business Organizations, except one. Identify the odd one out.

A. Statutory Corporations.
B. Partnerships.
C. Non-Governmental Organizations.
D. Cooperatives. (2 marks)

1.8 Under a Partnership, there are numerous kinds of Partners, which one is not?
A. Associate Partner.
B. Salaried Partner.
C. General Partner.
D. Dormant Partner. (2 marks)

1.9 Companies hold various meetings in the course of their business, which one of the following does not form part of such meetings?
A. Annual General Meeting.
B. Shareholders Meeting.
C. Extraordinary General Meeting.
D. Class Meeting. (2 marks)

1.10 A person shall not be a Director if he or she is?

A. Has been declared by a Court of competent jurisdiction to be of unsound mind.

B. Is disqualified from being a Director.

C. Is an not discharged Bankrupt.

D. Has, preceding his appointment served a prison sentence of at least five (5) years.

(2 marks)

[Total: 20 Marks]

SECTION B

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

Attempt any three (3) questions out of the remaining four (4)

QUESTION TWO - (COMPULSORY)

Banda has been doing business in his personal capacity for some time. However, a big contract has come his way which requires a company to execute. He has started the process of registering a company but before the company is registered, he has entered into a contract in the name of the yet to be registered company. Making reference to statute and case law, advice Banda on the following:

Required:

(a) Explain pre-incorporation to him (6 marks)

(b) Explain the consequences on pre-incorporation to Banda. (7 marks)

(c) Explain the position of the law on such contracts in the above serial (7 marks)

[Total: 20 Marks]

QUESTION THREE

African Trading Limited has since fallen on hard times and its Creditors and sadly itself too are considering winding up the Company through the Courts in order to be able to meet certain obligations. A Company called *Synergy Corporate Advisory Limited* have since been appointed as Independent Consultants on this matter.

The Company is also worried about the contracts it currently has running, but has been unable to effectively perform due to financial constraints, which in some instances has resulted into some the contracts being abruptly discharged due to circumstances beyond their control.

As if the above wasn't enough, the Company has received over 20 claims by third Parties who have sued the Company for the negligent actions of its Employees, arguing that they are vicariously liable.

Distressed and distraught, the Directors of *African Trading Limited* have now stormed your Office for assistance. Please advise.

Required:

(a) Discuss with the Directors in your office the procedure for winding-up by the Court. (10 marks)

(b) List for the Directors at least four ways in which a contract can be discharged. (4 marks)

(c) Explain to the Directors the concept of vicarious liability. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Distinguish by-laws from statutory laws (6 marks)

(b) Explain the Jurisdiction of the Supreme Court (4 marks)

(c) State the permitted use of premiums (3 marks)

(d) Define a floating charge (3 marks)

(e) Explain the duties of company secretary before the meeting (4 marks)

[Total: 20 Marks]

QUESTION FIVE

As *Chuma Musonda* was driving back home from work, he received a text message from his wife informing him that his son was unwell and he acted swiftly and decided to text back in order to ascertain the urgency of the situation, all of this whilst he was driving on the high way. Unfortunately, *Chuma* hit into another car. He has since been charged with dangerous driving by the Officers from the *Road Transport & Safety Agency* who first arrived on the scene. The owner of the Landcruiser he had hit has also sued him for negligence in the High Court for Zambia.

Required:

(a) Explain to *Chuma* what the elements of negligence are. (10 marks)

(b) Explain the following terms:

(i) General Partner. (2.5 marks)

(ii) Salaried Partner. (2.5 marks)

(iii) Partner by holding out. (2.5 marks)

(iv) Dormant Partner. (2.5 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Distinguish between a partnership and an incorporated company. (6 marks)

(b) Explain bankruptcy (2 marks)

(c) Discuss the circumstances that would give rise to a court order bankruptcy.

(4 marks)

(d) Explain a receiver and their power in bankruptcy (5 marks)

(e) Explain what 'statement of affairs' in bankruptcy means (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.4: COMMERCIAL AND CORPORATE LAW SUGGESTED SOLUTIONS

SOLUTION ONE

1. C
2. B
3. A
4. C
5. D
6. A
7. C
8. A
9. B
10. A

SOLUTIONS TWO

(i) What Banda has done is what in company law is known as pre-incorporation contract. These are contracts that sponsors enter into with a third party in the name of the company that is yet to be registered. The Companies Act 2017 provides for the same.

(ii) The Companies Act 2017 imposes a liability and benefits arising from such a contract on the persons entering into such a contract purporting to enter into the contract on behalf of the company yet to be registered. A person or persons that enter into such contracts are therefore entirely liable for breaches arising from that contract but are equally entitled to the benefits arising from the successful performance of the contract.

(iii) The law recognizes such contracts to be valid and all the parties are bound to the contract whose breach entitles the aggrieved party to bring an action as though it was a contract with a company that is already in existence. The Companies Act gives power to a company once registered to ratify the contract and once that is done, the benefits that accrued to the persons that entered into the contract in the name of that company then transfer to the company which then would bear all the liabilities and benefits as if it existed at the time the contract was entered into.

SOLUTION THREE

i. Procedure of winding up a Company by the Court

Since time immemorial, it has always been the position of the law that a company is a person at law, and as such has the attributes of a human being. It would however appear, and logically so that a company being an *artificial person* at law, it cannot certain things as a real human being do such as; die. The legal terminology for the death of a company is what termed as being; *Winding up of a Company*.

A Company may be would-up in so many ways, however, for purposes of this discussion, the focus will be on the winding up through/by the Court process.

A winding up by the Court will occur when the Directors of the Company make a statutory declaration before the Court in which they declare that the Company will not be able to settle and/or pay its debts within a twelve months period. Once satisfied as to the contents of the declaration, the Court will then make an Order to wind-up the Company. The effective date of a winding up by the Court is traced back to when the petition for dissolution is actually presented to the Court, save for instance in which there was already an earlier resolution regarding a voluntary dissolution.

Prior to the hearing of the petition for dissolution, the petition ought to have been advertised for a clear 7 days, once in the Gazette and once in a widely circulated Newspaper. Once the Court has heard the petition, the Court can either make any Orders it deems fit in the circumstance, or it may dismiss the petition altogether.

Suffice it to note that there mere fact that a petition for the dissolution of a company has been presented does not then entail that the Court is bound to make an Order, the Court upon reviewing the circumstances of the case may Order the Petition holds off for a while.

ii. A contract can, at law be discharged in any one of the following ways:

1. Performance.
2. Breach.
3. Frustration.
4. Agreement.

iii. Ordinarily, one that occasions a particular tortious act against another should be primarily responsible for such an act, however, there is at law a principle known as *Vicarious Liability*. This principle makes it possible at law for a Third Party to be responsible for the acts of another person.

The above can be illustrated in an *Employer-Employee* relationship, an Employer may in certain instances be held responsible for the acts of his Employee undertaken in the course of his duties.

The foregoing principle enjoys various justification, one of which is that; liability ought to be incurred by those with a deeper pocket, and that a Plaintiff is given a 2nd Defendant from whom he may have recourse against, one who is actually better placed to meet the Order of a judgment.

It is important to note that the Employer will not be *Vicariously liable* if the acts complained of were outside the scope of his Employer's duties.

SOLUTION FOUR

a) Statutory instruments are passed on by ministers and are the main form of delegated legislation. They are passed in times of emergencies and or when Parliament is not sitting. Statutory Instruments are not restrictive as they can apply in a district, province or the entire nation whereas By-laws are made by local authorities under powers given by parliament. By lays are restricted to a local authority or have juristic restrictions in terms of the territory.

b) The Supreme Court is the highest court of Appeal in the land and has jurisdiction to hear appeals from the Court of Appeal and jurisdiction conferred on it by other laws. The Supreme Court is bound by its decisions but can depart from their jurisdiction once reasons to do so have been raised.

c) To pay the following;
- Fully paid shares under a bonus
- Issue expenses and commission in respect of new share issue
- Any premium due

d) This is a charge on a class of assets of a company, present and future. Which class is in the ordinary course of the company's business until the holders enforce the charge

e)
1. Summon meetings
2. prepare the agenda
3. provide chairman with particulars,
4. get together all reports.

SOLUTION FIVE

(a) First and foremost, the Tort of negligence is one that focuses on certain acts of carelessness with regards to the conduct of a particular person, which conduct occasions damage upon a third Party. Suffice to note however that this Tort, unlike defamation is not actionable per se, there are certain elements to be proved, these are:

1) Duty of care

   A person pursing an action for negligence must be able to demonstrate that the person whom he claims against had a duty care, *vis-s-vis* himself, which duty of care must have arisen either as a result of statute or common law.

2) Breach of duty of care

   Upon satisfying the first element which is that a duty of care exists in favor of the aggrieved Party, what then follows is that the latter must then demonstrate that the said duty of care has been breached.

3) Damage

   Last but not the least, an aggrieved Party having proved that a duty of care exists, and that such a duty has been breached, the last thing to be proved is that; as a result of the foregoing, damage has been suffered.

   It is important to note however that the elements of negligence as above are consequential upon one another, meaning that upon the failure to prove any one of the said elements, the claim falls off.

(b) It goes without saying that a Partnership is comprised of Partners of the Firm, however, the said Partners are of different classifications and types.

1. General Partner

   This is your everyday Partner is in fact entitled to the day to day running of the business, unless a contrary agreement exists between/amongst the Partners themselves.

2. Salaried Partner

   A salaried Partner is one that holds a status that is more or less akin to an Employee of the business. This type of a Partner is free to leave at will, provided he has given notice, and he is not a Partner properly so called for dissolution purposes.

3. Partner by holding-out

This form of Partnership arises as a result of acquiescence, in the sense that were a Partner allows a Firm or business to use his name for letter-heading and for the purposes inspection, such a one becomes a Partner by *holding-out*. Further, were a Partner of a business has retired but does not take steps to have his name removed from the letterhead, he or she will be a Partner by *holding-out*.

4. Dormant Partner

A dormant Partner is one that merely contributes towards the capital of the Firm or business and has no active participation in the business.

Suffice to note too that the Act does not in fact recognize this kind of a Partner.

SOLUTION SIX

(a) A partnership is established under the Partnership Act 1890. It requires two or more persons coming together with a common purpose to form a business with intention to profit. Partnerships are unlimited liability companies meaning, the partners in the ship are all liable jointly and severally for the debts and wrongs of the company. A partnership will usually dissolve in event of death of anyone of the partners.

Conversely, an incorporated company is registered under the Company's Act. It has limited liability characteristics meaning, sponsors cannot be held liable for the debts and wrongs of the company but the company itself. A company evolves into an artificial person able to sue and be sued in its own capacity.

(b) Bankruptcy is defined as; the state of a person who has been adjudged by a court to be insolvent. Meaning, having more debts than assets.

(c) Pursuant to section 20 of the Bankruptcy Act, the court may adjudge someone bankrupt in the following events:

(i) Where the debtor applies to the court that they be declared bankrupt
(ii) On the application of the official receiver, and;
(iii) On the application of creditors pursuant to section 6(1)(a)(b) of the Bankruptcy Act.

(d)A receiver is a person appointed by the court to protect property during the course of liquidation. A receiver is appointed to take into account interests of creditors in liquidation. The powers of the receiver include:

(i) Power over all the assets of the company in liquidation
(ii) Power to appoint or terminate the appointment of a special manager of the debtor's estate or business in the interest of the creditors according to section 12(1) of the Act
(iii) Power to appoint a duty official receiver
(iv) Power to administer oaths.

(e) A statement of affairs is a document required to be made by the debtor pursuant to section 16 of the Act. The statement of affairs shows the assets and liabilities and the details of the debtor's creditors. In the case of a company, a company in liquidation is required to prepare a statement of affairs by the date of winding up which should indicate the assets, debts and liabilities. Names and addresses of creditors, securities held by each of the creditors, dates on which securities were given and any other information as requested by the liquidator. Per section 287 of the Company's Act.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 13 DECEMBER 2021

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

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. Each question is allocated two (2) marks.

1.1 Sole proprietorship business owner has...

A. Restricted Liability
B. No Liability
C. Unlimited Liability
D. Limited Liability

(2 marks)

1.2 An organization running a business has the following attributes: the assets belong to the organization, it can create a floating charge over its assets, change in membership does not alter its existence, and members cannot transfer their interests to others. What type of organization is it?

A. A general partnership
B. A limited liability partnership
C. Private limited company
D. A public limited company

(2 marks)

1.3 External stakeholders of a company exercise their power via which of the following?

A. Payment of tax
B. Quality of goods
C. Size of contract
D. All of the above

(2 marks)

1.4 In an organization, the functional areas are:

A. Finance, production, and communications
B. Communications, production, and marketing
C. Marketing, communications, and finance
D. Production, marketing, and finance

(2 marks)

1.5 Which of the following actions will NOT help directors to protect themselves from non-compliance with their obligations and responsibilities?

A. Including a disclaimer clause in their service contracts
B. Seeking professional help
C. Keeping themselves fully informed about company affairs
D. Ensuring that regular management accounts are prepared by the company

(2 marks)

1.6 Which of the following is NOT a characteristic of an "Ideal bureaucracy" according to Weber (1864-1920)?

A. There should be a hierarchy of authority, from top management down to workers from the bottom
B. The promotion of individuals within the organization should be based on their achievement
C. There should be division of labor and specialization of work
D. Impersonal relations can lead to stereotyped behavior

(2 marks)

1.7 Everyone has three needs according to David McClelland (1917-1998) needs-based motivational model except

A. A need for achievement ('n-ach')
B. A need for authority ('n-pow')
C. A need for affiliation ('n-affil')
D. A need for satisfaction ('n-sat')

(2 marks)

1.8 Which one of the following reasons is correct according to Kotter and Schlesinger reasons why individuals may resist change?

A. Low tolerance to change
B. Implicit coercion
C. Negotiation
D. Understanding

(2 marks)

1.9 Which one of the following is an example of hygiene factors?

A. Interpersonal relations
B. A sense of achievement
C. Growth in job
D. Responsibility

(2 marks)

1.10 A well-designed job should provide the individual with five (5) core dimensions which contribute to job satisfaction. Which four (4) of the following statements are correct?

I. The task is perceived to have a role, purpose, meaning and value
II. The individual should have some discretion over some area of decision making
III. The integration of operations into a whole task
IV. The opportunity to exercise different skills and perform different operations

A. I, II AND IV
B. I, II AND III
C. I, III AND IV
D. I, II, III AND IV

(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.

QUESTION TWO - (COMPULSORY QUESTION)

The Chief Accountant calls you into her office and explains that there is a staffing establishment meeting very soon. She states that she will strongly support your recent request for a ZICA trainee to be recruited for your budgeting section. She also thinks that there is a strong possibility that approval will be given and so you should plan to undertake recruitment very quickly.

Required:

(a) Explain any three (3) functions of personal manager (6 marks)

(b) Explain the three (3) main stages of job recruitment and selection process. (12 marks)

(c) Define the term "Job description". (2 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Define perception. (2 marks)

(b) Describe the determinants of perception. (8 marks)

(c) Most Managers are worried and concerned about the informal organizations. Remind them about the five (5) benefits of the informal organizations. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) When people are appointed to leadership positions most of them fail because they think it is a platform for self-service more than service of others and benefit of the organization. Can you help those in such positions by explaining the following terms in leadership:

(i) Authority
(ii) Responsibility
(iii) Accountability (12 marks)

(b) Define empowerment. (2 marks)

(c) Explain the three (3) things that go with empowerment. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

'I cannot just move on like this anymore', Mwanza complains to his friend John. But what is the problem my friend Mwanza asked John, 'you have a nice job in auditing department and getting a good pay. 'Every day I go for work I kind of do the same type of work all the time. It has stopped exciting me anymore. I need the job that is challenging,' responded Mwanza.

Required:

(a) Define following:

- (i) job enrichment.
- (ii) Job enlargement
- (iii) Job rotation
- (iv) Job optimization (12 marks)

(b) Describe the four (4) key factors that will help in job enrichment. (8 marks)

[Total: 20 Marks]

QUESTION SIX

Max Weber was a social scientist who had an interest in organization. His contention was that the rational organization performed tasks with maximum coordination and efficiency, this will be an organization built around a highly orderly system with a rigid structure of authority that worked according to defined set of procedures, rules and regulations. Such systems promote smooth communication in the organization.

Required:

(a) Explain two (2) types of communication process in an organization. (10 marks)

(b) List down five (5) barriers of communication. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5: MANAGEMENT THEORY AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) Explain any three functions of personal manager

- Managerial functions
- Advisory functions
- Operative functions

(b) Explain the three main stages of job recruitment and selection process.

i. *Defining the requirements, such* as the preparation of Job descriptions, job specification and personal specifications

ii. *Attracting applicants,* this involves advertising or notifying people about the job vacancy in some way, or enlisting the help of specialist job recruitment agency, and then receiving applications from individual who are interested in the job.

iii. *Selecting,* the appropriate candidates for the job, from among the applicants through interviews or tests.

(c) Define the term "Job description".

Job description: is a statement of the component tasks, duties, objectives and standards of the job.

SOLUTION THREE

a) Is the fact that different people see things differently and human beings behave in the world not as it is but as they perceive or see it.

b) The following are the determinants of perception:
   - The context – people want to see what they want to see what is relevant to them in a situation
   - the nature of stimuli –our attention tends to be drawn to large contrasting unfamiliar moving and repeated stimuli
   - internal factors-our attention is drawn to stimuli that match our personality needs interests, expectations and so on.
   - Fear or trauma- people are able to avoid seeing things that they don't want to see thing that threatening to their security and self-image or painful t them.

c) The following are the benefits of informal organizations:
   - Employee commitment due to the meeting of the employee's social needs which contribute to moral and job satisfaction.
   - Knowledge sharing availability of information due to networks which will give employees wider perspective on their roles.
   - Responsiveness
   - Cooperation
   - Promote social interactions

SOLUTION FOUR

a)

- Authority is given to a person to make decisions; by virtue of the position they hold in the organization
- Responsibility is the ability of a person to discharge certain duties it is the obligation to do something
- Accountability means having to explain actions or performance to the person from whom authority has been delegated. managers are accountable to their superiors.

b) Empowerment means making workers and particularly work teams responsible for achieving and even setting work targets with the freedom to make decisions about how they are to be achieved.

c) Three (3) things that go with empowerment.

- Delayering-a cut in the number of levels and managers in chain of command, since responsibility previously held by middle managers is in effect being given to operational workers
- Flexibility-since giving responsibility to people closest to the products and customers encourages responsiveness and cutting out layers speeds the process.
- New technology-people need less supervision since they are knowledgeable. Better information system will also remove the mystique and power of managers as possessors of knowledge and information in the organization.

SOLUTION FIVE

a) The following are definitions of ways of improving job designs:
   i. Job enrichment is planned deliberate action to build greater responsibility, breadth and challenge of work into a job. (empowerment)
   ii. Job enlargement is the attempt to widen jobs by increasing the number of operations in which a job holder is involved
   iii. Job rotation- is the planned transfer of staff from one job to another to increase task variety.
   iv. Job optimization- a well-designed job should provide the individual with five core dimensions which contribute to job satisfaction.
      - Skill variety
      - Task identity
      - Task significance
      - Autonomy
      - Feedback

b) The following are the four key factors in job enrichment:
   - Permitting workers freedom and control over scheduling and pacing 0f their work as opposed to machine pacing
   - Avoid excessive work division, so that workers are able to undertake the full cycle of at task to achieve a complete service
   - Providing workers with tasks or jobs which challenge their abilities and make fuller use of their training expertise and skills
   - Giving workers greater freedom to work in self-managing teams with greater responsibility for monitoring their own performance and a minimum of direct super vision.
   - Providing workers with the opportunity to have greater direct contact with clients, consumers or users of product or service.

SOLUTION SIX

a. (i) Top-Down communication process: Information flows from the management down to employees.

(ii) Bottom-Up communication process: information flows from the employees to management.

b. (i) Lack of established communication system in the organization

(ii) Lack of organization structure

(iii) Personal differences among employees.

(iv) Language barriers

(v) Noise environment.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY, 15 DECEMBER 2021

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.

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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.

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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.

1.1 Which of the following key combination is equivalent to support the ability to undo?

A. Shift + P
B. Ctrl + V
C. Ctrl + Z
D. Shift + S

(2 marks)

1.2 What is the name of an information system that combines different analytical models to support both semi-structured and unstructured decision making?

A. Decision Support System
B. Management Information System
C. Executive Information System
D. Transaction Processing System

(2 marks)

1.3 Which of the following is a major role for Information System?

A. Planning process
B. Controlling purposes
C. Recording transactions
D. Supporting Business processes

(2 marks)

1.4 Which of the following data items will NOT be stored on a transaction record after close of business?

A. The item code
B. The price of the items
C. The transaction type
D. The quantity sold or returned (2 marks)

1.5 System reports that identify customers who have exceeded their credit limit is an example of which type of control?

A. Corrective control
B. Preventive control
C. Procedural control

D. Detective control (2 marks)

1.6 In a situation where you need information from another department, what is the most effective way of obtaining such information?

A. A Telephone

B. A letter

C. A memo

D. A report (2 marks)

1.7 State one item that is included under the introduction section of the report

A. Executive summary

B. Acknowledgement

C. Title page

D. Terms of reference

(2 marks)

1.8 Why doesn't a Memo contain addresses?

A. It is used for internal communication

B. Staff can easily be contacted within the organization

C. It is used for both internal and external communication

D. Staff can easily be contacted within and outside the organization

(2 marks)

1.9 Which of the following features of a business letter is optional?

A. Copies circulated

B. Addresses

C. Signature

D. Salutation (2 marks)

1.10 Which of the following is <u>NOT</u> a characteristic of graphical communication?

A. Can have high impact

B. Can be memorable

C. Can draw attention to change trends

D. Can be face-to-face (2 marks)

[Total: 20 marks]

SECTION B

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

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

QUESTION TWO - (COMPULSORY)

You have discovered a financial problem that will cause your company to default on payment of the loan your company got from Zambezi Financial Aid. This has come about because the letter you sent to the bank instructing them to pay Zambezi Financial Aid did not reach the bank on time. You need to inform Zambezi Financial Aid right away or your organization risks paying legal penalties.

Required:

(a) Explain the importance of the following parts of a business letter:

- (i) Opening paragraph
- (ii) Middle paragraph
- (iii) Closing paragraph

(6 marks)

(b) As the Manager of your company, write a letter to Zambezi Financial Aid requesting to defer the payment of the loan amounting to K200, 000. In your letter explain why the delay in the payment of the loan is unavoidable and when the payment will be done.

(14 marks)

[Total: 20 marks]

QUESTION THREE

(a) Mainframe computers are still being used in business today besides minicomputers, laptops, notebooks etc.

Briefly explain the area of business use and any two (2) advantages of each of the following:

Required:

- (i) Personal Digital Assistance (PDA) (4 marks)
- (ii) Mini computers (4 marks)

(b) Outline any two (2) advantages of cloud storage (2 marks)

(c) Moniques Investments is a retail shop that deals in assorted groceries. It gives a discount of 15% to all its customers who order goods of more than K650. The table below shows some of the regular customers.

	A	B	C	D	E
1	**Account No**	**Customer Name**	**Amount (K)**	**Discount**	**Net Sales**
2	10301	Nosiku	700		
3	10304	Chola	800		
4	10310	Mwale	900		
5	10314	Mwangala	500		
6	10318	Bwalya	450		
7	10321	Taonga	750		
8	**Discount Rate**	15%			
9	**TOTAL SALES**				

Required:

Write formulae to:

(i) Calculate the discount charge using absolute referencing for all customers (3 marks)

(ii) Calculate the Net Sales for all the customers. (3 marks)

(iii) Calculate the TOTAL day's Sales at the close of business. (2 marks)

(iv) Customers will be awarded a bonus based on meeting the target of K650. Write a formula that will help you identify customers getting a BONUS and NO BONUS. (2 marks)

[Total: 20 marks]

QUESTION FOUR

(a) Password protected systems require users attempting to enter the system with a string of characters. System passwords are usually used in conjunction with usernames.

Required:

Distinguish between a Password and a Username. (4 marks)

(b) The operating system provides the link between hardware and software. It controls the interface between the user and the computer.

Windows Explorer is an important application in Windows operating Systems. State any four (4) functions of Windows explorer. (4 marks)

(c) Briefly explain how encryption is used in computer security (2 marks)

(d) The Internet offers different communication services. Email communication is one of major services used in communication.

Explain how information is sent and received on typical email systems. (10 marks)

[Total: 20 marks]

QUESTION FIVE

SCENARIO

You have been planning for the Annual General Meeting (AGM) scheduled to be held at Taj Pamodzi Hotel. All the preparations have been done unfortunately you receive information that most of the members of staff at the hotel have tested positive for Covid 19 and the place has since been closed. The AGM has to be postponed to a later date.

Required:

(a) Write a notice informing members about the postponement of a meeting. In your notice include the rescheduled date of the meeting and other necessary details. (10 marks)

(b) Briefly explain two (2) major differences between a notice and memo. (4 marks)

(c) Explain any three (3) strict conventions that govern formal meetings such as Annual General Meetings and Board meetings. (6 marks)

[Total: 20 marks]

QUESTION SIX

SCENARIO

You are a supervisor in the accounts department at LBM Limited. Recently you have observed that there is a skills gap in terms of effective communication among staff in the organization that you work for. You have since written to management requesting for a short training to be conducted among staff in your organization. Your management has given a positive response and has given you the authority together with staff from the Human resources department to organize for a conference in order to address the challenge of ineffective communication in the organization.

Required:

(a) Briefly explain the two (2) examples of in- house conferences that you can use as you organize for a conference. (6 marks)

(b) Briefly explain two (2) types of conferences other than in house conference. (4 marks)

(c) State six (6) factors that must be considered when designing and administering an appropriate training programme. (6 marks)

(d) Outline the four (4) steps that are involved when conducting on the job training. (4 marks)

[Total 20 marks]

END OF PAPER

CA 1.6: BUSINESS COMMUNICATION SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 C

1.2 A

1.3 D

1.4 B

1.5 D

1.6 A

1.7 D

1.8 B

1.9 A

1.10 D

COMPULSORY

SOLUTION TWO (a)

(i) The opening paragraph offers a brief explanation of why you are writing. It may also acknowledge relevant correspondence received.

(ii) The middle paragraph contains the substance of the message. It is the one that covers the main business of the letter.

(iii) The closing paragraph makes it clear to the reader what the sender hopes to achieve by sending the letter. It is the summary of all the points in the middle paragraph.

SOLUTION TWO (b)

J & M Financial Institution

P.O Box 31375

Lusaka

Ref : JM/101/21

Date : any date during examination time

The Manager

Zambezi Financial Aid

Private Bag 15

Lusaka

Dear Sir/madam,

<u>Re: Request to Defer the Payment of Loan – K200, 000</u>

This letter serves to inform you that the loan will not be paid on time. This has been necessitated by a communication problem that arose between ourselves and our bank. In view of the caption above, we request that your good office allows us to pay back the lon on (any appropriate date during examination period). The financial officer could not approve the remittance of funds on time hence the delay in payment by the bank

we have worked on the payment plan and we are certain of paying you the loan on (any appropriate date)

We the hope that your good office will be kind enough to grant us permission to pay back the loan on the proposed date and that this will situation will no longer attract any legal penalties.

Yours faithfully

(Sender's signature)

Peter Kalumbu

Finance Manager

SOLUTION THREE

(a)

(i) Personal Digital Assistant (PDA)

Personal digital assistant is a term for a small, mobile, handheld device that provides computing and information storage and retrieval capabilities for personal or business use, often for keeping schedules, calendars and address book information handy.

(ii) Mini Computer

A minicomputer is a type of computer that possesses most of the features and capabilities of a large computer but is smaller in physical size. A minicomputer fills the space between the mainframe and microcomputer, and is smaller than the former but larger than the latter.

Minicomputers were also known as midrange computers. Minicomputers are used for scientific and engineering computations, business-transaction processing, file handling, and database management.

Minicomputers are mainly multi-users systems where more than one user can work simultaneously.

(b) Advantages of cloud storage

- Can access your data from anywhere
- Cheaper than buying your storage devices
- It feels like your own
- Data security is provided by the service provider

(c)

i)

=C2*B8

=C3*B8
=C4*B8
=C5*B8
=C6*B8
=C7*B8

ii)

=C2-D2

=C3-D3
=C4-D4
=C5-D5
=C6-D6
=C7-D7

iii)

=Sum(E2:E7)   OR   =E2+E3+E4+E5+E6+E7

iv)

=(IF E2>650, “BONUS”,”NO BONUS”)

SOLUTION FOUR

a) A username is used to uniquely identify a user (someone) on the computer or computer resource. The username works with a password. A password is a set of characters a user enters the authenticate themselves i.e. to prove that they are who they claim to be.

b) Functions of Windows Explorer
   - Moves files from one folder to another
   - Copy files
   - Delete files
   - Rename files

c) Encryption is used to scramble data to be transmitted over computer network. When data is encrypted, even when it is intercepted, it cannot be read by the interceptor. The receiving end will have unscramble the data in order to read it.

d) Explain how information is sent and received on typical email systems
   - Information is posted by the sender to a central computer or mail server which allocates disk storage for each user.
   - The information is collected by the receiver from the mailbox
   - Senders of information have documentary evidence that they have given a piece of information to the recipient
   - Receivers collect the information at their convenience
   - Each user has password protected access to their individual inbox, outbox and filing system

SOLUTION FIVE (a)

MEMORANDUM

TO: All members Reference: 2020/4

FROM: Jito Kakonkanya Date: 20/12/2020

Executive Secretary

SUBJECT: Postponement of the AGM

December due to Covid 19 Pandemic.

This memorandum serves to inform you that the AGM which was scheduled to be held at Lusaka Taj Pamodzi Hotel on the 20th of December, 2020 has been postponed to a later date yet to be communicated.

This has been necessitated by the closure of Lusaka Taj Pamodzi Hotel by the Ministry of Health after an outbreak of the pandemic. Please note that the tickets remain valid and the time remains unchanged.

J. K

CC: Board Members

Enc:

QUESTION FIVE (b)

- A memo is only used internally while a notice can be for the general public.
- A Memo has a standard addressing system. ie, To and From, while the notice has does not need to have those elements.(a notice does not strictly require those elements)
- A notice is mostly provide information regarding an invitation for a meeting, a warning or a reminder while a memo may provide information such as instructions and any other vital information within the organisation.

QUESTION FIVE (c)

- Adequate notice of forthcoming meeting
- The timing of meeting
- Attendance rights
- The type of business to be discussed
- The need to speak through the chair.
- Recording of meeting delibarations and preparations of meeting documents such as minutes.
- A quorum must be formed all the time before a meeting is called to order.
- Election of officers is necessary at certain period of time.

SOLUTION SIX (a)

i) The two types of in house are: Horizontal conferences where members of a certain level discuss business trends and policy. Such conferences would also include information sessions where an outside expert would be invited to present a topic or one partner may explain development in his/ her own area

ii) Vertical in house conference where members of different status levels are from one department or one division of a company. For example, conference to discuss progress report during a management buyout or a major policy change.

SOLUTION SIX (b)

i) Public conferences – are held to discuss serious issues with an audience drawn from many companies and many industries. The main purpose of such a conference is mainly to inform the audience on certain serious issues. As a result, such conferences are usually one-way communication with limited opportunity to raise questions from For example an Accountant can use the platform to explain the effects of the Tax regulations.

ii) Sales conferences – this is usually held annually and includes all sales representatives above a certain status level or performance level. For example, a company launching a new product that is to be sold to customers

SOLUTION SIX (c)

Factor to consider when designing and administering an appropriate training programme should include the following:

i) The trainee's participation
ii) The provision of feedback to the trainees about his or her performance
iii) The transfer of training experience to the job
iv) Reinforcement for a desired behavior
v) Practical application of things learnt
vi) Improved performance through motivation

SOLUTION SIX (d)

The steps to follow when conducting on the job training are:

i) Preparing the trainee
ii) Giving the training the necessary knowledge or information and demonstrating how the job is to be done.
iii) Allowing the trainee to do the job
iv) Checking the trainee's performance.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED DIPLOMA IN IN ACCOUNTANCY

2.1: FINANCIAL REPORTING

MONDAY 13 DECEMBER 2021

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 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)

The Draft Financial Statements below relate to Peace and its subsidiary Sadness. Statements of profit or loss and other comprehensive income for the year ended 31 December, 2021

	Peace Ltd	Sadness Ltd
	K'000	**K'000**
Revenue	325,200	60,000
Cost of sales	(291,600)	(48,000)
Gross profit	33,600	12,000
Distribution costs	(4,000)	(2,400)
Administrative expenses	(7,000)	(3,600)
Finance costs	(400)	-
Profit before tax	22,200	6,000
Income tax expenses	(6,200)	(2,000)
Profit for the year	16,000	4,000
Other comprehensive income:		
Gain on revaluation of property	3,000	-
Total comprehensive income	19,000	4,000

Statements of financial position as at 31 December 2021

Assets	**K'000**	**K'000**
Non-current assets:		
Property, plant and equipment (PPE)	37,400	27,800
Investment in Joy	40,000	
10% loan note	2,000	-
	79,400	27,800
Current assets:		
Inventory	8,600	2,400
Trade receivables	9,400	5,000
Bank	-	600
	18,000	8,000
Total assets	97,400	35,800
Equity and liabilities:		
Share capital (issued at K1 each)	20,000	18,000
Revaluation surplus	4,000	-
Retained earnings	12,600	7,000
	36,600	25,000
Non-current liabilities:		
10% loan note	5,000	2,000
Current liabilities:		
Trade payables	46,800	7,200
Bank overdraft	3,400	-
Income tax payable	5,600	1,600

	55,800	8,800
Total Liabilities and Equity	97,400	35,800

Additional relevant information:

(i) Peace Ltd acquired 60% of the share capital of Sadness Ltd on 1 April 2021. The purchase consideration was settled by a share exchange transaction of two shares in Peace Ltd for every three acquired shares in Sadness Ltd. The share price of Peace Ltd at the acquisition date was K3 per share. In addition, Peace Ltd agreed to pay cash consideration of K0.275 for each acquired share in Sadness Ltd on 1 April 2022. Peace Ltd's cost of capital is 10% per annum. No record on acquisition of Sadness Ltd had been made by Peace Ltd.

(ii) The fair values of Sadness Ltd's net assets and liabilities were equal to their carrying amounts at the date of acquisition with the exception of Sadness's property, which had a fair value of K8 million above its carrying amount. For the purpose of consolidation, this led to an increase in depreciation charges of K200,000 in the post-acquisition period to 31 December 2021. Sadness Ltd had not incorporated the fair value of property increase into its entity's financial statements.

(iii) It is the policy of Peace Ltd group to value the non-controlling interest at fair value. For this purpose, Sadness Ltd's share price was trading at K2.50 each at the acquisition date.

(iv) On 1 October 2021, Peace acquired 30% interest in Joy Ltd for K40 million. Joy's reported profit after tax for the year ended 31 December, 2021 was K27 million. An impairment review conducted on 31 December, 2021 revealed that the investment in Joy had suffered an impairment loss of K 1 million only.

(v) The policy of Peace Ltd group is to value all properties to fair value at each year end. On 31 December 2021, the increase in Peace Ltd's property had already been recorded. However, a further increase of K1.2 million in the value of Sadness Ltd's property since its value at acquisition to 31 December 2021 had not yet been recorded.

(vi) Peace Ltd made monthly sales of K600,000 to Sadness Ltd during the year to 31 December 2021 at a mark-up of 25% on sales. At 31 December 2021, goods worth K1.2 million (at cost to Sadness Ltd) supplied by Peace Ltd during the post-acquisition period were in Sadness Ltd's reported inventory figure.

(vii) At 31 December 2021, Peace Ltd had a trade receivable balance owing from Sadness Ltd of K 2.4 million. However, this did not agree to the equivalent trade payable of Sadness Ltd as a result of a payment by Sadness Ltd of K800,000 made in December 2021, which did not reflect in Peace Ltd bank account until 4 January 2022. Peace Ltd's policy for cash timing differences is to adjust the parent's financial statements.

(viii) On 31 December 2021, Peace Ltd accepted a K1 million 10% loan note from Sadness Ltd.

(ix) At 31 December 2021, the goodwill that arose on acquisition of Sadness Ltd was impaired by K1 million. Peace Ltd has a policy of treating goodwill impairment as part of administrative expense.

(x) Assume that all items of income and expenditure accrue evenly throughout the year except where indicated otherwise.

Required:

(a) Prepare the consolidated statement of profit or loss and other comprehensive income for Peace Ltd group for the year ended 31 December 2021.

(18 marks)

(b) Prepare the consolidated statement of financial position for Peace Ltd group as at 31 December 2021. (22 marks)

[Total: 40 marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any three (3) questions in this section.

QUESTION TWO

(a) IAS 41 Agriculture, provides guidance on accounting for agricultural activity. Biological assets, Agricultural produce at the point of harvest and Government grants related to biological assets are within the scope of IAS 41.

Required:

State the provisions of *IAS 41: Agriculture,* regarding recognition and measurement of biological assets and agricultural produce in the preparation and presentation of financial statements. (5 marks)

(b) IFRS 13 Fair Value Measurement gives guidance on the measurement of fair value where a specific IFRS requires or permits fair value as a measurement basis. It provides a single IFRS framework for measuring fair value and requires disclosures about fair value measurement.

Required:

Describe the general requirements of IFRS 13 relating to the determination of fair value and fair value hierarchy (5 marks)

(c) A Financial instrument is any contract that gives a financial asset to one party (an entity) and a financial liability or equity instrument to the other entity.

Required:

Explain the Initial recognition, measurements and classifications which IFRS 9 identifies for financial assets and the basis of measurement which is appropriate for each classification. In your answer, clearly state any exceptions to the normal classifications which may apply in specific circumstances. (5 marks)

(d) The objective of **IAS 10 'Events after the reporting period'** is to prescribe: when an entity should adjust its financial statements for events after the reporting period; and the disclosures that an entity should give about the date when the financial statements were authorised for issue and about events after the reporting period.

Required:

(i) Distinguish between adjusting and non-adjusting events. (2 marks)

(ii) State the accounting treatment of an adjusting event and non-adjusting event.

(2 marks)

(iii) Give two (2) examples of an adjusting event. (1 mark)

[Total: 20 marks]

QUESTION THREE

You are the Financial Controller of Zamfruit Ltd which was incorporated 15 years ago. Summaries of Zamfruit Ltd's Statements of Profit or Loss and Financial Position for the previous three (3) years are given below.

Statement of Profit or Loss for the year ended 31 December

	2018	2019	2020
	K'm	**K'm**	**K'm**
Revenue	840	981	913
Cost of sales	(554)	(645)	(590)
Gross profit	286	336	323
Selling, distribution and administration expenses	(186)	(214)	(219)
Profit before interest and taxes	100	122	104
Finance cost	(6)	(15)	(19)
Profit before taxation	94	107	85
Taxation	(45)	(52)	(45)
Profit after taxation	**49**	**55**	**40**
Dividends	24	24	24

Statements of Financial Position as at 31 December

	2018	2019	2020
	K'm	**K'm**	**K'm**
Assets			
Non-current assets			
Intangible assets	36	40	48
Tangible assets at carrying amount	176	206	216
	212	246	264
Current assets			
Inventories	237	303	294
Receivables	105	141	160
Bank	52	58	52
	394	502	506
Total Assets	606	748	770
Equity and Liabilities			
Equity			
Stated capital	100	100	100
Retained earnings	299	330	346
	399	430	446
Non-current liabilities			
Long-term loans	74	138	138

Current liabilities			
Trade payables	53	75	75
Other payables	80	105	111
	133	180	186
Total Equity and Liabilities	606	748	770

Required:

Write a report to the Chief Executive Officer of Zamfruit Ltd, that:

(a) Analyses the performance and position of the company. (14 marks)

(b) Summarises three (3) areas which require further investigation, including Reference to other pieces of information which would complement your analysis of the performance of Zamfruit Ltd. (6 marks)

[Total: 20 marks]

QUESTION FOUR

Below are TWIKATANE Ltd's Income Statement and Statement of Changes in Equity for the year ended 30 September 2020 as well as the Statement of Financial Position as at 30 September 2020 together with the comparative Statement of Financial Position at 30 September 2019:

Income Statement for the Year Ended 30 September 2020

	K'000
Revenue	1, 034,300
Cost of sales	(908,760)
Gross profit	125,540
Operating expenses	(105,460)
Profit from operations	20,080
Finance costs	(8,090)
Profit from operations	11,990
Income tax expense	(6,720)
Profit for the year	5,270

Statement of Changes in Equity for the Year Ended 30 September 2020

	Share Capital	Share Premium	Retained Earnings	Total
	K'000	K'000	K'000	K'000
Opening balance	4,000	15,000	88,240	107,240
Issue of shares	500	1,000		1,500

Profit for the year			5,270	5,270
Dividends paid			(5,000)	(5,000)
Closing balance	4,500	16,000	88,510	109,010

Statement of Financial Position as at 30 September

	2020		2019	
Assets	**K'000**	**K'000**	**K'000**	**K'000**
Non-current Assets				
Property, plant and equipment	161,040		139,180	
Investment property	10,000		11,000	
Intangible assets	14,390		17,650	
		185,430		167,830
Current Assets				
Inventories	98,310		83,800	
Receivables	54,290		48,920	
Investments	10,000		10, 000	
Cash	26,580		65,180	
		189,180		207,900
Total Assets		374,610		375,730
Equity and Liabilities				
Equity				
Equity shares of K1 each	4,500		4,000	
Share premium	16,000		15,000	
Retained earnings	88,510		88,240	
		109,010		107,240
Non-current Liabilities				
18% Bank Loan – BMM Bank	Nil		18,560	
15% Bank Loan – Bupe Bank	79,430		Nil	
Deferred tax	2,340		1,080	
		81,770		19,640
Current Liabilities				
Trade payables	144,490		232,070	
Bank overdraft	21,230		Nil	

Taxation	3,000		2,500	
Provision for warranties	15,110		14,280	
		183,830		248,850
		374,610		375,730

Additional information:

(i) The current asset investments are government bonds and management has decided to class them as cash equivalents.

(ii) There were neither acquisitions nor disposals of intangible assets during the year.

(iii) TWIKATANE Ltd has a one year warranty policy on majority of the products it sells. The amounts shown as provision for warranty are an accurate assessment, based on past experience, of the amount of claims likely to be made in respect of warranties outstanding at each year end. Warranty costs are included in cost of sales.

(iv) TWIKATANE Ltd did not make any bonus issues, but issued additional equity shares for cash on 1 July 2020.

(v) On 30 September 2020, the company proposed ordinary dividends of K144,000.

(vi) Due to favourable macro-economic policies in the country, bank lending rates were adjusted downwards in 2020 and management of TWIKATANE Ltd seized an opportunity to restructure its loan portfolio.

(vii) The fair value movement on investment property, measured at fair value has been included in operating expenses.

(viii) During the year, TWIKATANE Ltd sold an item of plant with a carrying amount of K9,650,000 at a loss of K500,000. An inspection of the non-current asset register revealed that a depreciation charge of K23,950,000 was made to operating expenses for property, plant and equipment in the year ended 30 September 2020.

Required:

(a) Prepare a Statement of Cash flows for TWIKATANE Ltd for the year ended 30 September 2020 in accordance with IAS 7 Statement of Cash-flows using the indirect method. (18 marks)

(b) Explain why it is important for companies to identify cash generated from operations when assessing future liquidity? (2 marks)

[Total: 20 marks]

QUESTION FIVE

The following trial balance relates to Tamwibusha Plc as at 31 March 2021.

	K'000	K'000
Investment property (note 1)	10,000.0	
Revenue (note 2)		14,160.0
Cost of sales (notes 5 and 10)	12,343.2	
Distribution costs	60.8	
Administration expenses	158.4	
Loan interest paid	38.4	
Property (notes 3 and 4):		
Cost	1,600.0	
Accumulated depreciation at 1 April 2020		300.0
Plant and equipment (note 5 and 6):		
Cost	1,348.8	
Accumulated depreciation at 1 April 2020		388.8
License (note 8 and 10):		
Cost	320.0	
Amortization at 1 April 2020		128.0
Trade receivables	345.6	
Inventory at 31 March 2021	150.4	
Bank		15.6
Trade payables		281.6
Equity shares of K1 per share (note 9)		560.0
Share premium (note 9)		100.0
Deferred tax (note 7)		4.0
12% loan note (Issued 1 April 2020)		320.0
Current tax (note 7)		16.0
Retained earnings at 1 April 2020		10,091.6
	26,365.6	26,365.6

Additional information

1 The investment property in the trial balance is recorded at its fair value on 1 April 2020. The fair value of investment property at 31 March 2021 was K11,000,000. Tamwibusha Plc uses the Fair Value Model of IAS 40 to account for investment properties.

2 Revenue includes an amount of K1,600,000 for a sale made on 1 April 2020. The sale related to a single product and included ongoing servicing by Tamwibusha Plc for four years. The normal selling price of the product was K1,800,000 and the servicing would be K50,000 per annum (K200,000 in total).

3 On 1 April 2020, Tamwibusha Plc revalued its property to K1,920,000, of which K480,000 relates to the land. The property's original cost on 1 April 2010 of K1,600,000 included K400,000 for the land.

4 The building had an estimated life of 40 years when it was acquired and this has not changed as a result of the revaluation. Depreciation is charged on a straight line basis. The revaluation has not yet been recorded in the books. Tamwibusha Plc has a policy of transferring any excess depreciation to retained earnings.

5 During the year, Tamwibusha Plc sold some plant that cost K160,000 on 1 December 2018. The proceeds of this sale were K96,000. The carrying amount of this asset had been credited to cost of sales. No other entries had been made relating to the disposal.

6 Plant and equipment is to be depreciated on the reducing balance basis at a rate of 20% per annum. Tamwibusha Plc charges a full year's depreciation in the year of acquisition and none in the year of disposal.

7 The Directors estimate a provision for income tax for the year ended 31 March 2021 of K101,600 is required. The balance on current tax in the trial balance represents the under/over provision of the tax liability for the year ended 31 March 2020. At 31 March 2021, Tamwibusha Plc had taxable temporary differences of K25,000 requiring a provision for deferred tax. Any deferred tax movement should be reported in the statement of profit or loss. The income tax rate applicable to Tamwibusha Plc is 20%.

8 The licence is being amortised on straight line basis at a rate of 20% per annum.

9 On 31 January 2021, Tamwibusha Plc made a bonus issue of 100,000 shares, charging its share premium. This transaction had been correctly recorded.

10 All depreciation and amortization is to be charged to cost of sales.

11 Tamwibusha Plc had not paid any ordinary dividend during the year but just before year-end, the Directors approved dividends of K448, 000.

Required:

(a) Prepare the Tamwibusha Plc Statement of profit or loss and other comprehensive income for the year ended 31 March 2021. (8 marks)

(b) Prepare the Tamwibusha Plc Statement of Changes in Equity for the ended 31 March 2021 (4 marks)

(c) Prepare the Tamwibusha Plc Statement of Financial Position as at 31 March 2021. (8 marks)

[Total: 20 marks]

END OF PAPER

CA2.1: FINANCIAL REPORTING SUGGESTED SOLUTIONS

SECTION A

SOLUTION ONE

a) Peace Ltd Group
Consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2021.

	K'000
Revenue (K325,200 + (K60,000 x 9/12) – (K600 x 9 month))	364,800
Cost of sales (K291,600+ (K48,000 x 9/12) – K5,400 + K240 + K200)	(322,640)
Gross profit	42,160
Distribution costs (K4,000 +(K2,400 x 9/12)	(5,800)
Administrative expenses(K7,000 + (K3,600 x 9/12) + K1,000	(10,700)
Finance costs (K400 + (K2, 700 x 10% x 9/12)	(603)
Profit from Associate (3/12 x 27, 000 x 30% - 1, 000)	1, 025
Profit before tax	26,082
Income tax expenses (K6,200 + (K2,000 x 9/12)	(7,700)
Profit for the year	18,382
Other comprehensive income:	
Gain on revaluation of property (K3,000 + K1,200)	4,200
Total comprehensive income	22,582
Profit for the year attributable to:	
Shareholders of the parent	17,662
Non-controlling interest (K4,000 x 9/12 – K1000 – K200 x 40%)	720
	18,382
Total comprehensive income attributable to:	
Shareholders of the parent	21,382
Non-controlling interest (K720 + (K1,200 x 40%)	1,200
	22,582

b) Peace Ltd Group
Consolidated statement of financial position as at December 31, 2021

	K'000
Assets	
Non-current assets:	
Property, plant and equipment(K37,400 + K27,800) + K8000 - K200 + K1,200	74,200
10% Loan note (2,000-1,000)	1,000
Investment in Associate (W 5)	41,025
Goodwill W2	11,300
	127,525
Current assets:	
Inventory (K8,600+ K2,400 - K240 URP)	10,760
Trade receivables (K9,400 + K5,000 - K2,400 intra-group)	12,000
Bank (0 + K600)	600

	23,360
	150,885
Equity and liabilities:	
Equity Share Capital (K20,000 + (K7,200 x K1))	27, 200
Share premium (7, 200 x K2)	14, 400
Retained earnings W4	14,262
Revaluation surplus (K4,000 + (K1,200 x 60%)	4,720
	60,582
Non-controlling interest W3	19,200
	79,782
Non-current liabilities:	
10% loan notes (K5,000 + K2,000 - K1,000)	6,000
Current liabilities:	
Trade payables (K46,800 + K7,200 – K1,600)	52,400
Current tax payables (K5,600 + K1,600)	7,200
Bank (K3,400 – K800 cash in transit)	2,600
Deferred consideration (K2,700 + (10% x K2,700 x 9/12)	2,903
	150,885

Workings

Group structure

Peace Ltd

60 % → Sadness Ltd

30 % → Joy Ltd

NCI 40%

Post period = 9 months 3 months

Group share (60% x 18,000 shares) = 10.8 million shares acquired

Non-controlling interest share (40% x 18 m shares) = 7.2 m shares x K2.50 = K18 million

Pre-acquisition profit	**K'000**
Retained earnings b/f: (K7,000 – K4000)	3,000
Plus (3/12 x K4,000)	1,000
	4,000

1. Net asset – Sadness Ltd

	Acquisition date	Reporting date	Post acquisition
	K000	K000	K000
Share capital	18,000	18,000	-
Retained earnings (7000 - (4000 x 9 ÷ 12))	4,000	7,000	3,000
Fair values-property	8,000	9,200	-
Additional depreciation (Given in the question)	-	(200)	(200)
	30,000	34,000	2,800
Post-acquisition profit (K2800 – K1,000 impairment loss) = K1,800			
Or Post acquisition profit = (34,000-30,000 -1,200) = K2,800			

2. Goodwill

	K000
Purchase consideration:	
Shares (18,000 shares x 60% x 2/3 x K3)	21,600
Deferred consideration (18,000 shares x 60% x K0.275 x 1/(1.1)	2,700
	24,300
Fair value of NCI at acquisition (40% x 18,000 shares x K2.50)	18,000
	42,300
Net asset at acquisition date W1	(30,000)
	12,300
Impairment	(1,000)
	11,300

Alternative calculation of goodwill

	K000	K000
Cost of investment		24,300
Share of net assets (60% x K30,000)		(18,000)
Parent goodwill		6,300
Fair value of net asset at acquisition	18,000	
NCI share of net asset at acquisition (40% x K30,000)	(12,000)	6,000
		12,300
Impairment loss		(1,000)
		11,300

3. Non-controlling interest

	K000
Fair value of NCI at acquisition	18,000
Share of post-acquisition profit- P &L (K3000- K1000- K200 x 40% = K720 + (K1,200 x 40%)	1,200
	19,200

Alternative calculation of Non-controlling interest

	K000
Fair Value	18,000
Share of post-acquisition Profit (40% x 2,800)	1,120
Revaluation gain (40% x 1,200)	480
	19,600
Share of impairment loss (40% x1,000)	(400)
	19,200

4. Group retained earnings

	K000
Peace Ltd	12,600
Unrealized profit (K1,200 x 25/125)	(240)
Unwind discount (K2,700 x 10% x 9/12)	(203)
Share of post-acquisition profit (60% x K2,800)	1,680
Share of profit from Associate (statement of profit or loss, less impairment)	1, 025
Share of impairment loss (60% x1,000)	(600)
	14,262

5. Investment in Associate

	K000
Cost	40, 000
Share of profit (27, 000 x 30% x 3/12)	2, 025
Less impairment loss	(1,000)
	41,025

SOLUTION TWO

(a) IAS 41 AGRICULTURE

RECOGNITION

Biological assets or agricultural produce are recognised when:

- Entity controls the asset as a result of a past events
- Probable that future economic benefits will flow to the entity; and
- Fair value or cost of the asset can be measured reliably.

MEASUREMENT

Biological assets

Biological assets within the scope of IAS 41 are measured on initial recognition and at subsequent reporting dates at fair value less estimated costs to sell, unless fair value cannot be reliably measured.

If no reliable measurement of fair value (no quoted market price in an active market and alternative fair value measurements unreliable), biological assets are stated at cost less accumulated depreciation and accumulated impairment losses.

If circumstances change and fair value becomes reliably measurable, a switch to fair value less costs is required.

Agricultural produce

Agricultural produce is measured at fair value less estimated costs to sell at the point of harvest. Unlike a biological asset, there is no exception in cases in which fair value cannot be measured reliably. According to IAS 41, agricultural produce can always be measured reliably because harvested produce is a marketable commodity.

Point of-sale costs include brokers' and dealers' commissions, any levies by regulatory authorities and commodity exchanges, and any transfer taxes and duties. They exclude transport and other costs necessary to get the assets to a market.

Treatment of gain/loss

- The gain on initial recognition of biological assets at fair value less costs to sell, and changes in fair value less costs to sell of biological assets during a period, are included in profit or loss.

- A gain on initial recognition (e.g. as a result of harvesting) of agricultural produce at fair value less costs to sell are included in profit or loss for the period in which it arises.

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(b) <u>IFRS 13 Fair value measurements</u>

IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date The objective of a fair value measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. The IFRS applies to IFRSs that require or permit fair value measurements or disclosures about fair value measurements (and measurements, such as fair value less costs to sell, based on fair value or disclosures about those measurements), except in specified circumstances.

IFRS 13 provides the guidance on the measurement of fair value, including the following: An entity takes into account the characteristics of the asset or liability being measured that a market participant would take into account when pricing the asset or liability at measurement date (e.g. the condition and location of the asset and any restrictions on the sale and use of the asset)

Fair value measurement assumes an orderly transaction between market participants at the measurement date under current market conditions.

Fair value measurement assumes a transaction taking place in the principal market for the asset or liability, or in the absence of a principal market, the most advantageous market for the asset or liability.

A fair value measurement of a non-financial asset takes into account its highest and best use.

A fair value measurement of a financial or non-financial liability or an entity's own equity instruments assumes it is transferred to a market participant at the measurement date, without settlement, extinguishment, or cancellation at the measurement date.

The fair value of a liability reflects non-performance risk (the risk the entity will not fulfil an obligation), including an entity's own credit risk and assuming the same non-performance risk before and after the transfer of the liability.

An optional exception applies for certain financial assets and financial liabilities with offsetting positions in market risks or counterparty credit risk, provided conditions are met (additional disclosure is required).

Fair value hierarchy

To increase consistency and comparability in fair value measurements and related disclosures, the IFRS establishes a fair value hierarchy that categorises into three levels the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. *Level 2* inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. *Level 3* inputs are unobservable inputs for the asset or liability.

(c) IFRS 9 Financial Instruments

Initial recognition: a financial asset or financial liability should be recognised in the statement of financial position when the reporting entity becomes a party to the contractual provisions of the instrument.

Initial measurement of financial instruments

All financial instruments are initially measured at cost (fair value) plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Subsequent measurement of financial assets; IFRS 9 divides all financial assets into three classifications, those measured at amortised cost and those measured at fair value through profit or loss and fair value through other comprehensive income.

The classification and measurement of financial assets is largely based on:

The business model for managing the asset, specifically whether or not the objective is to hold the financial asset in order to collect the contractual cash flows. Whether or not the contractual cash flows are solely payments of principal and interest on the principal amount outstanding. Where the business model for managing the asset is to hold the financial asset in order to collect the contractual cash flows and the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, then the financial asset is normally measured at amortised cost.

Where the business model for managing the asset is to both hold the financial asset in order to collect the contractual cash flows and to sell the financial asset and the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, then the financial asset is normally measured at fair value through other comprehensive income. Interest income on such assets is recognised in the same way as if the asset were measured at amortised cost.

In other circumstances, financial assets are normally measured at fair value through profit or loss. Notwithstanding the above, where equity investments are not held for trading, an entity may make an irrevocable election to measure such investments at fair value through other comprehensive income.

Finally an entity may, at initial recognition, irrevocably designate a financial asset as measured at fair value through profit or loss if to do so eliminates or significantly reduces an accounting mismatch.

(d) **IAS 10 'Events after the reporting period'**

(i) Distinguish between adjusting and non-adjusting events.
Adjusting events are those events, favourable or otherwise that provide additional information to what existed at reporting date. They are therefore used to update the financial statements. While non-adjusting events do not provide additional information of what existed at reporting date. They are therefore, simply disclosed in the financial statements.

(ii) Accounting treatment

IAS 10 requires that the amounts recognised in the financial statements be adjusted to take account of an adjusting event.

The standard also requires that disclosures be up-dated in the light of new information that relates to a condition that existed at the reporting date. IAS 10 prohibits the adjustment of amounts recognised in the financial statements to reflect non-adjusting events after the reporting date. However, if a non-adjusting event is material and its non-disclosure could influence the decisions of users, then an entity should make a disclosure.

(iii) Adjusting events – examples

Adjusting events, as is evident by the name, require adjustments in the financial statements. Following are some examples:

- Invoices received in respect of goods or services received before the year end
- The resolution after the reporting date of a court case giving rise to a liability
- Evidence of impairment of assets, such as news that a major customer is going into liquidation or the sale of inventories below cost
- Discovery of fraud or errors showing that financial statements were incorrect
- Determination of employee bonuses/profit shares
- The tax rates applicable to the financial year are announced
- The auditors submit their fee
- The sale of a non-current asset at a loss indicates that it was impaired at the reporting date
- The bankruptcy of a customer indicates that their debt was irrecoverable at the reporting date
- The sale of inventory at less than cost indicates that it should have been valued at NRV in the accounts
- The determination of cost or proceeds of assets bought/sold during the accounting period indicates at what amount they should be recorded in the accounts

SOLUTION THREE

a) To: Chief Executive Officer
From: Financial Controller
Subject: Performance and position of Zamfruit Limited from 2018 to 2020
Date: Date of the exam

Introduction

This performance report relates to the financial statements of Zamfruit Limited for the period 2018 to 2020. The report covers the profitability, operating efficiency, liquidity and solvency positions of Zamfruit Limited over the period under review. An appendix is attached to this report which shows the ratios calculated as part of the performance review.

Profitability

The gross profit margin remained relatively static over the three year period, although it had risen by approximately 1% in 2020. ROCE, while improving very slightly in 2019 to 21.5% had dropped dramatically in 2020 to 17.8%. The net profit margin had also fallen in 2020, in spite of the improvement in the gross profit margin. There was a rise in expenses which suggests that they were not being well controlled. The utilization of assets compared to the turnover generated had also declined reflecting the drop in trading activity between 2019 and 2020.

Operating Efficiency

It is apparent that there was a dramatic increase in trading activity between 2019 and 2020, but then a significant fall in 2020. Revenue rose by 17% in 2019 but fell by 7% in 2020. The reasons for this fluctuation are unclear. It may be the effect of some kind of one-off event, or it may be the effect of a change in product mix. Whatever the reason, it appears that improved credit terms granted to customers (receivables payment period over the years of analysis were up from 46 to 64 days) had not stopped the drop in sales.

Liquidity

Both the current ratio and quick ratio demonstrate an adequate working capital situation, although the quick ratio has shown a slight decline. There has been an increased investment over the period in inventories and receivables which has been only partly financed by longer payment periods to trade payables and a rise in other payables (mainly between 2018 and 2019).

Solvency/Gearing

The level of gearing of the company increased when a further K64m was raised in long-term loans in 2019 to add to the K74m already in the statement of financial position. Although this does not seem to be a particularly high level of gearing, the debt/equity ratio did rise from 18.5% to 32.0% in 2019. The interest charge has risen to K19m in 2020 from K6m in 2018. The 2019 charge was K15m, suggesting that either the interest rate on the loan is flexible, or that the full interest charge was not incurred in 2019. The new long-term loan appears to have funded the expansion in both fixed and current assets in 2019.

Appendix

Ratio	*Working*	*2018*	*2019*	*2020*
Gross profit margin	(1)	34.0%	34.30%	35.40%
ROCE	(2)	21.1%	21.50%	17.80%

Profit margin	(3)	11.9%	12.40%	11.40%
Assets turnover	(4)	1.78	1.73	1.56
Gearing ratio	(5)	15.6%	24.30%	23.60%
Debt/equity ratio	(6)	18.5%	32.00%	30.90%
Interest cover	(7)	16.7	8.1	5.5
Current ratio	(8)	3.0	2.8	2.7
Quick ratio	(9)	1.2	1.1	1.2
Receivables collection period (days)	(10)	46	52	64
Inventory turnover period (days)	(11)	156	171	182
Payables payment period	(12)	35	42	46

	Workings (all in K'm)			
		2018	2019	2020
1	Gross profit margin	$\frac{286}{840}$	$\frac{336}{981}$	$\frac{323}{913}$
2	ROCE*	$\frac{100}{473}$	$\frac{122}{568}$	$\frac{104}{584}$
3	Profit margin	$\frac{100}{840}$	$\frac{122}{981}$	$\frac{104}{913}$
4	Assets turnover	$\frac{840}{473}$	$\frac{981}{568}$	$\frac{913}{584}$
5	Gearing ratio	$\frac{74}{74+399}$	$\frac{138}{138+430}$	$\frac{138}{138+446}$
6	Debt/equity ratio	$\frac{74}{399}$	$\frac{138}{430}$	$\frac{138}{446}$
7	Interest cover	$\frac{100}{6}$	$\frac{122}{15}$	$\frac{104}{19}$
8	Current ratio	$\frac{394}{133}$	$\frac{502}{180}$	$\frac{506}{186}$
9	Quick ratio	$\frac{157}{133}$	$\frac{199}{180}$	$\frac{212}{180}$
10	Receivables collection period	$\frac{105}{840} \times 365$	$\frac{141}{981} \times 365$	$\frac{160}{913} \times 365$
11	Inventory turnover period	$\frac{237}{554} \times 365$	$\frac{303}{645} \times 365$	$\frac{294}{590} \times 365$
12	Payables payment period	$\frac{53}{554} \times 365$	$\frac{75}{645} \times 365$	$\frac{75}{590} \times 365$

ROCE has been calculated here as:

$$\frac{Profit\ before\ interest\ and\ taxation\ (PBIT)}{Capital\ employed}$$

Where capital employed = shareholders' funds plus payables falling due after one year and any long-term provision for liabilities and charges. It is possible to calculate ROCE using net profit after taxation and interest, but this admits variations and distortions into the ratios which are not affected by operational activity.

b) Areas of further investigation include the following;

i) *Long-term loan:* There is no indication as to why this loan was raised and how it was used to finance the business. Further details are needed of interest rate(s), security given and repayment dates.

ii) *Trading activity:* The level of sales has fluctuated in quite a strange way and this requires further investigation and explanation. Factors to consider would include pricing policies, product mix, market share and any unique occurrence which would affect sales.

iii) *Further analysis:* It would be useful to break down some of the information in the financial statements, perhaps into a management accounting format. Examples would include the following.

- Sales by segment, market or geographical area
- Cost of sales split, into raw materials, labour and overheads
- Inventory broken down into raw materials, work in progress and finished goods
- Expenses analysed between administrative expenses, sales and distribution costs.

iv) *Accounting policies:* Accounting policies may have a significant effect on certain items. In particular, it would be useful to know what the accounting policies are in relation to intangible assets (and what these assets consist of), and whether there has been any change in accounting policies.

v) *Dividend policy:* Zamfruit Limited has maintained the level of dividend paid to shareholders during the three year period. Presumably, Zamfruit Limited would have been able to reduce the amount of long-term debt taken on if it had retained part or all of the dividend during this period. It would be interesting to examine the share price movement during the period and calculate the dividend cover.

SOLUTION FOUR

(a) TWIKATANE Ltd

Statement of Cash-flows for year ended 30 September 2020

	K'000	K'000
Cash Flows from Operating Activities		
Operating profit		11,990
Finance cost		8,090
Depreciation		23,950
Amortisation of intangible asset (14,390 - 17,650)		3,260
Increase in provision for warranty (15,110 - 14,280)		830
Fair value loss on investment property (10,000 -11,000)		1,000
Loss on sale of plant		500
Cash-flow from operating activities before changes in w/capital		49,620
Increase in inventory (98, 310 - 83,800)		(14,510)
Increase in receivables (54,290 - 48,920)		(5,370)
Decrease in payables (144,490 - 232,070)		(87,580)
Cash used on Operations		(57,840)
Interest paid		(8,090)
Taxation paid (wi)		(4,960)
Net cash used on Operating Activities		(70,890)
Cash Flows from Investing Activities		
Purchase of Plant (wii)	(55,460)	
Sale of plant (9,650 - 500)	9,150	
Net Cash used in Investing Activities		(46,310)
Cash Flows from Financing Activities		
Proceeds from Share Issue (wiii)	1,500	
Proceeds from Bupe bank loan	79,430	
BMM bank loan repayment	(18,560)	
Dividends paid	(5,000)	
Net Cash flow from Financing Activities		57,370
Net Decrease in Cash and Cash Equivalents		(59,830)
Cash and Cash Equivalents at start (10, 000 + 65, 180)		75,180
Cash and Cash Equivalents at end (26,580 +10,000 - 21,230)		15,350

(b) Cash generated from operations is a sustainable source of cash. Providing that a company continues to trade on the same basis as it currently does, a similar level of cash will be generated in the future. This is in contrast to cash received from share issues, raising debt or selling assets; these are non-sustainable sources of cash because shares or debt cannot be issued every year and assets cannot be sold every year if a business is to continue trading.

Cash from operations should be sufficient to cover mandatory interest and tax payments; if this is not the case, a company may have liquidity problems. Any excess cash is available for discretionary spend such as paying dividends.

Workings

(i) Taxation Paid

		K'000			K'000
Cash paid (Bal. figure)		4,960	Balances b/f -IT	- IT	2,500
Balances c/f	- IT	3,000		- DT	1,080
- DT		2,340	Income statement		6,720
		10,300			10,300

(ii) Non-current assets

	K'000		K'000
Balances b/f	139,180	Disposal	9,650
Cash paid (Bal. figure)	55,460	Depreciation	23,950
		Balances b/f	161,040
	194,640		194,640

(iii) Equity and Share premium

	K'000		K'000
Balances c/f -ES	4,500	Balances b/f -ES	4,000
-SP	16,000	-SP	15,000
	_____	Cash received	1,500
	20,500		20,500

SOLUTION FIVE

Statement of profit or loss and other Comprehensive Income for Tamwibusha plc for the year ended 31 March 2021.

	K'000
Revenue (14, 160 -120w6)	14, 040.00
Cost of sales (w1)	(12,729.12)
Gross profit	1,310.88
Distribution costs	(60.80)
Fair value gain on investment property (11,000 -10,000)	1,000.00
Administrative expenses	(158.40)
Operating profit	2, 091.68
Finance costs	(38.40)
Profit before tax	2, 053.28
Income tax (101.6 – 16 +1)	(86.60)
Profit for the year	1,966.68
Other comprehensive income - revaluation surplus	620.00
Total comprehensive income	2, 586.68

(b) Tamwibusha plc

Statement of Changes in Equity for the year ended 31 March 2021

	Share capital	Share premium	Retained Earnings	Revaluation Reserve	Total
	K'm	K'm	K'm	K'm	K'm
Balances b/d	460*	200*	10,091.60	-	10, 751.60
Profit for the year			1,966.68		1, 966.68
Dividends			(448.00)		(448.00)
Revaluation gain				620	620
Bonus Issue	100	(100)			0
Reserves transfer			18.00	(18)	0
Balances c/d	560	100	11,628.28	602	12,890.28

*balancing figure.

(c) Tamwibusha plc

Statement of Financial Position as at 31 March 2021

	K'000
Non-Current Assets	
Investment property	11,000.00
Plant and Equipment (w2)	686.08
Property (w2)	1, 872.00
License (w2)	128.00
	13,686.08
Current Assets	
Inventory	150.40
Trade receivables	345.60
Total assets	14,182.08
Equity	
Share capital	560.00
Share premium	100.00
Revaluation reserve	602.00
Retained earnings	11, 628.28
Shareholders' funds	12,890.28
Non Current liabilities	
12% loan notes	320.00
Deferred Tax (w7)	5.00
Deferred income (W6)	80.00
	405.00
Current liabilities	
Bank overdraft	15.60
Trade payables	281.60
Dividends	448.00
Deferred income (W6)	40.00
Income tax	101.60
	886.80
Total equity and liabilities	14,182.08

Workings

1.

Cost of sales	**K'000**
As per trial balance	12,343.20
NBV of disposal (w3)	102.40
Plant and equipment –depreciation	171.52
Buildings – depreciation	48.00
License – amortization	64.00
	12,729.12

2. Non-Current Assets

	Property	Plant & Equip	License	Total
	K'000	**K'000**	**K'000**	**K'000**
Cost per Trial balance	1,600	1,348.80	320	3,268.80
Disposal		(160.00)		(160.00)
Revaluation	320		-	320.00
	1,920	1,188.80	320	3,428.80
Accumulated dep per T/B	(300)	(388.80)	(128)	
Revaluation	300			
Disposal		57.60		
Charge for the year				
20% x 320			(64)	
20% x (1,188.80) –		(171.52)		
$^{(1,920 - 480)}/_{(40 - 10)\text{yrs}}$	(48)		-	
Carrying amount	1,872	686.08	128	

3. Net Book Value of the disposed plant

	K'000
Cost at 1 December 2014	160.0
Dep for year ended 31 march 2015 (20% x 160)	(32.0)
	128.0
Dep for year ended 31 march 2016 (20% x 128)	25.6
	102.4
Total accumulated depn at disposal (32.0 + 25.6)	57.6

4. A loss on disposal of K6 400 arises (proceeds of K96, 000 – Carrying amount of K102, 400). However, the proceeds have already been credited to cost of sales and therefore it is only necessary to debit the carrying amount of asset to cost of sales in order to record this loss.

Adjustment:

Dr cost of sales	K102,400	
Dr accumulated dep	K57,600	
Cr Asset at cost		K160,000

5. Revaluation:

Initial accounting:			K'000
Valuation			1,920
CA at 1 April 2020 (1, 600 – 300)			1, 300
Revaluation gain			620
Adjustment:			
Dr Property (1,920 – 1, 600)	K320,000		
Dr Acc dep (1,200/$_{\text{40 yrs x 10 yrs}}$)	K300,000		
Cr Revaluation reserve (320, + K300)		K620	
Reserve transfer			
New depreciation ($^{1,440}/_{30yrs}$)			K48,000
Old depreciation ($^{K1,200}/_{40\ yrs}$)			K30,000
Transfer excess depreciation			K18,000
Adjustment			
Dr Revaluation reserve	K18,000		
Cr Retained earnings		K18,000	

6. Product and servicing sale

Under IFRS 15 *Revenue from Contracts with Customers*, sales made which include revenue for on-going servicing work must have part of the revenue deferred and any discount offered to stand-alone selling prices must (normally) be allocated to each component pro rata to the stand-alone selling prices.

The stand-alone selling price of the product and the servicing work would be K2,000,000 (K1, 800,000 and K200,000 million (50,000 x 4 years) respectively). The actual combined selling price of K1,600,000 represents a 20% discount on the stand-alone selling prices ((2,000,000 – 1,600,000)/(1,800,000 + 200,000)). Thus the sales revenue of K1,600,000 would be allocated K1,440,000 (1,800 000 x 80%) to the product and K160,000 (200,000 x 80%) to the servicing. At 31 March 2021 there are three more years of servicing work, thus K120, 000 ((K160,000 x 3 years/4 years) must be treated as deferred revenue, split K40,000 as current liability and K80,000 as non-current liability.

7. Income tax

Year-end estimate	K101, 600
Increase in Deferred tax (0.2 x K25, 000 – K4,000)	1, 000

Over provision	(K16, 000)
Tax charge	K86, 600

Deferred tax at year end (0.2 x K25, 000) = K5, 000.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 14 DECEMBER 2021

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)

Twatowe Sewing Centre Ltd (TSC) specialises in making children's clothes. The Finance Director has asked you to prepare budgets for the company and has provided you with the following information for a boy's shirt:

- Budgeted sales:

	2021				2022	
Quarter	1	2	3	4	1	2
No. Of shirts	2,125	1,000	1,875	2,500	1,750	1,000

- Each outfit requires 0.5 metres of material. Raw material costs K20 per metre;
- It takes one employee 45 minutes to make a shirt. The current labour cost for TSC is K12 per hour. This is paid as incurred;
- Overhead costs will be K4 per shirt produced and are also paid as incurred.
- TSC allows for a 50% mark up on cost when calculating sales prices;
- TSC receives 80% of sales income in the quarter in which the sales are made and the remaining 20% in the following quarter;
- Trade receivables at the end of quarter four 2020 were K13,000. All outstanding balances will be received in quarter one 2021. There are no irrecoverable debts.
- TSC plans for closing inventory of finished units at the end of each quarter to be 20% of the budgeted sales for the next quarter. At the end of 2020 the company had 1,500 finished shirts in inventory. TSC has no work in progress.
- TSC requires that the closing inventory of raw material at the end of each quarter should be equal to 20% of the production needs of the next quarter. At the end of 2020 TSC had 300 kg of raw material in inventory.
- TSC pays for 90% of their raw material in the quarter that purchases are made and the remaining 10% in the following quarter.
- Raw material payables at the end of quarter four of 2020 were K7,700. All outstanding balances will be paid in quarter one 2021.
- Equipment costing K25,950 will be purchased in quarter one 2021 and paid for in three equal instalments starting in quarter one 2021.
- A loan of K38,000 received in 2020 is repayable in quarter one 2021.
- The cash balance at the start of quarter one 2021 is K15,000.

Required:

(a) Calculate the unit sales price of the shirt. (2 marks)

(b) Prepare the following for each of the FOUR quarters of 2021:

(i) Sales budget (2 marks)
(ii) Production budget in units(i.e. shirts) (4 marks)
(iii) Raw material usage budget in metres (2 marks)
(iv) Raw material purchases budget in metres and value (5 marks)
(v) Labour cost budget (2 marks)

(c) Prepare TRC's cash budget for the four quarters of 2021. (13 marks)

(d) State two (2) examples of an industry, one in the manufacturing sector and one in the service sector that would be suited to standard costing. (Company names are not required.)

(2 marks)

(e) Identify the four (4) types of standard and describe the characteristics of any two (2). (6 marks)

(f) Outline any two (2) problems that an organisation may experience when setting standards. (2 marks)

[Total 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Sports Equipment Ltd (SEL) produces various sports equipment including balls. It makes two main balls, Netball and Football, using broadly the same production methods and equipment for each. SEL uses a conventional absorption costing system for its products at present, although an activity-based costing (ABC) system is being considered.

Details of the two products for a typical period are as follows:

	Netball	Football
	Kwacha /ball	Kwacha /ball
Selling price	720.00	650.00
Materials cost	150.00	100.00
Labour cost	100.00	100.00
Volumes (units) produced and sold	900	1,000

SEL's total production overheads amount to K675,000. These are currently absorbed on a sales price basis. The overhead absorption rate for the period is 30%.

Further analysis shows that SEL's total production overhead costs can be divided as follows:

	%
Materials purchases	12%
Machine set-ups	20%
Product packaging	28%
Quality testing	25%
Machine maintenance	15%

The following activity volumes are associated with each product for the period:

Product	Netball	Football
Number of purchase orders	75	25
Number of machine set-ups	150	100
Number of packages	300	150
Number of tests carried out	500	1,500
Number of maintenance call outs	425	1,000

Required:

(a) Calculate, using the current method of allocating overheads on a sales price basis:

(i) The profit per unit for a football (2 marks)

(ii) The profit margin for a netball. (1 marks)

(b) Calculate, using an activity-based costing approach to allocating overheads:

(i) The profit per unit for a netball and a football. (9 marks)

(ii) The profit margin for a netball and a football. (2 marks)

(c) Comment on reasons why the unit profit for the two products is different when using absorption costing and activity based costing. (3 marks)

(d) List three (3) implementation issues that SEL may face should it decide to adopt an activity-based costing system. (3 marks)

[Total 20 Marks]

QUESTION THREE

Chingola Computing Ltd (CCL) is a computer software company based in Chingola. CCL makes and sells a wide variety of software suitable for a professional working environment. Recently, a versatile accounting package known as 'Accpak' was developed. The management at CCL will soon review the company's operating results for the financial year ended 31 March 2021, and to finalise financial projections for the forthcoming period. During the year under review 16,000 copies were produced and sold by CCL. The following information was available:

	K
Sales	3,200,000
Variable costs	2,120,000
Fixed costs	506,250

Required:

(a) Calculate the following:

(i) Contribution per copy. (2 marks)

(ii) Breakeven point in copies and in revenue. (3 marks)

(iii) Margin of Safety as a percentage (%) (2 marks)

(iv) Level of sales revenue required to achieve a target profit of K162,000.
(2 marks)

(b) Explain the term margin of safety and outline its significance for CCL.
(2 marks)

(c) Prepare a breakeven graph for CCL's Accpak. The graph should be labelled and the following should be clearly indicated:

(i) Sales revenue line
(iii) Fixed costs line
(iv) Total costs line
(v) Breakeven point

Candidates should use the graph paper at the back of the answer booklet.
(6 marks)

(d) State three (3) assumptions of CVP analysis. (3 marks)

[Total 20 Marks]

QUESTION FOUR

Eat Well Ltd (EWL) is a food processing company. EWL uses an absorption costing system but the company's chief executive officer is also aware of variable (marginal) costing and is keen to understand the difference between the two costing systems.

EWL wishes to increase levels of production during December 2020 to 500,000 units. Sales during December 2020 were budgeted at 400,000 units. Standard per unit sales and cost data for December 2020 is outlined below:

	K/unit
Selling price	50.00
Food	4.00
Labour	8.00
Variable production overheads	3.00
Variable selling overhead	3.00

Fixed production and fixed non-production monthly overheads are detailed in the table below. EWL absorbs fixed production overheads based on its normal production level of 400,000 units per month. EWL has no closing inventory at the end of December 2020. The annual fixed production overheads were K1,200,000 and annual fixed selling overheads were K300,000. All the fixed overheads were evenly distributed.

Required:

(a) Explain the six (6) features of marginal costing system. (6 marks)

(b) Calculate EWL's budgeted net profit/loss for December 2020 using absorption costing. Show clearly the valuation of any inventory figures. (6 marks)

(c) Calculate EWL's budgeted net profit/loss for December 2020 using variable (marginal) costing. Show clearly the valuation of any inventory figures. (6 marks)

(d) Explain the difference in the budgeted net profit under the two costing systems. (2 marks)

[Total 20 Marks]

QUESTION FIVE

(a) Solwezi Construction Ltd (SCL) moulds different sizes of bricks. The cost of each set of bricks varies depending on the size and number produced, although they can only be produced in batches of 1,000 units. SCL has already carried out some market research and identified that sales quantities are expected to vary depending on the price charged.

Consequently, the following data has been established for the first month:

Number of batches	Variable cost per unit K	Total fixed costs K	Expected selling price K
1	5.00	10,000	10.00
2	4.40	10,000	9.00
3	3.90	12,000	8.00
4	3.20	12,000	6.50
5	3.20	14,000	6.00
6	3.10	16,000	5.50
7	3.00	18,000	5.00

Required:

(i) Calculate how many batches SCL should produce and sell. Explain why you have chosen that level of batches. (7 marks)

(ii) Explain the term "relevant cost' in a decision making situation. (2 marks)

Recently, SCL was offered to construct a shopping mall in Solwezi at a price of K1,250,000. The construction works started on 1 April, 2020. The following information is available:

	K
Plant installed on site	75,000
Direct Expenditure	15,835
Establishment charges	20,630
Materials returned to store	2,745
Work certified by architects	975,000
Cost of work not yet certified	22,500
Materials on hand, 31 March	9,415
Wages Accrued on 31 March	12,000
Direct expenses accrued on 31 March	1,200
Value of plant on 31 March	55,000
Materials sent to site	426,745
Labour engaged on site	371,875
Cash received from contractee	900,000

Assume it is now 1 April 2021.

Required:

(i) Prepare a contract account for SCL for the year ended 31 March 2021. (9 marks)

(ii) Calculate the attributed profit for the year ended 31 March 2021.
(N.B: SCL policy is to recognise profit on contracts as follows:
Profits to be recognised = 2/3 x Cash Received /Value of Work Certified)

(2 marks)

[Total 20 Marks]

END OF PAPER

SOLUTION ONE

(a) Selling price

	K per shirt
Materials 0.5mtr @ K20 /mtr	10.00
Labour 0.75hr @ K12/ hour	9.00
Overhead	4.00
Total Production cost	23.00
Mark up @ 50%	11.50
Selling price per shirt	34.50

(b) Functional budgets for 2021

(i) Sales Budget

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Sales units	2,125	1,000	1,875	2,500
Selling price	34.50	34.50	34.50	34.50
Sales revenue	73,312.50	34,500.00	64,687.50	86,250.00

(ii) Production Budget

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Sales units	2,125	1,000	1,875	2,500
Less Opening finished goods inv.	(1,500)	(200)	(375)	(500)
Add Closing finished goods inv.	200	375	500	350
Budgeted production	825	1,175	2,000	2,350

(iii) Material usage Budget

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Budgeted production	825	1,175	2,000	2,350
Usage per shirt (mtr)	0.5	0.5	0.5	0.5
Budgeted material usage (mtrs)	412.50	587.50	1,000	1,175

(iv) Material purchases Budget in metres and value

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Budgeted material usage (mtrs)	412.50	587.50	1,000	1,175
Less Opening raw material inv.	(300)	(117.50)	(200)	(235)
Add Closing raw material inv.	117.50	200	235	160
Budgeted material purchases (mtrs)	230	670	1,035	1,100
Price per metre (K)	10	10	10	10
Budgeted material purchases (K)	2,300	6,700	10,350	11,000

(v) Labour Cost Budget

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Budgeted production (shirts)	825	1,175	2,000	2,350
Labour cost per shirt (K)	9	9	9	9
Budgeted labour cost (K)	7,425	10,575	18,000	21,150

(c) **TSC's Cash Budget for the Four Quarters of 2021(K)**

	Q1	Q2	Q3	Q4
Cash Inflows				
Trade sales (w1)	71,650	42,262.50	58,650	81,937.50
Total cash inflows	71,650	42,262.50	58,650	81,937.50
Cash Outflows				
Trade purchases (w2)	9,770	6,260	9,985	10,935
Loan repayment	38,000	-	-	-
Equipment	8,650	8,650	8,650	-
Wages	7,425	10,575	18,000	21,150
Overheads	3,300	4,700	8,000	9,400
Total cash outflows	67,145	30,145	44,635	41,485
Net cash flows	4,505	12,077.50	14,015	40,452.50
Opening cash balance	15,000	19,505	31,582.50	45,597.50
Closing cash balance	19,505	31,582.50	45,597.50	86,050

Workings:

1. Trade sales

	Q1	Q2	Q3	Q4
1. Trade sales	73,312.50	34,500	64,687.50	86,250
80% receivables Current period	58,650	27,600	51,750	69,000
20% receivables Next period	13,000.00	14,662.50	6,900	12,937.50
Total	71,650.00	42,262.50	58,650	81,937.50
2. Trade Purchases	2,300	6,700	10,350	11,000
90% payment	2,070	6,030	9,315	9,900
10% payment	7,700	230	670	1,035
Total payment	9,770	6,260	9,985	10,935

(d) Examples of industry that would be suited to standard costing

This list is not exhaustive:

(i) Manufacturing sector
- Pharmaceuticals
- Tyre manufacturers
- Chemical processing

(ii) Service sector
- Call centres
- Banks
- Hospitals

(e) Types of standards

(i) Basic standards

These will represent an old established standard designed principally to satisfy a given objective e.g. the first attempt at doing it. Basic standards are not subject to frequent alterations and therefore are outdated in nature. These are the least useful but the most commonly used because they are in reality the only standard the company measures performance against because they have not been updated at any time. Variances extracted from basic standards are unreliable and should not be relied on.

(ii) Ideal standards

These are designed on the basis of maximum productive capacity of the organization without providing adequately for any negative factors that may inhibit the attainment of the standard. For example, labour standards are established without the provision for lateness, absenteeism, industrial action, annual leave, maternity leave etc. Trying to achieve the ideal standard may have serious motivational impact i.e. operators may feel the goals / standards that are set are unachievable and hence do not work hard.

(iii) Attainable standards

These are also referred to as practical standards. They represent a standard specifically built upon what is considered practicable within the organization. Practical standards are established with adequate provision for negative factors that may affect the attainment of the standard. For example, in establishing these standards, adequate provision is given to idle time or loss of production due to machine breakdown, loss of power, lack of raw materials, repairs and maintenance, etc.

(iv) Current standards

A standard specifically based on the prevailing working conditions within an organization or the industry at large. Current standards are, however, subject to frequent changes in order to reflect the current position within the organization / industry. Once an attainable standard has been successfully achieved it then becomes current and the company then sets about progressing towards the ideal standard by setting a new attainable standard. Progression is incremental towards the ideal.

(f) Potential problems that an organisation may experience when setting standards include:

- Agreeing on the appropriate 'performance' standard;
- Taking into account the impact of inflation;
- Deciding on the quality of material to be used;
- Dealing with seasonal price variations or bulk purchasing purchase discounts, if significant;
- Time consuming process;
- Cost of setting up and maintaining a standard cost system;
- Behavioural problems – fear of blame for adverse variances.

SOLUTION TWO

(a) Current method of allocating overheads on a sales price basis:

(i) Profit per football

	K	K
Selling price		650
Material cost	100	
Labour cost	100	
Overheads cost (30% x K650)	195	
Total cost		395
Profit		255

(ii) Profit margin for the netball

	K	K
Selling price		720
Material cost	150	
Labour cost	100	
Overheads cost (30% of 720)	216	
Total cost		466
Profit		254

Profit margin = $\frac{254}{720}$ x 100% = 35.28%

(b) ABC method of allocation of overheads

(i) Profit per unit for both products

Type of ball	Netball	Football
	(K)	(K)
Selling price	720.00	650.00
Material	(150.00)	(100.00)
Labour	(100.00)	(100.00)
Overheads	(377.93)	(334.87)
Profit per ball	92.07	115.13

Workings

1. Allocation of overheads

Overhead	Allocation
Materials purchases	12% of K675,000 = K81,000
Machine set-ups	20% of K675,000 = K135,000
Product packaging	28% of K675,000 = K189,000
Quality testing	25% of K675,000 = K168,750
Machine maintenance	15% of K675,000 = K101,250

2. Rates

Activity	Cost Pool (K)	Cost driver	Rate
Materials purchases	81,000	100	K810/order
Machine set-ups	135,000	250	K540/set-up
Product packaging	189,000	450	K420/package
Quality testing	168,750	2,000	K84.38/test
Machine maintenance	101,250	1,425	K71.05/call out

3. Apportionment of overheads to units

Type of ball	Netball	Football
Materials purchases (K810 x 75)/900 (K810 x 25)/1,000	67.50	20.25
Machine set-ups (K540 x 150)/900 (K540 x 100)/1,000	90.00	54.00
Product packaging (K420 x 300)/900 (K420 X 150)/1,000	140.00	63.00
Quality testing (K84.38 x 500)/900 (K84.38 x 1,500)/1,000	46.88	126.57
Machine maintenance (K71.05 x 425)/900 (K71.05 x 1,000)/1,000	33.55	71.05
Total overheads per ball	377.93	334.87

(ii) Profit margin per product

Netball = $\frac{92.07}{720}$ x 100% = $\underline{\underline{12.79\,\%}}$

Football = $\frac{115.13}{650}$ x 100% = $\underline{\underline{17.71\,\%}}$

(c) Comments

- ABC attempts to trace overheads to products on a more realistic basis than traditional costing - based on products' use of each particular overhead;
- Overheads are assigned to activities ('cost pools') rather than departments, and 'cost drivers' are used to charge products with a suitable amount of overhead – based on usage of the overhead;
- ABC tends to use a greater number of 'cost pools' & subsequently a greater number of allocation bases.

(d) Issues that SEL may have encountered when implementing ABC include:

- The choice of cost drivers is subjective;

- ABC assumes a direct, linear relationship between the usage of a cost driver and the amount of overheads - very few costs indeed are truly variable in this sense;

- It is often difficult to attribute costs to single activities - some 'common' costs support several activities;

- It is not always apparent which product should carry the traced overhead - resources are required to identify and record cost pools and cost driver activity;

- A full ABC system having numerous cost pools and cost drivers is more complex and expensive to operate;

- There are many factors which influence the cost of an overhead activity in addition to the 'cost driver'.

SOLUSTION THREE

(a)

(i) Contribution per copy

	K	%
Sales	3,200,000	100.00
Variable costs	2,120,000	66.25
Contribution	1,080,000	33.75
Number of copies	16,000	
Contribution per copy	K67.50	

(ii) Breakeven point in revenue

Fixed costs/ contribution- sales ratio
K506,250/0.3375 = K1,500,000

Breakeven point in copies

Fixed costs/contribution per copy
K506,250/67.50 = 7,500 copies

(iii) Margin of safety %

[(Budgeted revenue – BEP revenue) / Budgeted revenue] x 100%

[(3,200,000 – 1,500,000) / 3,200,000] x 100% = 53%

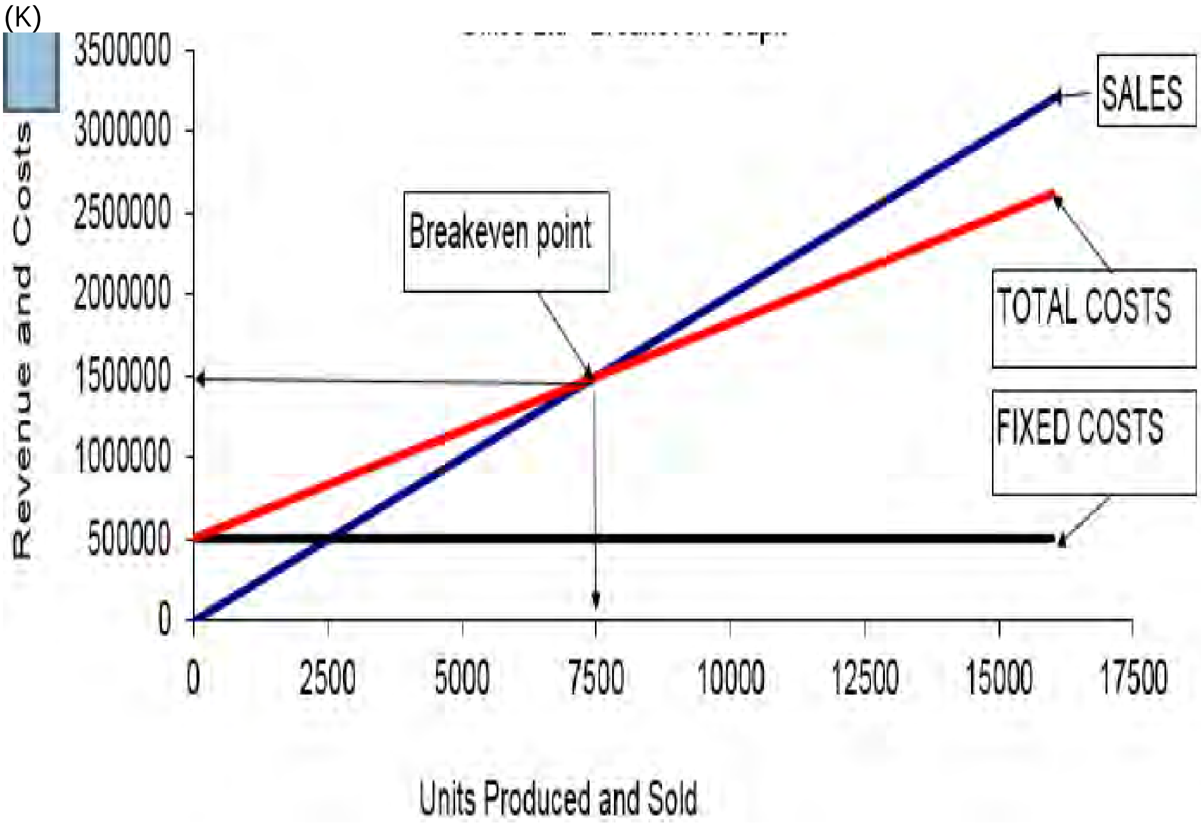
(iv) Sales revenue to achieve a target profit of K162,000:

Sales revenue = (Fixed cost + Target profit)/ contribution – sales ratio
Sales revenue = (506,250 + 162,000)/ 0.3375 = K1,980,000

(b) Margin of safety

Margin of safety provides management with an indication of the level by which sales would have to fall in order to reach the breakeven point. The higher the margin of safety the greater the likelihood that the product or sales mix will be profitable. If the margin of safety is low a small change in demand for the product could result in the company making a loss.
CCL has a margin of safety of 53% or 8,500 units. This suggests that CCL is not at risk of making a loss as a result of a drop in sales, ie sales volume can drop 53% below its budgeted level and CCL will still cover its costs.

(c) Break even graph for Accpak



(d) Assumptions

Assumptions behind CVP analysis:

- All costs can be classified into fixed and variable elements.
- Fixed costs remain constant
- Variable costs vary proportionately with activity
- Over the activity range being considered costs and revenues behave in a linear fashion
- That the only factor affecting costs and revenues is volume.
- That technology, production methods and efficiency remain unchanged.
- Particularly for graphical methods that the analysis relates to one product only or to a constant product mix.
- There are no inventory level changes or that inventories are valued at marginal cost only.

SOLUSTION FOUR

(a) Features of Marginal Costing

The following are the main features of Marginal Costing:

(i) It is a technique of costing which is used to ascertain the marginal cost and to know the impact of variable cost on the volume of output.
(ii) All costs are classified into fixed and variable cost on the basis of variability. Even semi fixed cost is segregated into fixed and variable cost.
(iii) Variable costs alone are charged to production. Fixed costs are recovered from contribution.
(iv) Valuation of inventory of work in progress and finished goods is done on the basis of marginal cost.
(v) Selling price is based on marginal cost plus the contribution.
(vi) Profit is calculated by deducting marginal cost and fixed cost from sales.
(vii) Cost Volume Profit (or Break Even) Analysis is one of the integral parts of marginal costing.
(viii) The profitability of product/department is based on contribution made available by each product/department.

(b) Profit statement using Absorption costing

	K'000	K'000
Sales (400,000 x K50)		20,000
Less Absorption cost of sales		
Opening inventory	NIL	
Production costs (500,000 x K18(W.1))	9,000	
Closing inventory (100,000 x K18)	(1,800)	
	7,200	
Adj for over-absorbed overheads 100,000 x K3)	(300)	
		(6,900)
Gross profit		13,100
Less Non-manufacturing costs		
Variable selling overheads (400,000 x K3)	1,200	
Fixed selling overhead	300	
		(1,500)
Net profit		11,600

Working W.1: production cost per unit

	K
Food	4.00
Labour	8.00
Variable POH	3.00
Total variable production cost per unit	15.00
Fixed Production Overhead cost per unit(K1,200,000/400,000	3.00
Total production cost per unit	18.00

(c) Profit statement using Marginal costing

	K'000	K'000
Sales (400,000 X 50)		20,000
Less marginal cost of sales		
Opening stock	Nil	
Production costs (500,000 x K15)	7,500	
Closing stock (100,000 x K15)	(1,500)	
	6,000	
Variable selling overheads	1,200	
Total variable costs		7,200
Contirbution		12,800
Less Fixed costs		
Production costs (500,000 x K3)	1,500	
Non – production (selling overheads)	300	
Total fixed costs		1,800
Profit		11,000

(d) As inventory levels increase the fixed production overhead included in the closing inventory valuation is deferred and not recognised as an expense until the inventory is sold, unlike marginal costing under which the fixed production overhead is treated as a period cost and expensed as incurred. As a result the profit is higher under absorption costing when inventory levels are increasing.

SOLUSTION FIVE

(a) Number to be produced and sold

Batches	Units	Price per unit	Total revenue	Variable cost per unit	Total variable costs	Fixed costs	Total cost	Profit
		K	K	K	K	K	K	K
1	1,000	10.00	10,000	5.00	5,000	10,000	15,000	(5,000)
2	2,000	9.00	18,000	4.40	8,800	10,000	18,800	(800)
3	3,000	8.00	24,000	3.90	11,700	12,000	23,700	300
4	4,000	6.50	26,000	3.20	12,800	12,000	24,800	1,200
5	5,000	6.00	30,000	3.20	16,000	14,000	30,000	0
6	6,000	5.50	33,000	3.10	18,600	16,000	34,600	(1,600)
7	7,000	5.00	35,000	3.00	21,000	18,000	39,000	(4,000)

Therefore SCL should mould and sell four batches (4,000 units) of bricks since at this point it will make the greatest profit of K1,200 for the month.

(b) Relevant cost

A relevant cost is a cost that influences decision making. A cost or revenue is relevant if there is a change in cash flow that is caused by the decision. An example of a relevant cost is an avoidable cost which is avoided when an activity or sector of a business ceases to exist.

(c) Contract Account

	K		K
Materials to site	426,745	Material returned c/f	2,745
Labour	371,875	Material at site c/f	9,415
Plant installed	75,000	Value of plant at site c/f	55,000
Direct Expenditure	15,835	Value of certified work	975,000
Establishment charges	20,630	Cost of uncertified work	22,500
Wages accrued	12,000		
Direct expenses accrued	1,200		
Balance c/d	141,375		
	1,064,660		1,064,660
		Balance b/d	141,375

(d) Attributable profit to the contract for the year

$$141{,}375 \times \frac{2}{3} \times \frac{900{,}000}{975{,}000} = \underline{\underline{K87{,}000}}$$

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 16 DECEMBER 2021

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

Sekelela Ltd is a manufacturer of medical supplies. For many years, the company has traded only in Zambia, supplying public hospitals, during which time reasonable profits have been made. However, the COVID-19 pandemic has resulted in a significant drop in profitability.

You were appointed to the managerial team of an audit firm, Hikaunu Accountants which is registered with ZiCA. Sekelela Ltd has been your firm's audit client for four (4) years. You are planning the audit of the financial statements of Sekelela Ltd for the year ended 30 September 2020. This is your first time to audit a company involved in the manufacture of medical supplies.

In January 2020, Sekelela Ltd started exporting medical supplies to Zimbabwe. To support the export sales, the company borrowed $4 million and successfully negotiated a 30% increase in the bank overdraft facility. Approved customer credit terms are forty days (40) days but the Zimbabwean customers' average collection period has been 72 days. A control account is maintained specifically for export sales. A US $ dollar account was opened for the export earnings and is reconciled on a weekly basis by the Chief Accountant. Export earnings are used to finance imports of some medical supplies which cannot be sourced locally.

At the beginning of the accounting year, the Directors approved profit-based bonuses for Senior Management. This was meant to attract, retain and motivate Senior Management to achieve the long-term interests of shareholders. The draft financial statements for the year ended 30 September 2020 show an increase in profit of 30%.

Only authorized staff has access to stores. However, during the year, an inventory fraud was uncovered by the internal auditors. The fraud occurred because the Stores Clerk colluded with one of the Security Guards. The Stores Clerk is responsible for receiving fuels and lubricants and thereafter raising Goods Received Note(s) (GRNs). The Security Guard is responsible for witnessing offloading of fuels and lubricants and thereafter counter signing on the Goods Received Notes (GRNs) to confirm receipt of the fuels and lubricants.

Fake Goods Received Notes (GRNs) were raised on two (2) occasions and were countersigned by the Security Guard. No one reviews the Goods Received Notes after they are prepared and countersigned. Copies of the Goods Received Notes (GRNs) are sent to the Accounts Department where they are matched with respective purchase orders and invoices before processing and effecting payment electronically. An Accounts Clerk has the responsibility of checking the invoice for mathematical accuracy.

The fraud was only uncovered when the Audit Committee requested the internal auditors to carry out an investigation on the procurement of fuels and lubricants. It was discovered that fake Goods Received Notes (GRNs) were raised on two (2) occasions to effect fraudulent payments to different suppliers. The matter was reported to the police and the company has since instructed the Company Lawyer to take legal action against the people involved. The Disciplinary Committee recommended that the Stores Clerk and the Security Guard should be dismissed but the Managing Director refused. He preferred waiting for the outcome of the legal case in order to avoid counter legal suits involving wrongful dismissals which have been very costly to the company. Perpetual inventory count has been introduced on fuels and lubricants.

In November 2019, the Chairperson of the Board of Directors decided to retire. The Finance Director is acting as Chairperson of the Board and Hikaunu Accountants have been requested to find a suitable replacement.

There is pressure from major suppliers and the Zambia Revenue Authority (ZRA). One of the major suppliers cancelled credit facilities and it is possible others may follow suite. The Zambia Revenue Authority (ZRA) is concerned with the level of non-compliance in respect of Pay As You Earn (PAYE). Sekelela Ltd has not remitted Pay As you Earn (PAYE) for the past four (4) months and the Zambia Revenue Authority (ZRA) has issued a demand notice.

At a recent meeting with the members of the audit team, one of the Junior Auditors requested for a clear explanation on elements of assurance engagements and also made the following statement:

"The audit plan converts the audit strategy into more detailed plan and includes the nature, timing and extent of audit procedures to be performed by engagement team members in order to obtain sufficient appropriate audit evidence to reduce audit risk to an acceptably low level. Audit client's timetable for reporting to its members and allocation of work are some of the examples of items included in the audit strategy".

Required:

(a) (i) Define control activities, giving one (1) example. (3 marks)

(ii) Identify six (6) control activities in Sekelela Ltd. (3 marks)

(iii) Explain the control objectives for the control activities identified in (a) (ii) above. (6 marks)

(iv) For each control activity identified in (a) (ii) above, suggest one (1) appropriate test of control. (6 marks)

(b) Evaluate the Junior Auditor's statement on audit strategy. (5 marks)

(c) Identify and explain eight (8) audit risks in the financial statement audit of Sekelela Ltd for the year ended 30 September 2020. (12 marks)

(d) Using the external statutory audit for Sekelela Ltd as an example, explain the elements of assurance engagement. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

(a) You are planning the audit of the financial statements of Nshimbi Hardware, a large retailer of hardware in Lusaka. The company has three outlets, each under the supervision of a Store Manager. For control purposes, each branch maintains a separate bank account into which all sales proceeds are banked. The bulk of the sales of Nshimbi Hardware are on a cash basis and the company has large amounts of cash on hand and cash at bank. The branches maintain a cash book which shows the cash on hand and at bank.

The risk of misstatement of cash and bank balances is considered high. You plan to carry a cash count of the cash on hand at the period end and also to confirm bank balances.

Required:

(i) Explain the procedure that should be followed for the planned cash count at the three (3) locations. (4 marks)

(ii) Describe the procedure that will be followed for the confirmation of bank balances of Nshimbi Hardware. (6 marks)

(iii) Explain the reliability of the evidence obtained from seeking direct confirmation of bank balances. (2 marks)

(b) Your firm responded to an advertisement by Victoria Plc for the expression of interest to offer auditing services. Victoria Plc has been an audit client of Waterloo Chartered Accountants for the past five (5) years.

Your firm received notification that it has been nominated to be auditor of Victoria Plc. Your firm is a medium size firm and this will be the largest single client that the firm will have. There are three other clients with the same accounting year end as that of Victoria Plc.

You are in charge of client acceptance and you are considering whether to accept or reject the nomination for your firm to be auditor of Victoria Plc.

Required:

(i) Explain four (4) matters that your firm will consider before accepting nomination as auditor of Victoria Plc. (4 marks)

(ii) Explain the procedure and response that should be followed in communicating with the outgoing auditors before accepting nomination.

(4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) You are the Audit Senior in your firm of Chartered Accountants. You have been assigned to the audit of the financial statements of Fig Ltd for the year ended 31 December 2020.

The Engagement Partner has suggested that you should perform some procedures at the interim audit visit of Fig Ltd.

Required:

Describe four (4) tasks that can be performed at the interim audit visit, clearly explaining the impact that the work will have on the final audit. (8 marks)

(b) The following information has been extracted from the draft statement of financial position of the financial statements of Derby Ltd for the year ended 31 December 2020.

	Km
Accounts payable	980
Provisions and accruals	540

You have been provided with schedules showing the make-up of the above balances by the Chief Accountant.

Required:

(i) Explain three (3) financial statement assertions for accounts payable. (3 marks)

(ii) Describe three (3) audit procedures other than circularization (confirmation) for the accounts payable balance in the financial statements of Derby Ltd. (3 marks)

(ii) Describe three (3) audit procedures for provisions and three (3) audit procedures for accruals in the financial statements of Derby Ltd. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Lukulu Ltd is a company that provides specialist geological services in North Western Province. The company is profitable but it is experiencing challenges in its corporate governance structures.

The Board of Directors is made up of three (3) Executive Directors (EDs) and three (3) Non-Executive Directors (NEDs). The Chief Executive Officer (CEO) is qualified and experienced. He is the Chairman of the Board of Directors.

There is no female Director because of the nature of the company's operations. All Directors are highly qualified in their respective fields and they have competence relevant to the geological sector. The Chairman of the Audit Committee has recent and relevant knowledge in financial reporting.

The company places a high degree of priority on the interests of shareholders as they have placed their trust in money in Lukulu Ltd to be used efficiently and effectively and continue to reward them with relatively above average dividends.

The Audit Committee is aware that the internal controls have always been assessed as poor by the external auditors and wants the external auditors to take a leading role in fraud prevention and detection.

The company's Finance Director is a former partner in one of the large accountancy firms. and is responsible for the appointment of External Auditors. His experience and independence is beyond question. He is a fellow of the Zambia Institute of Chartered Accountants (ZiCA) and three (3) reputable foreign professional bodies.

Your firm of Chartered Accountants, Nkhanga & Co. was appointed to review the governance structures and evaluate the proposal that External Auditors should take a leading role in fraud prevention and detection.

Required:

(a) Define internal auditing. (2 marks)

(b) Using the facts given in the scenario, explain what is meant by separation of authority in a company. (3 marks)

(c) Identify and explain four (4) deficiencies in the corporate governance in Lukulu Ltd, and recommend suitable solutions. (10 marks)

(d) Evaluate the proposal that external auditors should take a leading role in fraud prevention and detection. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Kaputa Electronics Ltd was incorporated in 2007 and is situated in Livingstone. The principal business of the company is the installation of Zambia Revenue Authority (ZRA) approved integrated electronic point of sale (EPOS) systems for recording of all sales of goods in retail stores. These are linked to the central database system at the Zambia Revenue Authority (ZRA) head office in Lusaka.

Following the expansion of the company's business, the company increased the credit period allowed to customers from 20 days to 45 days in August 2019. This resulted in a significant increase in revenue and receivables. The draft financial statements for the year ended 30 September 2020 show that revenues and receivables have both increased by 45% and 60% respectively.

Your firm is auditor of Kaputa Electronics. You have obtained the following information relating to the receivables in relation to the audit of the company's financial statements for the year ended 30 September 2020.

The Audit Manager informed you that there was a problem uncovered during the year concerning receivables. A number of "ghost" customers were discovered during a detailed physical verification exercise by the company's internal auditors. This resulted in a number of accounts and sales personnel being dismissed. He instructed you to perform appropriate substantive procedures regarding the existence of receivables.

In June 2020, the Zambia Revenue Authority (ZRA) became suspicious of the audited financial statements which Kaputa Electronics Ltd submitted for the year ended 30 September 2019. Serious questions were raised on the sales and receivables figures. An investigation was instituted and the Zambia Revenue Authority (ZRA) investigations team requested your audit firm to provide some details on sales and receivables.

Required:

(a) Define an audit of financial statements. (2 marks)

(b) Explain whether the Zambia Revenue Authority (ZRA) is justified in questioning some of the figures in the audited financial statements for Kaputa Electronics for the year ended 30 September 2019. (4 marks)

(c) Explain whether your audit firm should provide the information requested by the ZRA investigation team. (8 marks)

(d) Suggest six (6) audit procedures which should be performed to confirm the existence of the receivables. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA2.3 AUDITING PRINCIPLES AND PRACTICE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) (i) Definition of control activities

Control activities are those policies and procedures that help ensure that management directives are carried out. They include those activities designed to prevent or to detect and correct errors. Examples include activities relating to authorization, performance reviews, information processing, physical controls and segregation of duties.

Control activities, control objectives and tests of controls:

(ii) **Control activities**	(iii) **Objective of control activity**	(iv) **Tests of control**
Approved credit terms of 40 days.	This is aimed at ensuring that export sales remain profitable. Overdue debts are costly and could end up as irrecoverable.	Obtain a copy of the credit policy or relevant board resolution and confirm details on approved credit period.
A control account is maintained specifically for export sales	This is aimed at highlighting unusual transactions, so that timely control action can be effected by management.	Inspect the general ledger to confirm existence of the control account for export sales.
A US $ dollar account is reconciled on a weekly basis by the Chief Accountant	This is aimed at ensuring that the only differences are reconciling items such as outstanding lodgements and unpresented cheques.	Review reconciliations and check that they are carried out weekly.
An Accounts Clerk has the responsibility of recalculating the invoice totals.	This is aimed at ensuring the invoice totals are arithmetically accurate.	-Inspect a sample of invoices to confirm whether the Accounts Clerk recalculates the invoice totals. - Recalculate the totals on a sample of invoices
Only authorized personnel has access to the stores	This is aimed at minimising theft of inventory.	Visit the stores and observe personnel accessing the stores.
Perpetual inventory count has been introduced on fuels and lubricants	This aimed at ensuring inventory quantities are accurately determined.	Attend one of the inventory counts.

(a) Evaluation of **Junior Auditor's statement**

Audit strategy sets the scope, timing and direction of the audit, and guides the development of the more detailed audit plan. It provides the broader picture. The audit plan is more detailed and converts the audit strategy into a more detailed plan and no the other round as suggested by the Junior Auditor.

In addition, the Junior Auditor is wrong by saying the following:

- The audit strategy includes the nature, timing and extent of audit procedures to be performed by engagement team members in order to obtain sufficient appropriate audit evidence to reduce audit risk to an acceptably low level.
- Allocation of work is an example of items included in the audit strategy.

However, he is accurate when he states that the audit client's timetable for reporting to its members is an example of items included in the audit strategy.

(b) Audit risks:

Audit risks	Explanation
Sekelela Ltd is a manufacturer of medical supplies	Medical supplies are desirable/susceptible to theft leading to a risk that recorded inventories do not exist.
Significant drop in profitability	This may indicate going concern problems rendering preparation of the financial statements using going concern assumption invalid.
First time to audit a company involved in the manufacture of medical supplies	This increases the risk of misstatements going undetected.
Approved credit terms are 40 days but the Zimbabwean customers' average collection period has been 72 days.	There is a risk that the allowance for receivables could be understated.
Profit-based bonuses for senior management	Management has an incentive to manipulate profitability through fraudulent financial reporting.
Inventory fraud	This could be a "tip of an iceberg". It is possible others could remain undetected resulting in serious misstatement of some figures in the financial statements.
Perpetual inventory count	There could be a difference between the inventory based on perpetual inventory records and actual inventory at the year-end.
Electronic payment	There is an increased risk of cybercrime, which could invalid the level of indebtedness reflected in the financial statements.
The Finance Director is acting as Chairperson of the Board	There is a possibility of the Finance Director neglecting his role in the financial reporting process resulting in misstatements which may go unnoticed.

Significant pressure from major suppliers and the Zambia Revenue Authority (ZRA)	There is a risk of wrongly applying the provisions of IAS 37 *Provisions, contingent liabilities and contingent assets.* This could also negatively impact the going concern status of Sekelela Ltd.

(c) Elements of an assurance engagement

Elements of an assurance engagement	Example using Financial Statement
A three party relationship	Responsible party (Directors), Practitioner (Auditor) and Intended user (Shareholders)
A subject matter	Financial statements
Suitable criteria	Companies Act and IFRSs
Evidence	Sufficient appropriate evidence needed to support the required level of assurance
An assurance report	Audit report

SOLUTION TWO

(a) (i) Procedures for cash count:

1. The count of cash on hand should be done simultaneously at all the three locations.
2. The counting should be done in the presence of the individuals responsible for the cash.
3. The cash counts should be documented on suitable certificates and signed by those witnessing the count. This will form part of the evidence and working paper of the auditor.
4. A comparison of the cash counted with the balances per cash books should be made and explanations obtained for any differences.
5. Confirm that the cash counted is in agreement with the figure in the draft financial statements.

(ii) Procedure for confirmation of bank balances:

1. The auditor should obtain a list of the banks in which the company has accounts and the details of the nature of the accounts.
2. The auditor will decide from which bank or banks to request confirmation.
3. The client will require to provide the banks explicit written authority for the bank to respond to the request by the bank.
4. The auditor will write the bank confirmation letters making reference to the written authority of the client company.
5. The bank confirmation letter should request that the bank responds directly to the auditor.

(iii) Reliability of bank confirmation request:

The type of evidence obtained from the bank request is reliable because it comes directly from an independent source the bank. This form of evidence provides greater assurance of reliability than that obtained solely from the client company records.

Generally third party evidence is more reliable than evidence obtained from the entity.

(b) (i) Matters to consider before accepting nomination:

1. The firm should consider the fact that it has three other clients with the same year end as Victoria Plc. Will it have the resources in terms of time and manpower to carry out this audit.
2. The size of Victoria Plc should be considered in considering whether the firm has the capacity to carry out the audit.
3. The firm should consider the human resources that it has in view of the fact that this is the first time the firm will audit a client in this industry.
4. The adherence with ethical matters by the firm and the audit staff should be considered. If there are any ethical challenges the firm should not accept appointment unless suitable safeguards are put in place.

(ii) Procedure for communicating with outgoing auditors:

1. Obtain permission from Victoria Plc to communicate with Waterloo Chartered Accountants.
2. If permission is granted, write a letter of clearance to the outgoing auditors.
3. If permission is not granted, then the firm should decline the nomination.
4. When Waterloo Chartered Accountants receive the letter from the firm, they should seek the permission of Victoria Plc to respond to the letter.
5. If permission is granted, Waterloo Chartered Accountants will respond to the letter of inquiry.
6. Evaluate the contents of the response from Waterloo Chartered Accountants and if there are no reason why not to accept appointment the firm can go ahead and accept nomination.
7. If Victoria Plc. does not give permission to Waterloo Chartered Accountants to respond then the firm should decline appointment.

SOLUTION THREE

(a) Work that can be performed at the interim audit stage:

1. Assessing the risk of material misstatement and gaining an understanding:
   Risk assessment involving the assessment of risk in the audit of the financial statements of Fig Ltd could be done at the interim audit visit. This will enable the auditors identify potential problems early in the audit.

   At the final audit stage of the audit, the auditors will only remain alert for any risks that may exist and not established at the interim audit stage.

2. **Recording the entity's system of internal control:**
   This is a procedure that is required to be performed by auditors during the planning stage of the audit and involved recording the internal controls of the client companies. The recorded systems will be the basis of the tests of control that will be performed.

   At the final audit stage, the auditors will only require to record other controls for the period not covered at the interim audit stage as the systems would have been recorded and documented at the interim audit stage.

3. Performing tests of control:
   Tests of control for the period to the date of the interim audit can be performed. These are tests aimed at establishing the operating effectiveness of the controls with a view for the auditor to decide whether or not to rely on the internal controls during the audit.

   At the final audit stage, the auditors will only perform tests of control for the period not covered during the interim audit stage.

4. Substantive tests of transaction to date of interim audit:
   Substantive tests are tests carried out by the auditors with a view to detect material misstatements in the figures contained in the profit or loss account. Tests to the date of the interim audit can be performed at the interim audit visit.

   At the final audit stage, substantive tests will only be performed for transactions covering the period after the interim audit visit.

5. Limited substantive tests on account balances:
   At the interim audit stage, limited substantive tests can be performed by the auditors. For example tests on additions and disposals to the date of the interim audit visit.

   At the final audit visit, the auditors will perform procedures on the transactions since the interim audit and on the balances at the period end.

(b) (i) Assertions on accounts payables:

1. Completeness
   This is the claim by management that all the payables that must be included in the financial statements have been included and are part of the balance at the period end.

2. Accuracy
   This assertion means that the amounts included in the payables balances have been accurately determined and are not materially misstated.

3. Rights and obligations
   This assertions means that the obligations arising from the payables are for the client company and do not relate to other parties.

4. Existence:
   This means that the balances represented in the figure of payables represent amounts due at the period end of the company.

(ii) Audit procedures for accounts payables:

1. Agree the total on the list of payables to the amount in the draft financial statements.
2. Agree the total on the schedule of payables to the general ledger balance.
3. Cast and check the schedule of payables for mathematical accuracy.
4. For a sample of payables balances, confirm the balances with the payables statements at the period end.(Third party evidence)
5. For a sample of payables review the supplier reconciliations and verify reconciling items for correctness.

(iii) Audit procedures for provisions and accruals:

Provisions:

1. Confirm that the total of the schedule for provisions agrees with the amounts in the draft financial statements and the general ledge balance.
2. Cast the schedule of provisions to ensure that it is mathematically correct.
3. For a sample of balances on the list of provisions confirm that the amounts meet the criteria in ISA 37 for inclusion in provisions.
4. Review post year end transactions for any evidence on the amounts of provisions at the period end.
5. Obtain management written representations to support the amounts in provisions where necessary.

Accruals:

1. Cast the schedule of accruals for mathematical accuracy.
2. Agree amount on the schedule to the draft financial statements and the general ledger balance.
3. For a sample of accruals made recalculate the computations.
4. Review post year end transactions for evidence of amounts at the period end.

SOLUTION FOUR

(a) Meaning of internal auditing:

This is an appraisal or monitoring activity established or provided as a service to the entity. Its functions include examining, evaluating and monitoring the adequacy and effectiveness of internal control.

(b) Separation of authority:

Authority in a company generally resides with the Chairman of the Board and the Chief Executive Officer. These two powerful and demanding positions should be held by two different people.

The Chairman of the Board of Directors is the boss for the Board of Directors while the Chief Executive Officer (CEO) is the boss for management.

In Lukulu Ltd, the Chief Executive Officer (CEO) is also the Chairman of the Board of Directors. This is not good corporate governance.

(c) Deficiencies and recommendations

Deficiencies	Explanations	Recommendations
(1) The Chief Executive Officer (CEO) is also the Chairman of the Board of Directors.	The CEO's decisions are unlikely to be challenged since he has unfettered powers of decision.	An independent Non-Executive Director (NED) should be appointed as Chairman of the Board of Directors.
(2) There is no female director	The Board of Directors is not gender balanced and this could affect the quality of decisions.	At least one (1) female director should be appointed.
(3) Internal controls have always been assessed as poor	This has a negative impact on accountability and transparency which are key concepts in corporate governance. The company's reports may not be reliable.	The Board of Directors should engage a reputable professional firm to develop sound risk management and internal control systems as a matter of urgency.
(4) The company's Finance Director is responsible for the appointment of external auditors	The Finance Director is an interested party in the financial reporting process and may not want to appoint external auditors who may question his decisions. Hence, the external auditors may not be, or be seen to be independent.	The Audit Committee should make recommendations to the Board of Directors in relation to the appointment of the external auditors.

(d) Evaluation of the proposal that external auditors should take a leading role in fraud prevention and detection

ISA 240 *The auditor's responsibilities relating to fraud in an audit of financial statements* gives detailed guidance in this area. The primary responsibility for the prevention and detection of fraud is with those charged with governance and the management of an entity. This is effected by having a commitment to creating a culture of honesty and ethical behaviour and active oversight by those charged with governance.

The standard states that the auditor is responsible for obtaining reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. The risk of not detecting a material misstatement from fraud is higher than from error because of the following reasons:

- Fraud may involve sophisticated schemes designed to conceal it
- Fraud may be perpetuated by individuals in collusion
- Management fraud is harder to detect because management is in a position to manipulate accounting records or override control procedures

The auditor is responsible for maintaining professional scepticism throughout the audit, considering the possibility of management override of controls, and recognizing that audit procedures effective for detecting errors may not be effective for detecting fraud.

SOLUTION FIVE

(a) An audit is an independent review of the financial statements and disclosures produced by directors to ensure that they are both honest and unbiased.

(b) The assurance given by auditors is governed by the fact that auditors use judgement in deciding what audit procedures to use and what conclusions to draw, and also by the limitations of every audit, which include:
- Not all items in the financial statements are tested
- Limitations in accounting and control system

Auditors can never certify that the financial statements are correct due to the limitations of auditing. The Zambia Revenue Authority (ZRA) is therefore justified in questioning some of the figures in the audited financial statements.

(c) Auditors are under a duty of confidentiality. Confidentiality requires members to refrain disclosing information acquired in the course of professional work, except where
- Disclosure is permitted by law and is authorized by the client or employer
- Disclosure is required by law (e.g. production of documents or evidence in court proceedings or disclosure to public authorities of infringement of law)
- Professional duty or right to disclose.

If a ZiCA member is required to assist the police, the taxation or other authorities by providing information about a client's affairs in connection with enquiries being made, he should first enquire under what statutory authority the information is demanded.

Unless our audit firm is satisfied that such statutory authority exists it should decline to give any information until the Zambia Revenue Authority (ZRA) has obtained Kaputa Electronics' authority. If Kaputa Electronics' authority is not forthcoming and the demand for information is pressed, our audit firm should not accede unless advised by its legal advisor.

If our audit firm knows or suspects that Kaputa Electronics has committed a wrongful act it must give careful thought to its own position. It must ensure that it has not prejudiced itself by, for example, relying on information given by Kaputa Electronics which subsequently proves to be incorrect.

However, it would be a criminal offence for our firm to act positively, without lawful authority or reasonable excuse, in such a manner as to impede with intent the arrest or prosecution of Kaputa Electronics whom it knows or believes to have committed an arrestable offence.

(d) Audit procedures to verify existence of receivables:
- Perform a receivables confirmation on a sample of year-end trade receivables
- Follow up all balance disagreements and non-replies to the receivables confirmation
- Perform alternative procedures for any exceptions and non-replies to the receivables confirmation, such as:

- Review after-date cash receipts by inspecting bank statements and cash receipts documentation
- Examine the customer's account and customer correspondence to assess whether the balance outstanding represents specific invoices and confirm their validity
- Examine the underlying documentation (purchase order, dispatch documentation, duplicate sales invoice etc.
- Inquire from management explanations for invoices remaining unpaid after subsequent ones have been paid
- Observe whether the balance on the account is growing and if so, find out why by discussing with management.

END OF SOLUTIONS

CA-ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 16 DECEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes planning 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 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 for paper CA2.4– Taxation (2021 Examinations) Taxation Table Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	5.5% of norm value
From US$4,500 to less than US$6,000	6.5% of norm value
From US$6,000 to less than US$7,500	7.5% of norm value
From US$7,500 to less than US$9,000	8.5% of norm value
From US$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% 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 –	Plant used normally	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 K20,000)	
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 4%

Presumptive Tax for Transporters

Seating capacity	Tax per annum K	Tax per day K
From 64 passengers and over	10,800	29.60
From 50 to 63 passengers	9,000	24.70
From 36 to 49 passengers	7,200	19.70
From 22 to 35 passengers	5,400	14.80
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.90
Less than 12 passengers and taxis	900	2.40

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%
Rate of Tax on Realised Value on a transfer of Intellectual Property	5%

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 years but below 5 years		Aged 5 years and over	
Motor vehicles for the transport of ten or more persons, including the driver	Customs duty	Excise duty	Customs duty	Excise duty
	K	K	K	K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 years but below 5 years		Aged 5 years and over	
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 but not exceeding 2500 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 years but below 5 years		Aged 5 years and over	
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	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, with spark ignition internal combustion piston engine	30,697	13,302	24,119	10,452
Panel Vans				
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	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
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	19,461	0
GVW exceeding 20 tonnes, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. Trucks/lorries with gross weight exceeding 20 tonnes

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

Lilayi Ltd is a Zambia resident company, which is registered for Value Added Tax (VAT). It is involved in manufacturing and selling of a range of high quality paints mainly for industrial use. The company has a strong reputation for service and intends to list its shares on the Lusaka Securities Exchange (LuSE) in the next two years.

Lilayi Ltd's summarized statement of profit or loss for the year ended 31 December 2021 is as follows:

	Notes	K	K	K
Gross profit				5,321,006
Repairs and renewals	(1)		2,051,250	
Bad debts	(2)		74,000	
Legal and professional fees	(3)		235,000	
Loss on disposal of old canteen			34,800	
Other operating expenses	(4)		258,900	
				(2,653,950)
			2,667,056	
Other income:				
Bank interest (gross)		64,500		
Rental income (gross)		245,200		
Profit on sale of lorry		20,000		
				329,700
Profit before taxation				2,996,756

The following additional information is available:

Note 1: Repairs and renewals

Repairs and renewals include an amount of K1,803,500 for servicing plant and equipment, K132,750 for repairs and maintenance of company cars, K15,000 for depreciation of non-current assets, K60,000 for repainting administrative offices and K40,000 for repairing part of the security wall fence around the business premises that had developed cracks due to a heavy downpour.

Note 2: Bad debts

Bad debts expenses consist of the following:

	K
Loans to former employees written off	45,000
Trade debts written off	96,000
Increase in general provision	70,000
Decrease in specific provision	(57,000)
Loans to former employees previously written off but	

now recovered	(80,000)
Total	74,000

Note 3: Legal and professional fees

Legal and professional fees includes audit fees of K170,000, legal fees for trade debt collection of K9,000, legal fees for recovery of loans from former employees of K5,000, legal fees for defending Lilayi Ltd's internet domain name of K6,000, professional fees for cyber security consultancy of K15,000 and legal fees of K30,000 for successfully defending a tax appeal case at the Tax Appeals Tribunal (TAT).

Note 4: Other operating expenses

Other operating expenses include donation to an approved public benefit organization of K50,000, entertaining employees of K44,000, entertaining suppliers of K25,000, theft of inventory by stores clerk of K12,000 and canteen expenses for employees of K127,900.

Other information:

(1) Implements, plant and machinery

All implements, plant and machinery qualifying for capital allowances had nil income tax values at 1 January 2021.

Capital transactions in the year ended 31 December 2021 were as follows:

Date	Asset	Cost / (Proceeds)
		K
5 January 2021	Disposal of Lorry (VAT exclusive)	(116,000)
1 March 2021	Purchase of Manufacturing machinery (VAT inclusive)	1,320,000
15 August 2021	Purchase of Motor car (VAT exclusive)	120,000
8 November 2021	Purchase of Office furniture (VAT exclusive)	66,800
12 December 2021	Purchase of Mercedes Benz car (VAT inclusive) – 3300cc	580,000

The lorry was acquired at a cost of K129,920 (VAT inclusive) in 2014. The Mercedes Benz car is the Managing Director's personal- to-holder motor car. Private use has been agreed with the Commissioner General as 25%.

(2) Buildings

On 1 March 2021, Lilayi Ltd sold an old canteen building for K10,000 (VAT exclusive) to an unapproved public benefit organisation. It was acquired at a cost of K80,000 (VAT exclusive) and had an income tax value of K16,000.

Lilayi Ltd completed the construction of a building at VAT exclusive cost of K4,645,500 on 10 November 2021 and brought it into use immediately. The building was made up of the following:

	K
Land	600,000
Staff canteen	160,000
Engineering drawing office	95,000
Showroom	500,000
Factory	3,290,500
Total	4,645,500

(3) Income tax

In the tax year 2021, Lilayi Ltd paid a provisional tax of K432,000.

(4) The company has employed two (2) differently abled persons on permanent basis.

Required:

(a) Explain the circumstances under which a company may be given discounts to its applicable company income tax rate. (4 marks)

(b) Calculate Lilayi Ltd's maximum capital allowances for tax year 2021 on:

(i) Implements, plant and machinery. (9 marks)

(ii) Buildings. (10 marks)

(c) Calculate the taxable business profit for the company for the year ended 31 December 2021. (10 marks)

(d) Calculate the final amount of company income tax payable by the company for the tax year 2021. (4 marks)

(e) State the due date for the payment of the income tax you have computed above and explain the consequences of paying the tax late. (3 marks)

[Total: 40 Marks]

SECTION B

Attempt any three (3) questions in this section.

QUESTION TWO

You are employed in a firm of Chartered Accountants. Your firm is dealing with the tax affairs of a new client, "Sparkling Zambia", a copper mining company and subsidiary of "Sparkling group" a European based company.

Sparkling Limited extracted and sold the following quantities of copper each month of the first quarter of 2021:

Month	Quantity (tonnes)
January 2021	3,000
February 2021	4,000
March 2021	5,000

The relevant exchange rates were as follows

Month	K/Per US$
January 2021	19.50
February 2021	22.00
March 2021	18.00

The norm price of copper was $5,000 per tonne in January 2021. The norm price increased to $6,500 per tonne in February 2021. In March 2021 the norm price increased even further to $7,600 per tonne.

The mineral royalty tax returns for January 2021 and February 2021 were submitted on 14 April 2021. The mineral royalty returns for March 2021 were submitted on 14 June 2021.

Required:

(a) In relation to mineral royalty tax, explain the meaning of:

(i) Norm Value. (3 marks)

(ii) Gross Value. (2 marks)

(b) Compute the mineral royalty tax paid by Sparkling Zambia in the first quarter of 2021 stating the relevant due dates for the payment of the tax. (9 marks)

(c) Compute the penalties payable by Sparkling Zambia for late submission of mineral royalty tax returns. (6 marks)

[Total: 20 Marks]

QUESTION THREE

DX Farms Limited is a Zambian resident company engaged in farming. The net profit before taxation for the year 2021 was K2,800,000. The figure is after charging the following:

	K
Motor vehicle running expenses (note 1)	1,200,000
Skills development levy	20,000
Depreciation (note 2)	89,000
Employees emoluments (note 3)	400,000
Cost of sales (note 4)	22,950,000
Premium paid (note 5)	40,000

NOTES

(1) The motor vehicle running expenses include K20,000 spent on repairs and maintenance of the Managing Director's 1,500cc personal to holder motor car in June 2021. The balance relates to repairs and maintenance of pool cars in June 2021. The Managing Directors private mileage in the car is 80% of the total mileage done.

(2) The depreciation relates to a storage building constructed at the farm which was constructed at a cost of K980,000 in January 2021 and two (2) farm dwellings for employees at the farm which were constructed at a cost of K40,000 each in January 2021.

(3) These included directors emoluments of K186,000. The balance represents farm employee's emoluments.

(4) This includes the expenditure on the development of a banana plantation amounting to K220,000 and canteen expenses amounting to K176,500. The balance relates to the cost of farming inputs purchased in January 2021.

(5) The payment was made for the right to use of a trademark on 1 January 2021 over a period of 20 years.

Additional information

(1) The company received interest the following investment income during the year which was credited to the accounts and included in net profit:

(i) Government bonds of K9,350 (net) during the year 2021.
(ii) Royalties of K8,500 (net) during the year 2021.

(2) At 1 January 2021, the company had the following capital assets qualifying for capital allowances

	ITV b/f	Original cost
	K	K
Managing director's personal to holder car	66,000	110,000
Pool cars	120,000	200,000

All other implements qualifying for capital allowances as at 1 January 2021 were completely written down to zero as at 1 January 2021.

Required:

(a) Calculate the final taxable profit for farming for DX Farms Limited for the tax year 2021. (11 marks)

(b) Prepare a computation of the amount of company income tax payable by DX Farms Limited for the tax year 2021. (7 marks)

(c) Explain the circumstances under which a farmer may be allowed to average the profits of two (2) consecutive tax years. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

You are employed in the Tax Department of a firm of Charted Accountants. You are dealing with the tax affairs of GS Ltd, a new client of your firm.

GS Ltd was incorporated in Zambia on 1 January 2021. The company is engaged in the transportation of cargo to the SADC region. The company imported a second hand Scania Truck on 15 January, 2021 at a cost of $20,000. The truck has a capacity of 15 tones and was manufactured in December 2017. Insurance and freight costs up to the port of entry into Zambia amounted to $2,400 and $4,200 respectively. Transportation costs from the boarder to Lusaka were K10,950. The cost of insurance from the boarder to Lusaka was K1,750.

The Company also imported a brand new Canter on the same date at a cost of $3,700. The Canter has a capacity of 4 tones and was manufactured in December 2019; Insurance and freight charges up to the port of entry into Zambia amounted to $1,000 and $1,200. Transportation costs from the boarder to Lusaka were K8,960. The cost of insurance from the boarder to Lusaka was K1,250.

At the date of importation, the exchange rates as quoted by the bureau de change averaged K20 per US$1 and Bank of Zambia exchange rate which the Commissioner General approved averaged K19.50 per US$1.

On 1 April 2021, the company commenced its operations with the truck transporting goods locally and abroad and the Canter transporting goods locally. The truck is expected to travel a total of 1250 kilometers per month. 60% of travels are abroad. The company charges its clients K80 per kilometer abroad and K40 per kilometer locally. It charges its clients K20 per kilometer for the Canter. The

Canter is expected to travel a total of 650 kilometers per month .The company has 5 employees who are paid a monthly salary of K2,000 each .Each employee is required to make NAPSA contributions of 5% of their basic salary. Grand Sum Ltd is also required to contribute 5% of its employee's basic salary as employer's NAPSA contributions. Other operating expenses average K32,500 per month. Capital allowances on the truck and the Canter have been calculated as K171,247. The company incurred motor vehicle repairs and maintenance expenses of K20,000.

Required:

(a) Calculate the import taxes payable on the importation of the:

(i) Truck (5 marks)

(ii) Canter (6 marks)

(b) Explain how Calculate GS Limited will be assessed to income tax in the tax year 2021 and compute the amount of its tax payable for the year. (9 marks)

[Total: 20 Marks]

QUESTION FIVE

You are employed in a firm of Chartered Accountants. You are presented with the information relating to Choma Limited. The company has just been incorporated by Chola and Mambwe, and will commence trading on 1 January 2021. Chola and Mambwe are the directors and only employees of the company. The following information relates to the company for the year to 31 December 2021:

Revenue

The company will be dealing in both standard-rated and exempt supplies. The Value Added Tax (VAT) exclusive turnover is expected to be K150,000 per month throughout the tax year 2021. It has been established that 90% of the turnover will be standard-rated supplies while the remaining 10% will be exempt supplies.

The invoices will usually be issued to customers within ten (10) days after the goods have been collected by the customers. All the sales will be on cash basis.

Purchases and expenses

On 24 December 2020 the company acquired computers at a cost of K23,200 (VAT inclusive). On 5 January 2021 the company will acquire the Equipment and Light truck at a cost of K71,920 (VAT inclusive) and K104,400 (VAT inclusive) respectively.

On 20 February 2021 the company will buy two (2) Toyota Allion cars at a cost of K75,000 (VAT inclusive) each. Each motor car has a cylinder capacity of 1,800 cc and they will be used by Chola and Mambwe on personal-to-holder basis. It has been estimated that the business use in each motor car will be 70% by each individual. All other assets will be used wholly and exclusively for business purposes.

Purchases of goods for resale are expected to be K58,000 per month exclusive of VAT. 90% of the purchases are standard-rated supplies while the remaining 10% are exempt supplies.

Standard rated expenses will average K20,648 (inclusive of VAT) per month and these will be made up of the following:

	K
Entertaining customers	2,784
Entertaining suppliers	2,088
Motor vehicles servicing	3,480
Overheads	12,296
	20,648

Directors' remuneration

As Directors of the company, Chola and Mambwe will be entitled to annual salary amounting to K323,913 and K303,913 respectively. Chola and Mambwe will have no other income.

Required:

(a) Explain the reasons why Choma Ltd will be required to register for VAT in the charge year 2021. (2 marks)

(b) Assuming that Choma Ltd registered for VAT on 1 January 2021, compute the amount of Value Added Tax (VAT) payable for the year ended 31 December 2021. You should indicate zero where VAT is not chargeable or recoverable. (9 marks)

(c) Compute the amount of income tax payable by the company for the tax year 2021. (9 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.4 TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Companies that list their shares on the Lusaka Securities Exchange (LuSE) have the tax rate reduced by 2% in the year when they list their shares on LuSE).

The reduction for listing of shares applies only in the year when shares are listed.

If such companies offer one-third of their shares to indigenous Zambians, there is a further reduction in the tax rate by 5%.

The share offer reduction applies to all the tax years where the shareholding threshold is maintained.

(b) (i) LILAYI LTD

COMPUTATION OF CAPITAL ALLOWANCES ON IMPLEMENTS, PLANT AND MACHINERY

	Value	Capital allowances
	K	K
Lorry		
Income tax value	0	
Disposal		
(restricted to cost K129,920 X 25/29)	(112,000)	
Balancing charge	(112,000)	(112,000)
Manufacturing machinery		
Cost (K1,320,000 X 25/29)	1,137,931	
Wear and tear allowance		
(K1,137,931 X 50%)	(568,966)	568,966
Income tax value c/f	568,965	
Motor car		
Cost		
(K120,000 X 116/100)	139,200	
Wear and tear allowance		
(K139,200 X 20%)	(27,840)	27,840
Income tax value c/f	111,360	
Office furniture		
Cost	66,800	
Wear and tear allowance		
(K66,800 X 25%)	(16,700)	16,700
Income tax value c/f	50,100	

Mercedes Benz car		
Cost	580,000	
Wear and tear allowances		
(K580,000 X 20%)	(116,000)	116,000
Income tax value c/f	464,000	
Total capital allowances		617,506

(ii) LILAYI LTD

COMPUTATION OF CAPITAL ALLOWANCES ON BUILDINGS

	Value	Capital allowances
	K	K
Old canteen building		
Income tax value b/f	16,000	
Disposal proceeds	(10,000)	
Balancing allowance	6,000	6,000
Industrial building		
Cost (W4)	3,545,500	
Initial allowance		
(10% X K3,545,000)	(354,550)	354,550
Investment allowance		
(10% X K3,545,000)		354,550
Wear and tear allowance		
(5% X K3,545,000)	(177,275)	177,275
Income tax value c/f	3,013,675	
Showroom (Commercial building)		
Cost	500,000	
Wear and tear allowance		
(2% X K500,000)	(10,000)	10,000
Income tax value c/f	490,000	
Total capital allowances		902,375

Workings

1. Qualifying cost for an industrial building

	K
Total cost of building	4,645,500
Less cost of land	(600,000)
Total construction cost	4,045,500

2. 10% X K4,045,000 = K404,500

3. The cost of the showroom exceeds 10% of the total construction cost of building. Therefore, the showroom will not qualify as an industrial building.

4. Qualifying cost for an industrial building is as follows:

	K
Total construction cost	4,045,500
Less: Cost of showroom	(500,000)
Cost qualifying for industrial building allowances	3,545,500

(c) LILAYI LTD

COMPUTATION OF TAXABLE BUSINESS PROFIT FOR THE YEAR ENDED 31 DECEMBER 2021

	K	K
Profit before taxation		2,996,756
Add:		
Depreciation	15,000	
Loans to former employees written off	45,000	
Increase in general provision	70,000	
Legal fees for recovery of loans from former employees	5,000	
Legal fees for tax appeal case	30,000	
Golf club subscriptions for directors	25,000	
Canteen expenses	127,900	
Personal-to-holder car benefit – M.D.	40,000	
Loss on sale of old canteen building	34,800	
		392,700
		3,389,456
Less:		
Bank interest	64,500	
Rental income	245,200	
Profit on sale of lorry	20,000	
Loans to former employees previously written off but now recovered	80,000	
Relief- employing differently abled persons (K2,000 x 2)	4,000	
Capital allowances:		
Implements, plant and machinery	617,506	
Buildings	902,375	
		(1,933,581)
Taxable business profits		1,455,875

(d) LILAYI LTD

COMPUTATION OF FINAL AMOUNT OF COMPANY INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	K
Business profits	1,455,875
Bank interest	64,500
Taxable income	1,520,375
Company income tax	
(K1,520,375 X 35%)	532,131
Less tax already paid:	
Provisional tax	(432,000)
WHT on bank interest (15% X K64,500)	(9,675)
Final company income tax payable	90,456

(e) The due date for payment of the tax is 21 June 2022.

The consequences of paying the tax late are that:

(1) A penalty of 5% of the tax due per month or part thereof will arise.

(2) Additionally interest at the BOZ discount rate plus 2% will arise.

SOLUTION TWO

(a) Mineral royalty tax

(i) Norm value

Norm value means:

(1) The monthly average London metal exchange cash price per metric tonne multiplied by the quantity of the metal or recoverable metal sold.
(2) The monthly average FastMarkets MB cash price per tonne multiplied by the quantity of the metal sold or recoverable metal sold to the extent that the metal price is not quoted on the London metal exchange.
(3) The monthly average cash price per metric tonne of any other exchange market approved by the commissioner general multiplied by the quantity of the metal or recoverable metal sold to the extent that the metal price is not quoted on the London metal exchange or metal bulletin.

(ii) GROSS VALUE

Gross value means the realized price for a sale free on board (FOB), at the point of export from Zambia or point of delivery within Zambia

(b) Mineral royalty tax paid for the tax year 2021

Mineral royalty for January 2021

Norm value	\$5,000 per tonne x 3000 tonnes = \$15,000,000
Mineral royalty	\$15,000,000 x 6.5% x K19.50 K19,012,500
Due date	14 February 2021

Mineral royalty for February 2021

Norm value	\$6,500 per tonne x 4000 tonnes = \$26,000,000
Mineral royalty	\$26,000,000 x 7.5% x K22.00 K42,900,000
Due date	14 March 2021

Mineral royalty for March 2021

Norm Value	\$7,600 per tonne x 5000 tonnes = \$38,000,000

Mineral royalty	\$38,000,000 x 8.5% x K18.00 K58,140,000.	
Due date	14 April 2021	1

(c) Mineral royalty tax returns for January 2021 was submitted on 14 April 2021 which is two months late. Penalty payable = K600 x 2 =K1,200 or 2000 penalty units per month x 2 = 4000 penalty units.

Mineral royalty tax returns for February 2021 was submitted on 14 April 2021 which is one month late. Penalty payable = K600 x 1 =K600 or 2000 penalty units per month x 1 = 2000 penalty units.
Mineral royalty tax returns March 2021 was submitted on 14th June 2021 which is two months late. Penalty payable = K600 x 2 = K1,200 or 2000 penalty units per month x 2 = 4000 penalty units.

SOLUTION THREE

(a) DX FARMS LIMITED
COMPUTATION OF TAXABLE PROFIT FOR THE YEAR 2021

	K	K
Profit before taxation		2,800,000
Add:		
Depreciation	89,000	
Canteen expenses	176,500	
Cost of banana plantation	220,000	
dividends	93,000	
Premium on lease	40,000	
Personal to holder car benefit (1500cc)	18,000	
		636,500
		3,436,500
Less:		
Premium paid 40000/20	2,000	
Capital allowances:		
Storage buildings (K980,000 x 100%)	980,000	
Farm dwellings (K20,000 x100% x 2)	40,000	
Banana plantation (K220,000 x 10%)	22,000	
Toyota corolla 1.5cc 110000 x 20%	22000	
Interest on government bonds	9,350	
Pool cars (K200,000 x 20%)	40,000	
Royalties	8,500	
		(1,123,850)
Adjusted profit		2,312,650

(b) DX FARMS LIMITED
COMPUTATION OF COMPANY INCOME TAX FOR 2021 TAX YEAR

	K
Non - farming income	
Interest on government bonds K9,350 x 100/85	11,000
Royalties K8,500 x 100/85	10,000
Total non-farming income	21,000
Farming profits	2,312,650
Total taxable profits	2,333,650
Company income tax on non-farming profits	
K21,000 x 35%	7,350
Company income tax on farming profits	
K2,312,650 x 10%	231,265
	238,615

Less: Tax already paid	
WHT on royalties (K10,000 x 15%)	(1,500)
WHT on bond interest (K11,000 x 15%)	(1,650)
Final company income tax payable	235,465

(c) The following are the circumstances:

(1) If the profit for one consecutive tax year is substantially lower than the profit for the other consecutive tax year.

(2) If the farmer made a loss in one consecutive tax year and a profit in the other consecutive tax year.

SOLUTION FOUR

(a) Import taxes

(i) Truck- customs value

	$
Cost	20,000
freight	4,200
Insurance	2,400
CIF	26,600
VDP in ZMW $26,600 x K19.5	518,700

	VALUE K	TAXES K
Customs Value	518,700	
Customs duty	11,744	11,744
	530,444	
Excise duty	9,004	9,004
	539,448	
Value added Tax @ 16%	86,312	86,312
Total value	625,760	
Total import taxes		107,060

(ii) Canter- customs value

	$
Cost	3,700
Freight	1,200
Insurance	1,000
CIF	5,900
VDP in ZMW $5,900 x K19.5	115,050

	VALUE K	TAXES K
Customs value	115,050	
Customs duty 15%	17,258	17,258
	132,308	
Excise duty 10%	13,231	13,231
	145,539	
Value added Tax @ 16%	23,286	23,286
Total value	168,825	
Total import taxes		53,775

(b) GS will be assessed to income tax under the self assessment system:

Revenue from the Truck	K	K
Abroad: Truck 1250 x 9 x 60% X K80		540,000
Local: Truck 1250 x 9 x 40% X K40		180,000
		720,000
Revenue from the Canter		
(650 x 9 x K20)		117,000
Total revenue from the truck and canter		837,000
Less: allowable deductions		
Employees' salaries (K2,000 x 5 x 9)	90,000	
Capital allowances	171,247	
Motor vehicle expenses	20,000	
Other operating expenses (K32,500 x 9)	292,500	
Employers NAPSA contribution		
(K2,000 x 5 x 9 x 5%)	4,500	
		(578,247)
Net profit before tax		258,753
Company income tax (K258,753 x 35%)		90,564

SOLUTION FIVE

(a) VAT registration is required once the annual VAT exclusive turnover of taxable supplies exceeds K800,000 or K200,000 for a period of three months.

Choma Limited will therefore be required to register for VAT in 2021, because its turnover from taxable supplies will exceed the VAT registration threshold.

(b) CHOMA LIMITED

VAT payable for the year ended 31 December 2021

Output VAT	K	K
Exempt sales (K150,000 x 10% x 12)		0
Standard-rated sales		
(K150,000 x 90% x 12 x 16%)		259,200
		259,200
Input VAT		
Exempt purchases (K58,000 x 10% x 12)	0	
Standard-rated purchases		
(K58,000 x 90% x 12 x 16%)	100,224	
Entertaining customers	0	
Entertaining suppliers	0	
Motor vehicle servicing (K3,480 x 4/29 x 12)	5,760	
Overheads (K12,296 x 12 x 4/29 x 90%)	18,317	
Computers (pre-registration)	0	
Equipment (K71,920 x 4/29)	9,920	
Light truck (K104,400 x 4/29)	14,400	
Toyota Allion Cars	0	
		(148,621)
VAT payable		110,579

(c) CHOMA LIMITED

INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	K	K
Sales (K150,000 x 12)		1,800,000
Add:		
Personal-to-holder car benefit		
(K30,000 + K30,000)		60,000
		1,860,000
Less:		
Purchases (K58,000 x 12)	696,000	
Salaries (K323,913 + K303,913)	627,826	
Other expenses		
(K20,648 x 12) – (K5,760 + K18,317)	223,699	
Capital allowances:		
Computers (K23,200 x 25/29 x 25%)	5,000	
Equipment (K71,920 x 25/29 x 25%)	15,500	
Light truck (K104,400 x 25/29 x 25%)	22,500	
Toyota Allion car (K75,000 x 20% x 2)	30,000	

	(1,620,525)
Taxable business profit	239,475
Income tax @35%	83,816

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 17 DECEMBER 2021

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.

QUESTION ONE - COMPULSORY

KMB Co is a profitable company which is financed by equity with a market value of K190 million and by debt with a market value of K55 million. The company is considering an investment project in the production of Mango juice based on the following financial forecasts over a four-year period:

Year	1	2	3	4
Sales and Production (Units' 000)	2,000	3,500	3,000	2,500
Selling Price per unit (K)	10	11.5	12.5	13
Direct Materials cost (K'million)	5.3	7.87	9.53	11.36
Other variable costs (K'million)	3.18	5.62	7.15	7.57
Fixed Costs (K'million)	4.5	4.5	4.5	4.5

The initial investment cost is K26 million. All the operating costs are stated at current prices. The fixed costs are expected to increase by 5% per year. Fixed costs include accounting depreciation amounting to K500,000 per year. The current financing structure will not change significantly. KMB Plc pays tax on profit at a rate of 30% per year and tax liabilities are settled in the year in which they arise.

The interest rate is 10% on the debt which is redeemable at par in 4 years' time. The debt was issued at a par value of K1,000 and the book value of the debt is K50 million. The company asset beta is 0.85 and the equity premium is 9.5%. The interest rate on Government bonds is 7%.

Required:

(a) Calculate the Weighted Average Cost of Capital (WACC) using the market values as weighting factors. (10 marks)

(b) Evaluate the financial viability of the proposed investment using the Net Present Value (NPV) method. (10 marks)

(c) Calculate the Internal Rate of Return (IRR) of the investment and advise whether the proposed investment is acceptable. (6 marks)

(d) Discuss the reasons Net Present Value investment appraisal technique is superior to other investment appraisal methods such as Payback, Accounting Rate of Return and Internal Rate of Return. (14 marks)

[Total: 40 marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt Any THREE (3) Questions in this Section.

QUESTION TWO

ZTE Ltd is a manufacturer of enterprise electronic products. The Chief Executive Officer believes it is time to consider having the company quoted on a stock exchange, since the reported results for the year ended 31 December 2020, are showing an improvement in its profits for two consecutive years.

However, the Chief Financial Officer (CFO) believes that before a decision to quote is made, an assessment of the company's performance should be made by comparing its annual performance indicators with those of listed competitors.

The summarised financial statements for ZTE Ltd are as follows:

Statement of Profit or Loss for the Year ended 31 December 2020

	K'million
Revenue	62,500
Cost of sales	(51,800)
Gross profit	10,700
Operating costs	(5,800)
Finance costs	(1,800)
Profit before tax	3,100
Income tax expense	(1,000)
Profit for the year	2,100

Note: Earnings Before Interest, Taxation, Depreciation and Amortization (EBITDA) amounted to K8,100 million.

Statement of Financial Position as at 31 December 2020

		K'million
Assets		
Non-current assets		
Property		8,100
Owned plant		12,600
Leased plant		12,200
		32,900
Current assets		16,400
Total assets		49,300

Equity and liabilities		
Equity		
Equity shares of K1 each		9,000
Property revaluation surplus		4,000
Retained earnings		10,600
		23,600
Non-current liabilities		
10% loan notes	10,000	
Finance lease obligations	6,400	
		16,400
Current liabilities		
Finance lease obligations	2,100	
Other current liabilities	7,200	
		9,300
Total equity and liabilities		49,300

Key performance indicators for the industry, as at 31 December 2020, are as follows:

Return on capital employed (ROCE)	18.50%
Net asset (total assets less current liabilities) turnover	1.8 times
Gross profit margin	21%
Operating profit margin	10.30%
Current ratio	1.6:1
Price/EBITDA ratio	6
P/E ratio	9
Share Price	K30
Gearing (debt/equity)	36%

Required:

For the industry performance indicators provided:

(a) Compute the equivalent ratios for ZTE Ltd for the year ended 31 December 2020. (6 marks)

Note: The finance lease obligations should be treated as debt in the gearing calculations.

(b) Determine the price at which ZTE's shares could be quoted and discuss two (2) limitations of using ratios for assessing its corporate performance or valuation of its stock price. (4 marks)

(c) Write a report comparing the financial performance of ZTE Ltd for the year ended 31 December 2020 to that of the industry. (10 marks)

[Total: 20 Marks]

QUESTION THREE

During the annual meeting of ZamGems Plc to consider its five year capital budget, the Chief Executive Officer informed the board that the company would change its focus from the financial objective of maximization of profits to a primary objective of maximization of shareholder wealth.

The company is considering exploring for diamonds in Kalabo district. The cost to be capitalized will include the cost of constructing the mining asset now of K10 million and the present value of dismantling the mining asset in 20 years of K4 million.

Required:

(a) Distinguish between maximization of shareholder wealth and maximization of profits as financial objectives. (5 marks)

(b) Given ZamGems' cost of capital of 18% :

(i) Determine the valuation of the asset in present value terms,

(ii) The future value of dismantling costs of the mine asset in two years' time. (5 marks)

(c) The mining project will be financed using either a five (5) year term loan or a corporate bond as follows:

Bank loan

ZMW 15 million would be borrowed using a medium term bank loan at an annual interest rate of 18%. It would make payments of ZMW 5 million (including both principal and interest) per year on the loan.

Corporate bond

Issue on LuSE twelve (12) units of real estate corporate bonds each of ZMW 1 million par value with a 10 percent coupon rate, five year maturity, and Interest paid semi-annually.

Required:

(i) How long will it take the company to repay the bank loan? (5 marks)

(ii) What should be the market price of each ZMW 1 million par value corporate bond on LuSE if the current market interest rate is 10 per cent? (5 marks)

[Total: 20 marks]

QUESTION FOUR

(a) A not-for-profit or non-governmental organisation has consulted you to help them develop a proposal to secure funding to improve value for money (VfM) in the water and sanitation sector.

Choosing a corporate objective of a firm is extremely important and can determine whether a corporation achieves success or failure in the market.

Required:

(i) Explain the following value for money concepts:

1. Economy
2. Efficiency
3. Effectiveness

(6 marks)

(ii) Compare and contrast *value for money* and *corporate value maximization*.

(4 marks)

(b) One of the pre-requisites for the development of an economy is the existence of a dynamic financial market. Some financial markets, particularly in emerging economies are very small in terms of liquidity, with only a few market participants, while others in developed countries, like the New York Stock Exchange (NYSE) and the forex markets, trade trillions of dollars daily.

Required:

(1) Explain the meaning of the term "financial market" (1 mark)

(2) Differentiate between the following financial markets:

(i) Debt market and Equity market (3 marks)

(ii) Money market and Capital market (3 marks)

(iii) Forex market and Interbank market (3 marks)

[Total: 20 Marks]

QUESTION FIVE

Waima Limited makes annual sales of K6.0m. Credit terms are 50 days. All sales are on credit. Waima offers its customers a discount of 4% for payment within 25 days. 30% of customers pay within 25 days, the rest pay after 25 days.

The company has been experiencing cash flow problems lately. This is partly due to its poor credit rating with the credit reference bureau. Sales revenue of Waima Limited has dropped in recent years. Most customers of Waima limited have complained of a fall in sales due to the economic slowdown. In response to the cash flow problems, Management engaged a Financial Consultant. The consultant has advised the company to consider factoring its receivables.

A factor would take on the task of debt administration and credit checking. The factor will charge a service fee of 3% of total sales. It is expected that Waima Limited will save approximately K60,000 in expenses as a result of factoring. The factor would provide an advance of 70% on each invoice at an interest rate of 2% above the current base rate of 19%.

Required:

You are the finance manager for Waima Limited. The managing director has written to you asking for your advice.

(a) Advise the director whether it is financially worthwhile for the company to accept the factor's services. (12 marks)

(b) Explain other measures that Waima Management can put in place to improve its cash flow position despite its poor credit rating. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0 D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \text{ x spread}\right)$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

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

$$P_o = \frac{D_0(1+g)}{(r_e - g)}$$

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

$$s_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad f_0 = s_0 x \frac{(1+i_c)}{(1+i_b)}$$

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	0·914	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	0·350	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

CA2.5 FINACIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

a) Cost of Capital

Ba= Be x Ve/Ve+Vd (1-t)

0.85=Be x 190/190+55(1-0.3)

Be=1.02

Ke=7% + 1.02(9.5%)

Ke = 16.69%

Interest= 10% x 1000 (1-0.3) = 70

Period	CF	Dis@10%	PV	Dis@6%	PV
0	-1,000	1	-1,000	1	-1,000
1 to 4	70	3.17	221.9	3.465	243
4	1000	0.683	683	0.792	792
NPV			-95		35

IRR= 6% + 35/(35+95) (10%-6%) = 7.1%

WACC= (16.69% x 0.78) + (7.1% x 0.22) 14.6% say 15%

b) Financial Evaluation Using Npv

Year	0	1	2	3	4
	K'm	K'm	K'm	K'm	K'm
Sales	-	20.00	40.25	37.50	32.50
Direct Material Costs	5.30	7.87	9.53	11.36	
Other Variable Costs	3.18	5.62	7.15	7.57	
Fixed Costs	-	4.20	4.41	4.63	4.86
Taxable cash flows	-	7.32	22.36	16.20	8.70
Tax@30%	-	2.20	6.71	4.86	2.61
Initial Cost	-26.00	-	-	-	-
Net cash flow	-26.00	5.12	15.65	11.34	6.09
Discount@15%	1	0.87	0.756	0.658	0.572
Present Values	-26.00	4.46	11.83	7.46	3.48
NPV	1.23				

Project should be undertaken bacause it gives positve NPV which means the wealth of shareholders will be increased.

c) Internal Rate of Return

Year	0	1	2	3	4
	K'm	K'm	K'm	K'm	K'm
Net Cash Flow	-26.00	5.12	15.65	11.34	6.09
Discount@20%	1	0.833	0.694	0.579	0.482
Present Values	-26.00	4.27	10.86	6.56	2.94
NPV	-1.37				

IRR= 15% + 1.23/(1.23+1.37) (20% - 15%)

IRR= 17.37%
Project should be undertaken because it gives an IRR that is above the cost of capital.

d) The net present value method of investment appraisal has a number of advantages over other methods.

i. It is based on cash flows not accounting profit unlike ARR. Accounting profits are subject to a number of different accounting treatments and cash flows can add to the wealth of the shareholders via increased dividends.
ii. NPV looks at cash flows throughout the whole of an investment period unlike payback, which ignores cash flows after the end of the payback period. This avoids the incorrect rejection of projects with later high returns, although it is unlikely in practice that payback would be used in isolation.
iii. NPV incorporates the time value of money by using discounted cash flows whereas ROCE and payback do not. This means that it takes account of the fact that $1 today is worth more than K1 in one year's time. Discounted payback can be used but this will still ignore cash flows after the payback period.
iv. NPV is viewed as being technically superior to IRR and simpler to calculate. It reflects the amount of the initial value rather than a relative measure of return and represents the change in total market value that will occur if the investment project is accepted. Other investment appraisal methods do not directly show the potential increase in shareholder wealth, which is a primary financial management objective.
v. The NPV method is superior for ranking mutually exclusive projects in order of attractiveness. IRR will give an incorrect indication where discount rates are less than the IRR of incremental cash flows.
vi. Where cash flow patterns are non-conventional, for example where the sign of the net cash flow changes in successive periods, there may be several IRRs which decision makers must be aware of to avoid making the wrong decision. NPV however can accommodate these non-conventional cash flows.
vii. When discount rates are expected to differ over the life of the project, such variations can be incorporated easily into NPV calculations, but not into IRR calculations.
viii. An assumption underlying the NPV method is that any net cash inflows generated during the life of the project will be reinvested at the cost of capital (that is, the discount rate). The IRR method, on the other hand, assumes these cash flows can be reinvested to earn a return equal to the IRR of the original project, which is not necessarily reasonable.

SOLUTION TWO

2 (a) ZTE's equivalent ratios for the year ended 31/2020

	ZTE	Industry
Return on capital employed (ROCE) - [4,900/42,100 x 100]	11.6%	18.50%
Net asset (total assets less current liabilities) turnover – [62,500/40,000]	1.6 times	1.8 times
Gross profit margin [10,700/62,500 x 100]	17.1%	21%
Operating profit margin [4,900/62,500 x 100]	7.8%	10.3%
Current ratio [16,400/9,300 :1]	1.8:1	1.6:1
Gearing (debt/equity) [18,500/23,600 x 100]	78%	36%

2 (b)

Valuation Range of ZTE shares (K2.10 – K5.40)

	Computation	Price (K)
Price(using P/E) = [EPS] X [P/E]	[2100/9000 X 9]	2.1
Price(using EBITDA) = [EBITDA/shares] X [P/EBITDA]	[8,100/9000] X [6]	5.4

Some of the limitations of ratio analysis include the following:

- Not predictive if based on historical information

- They can be manipulated by window dressing or creative accounting

- Differences in accounting policies can distort comparison

- ZTE's competitors may be within the same industry but serve different market segements, which can affect profitability and other ratios, making comparisons less useful.

- Some ratios for instance ROCE and gearing may be calculated in different ways

2 (c) Analysis of comparative financial performance and position

Financial performance

As measured by the return on capital employed (ROCE), ZTE Ltd's overall profitability does not compare well with its competitors, underperforming the industry profitability by over 37% ((18·5% – 11·6%)18·5%). The component parts of overall profitability are asset turnover and profit margins and, on both of these, ZTE Ltd underperformed the industry. The underperformance is worse for profit margins than for asset utilisation and it is the gross margin which is the main cause of the unfavourable comparative performance. This may be due to a deliberate policy to under-price competitors (to increase sales) or it may be due to inefficiency in manufacturing.

ZTE's control of operating expenses, as shown by the difference between gross and operating profit margins, is relatively good (at 9·3% of revenue compared to 10·7% for industry) which confirms that it is the gross profit margin which is the problem area, assuming there are no differences in cost classification.

ZTE is generating approximately 11% ((1·8 – 1·6)/1·8) less revenue from its assets compared to industry which (as already noted) is also contributing to overall lower profitability (ROCE). Apart from the obvious implication that ZTE Ltd may be a less efficient manufacturer, there could also be a number of other reasons for the lower asset utilisation.

ZTE has revalued its property, whereas it is not known if its competitors have (without the revaluation ZTE's ROCE would be 12·9% ignoring additional depreciation). Some of ZTE's plant may have been recently acquired and therefore may not be up to full production capacity, meaning the current year's revenue does not contain sales for a full year in respect of production from this plant.

The leasing of plant is usually more expensive than outright purchase (although the finance costs would not affect ROCE). Of course other competitors may also experience some of these issues, the effects of which would be included in the industry figures.

Financial position

The current ratio shows that the liquidity of ZTE Ltd is within expected norms and compares well with its competitors. There may be an argument to exclude the current finance lease liability from the current ratio which would then put it at 2·3:1 (16,400:7,200) which is perhaps a little higher than expected norms (usually an upper limit of 2).

ZTE 's gearing is quite high at more than double that of its competitors. This obviously increases finance costs and with an interest cover of only 2·7 times (4,900/1,800), any reduction in profitability may place ZTE Ltd in a difficult position. The finance cost of 10% on the loan notes (plus the finance costs of the lease obligations) has a lower effective rate or cost of debt of 9.7% (1,800/[16,400 +21,100]) compared to that of the ROCE (11.7%) so shareholders are getting a (slight) benefit from the debt, but this is at considerable risk.

It is possible that if ZTE Ltd had not leased some of its plant, its gearing would be more in line with the industry, however, the question of how else it would have financed the plant would arise. Issuing a further loan note would leave ZTE Ltd in a similar debt position as now; an introduction of cash from a new share issue would reduce the gearing. Another possibility is that ZTE Ltd could structure its plant leases such that they qualified as operating rather than finance leases. Indeed, it may be that ZTE Ltd already has some operating leased plant, but this cannot be determined from the information provided.

Conclusion

ZTE Ltd's performance is considerably below that of Industry and the finance director is correct to say that a comparison with its competitors is a better indication of the company's current performance than looking at the trend of its past performance alone.

Subject to the accounting policies used by Industry, the analysis indicates ZTE Ltd may need to look at its pricing policy or manufacturing efficiency and also needs to consider a strategy of reducing its gearing.

SOLUTION THREE

(a).
Profits may not necessarily represent money that investors can use to consume.

Profits may be maximized in the short-run by manipulation of accounting profits but this is not sustainable in the long-run. They may therefore not be the best measure of a company's performance.

Wealth is what needs to be maximized. At the same time firms may also have other stakeholders that may need to be considered for the long-term sustainability of the business.
The wealth of shareholders comes from dividends received and capital gains from increases in the market value of shares.
This measure is called the total shareholder return.

(b) (i)
PV of Dismantling Mining Asset = K4 X $1/(1.18)^{20}$ = 146,022
Value of mining Asset = K10 Million + K0.146022 Million = K10.146 Million

(b) (ii)
Future Value of dismantling costs of mine assets in two years time = 146,022 $(1.18)^2$ = K203,322

(c) (i). 15 000 000/5 000 000 = 3

Check the annuity factor for 18% equivalent to 3.0 in the annuity table. The period is between 4 and 5 years.

(c) (ii). 50 000(7.722) + 1 000 000(0.6139)
386,100 + 613, 900 = 999, 999 ≈ 1,000,000

SOLUTION FOUR

(a)(i) Value for money (3Es/4Es)

Value for money (VfM) is the process of ensuring that resources applied to achieve optimal results in the most sustainable way and also for the right target. The key elements of value for money are:

- Economy
- Efficiency
- Effectiveness
- Equity

The three key elements (sometimes referred to as the 4Es) are discussed below;

Economy – this measures the acquisition of inputs at the highest quality, at the lowest cost and within acceptable time for achieving a given output.

Efficiency – this measures the amount of resources used to achieve a giving output. It also considers the proficiency and appropriateness of the process used for converting the input into output.

Effectiveness – this measures the extent to which stated objectives are achieved.

Equity – ensuring fair distribution that targets the needs of vulnerable groups and most deprived entities.

(a)(ii) Similarities and differences between VfM and value maximization

Similarities

VfM and value maximization are both corporate objectives which can be used to measure performance of managers.

As performance measure benchmark, they ensure resources are utilized efficiently for the acquisition of inputs to yield best results.

Achieving VfM and ensuring corporate value maximization all have positive social impact

Differences

VfM is an objective for not-for-profit entities whereas value maximization is emphasized in profit making entities.

Whereas VfM considers social welfare at large, value maximization focuses on the interest of the shareholders (few owners of the business).

VfM may sacrifice economic benefit for overall social good, especially for vulnerable groups but value maximization focuses on economic returns to the owners for every resource utilised.

A financial market is a broad term describing any marketplace where buyers and sellers participate in the trade of assets such as equities, bonds, currencies and derivatives. Financial markets are typically defined by having transparent pricing, basic regulations on trading, costs and fees, and market forces determining the prices of securities that trade.

(b)
(i)
Equity markets allow investors to buy and sell shares in publicly traded companies. They are one of the most vital areas of a market economy as they provide companies with access to capital and investors with a slice of ownership in the company and the potential of gains based on the company's future performance.

Debt market is where an investor loans money to an entity (corporate or governmental), which borrows the funds for a defined period of time at a fixed interest rate. Bonds which are mostly used in debt markets are used by companies, municipalities, states and U.S. and foreign governments to finance a variety of projects and activities. Bonds can be bought and sold by investors on credit markets around the world. This market is alternatively referred to as the credit or fixed-income market. It is much larger in nominal terms that the world's stock markets.

(ii)
The money market is a segment of the financial market in which financial instruments with high liquidity and very short maturities are traded. The money market is used by participants as a means for borrowing and lending in the short term, from several days to just under a year. Money market securities consist of negotiable certificates of deposit (CDs), banker's acceptances, commercial paper, municipal notes, federal funds and repurchase agreements (repos). Money market investments are also called cash investments because of their short maturities.

A capital market is one in which individuals and institutions trade financial securities. Organizations and institutions in the public and private sectors also often sell securities on the capital markets in order to raise funds. Any government or corporation requires capital (funds) to finance its operations and to engage in its own long-term investments. To do this, a company raises money through the sale of securities - stocks and bonds in the company's name. These are bought and sold in the capital markets.

(iii)
The interbank market is the financial system and trading of currencies among banks and financial institutions, excluding retail investors and smaller trading parties. While some interbank trading is performed by banks on behalf of large customers, most interbank trading takes place from the banks' own accounts.

The forex market is where currencies are traded. The forex market is the largest, most liquid market in the world with an average traded value that exceeds K1.9 trillion per day and includes all of the currencies in the world. The forex is the largest market in the world in terms of the total cash value traded, and any person, firm or country may participate in this market.

SOLUTION FIVE

(a) Total sales per annum =K6m

Average collection period= 50 days
Therefore average receivables=
6000,000 *50/365 =
K821,918

Amount that can be drawn
821918 x 70%
575342.6

Interest= 19%+2%=21%

Finance charges= K573542.6*21%=120443.946
Service fees 3% * k6m=K180,000

Actual cost of factoring:

Finance charges	120443
Service fees	180000
TOTAL	300443

Cash discount for early settlement

K6m * 30% *4%=	K72000
Expense saved	K60000
TOTAL	K132000

Therefore net cost of factoring=
300,443-132,000=168,443

The effective cost of factoring = (168443/575342)*100
29.20%

The effective cost of factoring is higher than the interest charged 21%
Therefore the company should not accept the factor's services.

(b) METHODS OF IMPROVING THE CASH FLOW POSITION

(1) Postponing capital expenditure.

Some new non-current assets might be needed for the development and growth of the business, but some capital expenditures might be postponed without serious consequences. If a company's policy is to replace company cars every two years, but the company is facing a cash shortage, it might decide to replace cars every three years.

(2) Accelarating cash inflows which would otherwise be expected in a later period.

One way would be to press accounts receivable for earlier payment. Often this policy will result in a loss of goodwill. It might be possible to encourage accounts receivable to pay more quickly by offering discounts for earlier payment.

(3) Reversing past investment decisions by selling assets previously acquired.

Some assets are less crucial to a business than others. If cash flow problems are severe, the options of selling investments are property might have to be considered.

(4) Negotiating a reduction in cash outflows, to postpone or reduce payments.

There are several ways in which this could be done.

(i) Longer credit might be taken from suppliers. Such an extension of credit would have to be negotiated carefully: there would be a risk of having further supplies refused.
(ii) Loan repayments could be rescheduled by agreement with a bank.
(iii) A Deferral of the payment of company tax might be agreed with the taxation authorities. They will however charge interest on the outstanding amount of company tax.
(iv) Dividend payments could be reduced. Dividend payments are discretionary cash outflows, although a company's directors might be constrained by shareholders expectations, so that they feel obliged to pay dividends even when there is a cash shortage.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 13 DECEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

Section A: One (1) compulsory scenario question.

Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

The draft statements of financial position as at 31 December 2020 for Mwimba Plc and its investees Ngánjo Plc and Nthonkho Plc are as follows:

Statement of Financial Position as at 31 December 2020.

	Mwimba	Ngánjo	Nthonkho
Assets	**K'm**	**K'm**	**K'm**
Non current			
Property Plant and Equipment	500	225	210
Investment in:			
Ngánjo	205		
Nthonkho	165		
	870	225	210
Current assets	232	125	95
Total assets	1,102	350	305
Equity and Liabilities			
Equity			
Share Capital	50	25	25
Retained Earnings	563	160	175
Other Reserves	189	55	50
	802	240	250
Non current liabilities	175	63	30
Current liabilities	125	47	25
Total equity and liabilities	1,102	350	305

Further information:

1. Mwimba Plc had originally acquired 35% of Ngánjo Plc's equity on 1 January 2015 at a cost of K50 million when Ngánjo's retained earnings and other reserves amounted to K80 million and K10

million respectively. The fair value of Ngánjo's identifiable net assets on 1 January 2015 was equal to their book values

Mwimba Plc acquired a further 45% of Ngánjo Plc's equity on 1 January 2017 at a cost of K87 million when Ngánjo's retained earnings and other reserves amounted to K105 million and K15 million respectively. The fair value of Ngánjo's identifiable net assets on 1 January 2017 amounted to K150 million. The difference between the fair value and carrying amounts of Ngánjo's net assets at that date was attributable to plant and equipment which had a remaining useful economic life on 1 January 2017 was 10 years. The fair value of a 35% holding in Ngánjo's equity on 1 January 2017 was K68 million.

Mwimba Plc has adopted the 'full goodwill' policy in respect of the acquisition of Ngánjo Plc in accordance with IFRS 3 Business Combinations. A 20% holding in Ngánjo Plc's equity had a fair value of K39 million on 1 January 2017.

2. Mwimba acquired 60% of Nthonkho Plc's equity on 1 January 2019 at a cost of K130 million when Nthonkho's retained earnings and other reserves amounted to K140 million and K22 million respectively. The fair value of Nthonkho's identifiable net assets on 1 January 2019 was K200 million. The difference between the fair value and carrying amounts of Nthonkho's net assets at that date was attributable to plant and equipment which had a remaining useful economic life on 1 January 2019 of 5 years.

Mwimba Plc has adopted the 'proportionate goodwill' policy in respect of the acquisition of Nthonkho Plc in accordance with IFRS 3 Business Combinations. A 40% holding in Nthonkho Plc's equity had a fair value of K87 million on 1 January 2019.

3. On 1 October 2020, Mwimba Plc disposed of a 5% holding in Nthonkho Plc for cash proceeds amounting to K15 million. Any gain or loss on disposal has been correctly accounted for in the separate financial statements of Mwimba Plc. The carrying amount of Mwimba Plc's investment in Nthonkho Plc in the statement of financial position above relates to the fair value of the remaining 55% holding at 31 December 2020. Nthonkho Plc's profit and other comprehensive income for the year ended 31 December 2020 amounted to K18 million and K12 million respectively. It can be assumed that profits and other comprehensive income accrued evenly over the year to 31 December 2020.

4. Both investment in Ngánjo Plc and Nthonkho Plc have been correctly classified as Fair Value Through Profit or Loss (FVTPL) items in the separate financial statements of Mwimba Plc above in accordance with IFRS 9 Financial Instruments.

5. There had been no impairment losses in respect of investments in Ngánjo Plc and Nthonkho Plc prior to 1 January 2020. A review of investments in Ngánjo Plc and Nthonkho Plc as Cash Generating Units at 31 December 2020 shows that their recoverable amounts at that date are K265 million and K255 million respectively.

6. Nthonkho Plc's inventory as 31 December 2020 includes goods bought from Ngánjo Plc at a cost of K20 million. Ngánjo Plc had invoiced these goods at a markup of 25%.

7. On 1 January 2020, Mwimba Plc sold a building which had a carrying amount on that date of K50 million to an unrelated third party for cash disposal proceeds amounting to K60 million when the fair value of the building was K65 million. Mwimba Plc immediately leased back the building for a term of 10 years which was also the building's remaining useful economic life at 1 January 2020. In arriving at the above draft statement of financial position, Mwimba Plc has derecognized the building and reported a gain on disposal amounting to K10 million in its statement of profit or loss.

Under the lease back, Mwimba Plc pays an annual rent of K9.8 million in arrears (On 31 December each year). The rent paid on 31 December 2020 has been charged as an expense in profit or loss. Assume that the interest rate applicable on Mwimba's borrowings is 10%.

Mwimba Plc uses the IAS 16 Cost model in measuring buildings, depreciating them on a straight line basis.

Required:

Prepare the Mwimba Plc Group Consolidated Statement of Financial Position as at 31 December 2020. (40 marks)

[Total: 40 marks]

SECTION B

Answer ANY Three (3) questions in this section.

QUESTION TWO

(a) Mwanauta Plc

Mwanauta Plc was incorporated 50 years ago, it prepares financial statements to 30 September each year. Each year the financial statements are authorised for issue on 30 November. On 1 June 2019, Mwanauta decided to dispose of the trade and assets of a business it had acquired several years previously. This disposal does not involve Mwanauta withdrawing from a particular market sector. The carrying values on 1 June 2019 of the assets to be disposed of were as follows:

	K' million
Goodwill	20
Property, plant and equipment	40
Patents and trademarks	16
Inventories	30
Trade receivables	20
	126

Mwanauta offered the business for sale at a price of K93 million, which was considered to be reasonably achievable. Mwanauta estimated that the direct costs of selling the business would be K1 million. These estimates have not changed since 1 June 2019 and Mwanauta estimates that the business will be sold by 31 March 2020 at the latest.

None of the assets of the business had suffered obvious impairment at 1 June 2019. At that date the inventories and trade receivables of the business were already stated at no more than their recoverable amounts.

Required:

Explain and show (where possible by quantifying amounts) how the transaction would be reported in the financial statements of Mwanauta for the year ended 30 September 2019. (6 marks)

(b) Bonilinda Plc

Bonilinda is a listed company which prepares financial statements in accordance with International Financial Reporting Standards (IFRS). On 1 October 2018, Bonilinda purchased some land for K10 million (including legal costs of K4 million) in order to construct a new factory. Construction work commenced on 1 November 2018. Bonilinda incurred the following costs in connection with its construction:

- Overhead costs incurred directly on the construction of the factory – K100,000 per month.
- Preparation and levelling of the land – K300,000.
- Purchase of materials for the construction – K6·08 million in total.
- Employment costs of the construction workers – K200,000 per month.
- Ongoing overhead costs allocated to the construction project using Bonilinda's normal overhead allocation model – K150,000 per month.
- Income received during the temporary use of the factory premises as a car park during the construction period – K540,000.
- Costs of relocating employees to work at the new factory – K340,000.
- Costs of the opening ceremony on 31 July 2019 – K550,000.

The factory was completed on 31 May 2019 and production began on 1 August 2019. The overall useful life of the factory building was estimated at 40 years from the date of completion. However, it is estimated that the roof will need to be replaced 20 years after the date of completion and that the cost of replacing the roof at current prices would be 30% of the total cost of the building. At the end of the 40-year period Bonilinda has a legally enforceable obligation to demolish the factory and restore the site to its original condition. The directors estimate that the cost of demolition in 40 years' time (based on prices prevailing at that time) will be K20 million. An annual risk adjusted discount rate which is appropriate to this project is 8%. The present value of K1 payable in 40 years' time at an annual discount rate of 8% is 4.6 ngwee.

The construction of the factory was partly financed by a loan of K17·5 million taken out on 1 October 2018. The loan was at an annual rate of interest of 6%. During the period 1 October 2018 to 28 February 2019 (when the loan proceeds had been fully utilised to finance the construction), Bonilinda received investment income of K100,000 on the temporary investment of the proceeds.

Required:

Determine and explain the treatment of each of the amounts in the calculation of the carrying amount of the factory that should be in the statement of financial position of Bonilinda at 30 September 2019. (14 marks)

[Total: 20 marks]

QUESTION THREE

(a) Mukatasha Plc

On 1 June 2019 Mukatasha Plc, granted to each of its senior management team either 130,000 shares in Mukatasha Plc or a cash equivalent equal to the market price of 120,000 shares. The right is conditional on the managers remaining in employment at Mukatasha Plc until 31 May 2021.

Mukatasha Plc reserves the right to choose whether to settle the scheme in cash or shares. However, in the past, Mukatasha Plc has always opted to settle similar schemes in cash. If the shares are issued, they must be held for 2 years from 31 May 2021 before being sold.

Mukatasha Plc's share price was K1,700 on the 1 June 2019 and K1,800 on 31 May 2020. It rose to K1,850 on 20 June 2020, the date the financial statements were authorised for issue. The fair value of the shares alternative was calculated at K1,620 K1,720 and K1,770 at the same dates respectively.

At 1 June 2019, there were 60 members of the senior management team. As at 1 June 2019 no members of the team were expected to leave during the vesting period. However, due to a buoyant job market, 4 managers left in May 2020 and as at 31 May 2020, a further 6 managers were expected to leave within a few months of the year end

Required:

Explain the appropriate accounting treatment of the above transaction for the year ended 31 May 2020 according to provisions of applicable accounting standard.
(10 marks)

(b) Mwapasa Plc

On 1 October 2018 Mwapasa granted share options to 200 senior executives. The options will vest on 30 September 2021 subject to the following conditions:

- Each executive will be entitled to 1,000 options if the cumulative profit in the three year period from 1 October 2018 to 30 September 2021 exceeds K30 million. If the cumulative profit for this period is between K35 million and K40 million, then 1,500 options will vest. If the cumulative profit for the period exceeds K40 million, then 2,000 options will vest.
- If an executive leaves during the three year vesting period, then that executive would forfeit any rights to share options.
- Notwithstanding the above, no options will vest unless the share price at 30 September 2021 exceeds K5.

Details of the fair values of the shares and share options at relevant dates are as follows:

Date	Fair value per	
	Share	Option
	K	K
1 October 2018	4.00	0.50
30 September 2019	4.40	0.60
30 September 2020	4.60	0.75

The estimate of the cumulative profit for the three-year period ending 30 September 2021 was revised each year as follows:

Date	Expected profit for the three-year period
	K' million
1 October 2018	32
30 September 2019	39
30 September 2020	45

On 1 October 2018, none of the relevant executives were expected to leave in the three year period from 1 October 2018 to 30 September 2021 and none left in the year ended 30 September 2019. However, 10 executives left unexpectedly on 30 June 2020. None of the other executives are expected to leave before 30 September 2021.

Mwapasa correctly reflected this arrangement in its financial statements for the year ended 30 September 2019.

Required:

Showing relevant financial statement extracts for the year ended 30 September 2020, discuss how the above share option arrangement with senior executives must be accounted for in accordance with applicable IFRSs. (10 marks)

[Total: 20 marks]

QUESTION FOUR

(a) Kaluzi Plc purchased an item of heavy industrial machinery for use in mining operations at a cost of K360, 000 on 1 October 2017. It had an estimated useful life of 10 years and a residual value of K20, 000. Plant and machinery is depreciated on a straight-line basis. The tax authorities (ZRA) do not allow depreciation as a deductible expense. Instead, tax relief is granted by way of wear and tear at an allowance computed at 20% of the cost of the asset on a straight-line basis.

Required:

Explain the purpose of providing for deferred tax and prepare extracts from the financial statements of Kaluzi for the year ended 30 September 2020 showing the impact of deferred tax. (5 marks)

(b) Zammicro Financial Services prepares financial statements to 31 March each year. The following events have occurred which are relevant to the year ended 31 March 2020:

(i) On 1 April 2019, Zammicro loaned K60 million to another entity. Interest of K3 million is payable annually in arrears. An additional final payment of K70.6 million is due on 31 March 2022. Zammicro incurred direct costs of K0.5 million in arranging this loan. The annual rate of interest implicit in this arrangement is approximately 10%. Zammicro has no intention of assigning this loan to a third party at any time. (5 marks)

(ii) On 1 April 2019, Zammicro purchased 1,000,000 shares in a key supplier entity ABC. The shares were purchased in order to protect Zammicro's source of supply and Zammicro has no intention of trading in these shares. The shares cost K4 per share and the transaction costs of purchasing the shares were K200, 000. On 1 January 2020, the supplier paid a dividend of 60 ngwee per share. On 31 March 2020, the fair value of a share in entity ABC was K4.5 (5 marks)

Required:

Explain how the transactions in (i) and (ii) above must be accounted for in Zammicro's financial statements for the year ended 31 March 2020.

(c) An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term.

Required:

Explain how integrated reporting merges sustainability reporting and financial reporting.

(5 marks)

[Total: 20 marks]

QUESTION FIVE

(a) It is often argued that historical cash flow is more useful in appraising a company than historical profit, particularly because cash flows are factual and do not involve the exercise of judgement.

Required:

Explain four (4) arguments against this view. (4 marks)

(b) Chapter six (6) of the 2018 IASB's conceptual framework describes the two (2) main measurement bases, namely historical cost and current value.

The users of financial statements acknowledge that historical basis is the most commonly used measurement basis. Even in times of inflation, published financial statements continue to be prepared under the historical cost convention despite its alleged limitations.

Required:

Explain why historical cost accounting has been criticised and discuss some of the advantages associated with its use. (6 marks)

(c) Chitenge Ltd and Chitambala Ltd are two companies in the Clothing Industry. The following are financial ratios computed by the respective Chief Financial officer for each company based on the latest audited financial statements.

Ratios of companies for the year ended 31 December 2021

	Chitenge Ltd	Chitambala Ltd
Return on capital employed	24.10%	30%
Net assets turnover	1.9 times	2.5 times
Gross profit margin	35%	20%
Net profit (before tax) margin	10.50%	38%
Current ratio	1.0:1	2.0:1
Quick ratio	0.8:1	1:01
Inventory holding period	60 days	90 days
Receivables collection period	58 days	60 days
Payables payment period	50 days	50 days
Debt to equity	50%	30%
Dividend yield	3%	2%
Dividend cover	2 times	1.5 times

Required:

(i) Explain two (2) problems that are inherent when ratios are used to compare the performance of two companies even in the same industry. (2 marks)

(ii) Analyse and compare the financial performance and financial position of Chitenge Ltd and Chitambala Ltd. The analysis should cover the *Operating Performance, Liquidity, Gearing and stock market Ratios.* (8 marks)

[Total: 20 marks]

END OF PAPER

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

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

CA 3.1 ADVANCED FINANCIAL REPORTING SUGGESTED SOLUTIONS

SOLUTION ONE

Mwimba Plc Group CSFP as at 31.12.2020

Assets				K'm
Non current				
Property Plant and Equipment		(W1)		988
Goodwill	(W2)		26	
				1,014
Current	(232+125+95- (20 X 25/125)			448
Total assets				1,462
Equity and Liabilities				
Equity				
Share Capital				50
Retained Earnings		(W6)		479.7
Other Reserves		(W8)		241.9
Equity attributable to owners of parent				771.6
Non controlling Interests		(W10)		169.3
Total Equity				940.9
Non current liabilities	(W4)			320
Current liabilities	(W5)			201.2
Total equity and liabilities				1,462.1

Workings to the CSFP:

W1.	PPE			K'm
	Given amounts:			
	Mwimba			500
	Ngánjo			225
	Nthonkho		210	
				935
	Adjustments:			
	Fair value gains on acquisition of:			
	Ngánjo	(150-[25+105+15])		5
	Nthonkho	(200-[25+140+22])		13
	Accum deprec on FV gains:			
	Ngánjo	(5/10) X 4		(2)
	Nthonkho	(13/5) X 2		(5.2)
	Reinstatement of Mwimba's plant in sale and lease back			

Transaction (note* below)	50X9/10	45
Nthonkho impairment loss attributable to PPE (W3)		(2.8)
		988

Note* The sale and lease back transaction did not meet the IFRS 15 conditions for a sale. This is because Mwimba retained substantially all economic benefits relating to the asset (has right to use the asset over the entire remaining economic life). Therefore the substance of the transaction is that of a loan.

W2. Goodwill on acquisition of:

i) Ngánjo

K'm

Cost of acquisition	(68+87)	155
NCI at acquisition		39
Less FV of identifiable NA		(150)
Goodwill at acquisition		44
Less impairment loss (W4)		(18)
Carrying amt at 31.12.2020		26

ii) Nthonkho

K'm

Cost of acquisition		130
NCI at acquisition	40%X200	80
Less FV of identifiable NA at acquisition		(200)
Goodwill at acquisition		10
Impairment loss	(4)	(10)
Carrying amount at 31.12.2020		-

W3. Review of Ngánjo and Nthonkho as CGUs for impairment:

i) Ngánjo

K'm

Carrying amounts at 31.12.2020:

Identifiable:

Given (Equity)		240
Net FV gain	(5-2)	3
Unrealised profit in inventory	25X20/125	(4)
		239
Goodwill		44
Total		283

Recoverable amount (given in question)		265
Total loss (283-265)		18
Allocated to Goodwill		(18)

ii) Nthonkho

K'm

Carrying amounts at 31.12.2020:	
Identifiable:	
Given (Equity)	250
Net FV gain (13-5.2)	7.8
	257.8
Grossed up Goodwill 10 X 100/60	16.7
Total	274.5
Recoverable amount (given)	255
Total loss (274.5-255)	19.5
Allocated to gross goodwill (maximum)	(16.7)
Balance to PPE (there are no other intangible assets)	2.8
Loss allocated to goodwill to be recognised 16.7X 60%	10

W4. Non current liabilities

	K'm	K'm	
Given amounts:			
Mwimba			175
Ngánjo		63	
Nthonkho		30	
Adjustments:			
Non current portion of sale and lease back loan:			
Liability at 31.12.20 (60X1.1-9.8)	56.2		
Liability at 31.12.21 (56.2X1.1-9.8)			52.0
			320

W5. Current liabilities

K'm

Given amounts:

Mwimba			125
Ngánjo		47	
Nthonkho		25	
Adjustments:			
Current portion of sale and lease back loan (56.2-52)			4.2
			201.2

W6 Group Retained Earnings

				K'm
Mwimba RE				563
Share of post acquisition RE of				
Ngánjo	(35%[105-80]+80%[160-105])			52.8
Nthonkho	(60%[170.5(W7)-140]+55%[175-170.5])			20.8
Adjustments:				
Reversal of gains on remeasurement/disposal of FVTPL assets				
- Ngánjo	(205-87-50)			(68)
- Nthonkho	(165-15-130)			(50)
Gain on derecognition of Ngánjo as associate:				
Fair Value at date of derecognition			68	
Carrying amt of associate (equity value):				
Cost			50	
Share of post acquisition				
RE	35%(105-80)	8.8		
Other reserves	35%(15-10)	1.8		
			(60.6) 7.4	
Accum FV depreciation:				
- Ngánjo	80%X2			(1.6)
- Nthonkho	(60%X13X1.75/5+55%X13X0.25/5)			(3.1)
Unrealised profit in closing inventory	4X80%		(3.2)	
Reversal of gain on sale and lease back of plant	(60-50)		(10)	
Finance cost on sale and lease back loan	10%X60		(6)	
Depreciation of sale and lease back plant	50/10		(5)	
Reverse of lease rentals			9.8	
Impairment losses (W3):				
- Goodwill in Ngánjo	80%X18			(14.4)
- Goodwill in Nthonkho				(10)
- PPE in Nthonkho				(2.8)
479.7				

W7. Nthonkho Reserves at 1.10.2020

	Other Reserves K'm	Other reserves K'm
Balances at 31.12.2020	175	50
Less profit for the year 18X3/12	(4.5)	
Less OCI for the year 12X3/12		(3)
Balances at 1.10.2020	170.5	47

W8. Other Reserves

			K'm
Mwimba OR			189
Share of post acquisition OR of			
Ngánjo (35%[15-10]+80%[55-15])			33.8
Nthonkho (60%[47(W7)-22]+55%[50-47])		16.7	
Adjustments on reducing holding in Nthonkho:			
Disposal proceeds	15		
Identifiabl NA transferred to NCI (W9)	(12.6)		2.4
			241.9

W9. Net assets transferred to NCI on Mwimba reducing holding in Nthonkho

		K'm
Nthonkho identifiable NA on 1.10.2020:		
Share capital		25
Retained Earnings	(W7)	170.5
Other reserves	(W7)	47
Net FV gain	(13-13X1.75/5)	8.5
		251
Amount transferred to NCI	5%X251	12.6

W10. NCI in

i) Ngánjo

		K'm
At acquisition		39
Post acquisition changes:		
RE	20%(160-105)	11
FV depreciation	20%X2	(0.4)
Unrealised profits	20%X4	(0.8)
Goodwill loss	20%X18	(3.6)
Other Reserves	20%(55-15)	8
		53.2

ii) Nthonkho

		K'm
At acquisition		80
Post acquisition changes:		
RE	[40%(170.5-140)+45%(175-170.5)]	14.2
FV depreciation	[40%X13X1.75/5+45%X13X0.25/5]	(2.1)
Net assets from owners of parent		12.6
Other Reserves	[40%(47-22)+45%(50-47)]	11.4

		116.1
Total NCI	(53.2+116.1)	169.3

SOLUTION TWO

(a)

The business would be regarded as held for sale from 1 June 2019. The held for sale criteria apply because the business is being actively marketed at a reasonable price and the sale is expected to be completed within one year of the date of classification.

Given this classification, IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations* – requires that the assets be separately classified under current assets in the statement of financial position. No further depreciation would be charged on these assets.

The assets will be measured at the lower of their current carrying amounts at the date of classification and their fair value less costs to sell. In this case, the total carrying amount after re-measurement will be K92 million (K93 million – K1 million).

The impairment loss of K34 million (K126 million – K92 million) will first be allocated to goodwill taking its carrying amount to nil.

None of the remaining impairment loss will be allocated to inventories or trade receivables since their recoverable amounts are at least equal to their existing carrying amounts.

The remaining impairment loss of K14 million (K34 million – K20 million) will be allocated to the property, plant and equipment and the patents on a pro-rata basis.

The closing carrying amounts of the property, plant and equipment and the patents will be K30 million and K12 million respectively.

(b) Computation of the cost of the factory

Description	Included in PPE **K'000**	Explanation
Purchase of land	10,000	Both the purchase of the land and the associated legal costs are direct costs of constructing the factory
Preparation and levelling	300	A direct cost of constructing the factory
Materials	6,080	A direct cost of constructing the factory
Employment costs of construction workers	1,400	A direct cost of constructing the factory for a seven-month period
Direct overhead costs	700	A direct cost of constructing the factory for a seven-month period
Allocated overhead costs	Nil	Not a direct cost of construction

Income from use as a car park	Nil	Not essential to the construction so recognised directly in profit or loss
Relocation costs	Nil	Not a direct cost of construction
Opening ceremony	Nil	Not a direct cost of construction
Finance costs	700	Capitalise the interest cost incurred in an eight-month period (purchase of land would trigger off capitalisation)
Investment income on temporary investment of the loan proceeds	(100)	Must offset against the amount capitalised
Demolition cost recognised as a provision	920	Where an obligation must recognise as part of the initial cost
Total	20,000	
Computation of accumulated depreciation		
Total depreciable amount	10,000	All of the net finance cost of 600 (700 – 100) has been allocated to the depreciable amount. Also acceptable to reduce by allocating a portion to the non-depreciable land element
Depreciation must be in two parts		Principle
Depreciation of roof component	50	10,000 x 30% x 1/20 x 4/12
Depreciation of remainder	58	10,000 x 70% x 1/40 x 4/12
Total depreciation	108	
Computation of carrying amount		
	19,892	20,000 – 108

SOLUTION THREE

a) This is a share-based payment transaction where the entity (Mukatasha plc) has a choice of settlement. IFRS 2 *Share-based Payment* requires the transaction to be treated as cash-settled if there is a present obligation to settle in cash. If there is no obligation, the transaction should be treated as equity settled.
Here, Mukatasha plc's past practice of always settling in cash has created a valid expectation in employees that they will receive cash. Therefore, there is a constructive present obligation for Mukatasha plc to settle in cash and Mukatasha plc should account for the scheme as a cash settled transaction.

Cash-settled share-based payments are accounted for as follows:

- An expense should be recognised over the vesting period (2 years)
- A corresponding liability should be recorded in the statement of financial position
- The liability should be measured at fair value and this fair value updated each year end to give the best estimate of amount to be paid
- Any expected leavers over the vesting period should be removed from the number of employees as they will not receive the share-based payment (the best estimate at each year end should be used).

Calculation

The fair value of the liability at the year end is valued using the year end share price as this represents the cash value at that date.

The liability as at 31 May 2020 and the corresponding expense to be recognised in profit or loss for the year ended 31 May 2020 is calculated as follows:

[(60 managers – 10 leavers) x 120,000 shares x K1, 800 year end fair value x ½ vested] = K5, 400, 000, 000.

(b) Amount included in statement of financial position at 30 September 2020

	Number/Amount	Explanation
Number of executives	190	Use expected number based on latest estimates as a non-market vesting condition
Options vesting for each executive	2,000	Use expected number based on latest estimates as a non-market vesting condition
Impact of expected share price	None	This is a market-based vesting condition and is ignored for this purpose

Fair value of option	K0·50	Use fair value on grant date per IFRS 2
Proportion vesting period	2/3	Two years through a three-year vesting
Included in equity	K126,667	190 x 2,000 x K0·50 x 2/3

Amount included in statement of profit or loss and other comprehensive income for the year ended 30 September 2020

Cumulative amount recognised in equity at 30 September 2020 (see above)	K126,667	
Amount recognised in previous year	K(50,000)	200 x 1,500 x K0·50 x 1/3
So included in current year's profit or loss	K76,667	

SOLUTION FOUR

(a)
The need for deferred tax arises because of the temporary differences that exist between accounting rules for recognition of profits and the equivalent taxation rules. These differences potentially result in profits being recognised in the financial statements in accounting periods different from the period in which the entity is liable to pay tax on such profits, leading to a mismatch between the tax expense in the income statement and the profit against which it is being charged. The purpose of deferred tax is to alleviate this mismatch by recognising the tax effect of transactions in the period in which such transactions are recognised in the accounts rather than the period in which the tax effect actually crystallises in the tax computation.

<u>Extract- Statement of profit or loss</u>

tax expense/(income) (K374) credit

Extract - Statement of financial position:
Non-current liabilities
Deferred tax liability K15, 186

Working

	Carrying amount	*Tax base*	*Cumulative temporary difference*
	K	K	K
1.10.2017 Cost	360,000	360,000	0
30.9.2018			
Dep'n (K360 – K20)/10yrs	(34,000)		
Allowances K360,000 x 30%	______	(108,000)	
	326,000	252,000	74,000
30.9.2019			
Dep'n	(34,000)		
K252 000x 15%	______	(37,800)	
	292,000	214,200	77,800
30.9.2020			
Dep'n	(34,000)		
K214,200 x 15%		(32,130)	
	258,000	182,070	75,930

Hence,

		K
Required deferred tax liability at 30.9.2020 is K75,930 x 20%	=	15,186
Required deferred tax liability at 30.9.2019 was K77,800 x 20%	=	15,560
Required *reduction* in y/e 30.9.2020		374

DR Deferred tax liability
CR income tax expense

(b) (i) Since the business model is to collect the contractual cash flows and the cash flows consist solely of the repayment of principal and interest, this asset is measured at amortised cost.
The initial carrying amount of the financial asset will be K60·50 million (K60 million fair value + K500,000 transaction costs). The finance income recorded under investment income category in the statement of profit or loss for the year ended 31 March 2020 will be K6·05 million (K60·5 million

x 10%). The carrying amount of the financial asset in the statement of financial position at 31 March 2020 will be K63.55 million (K60·5 million + K6·05 million – K3 million).

(ii) Since this is an equity investment which Zammicro has no intention of selling, Zammicro can measure the investment at fair value through other comprehensive income (provided irrevocable election on initial recognition has been made). Since the financial asset is measured at fair value through other comprehensive income, the transaction cost (agent's commission) is included in the initial fair value of shares (1,000,000 x K4 + K200, 000) = K4.2 million.
The carrying amount of the financial asset in the statement of financial position at 31 March 2020 will be K4·5 million based on fair value of shares at the year end (1,000,000 x K4.5).
The difference (fair value gain) of K300,000 (K4.5 million – K4.2 million) will be recognised in other comprehensive income. Dividend income of K600,000 (1,000,000 x 60 ngwee) will be recognised as other income in the statement of profit or loss.

(c) Integrated reporting: merging sustainability and financial reporting

The value created by an organisational strategy that achieves financial results and creates sustainable value cannot be expressed by individual financial and sustainability reports with no obvious links between the profit figure and sustainability impacts. Integrated reporting therefore involves taking a more cohesive and efficient approach to corporate reporting with the aim of improving the quality of information available.

An integrated report is a single annual report, however unlike a traditional annual report, it focuses on government, social and environmental as well as financial issues. An integrated report is prepared with all stakeholders in mind, rather than simply shareholders; it requires the co-operation of departments throughout an organisation rather than the individual input of some; it deals with the future as well as the past. The Framework provides guidance on the principles and contents that should be incorporated into financial reporting.

It explains that there are three main aspects to an integrated report, being capitals, guiding principles and content elements.

- Capitals are the inputs to an organisation that are used to create value. These include financial capital as well as non-financial capital such as human, social and natural capitals.
- Guiding principles explain how an integrated report should be prepared – these include principles that underlie financial reports such as materiality and reliability, but also principles more relevant to sustainability such as stakeholder relationships and future orientation.
- Content elements of an integrated report again include both financial and sustainability elements. They are: organisational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook and basis of presentation.

SOLUTION FIVE

a) Although it is true that cash flows are factual and not affected by accounting policies, there are a number of areas in which it could be argued that profit is a better measure of performance:

- Profit is accrual based. This has the following implications:

– Management can manipulate cash flows to appear better than they are by delaying payments and bringing forward receipts; this is irrelevant to profits.
– Certain items relating to the future are recognised in profit but not in cash flows. For example a provision for a liability is recognised in profit or loss so providing indicators of future cash flows.

- Non-cash items may be represented in profit or loss, but are obviously not represented in the statement of cash flows. An example is share-based payments. Although these do not involve the payment of cash, they are still relevant to performance appraisal.

- Due to the way in which cash flows are disclosed, normalisation for exceptional and one-off items is difficult to achieve. In the statement of profit or loss these items are disclosed and so can be excluded in order to assess sustainable performance more accurately.

- Management can time the purchase and sale of non-current assets in order to improve cash flow performance in a given year. The equivalent expense is depreciation; as this is recognised over the life of the underlying asset, there is limited opportunity to take a similar short-term approach to improving performance.

b) Historical cost accounting (HCA) has been criticised on the following grounds.

- Reported results may be distorted as a result of the matching of current revenues with costs incurred at an earlier date. The full distribution of profits calculated on that basis may result in the distribution of sums needed to maintain capital. A distribution which appears well covered when measured against historical cost profit may appear much less well covered when compared with a measurement of profit that takes account of changing prices.
- The amounts reported in a statement of financial position in respect of assets may not be realistic, up-to-date measures of the resources employed in the business.
- As a result of the above points, calculations to measure return on capital employed may be misleading.
- Because holding gains or losses attributable to price level changes are not identified, management's effectiveness in achieving operating results may be concealed.
- There is no recognition of the loss that arises through holding assets of fixed monetary value and the gain that arises through holding liabilities of fixed monetary value.
- A misleading impression of the trend of performance over time may be given because no account is taken of changes in the real value of money.
- Criticism of HCA becomes most vocal in periods of high inflation, such as the late 1970s, since so many of the profits then reported are due to realised holding gains rather than true operating gains.

When inflation levels are low, such as in most of the world today, there is less pressure on standard setters to recommend new accounting methods that do not suffer from the limitations of HCA noted above.

HCA has remained the principal basis for preparing accounts in most countries for many years, so it must have some advantages. Among these advantages are the following:

- It is more objective than adjusted-price methods. The cost of a non-monetary asset is a fact established in the past, whereas the current value of such an asset is a subjective opinion, whether the basis for the value is replacement cost, net realisable value or economic value.
- HCA is well established with users aware of its limitations when they make decisions from accounts drawn up under this basis.
- In times of low inflation, such as the present, HCA's problems are less serious. If one believes that inflation has been permanently squeezed out of the world economy, then there is little advantage in shifting to methods of current value accounting.
- It is relatively inexpensive to operate. The historical cost convention has the advantage of familiarity. This probably makes it cheaper to apply, because procedures for its implementation are well established, and easier to use, because users too have established routines for interpreting it.

(c)

(i) Of particular concern with this method of using ratios is:

- Many large firms operate different divisions in different industries. For these companies it is difficult to find a meaningful set of industry-average ratios.
- Inflation may have badly distorted a company's statement of financial position. In this case, profits will also be affected. Thus a ratio analysis of one company over time or a comparative analysis of companies of different ages must be interpreted with judgment.
- Seasonal factors can also distort ratio analysis. Understanding seasonal factors that affect a business can reduce the chance of misinterpretation. For example, a retailer's inventory may be high in the summer in preparation for the back-toschool season. As a result, the company's accounts payable will be high and its ROA low.
- Different accounting policies and practices can distort comparisons even within the same company (leasing versus buying equipment, LIFO versus FIFO, etc.).
- It is difficult to generalize about whether a ratio is good or not. A high cash ratio in a historically classified growth company may be interpreted as a good sign, but could also be seen as a sign that the company is no longer a growth company and should command lower valuations.
- A company may have some good and some bad ratios, making it difficult to tell if it's a good or weak company.

(ii)

Operating Performance

- Operating performance ratios are tools which measure the function of certain core operations for an organization or business. Particularly, these ratios reveal information about how efficiently that organization is using resources to generate sales and cash. A company with strong performance ratios is able to utilize a minimum resource pool to generate high levels of sales, as well as a significant cash inflow.
- Using the Gross Profit Margin, Chitenge is doing better than Chitambala. This means that Chitenge is able to control its cost of production and at the same time maximise its revenue or sales.

- Using the Net profit margin Chitambala (38%) is doing extremely well compared to Chitenge (10.50%). This means that Chitambala is able to control its operating expenses compared to Chitenge. Chitambala is more efficient in controlling its expenses.
- Chitambala's ROCE of 30% is higher than Chitenge's 24.10% ROCE. This means that Chitambala does a better job of deploying its capital than Chitenge. A higher ROCE indicates more efficient use of capital. ROCE should be higher than the company's capital cost; otherwise it indicates that the company is not employing its capital effectively and is not generating shareholder value.

Liquidity

- Liquidity ratios analyse the ability of a company to pay off both its current liabilities as they become due as well as their long-term liabilities as they become current. In other words, these ratios show the cash levels of a company and the ability to turn other assets into cash to pay off liabilities and other current obligations.

- The current ratio is mainly used to give an idea of a company's ability to pay back its liabilities (debt and accounts payable) with its assets (cash, marketable securities, inventory, and accounts receivable). As such, current ratio can be used to make a rough estimate of a company's financial health. For every K1 of current debt, Chitenge has K1 available to pay for the debt. Chitambala has K2 in current assets for each K1 of current debt. Chitambala has more than enough to cover its current liabilities if they come due.

- The quick ratio measures the amount of liquid assets available for each K1 of current liabilities. Thus, a quick ratio of 0.8:1 for Chitenge means that a company has K0.80 of liquid assets available to cover each K1 of current liabilities and Chitambala has K1.0 of liquid assets available to cover each K1 of current liabilities.

Gearing

- Gearing ratio refers to the fundamental analysis ratio of a company's level of long-term debt compared to its equity capital/capital employed. The point when processing what amount of debt an organization is undertaking as contrasted with its equity, the debt to equity ratio is generally utilized.

- Generally, a lower gearing ratio means greater financial stability. However, not all debt is bad debt. Loans and other fixed interest liabilities are a way for companies to leverage their value to increase profits for shareholders, so the optimal gearing ratio is largely determined by the individual company relative to others in its sector. Therefore Chitenge with a debt to equity ratio of 50% is riskier than Chitambala with 30%.

Investment Ratio

- Dividend yield is a way to measure how much cash flow you are getting for each kwacha invested in an equity position. In other words, it measures how much kwacha you are getting from dividends. In the absence of any capital gains, the dividend yield is effectively the return on investment for a stock. Assuming all other factors are equivalent, then, an investor looking to use his or her portfolio to supplement his or her income would likely prefer Chitenge's stock over that of Chitambala, as it has 3% the dividend yield compared to 2% of Chitambala.

- Dividend cover is the ratio of company's net income over the dividend paid to shareholders, calculated as earnings per share divided by the dividend per share.

It helps indicate how sustainable a dividend is. Dividend Cover of less than 1.5 may indicate a danger of a dividend cut while more than 2 is viewed as healthy. Investors will prefer Chitenge with a dividend cover of 2 as compared to Chitambala with a dividend cover of 1.5

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 16 DECEMBER 2021

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

There are FOUR (4) questions in this section.

This question is compulsory and must be attempted.

QUESTION ONE - COMPULSORY

You are the Audit Senior in Quick Solutions Chartered Accountants and you have been assigned to the audit of the financial statements of Limpopo Plc. for the financial year ended 31 December 2020. This will be the first year that your firm will audit the financial statements of Limpopo Plc. The financial statements for the year ended 31 December 2019 were audited by a different firm of auditors.

Limpompo Plc is a manufacturing company with an old plant which has been in use for the past twenty (20) years. Limpopo Plc has one (1) subsidiary company and during the year under review, the company acquired a controlling interest in another company in which Quick Solutions Chartered Accountants has significant shares. The Company bought new equipment in the first quarter of the year, and during the second quarter of the year in May 2020, the Company disposed of some equipment in order to raise funds to pay interest and capital on a secured loan it obtained five (5) years ago. The Company defaulted in repaying the loan in the last and current year. The Company prepares quarterly management accounts and half yearly accounts.

In a meeting with the Audit Committee of Limpopo Plc you established that the agreement for audit services with the former auditors was terminated on account of a disagreement on the opinion given. The former auditors issued an opinion which did not please the major shareholders and they have indicated in the meeting that they do not wish the audit opinion to be modified because this will impact on the Company relationship with the major lenders. Limpopo Plc did not agree with the proposed modification after they sought for a second opinion from a different firm of auditors.

The Chief Executive Officer of Limpopo Plc. requested that the audit team should assist in the finalization of the financial statements and specifically assist in the determination of the tax due, and completion and submission of the tax returns. In the previous year, Limpopo Plc had a dispute with the Revenue Authority regarding taxes paid in previous periods. The matter was taken to the Tax Appeals Tribunal and the Company has requested that your firm should represent it at the next hearing as an expert witness.

The Finance Director of Limpopo Plc. left employment without giving notice and hence creating the crisis in the finalization of the financial statements. The has company requested that the firm recruits a Finance Director on its behalf as a short-term measure.

It was established during risk assessment that Limpopo Plc conducted an impairment review of its tangible non-current assets during the year and the impairment losses were accounted for in the general ledger. It was further established that 35% of the sales of Limpopo Plc are on credit and the Company uses the simplified approach to determine receivables credit losses in line with the provisions of IFRS 9 *Financial Instruments*. In the past, the Company has experienced credit losses resulting in writing off of the debts.

The year-end timetable for Limpopo Plc is very tight in that the audit should be finalised within one and half months after the year end because the date of the Annual General Meeting is fixed and cannot be changed. You have suggested that in order to meet the tight deadline you will need to perform some audit procedures at the interim audit visit after the preparation of the half yearly financial statements by Limpopo Plc.

Required:

(a) Identify and explain five (5) ethical matters in the audit of the financial statements of Limpopo Plc. and suggest suitable responses. (15 marks)

(b) Identify and explain six (6) audit risks in the audit of Limpopo Plc and for each risk explain the audit response that should be taken. (12 marks)

(c) Explain, using a suitable example, the meaning of financial statement assertions and describe their relevance in designing suitable audit procedures to be performed. (4 marks)

(d) (i) Suggest the audit work that could be carried out on tangible non-current Assets at the interim audit visit in the audit of the financial statements of Limpopo Plc. (3 marks)

(ii) Describe four (4) audit procedures that should be performed at the final audit regarding the figures of tangible non-current assets tested for impairment. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

Kabwe Mining Plc. is a large company involved in mining of manganese. It is the first time that your firm of Chartered Accountants will audit the financial statements of Kabwe Mining Plc.

The Company has a Board of Directors comprising a majority of Executive Board Members and a few Non-Executive Board Members. Kabwe Mining Plc. has seen rapid growth in revenue and profitability under the leadership of the Chief Executive Officer (CEO), Kapili who is also Chairperson of the Board of Directors. The Company has an Internal Audit Department headed by Mary who is a qualified Accountant. The Head of internal audit reports to the Director of Finance. The main function of the Internal Audit Department is to review the internal controls in the Company and where necessary make recommendations on improving the controls. The Head of Internal Audit is a member of Risk Committee of the Company whose main function is to monitor and respond to the risks that face Kabwe Mining Plc. Internal Audit reports are circulated to the Management team of Kabwe Mining Plc. after being reviewed and passed by the Director of Finance.

Inventory of Kabwe Mining Plc. includes large stocks of manganese ore and significant amounts of work in progress. Over the years, the company engaged the services of experts to determine the volume and value of raw materials and work in progress. The Company has been spending a lot of money paying for the services by experts. Two (2) years ago, the Board of Directors made a decision to employ, under Internal Audit, an Engineer with technical knowhow on the valuation of inventory. This is the first year that the Company will not use the services of an external expert and instead use the services of the Engineer in Internal Audit.

You are in charge of the audit of Kabwe Mining Plc. and you are planning the audit for the year ended 30 June 2020. You are considering using the services of the Internal Audit Department of Kabwe Mining Plc. in risk assessment and inventory valuation. You further intend to seek direct assistance from the Internal Audit Department to attend inventory count at three (3) locations that your firm will not attend.

Required:

(a) Evaluate the corporate governance issues in Kabwe Mining Plc. and make recommendations where necessary. (4 marks)

(b) Evaluate four (4) matters that your firm will consider in deciding to use the work of internal audit of Kabwe Mining Plc. or to seek direct assistance. (4 marks)

(c) Evaluate the need for your firm to use the work of an expert and state four (4) matters that you will consider when engaging an expert. (6 marks)

(d) Describe the areas in the audit of Kabwe Mining Plc. that the firm will not seek direct assistance of Internal Audit Department. (6 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Getwell Hospital Ltd was formed by a group retired Senior Experienced Doctors using their terminal benefits. The Hospital has grown from a clinic to a 200 bed hospital.

A Board of Directors was formed comprising exclusively the founder members and one of them was appointed Board Chairperson and Chief Executive Officer of the Company. The rest of the founder members of the Hospital work full time for the Hospital leading the Departments of their expertise.

The profitability of the Company has been declining over the last three (3) years. The founders are worried that they may lose their investments if this trend is not reversed.

The Board recently put in place an Audit Committee comprising four (4) Directors and the Internal Auditor who is the Secretary of the Committee.

Required:

Discuss the corporate governance of Getwell Hospital Plc. and make recommendations for improvements. (4 marks)

(b) The audit for the financial statements of Himalaya Plc. for the year ended 31 March 2020 is nearing completion.

As part of the quality control policies of your firm of chartered accountants, you have been presented with the working paper files of the audit of Himalaya Plc to review. Your main areas of concern are the sufficiency and appropriateness of the evidence that was gathered by the audit team together with the opinion reached.

The financial statements of Himalaya Plc. for the previous financial year were audited by a different audit firm MCM Chartered Accountants.

You have observed the following from the working papers:

1. Earnings per share:
   The share capital of Himalaya Plc. comprises of one (1) million Ordinary Shares of K2 each and 500,000 Convertible Preference Shares convertible to 1 Ordinary Share for every 5 Preference Shares currently held.

   The basic earnings per share for the current year is K12 and Management has not computed the diluted earnings per share as required by the accounting standards. The diluted earnings per share considering the dilutive Convertible Preference Shares would be K7 and Management does not wish to disclose this in the financial statements.

2. Development expenditure:
   An amount of K14 million in respect of research and development expenditure was capitalized during the year. The total assets of Himalaya Plc. amount to K650 million. Your assessment of the criteria used to capitalize the amount indicates that the expenditure does not meet the conditions required by IAS 38 *Intangible assets* for capitalization of development expenditure. Had this amount been charged against income, the reported profit would have been turned into a loss for the year.

The following are extracts from the draft report contained in the working papers:

Opinion:
In our opinion, the financial statements of Himalaya Plc give a true and fair view of the financial position as at 31 March 2020 and of its financial performance and its cash flows for the year then ended.

Basis for Opinion:
We relied on the work of the Management Expert in confirming the figure of closing inventory and we were satisfied that the amount was fairly stated.

Emphasis of matter paragraph:
We draw the attention of the users of the financial statements that the financial statements of Himalaya Plc for the previous year were audited by a different firm of Chartered Accountants MCM Chartered Accountants. We are, therefore, not responsible for any misstatements that may be contained in the opening balances of Himalaya Plc.

Required:

(i) Evaluate the impact, if any, of matters (1) and (2) above on the auditor's opinion. (6 marks)

(ii) Evaluate extracts from the draft report. (8 marks)

(iii) Explain the impact on the elements of the audit report in the event that a modified opinion will be appropriate. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

You are an Audit Manager, in Kimathi Chartered Accountants. You are currently responsible for the evaluation of the extract of the proposed management report to Musa Ltd prepared by the Audit Supervisor, and planning the audit of the financial statements for Dedan Ltd.

Extract of proposed management report to Musa Ltd

"Financial statements for the year ended 30 September 2020

We set out in this letter certain matters which arose as a result of our review of the accounting systems and procedures operated by your company during our recent interim audit. The matters dealt with in this letter came to our notice during the conduct of our normal audit procedures which are designed primarily for the purpose of expressing our opinion on the financial statements.

Consequently our work did not encompass a detailed review of all aspects of the system and cannot be relied on necessarily to disclose defalcations or other irregularities or to include all possible improvements in the internal control.

Accounting estimates

Deficiency

Although your procedures require Management to use methods prescribed by the relevant accounting standard when determining the accounting estimates, this was not done in respect of provisions.

Implication

This resulted in a material understatement of the provision included in the financial statements for the year ended 30 September 2020. This was confirmed by an independent professional firm using a method prescribed by IAS 37 *Provisions, contingent liabilities and contingent assets.*

Recommendation

Since the matter is considered to be material and pervasive to the financial statements for the year ended 30 September 2020, Management should always use methods prescribed by relevant accounting standards to avoid such misstatements in future.

Planning the audit of the financial statements of Dedan Ltd

You have been provided with draft financial statements for the year ended 30 November 2020 and you are carrying out a risk assessment. The Engagement Partner insisted that you use analytical procedures in the risk assessment.

Dedan Ltd is a long standing audit client which transports refinery feedstock to a newly built refinery in Western Province. It is a well-managed Company with an effective Board of Directors. Instances of fraudulent activities have been reduced to zero following computerization and integration of Company operations.

You have sufficient experience and knowledge in this sector having worked for a similar Company in Zimbabwe for over eight (8) years. The preliminary indications are that the Company's internal controls are now effective and can be relied upon.

The Engagement Partner has discussed with the Audit Committee, the possibility of using the business risk approach to auditing instead of the traditional approaches.

Required:

(a) Explain five (5) advantages of using the business approach in the audit of the financial statements of Dedan Ltd. (5 marks)

(b) Explain the suitability of the use of analytical procedures at the planning stage of the financial statement of Dedan Ltd. (3 marks)

(c) Explain the importance of risk assessment in the financial statement audit of Dedan Ltd. (4 marks)

(d) Evaluate the extract of the proposed management report to Musa Ltd prepared by the Audit Supervisor for suitability of the contents. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Your firm is the auditor of Lusaka Engineering Company Ltd, a Company involved in the manufacture of a wide range of industrial equipment.

The bulk of the sales of Lusaka Engineering Company Ltd are on credit. The Company bought investments in an oil company listed on the Lusaka Securities Exchange (LuSE).

The following figures were extracted from the statement of financial position of Lusaka Engineering Company Ltd:

	K000
Trade receivables	50,000
Loan to a supplier	40,000

1. You have been provided with an age analysis of the trade receivables amount of K50 million. The policy of the Company is to recognize credit losses using the simplified approach relevant to trade receivables in accordance with IFRS 9 *Financial Instruments*.

   You have also been provided with the expected default rates for the different ages of the receivables.

2. Credit losses for the loan are calculated in accordance with IFRS 9 *Financial Instruments* using the general approach and the current year is the recognition year.

Required:

(i) Discuss the risk of misstatement of the credit losses on the trade receivables and the loan in the financial statements of Lusaka Engineering Company Ltd.

(4 marks)

(ii) Suggest two (2) audit procedures each that should be performed on the impairment of trade receivables and the loan. (4 marks)

(b) PG & Associates have been auditor of Melbon Ltd for many years and James has been Engagement Partner during this period. The firm has enjoyed a good auditor client relationship over the years.

Recently, the firm received a letter from the Company Secretary of Melbon Ltd requesting that the Engagement Partner to attend a meeting with the Audit Committee of Melbon Ltd. The agenda for the meeting was a discussion concerning legal action that had been taken against Melbon Ltd.

Melbon Ltd has been sued by a Non-Governmental Organization (NGO) that is involved in environmental protection for breaching the recently enacted laws banning dumping of effluents from manufacturing into the nearby river which is a source of drinking water for the Communities around. The litigation of the Company has come soon after the audit of the financial statements was completed and the Company is unhappy that your firm did not detect this and advise Management accordingly.
The Company is not aware of the newly enacted laws and do not understand why you were inquiring on adherence with laws and regulations during the audit yet you failed to detect the

noncompliance. Melbon Ltd intends to bring legal action against the firm and will seek compensation equivalent to the penalties that will be charged by the Regulatory Authorities.

Required:

(i) Describe the expectation gap in the audit of the financial statements of Melbon Ltd and state how this is *narrowed* in the auditor's report. (4 marks)

(ii) Discuss the objective of the Auditor with regards to compliance with laws and regulations of Melbon Ltd. (4 marks)

(iii) Describe the defence that PG & Associates can bring in case of litigation for not detecting non-compliance with laws and regulations. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA3.2 ADVANCED AUDIT AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Ethical matters and related safeguards in the audit of Limpopo Plc:

1. Shares in a company in which Limpopo Plc has an interest:

   The fact that Limpopo Plc has acquired a company in which the firm has shares brings about self-interest threat. This is because the firm and the client will be jointly running the company through the shareholdings by both.

   Safeguard:

   Guidance provides that the firm and an assurance client should not jointly run a business. The firm is unlikely to be objective in auditing the financial statements of a Company that it has common business interest. In this case, the firm should dispose of its interest and if there is no alternative the firm may consider resigning from the appointment.

2. Termination of contract with previous auditors:

   The termination of the contract for audit services with the previous auditors on account of a disagreement on the opinion and seeking a second opinion is an ethical matter. This is intimidation on the Auditor whereby the Company is threatening to terminate the audit services or terminate the agreement. This may force the firm to oblige and issue an opinion in line with the expectations of the Company.

   Safeguard:

   The fact that the agreement with the previous auditors was terminated suggests that the firm stood by its opinion. Quick Solutions Chartered Accountants should make it clear that it is responsible for expressing an opinion on the financial statements based on evidence obtained. If the management of Limpopo Plc does not agree with this the firm may consider resigning from the engagement.

3. Seeking of second opinion by Limpopo Plc:

   The request by Limpopo Plc for a second opinion to a firm that did not perform the audit is an ethical issue on the part of the firm that has been requested. Only the firm that has performed the audit is in a position to give an opinion. The firm requested to give a second opinion must take great care before responding to the request.

   Safeguard:

   The firm requested to give a second opinion should not do no because it did not carry out the audit. The firm may wish to get the permission of Limpopo Plc to communicate with the auditors who performed the audit to confirm the information given to it by Limpopo Plc.

4. Tax computation and tax returns by the firm:

The request by the CEO of Limpopo Plc that the firm should assist the company in determining the tax due to be included in the financial statements and that it should submit the tax returns on behalf of the company is an ethical issue which gives rise to a self-review threat. This is because the firm will have been involved in the determination of a figure in the financial statements and later requested to give assurance on the same figures.

Safeguards:

With regards to the assisting of the tax computation, this should not be done unless suitable safeguards are put in place. This could include a different team assisting in computing the tax due from the team that will be involved in providing assurance services.

With regards to the completion of tax returns, generally this is not taken to give rise to a self- review threat and the firm may go ahead and do this. This is because tax returns are based on historical information and are reviewed by the Tax Authorities on submission.

5. Request for recruitment of Finance Director:

The request that the firm recruits a Finance Director on behalf of Limpopo Plc gives rise to a self-interest threat. Unless the auditors apply suitable safeguards, they will be taking on a Management role which should not be the case.

It is common for audit firms to offer human resources services to its clients but they should apply suitable safeguards when doing so.

Safeguard:

The firm should end up to shortlisting a number of suitable candidates for the position of Finance Director and Management should do the final selection of the person to employ.

6. Firm requested to be expert witness:

The request that the firm should represent Limpopo Plc in a dispute with the Tax Authorities at the hearing by the Tax Tribunal suggests that the firm will take the role of advocates for the assurance client which gives rise to a self-interest.

Guidance provides that firms should not take sides supporting an assurance client in a dispute the client may have with a third party. This may result in the firm losing objectivity in carrying out the audit because of the interest created in the role of advocates.

Safeguards:

A different department of the firm should be involved in the work of standing as expert witnesses in the dispute. A different team not involved with this should be assigned to perform the audit. If no suitable safeguards can be put in place, the firm should decline the offer to represent Limpopo Plc in the dispute.

(b) Audit risks and responses in the audit of Limpopo Plc:

1. First time audit in this industry:

   The fact that the firm will be auditing a client in this industry for the first time suggests that the firm may not have required skills and competences to carry out an effective audit. This means that the detection risk is high and this is the risk that the auditors may not detect material misstatements which may result in an inappropriate audit opinion being reached.

   Audit response:

   The firm will require to use experienced auditors to carry out the audit and there should be close supervision of the work being carried out. The need for using an Auditor Expert in areas that the firm may not have expertise should be considered and quality control reviews by someone who was not involved in the audit should be performed.

2. Previous year financial statements audited by different auditors:

   The fact that the previous year financial statements were audited by a different firms of auditors means that there is a risk that opening balances for the current year will have been audited by the previous auditors. There is a risk that these may be misstated and may impact on the closing balances for the current year under audit.

   Audit response:

   The audit team should be alert during the audit and look out for information that may give evidence on the opening balances. The auditors should perform specific audit procedures in accordance with the provisions of ISA 510 *Initial Audit Engagements – Opening Balances*

3. Acquisition of subsidiary during the year:

   Limpopo Plc acquired a subsidiary company during the year. In doing so, it is necessary that the accounting treatment is performed in accordance with relevant accounting standards. There is a risk that the recognition and accounting for goodwill arising at acquisition may not have been done correctly resulting in a misstatement of the financial statements.

   Audit response:

   Review the agreement and contract on acquisition and confirm the consideration payable and also recompute the calculation of goodwill arising on acquisition of the subsidiary and ensure the provisions of the relevant accounting standards have been followed.

4. Failure by Limpopo Plc to repay interest and principal:

   The failure by Limpopo Plc to repay the interest due and the principal amount has implications that the Lender may enforce the security on the loan. Enforcement of the security will have going concern implications on Limpopo Plc. This will impact on the basis upon which the financial statements are prepared.

Audit response:

The auditors should evaluate the assumptions upon which Management bases their conclusion that the company is a going concern. During the audit, the audit team should be reminded to observe professionals skepticism throughout the audit so that they look out for any evidence that suggests going concern problems facing Limpopo Plc.

5. Impairment review of the plant:

   During the risk assessment stage of the audit, the auditors should have established that the plant is old and therefore it is likely that the equipment is impaired and thus requiring an impairment exercise to be carried out. There is a risk that an impairment review is not undertaken which could result in the financial statements being misstated. In this case, the Management of Limpopo Plc undertook an impairment review, the auditor should establish if the conditions for impairment were met.

   Audit response:

   There will be need to perform audit procedures on the impairment that has been carried out by Management. There is an element of subjectivity in calculating impairment and the Auditors should consider Management's assumptions made for reasonableness.

6. Credit loses for receivables:

   Limpopo Plc has a substantial amount of its sales on credit and does experience credit losses whereby some debt is irrecoverable. The policy of the company is to calculate credit losses on the basis of the provisions of IFRS 9 *Financial Instruments* using the simplified approach. There is an audit risk that the receivables figure in the financial statements may be misstated. The computations may not have been done in accordance with the provisions of the accounting standards and the assumptions used to determine the credit losses may not be appropriate.

   Audit response:

   Evaluate the actual credit losses for past periods against the provisions made in the past. There will be need to find out from Management, the calculation of the credit losses for the current year and to review the reasonableness of the groupings of customers and the related expected default rates used.

(c) Financial statement assertions and their relevance in designing audit procedures:

Financial statement assertions are claims made by Management in the figures contained in the financial statements. Financial statements are required to be prepared in accordance with the relevant financial reporting framework and the relevant IFRSs. By submitting draft financial statements to the Auditors, Management are claiming that the figures contained in the financial statements have been determined in accordance with the relevant laws and regulations.

There are financial statements for transactions, balances and disclosures made in the financial statements.

For example the inventory figure in the statement of financial position should represent inventory that existed at the period end. Management is making a claim (assertion) that the inventory figure represents all inventory that exited.

Relevance of financial statements assertions in designing audit procedures:
The objective of the Auditor is to obtain sufficient appropriate evidence that the financial statements are prepared in all material respects in accordance with the applicable financial reporting framework. In order to conclude appropriately, the Auditor will design suitable audit procedures with a view to confirm whether or not the assertions contained in the figures and disclosures hold true.

Using the example of the assertion of existence of inventory, the Auditor will plan to attend the year-end inventory count which is the basis of valuing the inventory figure in the financial statements. By attending the inventory count, the Auditor is testing the assertion of existence. Attending inventory count, is the suitable audit procedure to perform.

(d) (i) Work on tangible non-current assets at interim audit:
The auditors of Limpopo Plc may perform the following audit procedures during the interim audit visit:

1. Gaining an understanding of the internal controls related to tangible non-current assets and the related procedures for acquisition and disposal of tangible non-current assets.
2. Perform audit procedures on the opening balances on the tangible non-current assets to confirm that they are not misstated.
3. Perform substantive audit procedures on the additions to tangible non-current assets acquired during the first six months of the year.
4. Perform substantive tests on the disposals of tangible non-current assets disposed of during the six (6) month period.

(ii) Audit procedures on tangible non-current assets tested for impairment:
1. Confirm that all assets in the class have been tested for impairment in accordance with the requirements of IAS 36.
2. Review the computations for impairment and ensure that the carrying amount is higher than the recoverable amount.
3. Confirm that the entries in the relevant asset accounts arising from impairment have been correctly made.
4. Where the recoverable amount was estimated, ensure that the estimates of fair values made by Management are reasonable by enquiry.
5. Regarding value in use which is part of the component of determining recoverable amount, the following audit procedures should be performed:
    - Obtain the calculations made by Management and re-perform the calculations to ensure that they are mathematically correct.
    - Compare the cash flow projections used in determining value in use to recent budgets and projections to confirm that they are realistic.

- Confirm that the discount rate used in the calculation reflects the return expected in the market. This can be done by comparisons with any published market rates.
- Make comparisons of how similar assets are valued from published information of companies similar to Limpopo Plc.
- Confirm that in the calculation, the cost or income from disposal of the relevant assets at the end of useful life have been included in the computation.

SOLUTION TWO

(a) Corporate governance issues in Kabwe Mining Plc.:

Corporate governance guidance requires that there should be separation between the Head of the Board of Directors the Chairperson and the person with executive responsibilities of running the company.

In the case of Kabwe Mining Plc., Kapili is both Chairperson of the Board and CEO. This is contrary to best practice.

The second matter relates to the reporting line of the Internal Audit Department. Best practice requires that the function should not report to the Head of the function that will be subject to internal audits by the Department.

In order to give the Department some level of independence, it will be preferable for it to report to an Audit Committee which can be set up by the Board. In this case the Internal Audit Department reports to the Finance Director who may exert influence on how the Internal Audit should function.

(b) Matters to consider in relying on work of Internal Audit Department of Kabwe Mining Plc.:

1. The level of objectivity that the Department has in Kabwe Mining Plc considering the reporting structure of the Internal Audit Department.
2. The skills and competences of the staff in the Internal Audit Department. In the case of the Internal Audit Department of Kabwe Mining Plc. the Department has a mixture of sufficiently qualified and experienced staff to perform the tasks.
3. The way in which the work of Internal Audit Department is planned, performed, documented and reviewed.
4. Management's responses regarding implementing the recommendations of the Internal Audit Department.

(c) Need for the use of an auditor expert:

Kabwe Mining Plc. has significant quantities of manganese ore and work in progress at the period end. Unless the audit firm has the skills needed to measure the quantities and value of ore and work in progress, the firm may need to rely on the figures determined by the Management Expert.

It should be noted that a Management Expert may not always be objective and the firm may wish to engage its own Auditor Expert to assist verify the inventory quantities and values in Kabwe Mining Plc.

Matters that should be considered in engaging an Auditor Expert:

1. The qualifications and experience of the Auditor Expert to perform the work.
2. Membership of the Auditor Expert to the professional body that governance the field of expertise of the Expert.
3. The objectivity of the Expert in terms of his independence from Kabwe Mining Plc.
4. Whether the work of the expert is subject to technical performance standards or other professional or industry requirements such as ethical standards.

(d) Areas where firm will not seek direct assistance in the audit of Kabwe Mining Plc.:

1. The firm should not seek direct assistance from the Internal Audit Department of Kabwe Mining Plc. concerning any work on internal controls such as evaluating the internal control systems and carrying out tests of control.
   This is because this is the main function of the Department and seeking direct assistance in this area will be asking the Department to review its own work.

2. The Head of Internal Audit is a member of the risk committee of Kabwe Mining Plc. It will be inappropriate for the firm to seek direct assistance of the Internal Audit Department at the planning stage of the audit involving risk of the Company.
3. The determination of the allowance for receivables is a matter that involves accounting estimates. In areas that require estimating, the use of direct assistance of Internal Audit would be inappropriate and the Statutory Auditor should perform this task.
4. Any work concerning significant risks identified at the planning stage of the audit should be performed by the audit team members. Direct assistance should not be sought from Internal Audit Department to carry out this work.

SOLUTION THREE

(a) Corporate governance of Getwell Hospital Ltd:

Corporate governance is the way that organizations are organized and run. For most of the organizations that have collapsed in the past, it has been established that they had poor corporate governance structures.

In the case of the Getwell Hospital Ltd, the following are observed:

- The founders of the Hospital all have an interest in the running of the Company. They may not all have the skills and ability to run a successful business because this is not their area of expertise.
- The Board of Directors set up comprised solely of the founder members. The Board of Directors is supposed to give oversight on the Management of the Company. The fact that the founders are involved in running the Hospital suggests that they will be reviewing their own work when they sit as a Board.

  The fact that there are no independent Non-Executive Board Members suggests that the board lacks the independent voice that Non-Executive Board Members bring to the Board.
- The Audit Committee also comprises of the same Executive Board Members. This suggests that the Committee will the independence required for it to remain objective.
- The same person is both Board Chairperson and Chief Executive. This means that he will lack objectivity when evaluating how Management performs its functions.

Recommendations:

- The composition of the Board of Directors should be reviewed so that it should comprise of a balance and mixture of Executive and Non-Executive Members.
- The audit committee should largely comprise of Non-Executive board members and one of the members of this committee should have knowledge of financial reporting.
- The roles of Board Chairperson and Chief Executive Officers (CEO) should not be held by one individual.

(b) (i) Impact on the audit opinion of matters 1 and 2:

1 Earnings per share (EPS):

The earnings per share is an important ratio that is required to be calculated and disclosed in the financial statements of listed companies. The size of the figure may not be material in itself but it is a key investor figure.

Computation and disclosure requirements for the EPS is contained in IAS 33 *Earnings per share*. The fact that Management of Himalaya Plc. has not computed the diluted earnings per share is contrary to the provisions of the accounting standard. To that extent, the financial statements will be considered as being misstated and this will have an impact on the audit opinion reached.

The impact on the opinion will depend on the materiality and pervasiveness of the matter to the users of the financial statements.

By nature the earning per share is material to the financial statements. Further, it is such an important ratio to investors as it impacts on the decisions made by users of the financial statements.

In view of the fact that the matter of disagreement with the Management of Himalaya Plc. is both material and pervasive to the financial statements the appropriate form of opinion is a modified adverse opinion.

2 Development expenditure:
The development expenditure of K14 million is 2.2% of the total assets of Himalaya Plc. and is therefore material to the financial statements of Himalaya Plc.

The fact that the development cost does not meet the requirements for capitalization contained in IAS 38 Intangible assets suggests that by capitalizing this amount then financial statements are misstated to that extent.

Further, had the amount been written off as required the reported profit would have been turned into a loss. The profit figure impacts on the decisions made by users of the financial statements.
This matter if left uncorrected should result in an adverse opinion on the financial statements of Himalaya Plc.

(ii) Evaluation of draft report:
The suggested audit opinion is unmodified stating that the financial statement show a true and fair view.

The two matters referred to in the question are material and pervasive to the financial statements. The suggested opinion is therefore not appropriate. The opinion is supposed to be modified. The form of modification will depend on the materiality and pervasiveness of the matter at hand.

In the case of the earnings per share, Management has refused to compute the diluted earnings per share. This is one ratio that is used by investment Advisors and non-disclosure of the diluted earnings per share impacts adversely on the users of financial statements.

With regards to the capitalized development expenditure, had the correct treatment been made the reported profit will turn into a loss. Reporting a profit as against a loss is likely to adversely affect the decision making of users of financial statements.
In view of the above observations, the opinion should be modified as an adverse opinion.

The following are the comments on the content of the extracts of the audit report:

1. The contents of the basis for opinion are wrong in that what should come in this paragraph is the basis for arriving at whatever opinion is contained in the

opinion paragraph. No mention should be made in the auditor's report on any reliance made on the work of an expert as was the case here.

2. The matter included in the emphasis of matter paragraph is incorrect. This paragraph is supposed to be for matters that have been appropriately accounted for and disclosed in the financial statements by Management and the Auditor wishes to make mention of them.

   The fact that the previous year financial statements were audited by different auditors may be included in the other matter paragraph in accordance with ISA 706 (Revised) *Emphasis of matter paragraphs and other matter paragraphs in the independent Auditor's report*.

3. The assertion in the emphasis of matter paragraph that the firm will not be responsible for the misstatements in the opening balances in not correct. The firm is required to perform audit procedures regarding the opening balances and it is not appropriate to disclaim this responsibility.

(iii) **Impact of modification on the elements of the auditor's report:**

The impact of modifying the audit opinion on the elements of the auditor's report will depend on the form of modification that is used. Assuming that an adverse opinion will be appropriate the following will be the impact:

- The Opinion paragraph in the auditor's report will be renamed adverse opinion.
- The Basis for opinion will be renamed to Basis for Adverse Opinion.

SOLUTION FOUR

(a) Advantages of using the business risk approach

There are a number of advantages of using the business risk approach in the audit of the financial statements of Dedan Ltd, which could include the following:

- Added value will be given to Dedan Ltd as the approach focuses on the business as a whole
- Audit attention will be focused on high level controls and high use of analytical procedures which will increase audit efficiency and therefore cost
- There will be no focus on routine processes, which computerization and integration of company operations has rendered less prone to error than has historically been the case
- Business risk approach will responds to the importance that regulators and the government have placed on corporate governance in recent years
- There will be lower engagement risk (risk of Kimathi Chartered Accountants being sued) through broader understanding of Dedan Ltd's business and practices.

(b) Suitability of the use of analytical procedures at the planning stage of the financial statement of Dedan Ltd:

First and foremost, the use of analytical procedures at the planning stage is a requirement under ISA 520 *Analytical procedures.* The standard states that analytical procedures must be used at the planning and overall review stages.

In addition, the Audit Manager has sufficient experience and knowledge in this sector having worked for a similar company in Zimbabwe for over eight (8) years. This therefore means that it may be easy to spot any unusual or unexpected fluctuations and plan appropriate audit responses.

Dedan Ltd is a well-managed large company with an effective Board of Directors. Hence, it appears that strong explanations will be available for movements on accounts over the period, which will be very useful.

(c) Importance of risk assessment

ISA 315 gives detailed guidance in this area. Risk assessment is important mainly because it:

- is a requirement that Kimathi Chartered Accountants must carry out a risk assessment
- will enable Kimathi Chartered Accountants to identify and assess the risks of material misstatement, whether due to fraud or error, at the financial statement levels, through understanding Dedan Ltd and it's environment
- provides a basis for designing and implementing responses to the assessed risks of material misstatement.

(d) Evaluation of the extract of the proposed management report to Musa Ltd prepared by the Audit Supervisor

ISA 265 *Communicating deficiencies in internal control to those charged with governance and management* states that the Auditor shall communicate in writing significant deficiencies in internal control identified during the audit to those charged with governance on a timely basis. The communication should include a description of the deficiencies and an explanation of potential effects. The communication should also make clear that the audit was for the purpose of identifying misstatements in financial statements, not identifying deficiencies in controls, and that the deficiencies in controls, and that the deficiencies identified as part of audit work, and are not comprehensive.

The structure of the extract of the proposed management report to Musa Ltd prepared by the Audit Supervisor is in line with the guidance given in ISA 265. The contents of the first paragraph is also in line with the standard.

However, a close examination of the contents on accounting estimates shows that the use of the management report for this matter was incorrect. The Audit Supervisor has indicated that the matter is material and pervasive and therefore if this is true, then the use of the management report is not correct. Management reports do not include matters which have resulted in a modified opinion.

Hence, the section on accounting estimates must be removed from the management report and included in the audit report. According to IS 705 (Revised) *Modifications to the opinion in the independent auditor's report*, an adverse opinion should be expressed since the matter is material and pervasive.

SOLUTION FIVE

(a) (i) Risk of material to misstatement of credit losses:

The risk of material misstatement is the risk that an assertion in the financial statements will be misstated due to the two (2) elements of inherent risk and control without considering the work of the auditor.

Risk with regards to credit losses:

The policy of Lusaka Engineering Company is to recognize credit losses using the simplified approach of IFRS 9 *Financial Instruments*.

This requires that the credit losses to be measured at the lifetime expected credit losses from initial recognition. The trade receivables require to be grouped based on customer bases or groupings with different historical loss patterns. Using historical provision rates credit losses are computed and accounting entries passed in the financial statements.

There is a risk that the groupings of receivables made at the period end may be in a biased manner so that they result in credit losses desired by Management. Credit losses may also be misstated due to the fact that the expected default rates used in the calculations are subjective and determined by Management.

Risk with regards Loan:

There is a risk that Lusaka Engineering Company. has not computed the credit losses arising on the loan in accordance with the provisions of IFRS 9 *Financial instruments*. The company may not have computed credit losses in this first year of recognition by creating a credit loss allowance equal to 12 month's expected credit losses. There is also a risk that the credit losses may be misstated due to subjectivity in deciding on probabilities used in the computation.

(ii) Audit procedures for the impairment of trade receivables:

- Obtain the analysis of the trade receivables prepared by Lusaka Engineering Company. and confirm total agrees with the receivables total in the draft financial statements.
- Enquire from Management, the basis for the analysis and the basis for determining the expected default rates.
- Recalculate the credit loss for mathematical accuracy.
- Confirm that the entries in accounting records have been done correctly.
- Obtain written representations from Management concerning the estimates made in calculating credit losses.

Audit procedures for impairment of the Loan:

- Confirm that the loan was given in the current year and that this is initial recognition in the financial statements.
- Obtain the working for credit losses and ensure that credit losses for the next 12 months have been recognized.
- Enquire from Management on the probabilities used in the computation of credit losses.
- Recalculate the computation for credit losses for mathematical accuracy.

- Obtain written representations from Management on the assumptions made in the computation for credit losses.
- Confirm that the accounting entries in the ledger have been correctly done.

(b) (i) Expectation gap in the audit of Melbon Ltd:

The expectation gap is the difference between the actual legal duty of the auditor and the common public perception of what is expected of the auditor.

In the case of the audit of Melbon Ltd the following are clearly indicative of the expectation gap:

The displeasure by the Management of Melbon Ltd that the firm did note detect non-compliance with the relevant laws and regulation is indicative that Management do not understand the role of the Auditor.

It is Management's duty to ensure compliance with laws and regulations. The auditor's objective is to perform an audit on the financial statements and form an opinion.

Auditor's report and narrowing the expectation gap:

In the recent years, the audit report has been made more informative for the benefit of the users of financial statements.

The audit report has two elements which help in narrowing the expectation gap. There is the paragraph on the responsibility of management and another for the responsibilities of the Auditors.

In the paragraph on the responsibilities of Management the audit report explains Management's responsibility for the preparation of the financial statements in accordance with the applicable regulatory framework.

The paragraph for the responsibilities of the Auditors explain in detail the responsibilities of the Auditor which basically is to obtain sufficient appropriate evidence and form an opinion on the financial statements of a client company.

(ii) Objective of the auditors with regards laws & regulations:

ISA 250 *Consideration of laws and regulations in an audit of financial statements* gives guidance to the Auditor with regards to responsibilities for laws and regulations.

The objective of the Auditor will be to obtain sufficient appropriate audit evidence that the financial statements of Melbon Ltd are not misstated due to non-compliance with laws and regulations.

In achieving the above objective, the standard provides that:

- To obtain evidence with regards to compliance with provisions of the laws and regulations that have a direct effect on determination of amounts and disclosures in the financial statements of Melbon Ltd.
- The Auditor should aim at carrying out procedures in accordance with the standard with regards to those laws and regulations that have a material effect on the financial statements.
- If there is non-compliance or suspected non-compliance with laws & regulations that have been identified during the audit of Melbon Ltd, the

Auditor is required to respond appropriately in accordance with the provisions of the standard.

(iii) Defence by PG & Associates against litigation:

- Explaining the responsibility of the Management with regards to compliance with laws and regulations of a company. The Management of Melbon ltd is charged with running the company in full compliance with relevant laws and regulations.
- Explaining the duty of the Auditor which is to carry out an audit and form an opinion on the financial statements.
- To show that the audit performed on the financial statements was performed in accordance with relevant standards on auditing.
- The Auditor will have obtained written representations from Management acknowledging its responsibilities with regards to the preparation of the financial statements and putting into place necessary controls.
- That the Auditor has performed its audit on the financial statement of Melbon Ltd in accordance with the standards on quality control.

END OF SOLUTIONS

Zambia Institute of Chartered Accountants

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 3.3: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 15 DECEMBER 2021

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 question.
   Section B: There are four (4) 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 is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

TECHNOLOGICAL CHANGE AND ORGANISATIONAL INERTIA IN THE COMPUTER INDUSTRY

An organization's "*Achilles heel"* can often be found in its past bases of success.

In a fast-moving, technologically complex and innovative industry dominated by small firms with well-developed communication and technological transfer, one firm's inability to keep pace with innovation in manufacturing processes forced it out of business.

Kasper Instruments produced photolithographic alignment equipment, used to manufacture semi conductor devices. Their manufacture required the transfer of small, increate patterns onto the surface of a wafer of semiconductor material such as silicon. This transfer process called lithography required only certain areas of the wafer to be exposed to light, with masks used to provide the appropriate shield.

Contact aligners were the first form of mask to be used commercially and, as the name suggests, these made contact with the wafers. Kasper Instruments had earned its position as industry leader because of its expertise in the contract alignment technology. However, as technology became more advanced, proximity masks were able to be used. These did not come into contact with the water, so the risk of damage was reduced. Technology within the industry continued to develop incrementally until a quiet different process of electron beam alignment was developed in which a focused beam wrote directly onto the wafer. Yet, in each stage of innovation the industry leader was unable to make the technological transition. It was in the switch from contact to proximity aligners that Kasper Instruments lost its position of industry leader to Canon and was ultimately forced to leave the industry.

The technological change needed for Kasper to keep pace with Canon and introduce the more efficient proximity alignment technique was in technological terms, relatively minor: and the top teams at Kasper were keenly aware of the need to change. However, they seemed unable to rise to Canon's challenge, refusing to accept the obsolescence of their own expert knowledge in the contract technique. While Kasper continually held onto the past, trying to modify its own production technology to include some elements of Canon's innovative procedure, with no success, its market share slipped away. When the engineers at Kasper were given a Canon proximity aligner to take apart with a view to producing their own model, they dismissed it as a mere copy of their own (very different) contract aligner and in doing so cost the company the opportunity to imitate, re-innovate and regain their place edge of regain their place at the cutting edge of competition.

What seemed to be a small incremental development in technology required Kasper to totally rethink the way it did business, from its production processes to its sales and marketing strategies. In its failure to translate its technical understanding of the need for change by changing the routinized processes existing in the organization, it was not alone. Throughout the history of technological change within this industry, each innovation has been a harbinger of doom for the market leader. Kasper Instruments was just one of many firms that found it just could not meet the challenge of change.

Source: Gerry Johnson and Scholes. Exploring Corporate Strategy, Prentice Hall Europe, 5th Edition; page 80

Required:

(a) Being a Consultant in charge of strategy invited to advise Kasper Instruments company management, discuss the four (4) phases of strategic decision making that should be undertaken to correct the situation in the company. (12 marks)

(b) There seems to be a problem with strategic vision with Kasper's Management, describe three (3) important issues that constitutes the concept of Strategic Vision that is used in competing in the market. (12 marks)

(c) The influence of "the way we do things around here" is likely to have important implications for the development of strategy in an organization as it happened at Kasper Instruments. In this case, for Kasper, the situation resulted into a "strategic drift" as Kasper's strategy gradually moved away from relevance due to the forces at work in its environment.

Required:

(i) Explain any four (4) reasons that may lead to a strategic drift. (8 marks)

(ii) Describe the four (4) phases of the Strategic drift. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Answer Any Three (3) Questions.

QUESTION TWO

Mr. John Bwalya and Mr. Mundia Mulyata are partners in Bwamu Oil Company (BOC) operating along the line of rail with office in Choma, Kitwe, Kabwe and Lusaka which also happens to its headquarters. The company has performed very well in its business. The partners and the employees' union have been considering an idea of corporate social responsibility (CSR) as a contribution to society along the line of rail where they operate. Although Mr. Bwalya being a higher shareholder has not been so keen, his counterpart Mr. Mulyata and the union have managed to prevail on the implementation.

Required:

(a) Explain any four (4) of the basic elements of Corporate Social Responsibility Bwamu Oil Company management may want to get involved in. (12 marks)

(b) State the arguments against Corporate Social Responsibility advanced by Milton Friedman that could have negatively influenced Mr. John Bwalya on implementation of this policy. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Batoka Development Company is an indigenous company based in Maamba dealing in the processing of Diesel from Coal. Its Managing Director, Justin Mwiya, is former engineering employee of SASOL of South Africa from 1996 to 2006 in a similar establishment of diesel form coal at Sasolburg. With a number of Zambians that worked with him, he decided to set up a similar business in Maamba with the help of the Citizens Economic Empowerment and the Saudi Fund loans. The company started full production from 2010 and was doing well until 2019 when operation problems became worrisome.

Required:

You have been requested as consultant to advise:

(a) Describe any five (5) risks that the Batoka Company may have faced and caused problems. (15 marks)

(b) Although the terms risk and uncertainty are used interchangeably, they are different. What is the distinction? (4 marks)

(c) Who have the key responsibility for taking risks in the day to day operations of a company between the board and management and why? (1 mark)

[Total: 20 Marks]

QUESTION FOUR

Big retail stores known more for giant stores in suburbs are resizing stores, changing layouts and remixing merchandise to make it big in the big cities. Home Life (building supplies store) recently joined Toys & Us (children's toys), Fashiomart (clothing), Value Buy (electronics) and The Store (retailer) in Lusaka city in exploring ways to adapt their formulas to an urban environment based on changes in their products and customers.

Required:

(a) If these companies were to adopt offshoring as a competitive strategy, describe its advantages and disadvantages to these companies. (5 marks)

(b) Describe the different kinds of information systems they could utilize, giving their purposes, features and some examples of their analyses and outputs. (10 marks)

(c) Describe the features of a company code of ethics which they could use and its functions. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

After discovering that women make 80 percent of all wine purchases, Mweshi Wine Estates, a winery, introduced White Nwee, the first wine aimed specifically at women. The winery's market research showed that women preferred wines with lower alcohol content and fewer calories but were not interested in a " diet wine" that compromised on taste. By harvesting grapes earlier in the season, the company was able to create a wine with 32 percent less alcohol and 25 percent fewer calories than regular Chardonnay wine without sacrificing taste. As part of its marketing strategy, Mweshi will distribute White Nwee primarily through grocery stores, where women are most likely to purchase wine, and will advertise the label on radio and billboards as well as on Web sites that women visit most often.

Required:

(a) Describe what happened at this farm in terms of market diversification as process and its benefits. (4 marks)

(b) Describe the different control processes which this management could choose from. (6 marks)

(c) If you were asked to undertake a resource audit at this winery, explain what its contents would be. (5 marks)

(d) Describe the requirements for and general sources of cost efficiency which this company could focus upon. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA3.3: STRATEGIC BUSINESS ANALYSIS SUGGESTED SOLUTIONS

SOLUTION ONE

1. There are four main phases of Strategic decision making which include the following:

   (i) *Issue Awareness*

   The awareness of strategic issues in organisations is not necessarily an analytical process but rather people get a 'gut feeling' based on their previous experience or received wisdom. This awareness in people 'incubates' as various stimuli help build up a picture of the extent to which circumstances deviate from what is normally to be expected, perhaps in terms of internal performance measures such as turnover or profit performance; or perhaps customer reaction to the quality and price of service or products. A triggering point is reached when the formal information systems of the organisation highlights the problem; a variance against budget may become undeniable or a number of sales areas may consistently report dropping sales.

   (ii) *Issue formulation*

   This phase involves a number of processes gathering takes place, but not always in a highly structured, objective manner. Information is likely to be sought and gathered on a verbal and informal basis, though this may be supplemented through much more formal analysis. However, the rationalization of information so as to clarify the situation draws heavily on managerial experience and the assumptions encapsulated in the paradigm. The role of information generated from more formalized analysis is often to post-rationalise or legitimize managers' emerging views of the situation. Through debate and discussions there may be an attempt to reach an organisational view on the problem to be tackled. The emerging view therefore takes shape in terms of both individual and collective experience, with different views resolved through political process or by drawing on social networks.

   (iii) Solution Development

   At this phase, managers are typically 'search" for known, existing or tried solutions, or wait for possible solutions to emerge, drawing on their experience before design of solution custom-built to address the problem is attempted. Managers begin with rather vague ideas of a possible solution and refine it by recycling it through selection routines back into problem identification or through further search routines. The process is based on debate and discussion within the organisation and collective management wisdom and experience.

   (iv) Selecting solutions

   The process of developing solutions may overlap with the process of selecting solutions. They might be regarded as part of the same process, in which a limited number of potential solutions get reduced until one or more emerges. It is not so much formal analysis which plays a major role here, but managerial judgment, negotiations and bargaining. It should also be remembered that the process might well be taking place below the most senior levels of management, so referring possible solutions to a higher level may be required, and another way of selecting between possibilities may be to seek this authorization.

It has been suggested that strategic decisions emerge as the outcome of managerial experience within a social, political and cultural context, even if formal planning procedures exist.

2. A strategic vision is the desired future state or aspiration of the organisation. A strategic vision provides an overview of where an organisation wants to be at in specific time in future and should present the ideal, but achievable outcome. Three issues that constitutes a strategic vision include:

(i) A strategic vision is associated more personally with the founder of the business or a strong Chief Executive Officer of a business and perhaps become embedded in the history and culture of the organisation. This becomes a driving force fostering employee enthusiasm and commitment, ambition, standards of excellence etc.

(ii) This may be associated with external agency imposition of strategy like those under the Industrial Development Corporation (IDC) in Zambia and similar state holding companies in other countries. Public sector organisations subject to the privatisation and deregulations follow strategic visions as articulated by holding and the government in power.

(iii) Strategic vision could also be thought of as related to intuition. It is suggested by some writer that strategic management has consistently emphasised the importance of analysis – that the role intuition has been neglected. It is argued that setting up of new businesses, new ventures, turnaround and new strategies are the products of creativity, innovation management rather than detailed planning. This may be associated with executives of especially high intuitive capacity who see what other managers do not see and espouse new ways of working. The outcome of the intuition may be seen as a "vision' associated with the "command" of a leader.

3. (a) Strategic drift arises from a combination of factors including:

(i) Business failing to adapt to a changing external environment like social and technological change
(ii) A discovery that what worked before in terms of competitiveness does not work anymore.
(iii) Complacency setting in and often builds on previous success which managements assume will continue.
(iv) Senior management deny there is a problem, even when faced with evidence.

(b) The four phases of the strategic drift include the following:

Phase 1 - Incremental change

In this phase, there is little significance in the external environment. A series of small, incremental changes to strategy enables the business to remain in touch with external environment.

Phase 2 – Strategic Drift

Now things are starting to drift apart. The rate of change in the external environment is accelerating and small, incremental changes in strategy are not enough on their own to remain in touch. The business will be losing its competitive advantage.

Phase 3 – Flux

This phase is characterized by management indecision. There is now a significant gap between what the market expects and what business is delivering. Management may have recognized this gap and begun to alter strategy, however there is no decisive improvement. There may be disagreement between the senior management team members about how to address what is now significant strategic drift.

Phase 4 – Transformational Change or Death

This is the moment of truth. Either management recognises the need for transformation change in the strategic direction, or the business fails. It often takes new, external leadership for this recognition to be made and the relevant strategic change programme implemented. For some businesses, this phase comes too late.

SOLUTION TWO

(a) Basic elements of Corporate Social Responsibility

Corporate Social Responsibility (CSR) is more closely associated with contemporary business issues, and concerns organisations giving something back to society, and being good citizens. Therefore, in contrast to ethics, CSR is socially mediated and likely to be specific to the time and culture in which it is considered. For example, CSR could include:

- Staff development via training and education
- Equal opportunities statements
- Written antidiscrimination policies
- Commitment to reporting on CSR
- Policies for restricting the use of child labour by suppliers
- Policies on fair trade
- Commitment to the protection of the local community

(b) Arguments against Corporate Social Responsibility advanced that could influence a negative attitude of Mr. Bwalya include:

(i) Businesses do not have responsibilities, only people have responsibilities. Managers in charge of corporations are responsible to the owners of the business, who employs them.

(ii) These employers may have charity as their aim, but 'generally their aim will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law in ethical custom.'

(iii) If the statement that a manager has social responsibilities is to have any meaning, 'it must mean that he is to act in some way that is not in the interest of his employers.

(iv) If managers do this, they are spending the owners' money for the purposes other than those they have authorized;

SOLUTION THREE

(a) Batoka Development Company performance could have been affected by the following risks:

(i) Physical Risks - these will include fire, flooding and equipment breakdown. In the long-term, climatic, global warming, etc.

(ii) Economic risks – These could include downturn of National economy, including price of the product going down, inflation, unstable national currency, global financial crisis etc.

(iii) Financial risks – The risk to shareholders caused by debt finance. The risk exists because the debt finance might prevent capital growth or the payment of dividends. The converse is that when businesses are buoyant, interest payments are easily covered and shareholders receive the benefit of the remaining profits.

(iv) Business risks – Lowering of entry barriers due to issues like technology; Changes in customer/supplier in the industry leading to changes to relative power; changes to the firm's internal structure (e.g. its culture or technical systems. Management's misunderstanding of core competences; volatile cash flow etc.

(v) Political risks – Nationalisation, political sanctions and interference, civil war, political instability, National pandemic, can all have an effect on the business.

(vi) Exchange risks – The unstable and changes in exchange rates affect the value of transactions in the currency and how it is reported.

(b) We can make a distinction between risk and uncertainty, although the two terms are often used interchangeably.

(i) Risk is sometimes used to describe situations where outcomes are not known, but probabilities can be estimated.

(ii) Uncertainty is present when the outcome cannot be predicted or assigned probabilities.

(c) Management bear the key responsibility as they are the key decision makers on a daily basis.

SOLUTION FOUR

(a) If these companies were to adopt offshoring as a competitive strategy, define and describe its advantages and disadvantages to these companies.
SOLUTION

Offshoring is a form of outsourcing that involves an external entity based in a different country providing an organization with a particular product or process which had previously been provided in-house.

Advantages	Disadvantages
Cost savings are the main motivation behind the decision to offshore	Quality. Allowing third party providers to act as the interface between the organization and its customers increases the scope for quality issues to arise.
Focus on core activities. Managing non-core functions is often regarded as a distraction which can be alleviated by offshoring.	Public perceptions. Organizations may receive bad press if consumers in the home market perceive moves to offshore operations as leading to domestic job losses.
Capability. Offshoring can help organizations which lack expertise in delivering a particular process.	Loss of control. Offshoring increases the scope for third parties not to meet agreed service levels.
Skills. Some countries lend themselves to offshoring due to local conditions.	
Flexibility. Offshoring may increase the flexibility of an organization's operations as agreements with third parties to supply a service can be established for the short and long term.	

(b) Describe the different kinds of strategic information systems they could utilize, giving their purposes, features and some examples of their analyses and outputs.
SOLUTION

Strategic information systems include Executive Information Systems (EIS), Management Information Systems (MIS) and Decision Support Systems (DSS).

Executive Information Systems (EIS) pool data from internal and external sources and make information available to senior managers in an easy-to-use form.

They help senior managers make strategic, unstructured decisions.

The systems summarizes and tracks strategically critical information, possibly drawn from internal MIS and DSS, but also including data from external sources, e.g. competitors, legislation, external databases, etc.

An EIS is likely to have the following features:

- Flexibility
- Quick response time
- Sophisticated data analysis and modelling tools.

Examples of analyses and outputs:

- Key ratios and performance indicators.
- Ad hoc market analysis.
- Strategic plans.

Management Information Systems (MIS) convert data from mainly internal sources into information like summary reports and exception reports.

This information enables managers to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible.

An MIS provides regular reports and on-line access to the organization's current and historical performance.

MIS usually transform data from underlying transaction processing systems into summarized files that are used as the basis for management reports.

MIS have the following features:

- Support structured decisions at operational and management control levels.
- Designed to report on existing operations.
- Have little analytical capability.
- Relatively flexible.
- Have an internal focus.

Decision Support Systems (DSS) combine data and analytical models or data analysis tools to support semi-structured and unstructured decision making.

DSS are used by management to assist in making decisions on issues which are subject to high levels of uncertainty about the problem, the various responses which management could undertake or the likely impact of those actions.

DSS are intended to provide a wide range of alternative information gathering and analytical tools with a major emphasis upon flexibility and user-friendliness.

DSS have more analytical power than other systems enabling them to analyse and condense large volumes of data into a form that helps managers make decisions.

The objective is to allow the manager to consider a number of alternatives and evaluate them under a variety of potential conditions.

(c) State the features of a company code of ethics which they could use and its functions.
SOLUTION

An ethical code typically contains a series of statements setting out the organization's values and explaining how it sees its responsibilities towards stakeholders.

Codes of corporate ethics normally have the following functions:

- They focus on regulating individual employee behavior.
- They are formal documents.
- They cover specific areas such as gifts, anti-competitive behavior, etc.
- Employees may be asked to sign that they will comply.
- They may be developed from third-party codes (e.g. regulations) or use third parties for monitoring.
- They tend to mix moral with technical imperatives.
- Sometimes they do little more than describe current practices.
- They can be used to shift responsibility from senior managers to operational staff.

SOLUTION FIVE

(a) Describe what happened at this farm in terms of market diversification as process and its benefits.

SOLUTION

Market diversification occurs when a company decides to make new products (White Nwee) for new markets (women).

The company must have a clear idea of what it expects to gain from diversification:

- Growth. New products and new markets should be selected which offer prospects for growth which the existing product-market mix does not.
- Investing surplus funds not required for other expansion needs, bearing in mind that the funds could be returned to shareholders. Diversification is a high risk strategy having many of the characteristics of a new business startup. It is likely to require the deployment of new competences.

(b) Describe the different indirect control processes which this management could choose from.

SOLUTION

i. Self-control. Control can be exercised indirectly by promoting a high degree of employee motivation. When combined with autonomy, this can lead to both the exploitation of knowledge and effective coordination of activities by individuals interacting with one another while management just provides appropriate channels for interaction, knowledge creation and information use.
ii. Cultural processes. Cultural control processes are indirect and internalized by employees as they absorb the prevailing culture and its norms of behaviour and performance. Culturally conditioned behaviour can provide effective responses to environments that are both dynamic and complex.
iii. Internal markets. Organizations are used to market relationships with entities like suppliers outside the boundaries of their own systems. Attempts have been made to bring the responsiveness, self-regulating discipline and efficiency of the market inside those boundaries.

(c) If you were asked to undertake a resource audit at this winery, explain using a suitable model what its contents would be and their examples.

SOLUTION

A resource audit is a review of all aspects of the resources the organization uses. Using the Ms model it categorizes the resources as follows:

Resource	Examples
Machinery	Age, condition, utilization rate, value, replacement cost.
Make-up	Culture and structure. Patents. Goodwill. Brands.
Management	Size. Skills. Loyalty. Career progression. Structure.

Management Information	Ability to generate and disseminate ideas. Innovation. Information Systems.
Markets	Products and customers. Specialized or general. Regional, national, international.
Materials	Source. Suppliers and partnering. Waste. New materials. Cost. Availability. Future provision.
Men and women	Number. Skills. Efficiency. Industrial relations. Adaptability. Innovatory capacity. Wage costs. Labor turnover.
Methods	How are activities carried out? Outsourcing. Quality.
Money	Credit and turnover periods. Cash surpluses/deficits. Short term and long term finance. Gearing levels. Debts.

(d) Describe the requirements for and general sources of cost efficiency which this company could focus upon.

SOLUTION

Requirements for cost efficiency:

- Cost efficiency is a fundamental aspect for strategic capability.
- It requires both the possession and efficient use of appropriate resources and the ability to manage costs so that they are under constant downward pressure.
- In the public sector, cost efficiency is demanded by the political imperative to provide improved and extended levels of service while containing or reducing the cost of the public finances.
- For a commercial organization, cost efficiency permits the firm to offer extended benefits at the same price, the same benefits at a lower price or a combination of the two.

Sources of cost efficiency:

- Economies of scale.
- Supply costs.
- Design of products and processes.
- Experience.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4: ADVANCED TAXATION

THURSDAY 16 DECEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading and planning time. Use it to study the examination paper carefully so that you understand what to do in each question. DO NOT write in your answer booklet during this TIME.

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

Section A: ONE Compulsory Question.
Section B: FOUR (4) Optional Questions. Attempt any THREE (3) questions from Section B.

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 for paper CA3.4– Advanced Taxation (2021 Examinations)

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals		
K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	5.5% of norm value
From US$4,500 to less than US$6,000	6.5% of norm value
From US$6,000 to less than US$7,500	7.5% of norm value
From US$7,500 to less than US$9,000	8.5% of norm value
From US$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% 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 –	Plant used normally	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 K20,000)	
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	4%

Presumptive Tax for Transporters

Seating capacity	Tax per annum K	Tax per day K
From 64 passengers and over	10,800	29.60
From 50 to 63 passengers	9,000	24.70
From 36 to 49 passengers	7,200	19.70
From 22 to 35 passengers	5,400	14.80
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.90
Less than 12 passengers and taxis	900	2.40

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%
Rate of Tax on Realised Value on a transfer of Intellectual Property	5%

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 years but below 5 years		Aged 5 years and over	
Motor vehicles for the transport of ten or more persons, including the driver	Customs duty	Excise duty	Customs duty	Excise duty
	K	K	K	K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 years but below 5 years		Aged 5 years and over	
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 but not exceeding 2500 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 years but below 5 years		Aged 5 years and over	
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	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, with spark ignition internal combustion piston engine	30,697	13,302	24,119	10,452
Panel Vans				
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	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
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	19,461	0
GVW exceeding 20 tonnes, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. Trucks/lorries with gross weight exceeding 20 tonnes

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

For the purposes of the question, you should assume that today is 20 December 2020.

Twiza wishes to commence in business on 1 January 2021 running a retail business. She wishes to involve her friend Mwiza in running the business. Twiza is not sure whether from a taxation point of view, it will be beneficial to take on Mwiza as an employee and run the business as a sole trader, take on Mwiza as a partner and run the business as a partnership or form a limited company and run the company together with Mwiza as full-time working Directors.

Whether the business is run as a sole proprietorship, partnership or as a company, Twiza and Mwiza will use their own private personal motor cars which each individual will buy in January 2021 partly for business purposes. Business mileage will be 60% of the total mileage done in each motor car and the remainder will be for private purposes. The motor cars will be a Toyota Fortuner Car costing K350,000 and having a cylinder capacity of 3000 cc and a Toyota Landcruiser Prado Car costing K320,000 and having a cylinder capacity of 3000 cc. Twiza will drive the Toyota Fortuner car while Mwiza will drive the Toyota Landcruiser Prado car. Each individual will incur motor car running expenses of K50,000 per year on each motor vehicle under each option.

The business is expected to produce an annual turnover of K2,400,000 whether it is run as a sole proprietorship, partnership or as a company and the net profit as per accounts is expected to be K1,600,000, under each option. The net profit figure of K1,600,000 is before deducting any payments relating to Twiza and Mwiza, motor car running expenses to be incurred by each individual on their private motor vehicles and any NAPSA contributions arising where applicable. All the other expenses that will be incurred and deducted in arriving at the net profit figure of K1,600,000 are allowable expenses for taxation purposes.

The following additional information relating to each option is available:

Sole Proprietorship
Under this option Twiza will run the business as a sole trader, and will involve Mwiza as an employee in running the business. Twiza will draw an annual salary of K250,000 and Mwiza's salary will be K220,000. Each individual will additionally draw an allowance of K50,000 per year to meet the cost of motor car running expenses which will be incurred by each individual in each vehicle. Twiza will be required to pay NAPSA contributions of 5% of Mwiza's gross earnings, as the employer's contribution and Mwiza will also pay 5% of his gross earnings as employee's NAPSA contribution.

Partnership
Under this option Twiza will take on Mwiza as a partner. Twiza will draw an annual partner's salary of K250,000 and Mwiza's annual partnership salary will be K220,000. Each individual will additionally draw K50,000 per year to meet the motor car running expenses which will be incurred by each individual on each vehicle. National Pension Scheme Authority (NAPSA)

contributions will not be payable. The balance of any profits or losses will be shared in the ratio 3:2 between Twiza and Mwiza respectively.

Company

If the business is run as a company, the company will be called Wiza Ltd. Twiza and Mwiza will be the only shareholders and full-time working directors in the company. Twiza will draw an annual amount of K250,000 a gross director's salary whilst Mwiza will draw an amount of K220,000 as a gross director's salary. Each individual will additionally draw K50,000 per year to meet the motor car running expenses which will be incurred by each individual on each motor vehicle. NAPSA contributions will be payable where applicable by both the directors and Twiza Ltd at the rate of 5% of the relevant gross earnings.

NAPSA Earnings threshold

The NAPSA earnings threshold for the year ending 31 December 2021 should be taken to be K278,256.

Required:

(a)Assuming that Twiza runs the business as a sole trader, calculate for the tax year 2021, the amount of:

(i) Income tax and NAPSA contributions payable by Twiza. (5 marks)

(ii) Income tax and NAPSA contributions payable by Mwiza. (5 marks)

(b)Calculate the amounts of income tax payable by Twiza and Mwiza for the tax year 2021, assuming that the business is run as a partnership. (10 marks)

(c) Assuming the business is run as a limited company compute:

(i) The *income tax* and *NAPSA contributions payable* by Twiza and Mwiza for the tax year 2021. (10 marks)

(ii) The income tax payable by Wiza Ltd for the tax year 2021. (4 marks)

(e) Advise Twiza and Mwiza as to how they should run their proposed business. Your answer should be supported by appropriate computations of net income arising under each option after deduction of all statutory payments arising under each option (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

You are employed as a tax manager at a firm of Chartered Accountants. You have been provided with the following information relating two (2) clients of your firm XLT Bank plc and Grape General Insurance:

XLT BANK PLC.

The company was incorporated in Zambia and it is listed on the Lusaka Securities Exchange (LuSE). The net income before tax made by the company for the year ended 31 December 2021 amounted to K12,220,000. The profit was arrived at after the following:

(1) Other income

This included profit on disposal of office equipment amounting to K25,000, dividends K34,000 (net) and royalties K89,250 (net). The office equipment was acquired at cost of K100,000 in 2016, and it was sold for K40,000.

(2) Interest expenses

Included in interest expenses is interest paid to other banks (not related to XLT) amounting to K14,200,000, interest paid on customer deposits amounting to K17,890,000 and loan notes interest amounting to K1,320,000. The loan notes interest was incurred on the loan obtained to construct the head office building.

(3) Provision for loan losses

This comprises of loan losses written off amounting to K1,860,000, increase in general provision for loan losses amounting to K3,220,000 and decrease in specific provision for loan losses amounting to K900,000.

(3) Non-interest expenses

This comprises of the following:

		K
Depreciation	2,600,000	
Entertaining customers	1,030,000	
Donations to political parties	500,000	
Donation to approved public benefit organisations	1,000,000	
General allowable expenses	25,480,000	
		30,610,000

Other information

(1) Provisional income tax paid by the company during the year amounted to K4,150,003. Withholding tax deducted from interest income amounted to K1,723,000
.

(2) Implements, plant & machinery and Buildings.

There were no assets qualifying for capital allowances at 1 January 2021. During the year, the company acquired two (2) motor cars each with a cylinder capacity of 3,200 cc at a cost of K320,000 each. The motor cars are used by the Chief Executive Director and the Finance Director on personal-to-holder basis and it has been agreed with the Commissioner General that the business use in each car is 45%.

The company also constructed the head office building at a total cost of K7,200,000. The building was occupied on 31 July 2021 when the company moved from a rented building.

GRAPE GENERAL INSURANCE LIMITED

This is a Zambian resident company providing general insurance services. The following information is available for the year ended 31 December 2021:

	K
Unexpired premiums reserves at 1 January 2021	1,100,000
Unexpired premiums reserves at 31 December 2021	1,500,000
Claims from customers outstanding at 1 January 2021	970,000
Claims from customers outstanding at 31 December 2021	1,020,000
Gross premiums from customers	33,400,000
Premiums refunded to customers	2,560,000
Premiums paid on reinsurance	1,420,000
Other income (Note 1)	2,000,000
Operating expenses (Note 2)	12,400,000

The following additional information is relevant:

(1) Other income

Other income comprises dividends from Zambian companies not listed on the LuSE amounting to K400,000 (gross), rental income from properties let out in Zambia amounting to K950,000 (gross), bank interest amounting to K50,000 (gross) and royalties amounting to K600,000 (gross). Withholding tax had been deducted at source.

(2) Operating expenses

Operating expenses comprises depreciation K210,000, employees' salaries K5,800,000, directors' emoluments K3,000,000, entertaining customers K600,000 and general allowable expenses amounting to K2,790,000. The company has employed five (5) differently abled persons (registered with Zambia Centre for People Living with Disabilities) on permanent basis. All the directors are accommodated in company owned houses for which they pay no rent.

Required:

(a) Advise the Directors of XLT Bank Plc of the amount of income tax payable by the company for the tax year 2021. (11 marks)

(b) Advise the Directors of Grape General Insurance Limited of the amount of income tax payable by the company for the tax year 2021. (9 marks)

[Total: 20 Marks]

QUESTION THREE

For the purposes of this question you should assume that today's date is 1 October 2022

Mutowe Chewe Musonda commenced in business on 1 January 2021, running a retail business. She has informed you that she recently received a letter from the Zambia Revenue Authority giving her notice of their intention to perform a tax audit on the affairs of her business. This letter also warned that penalties and interest may be payable, should the audit uncover any undeclared income or tax defaults.

Mutowe registered her business for tax purposes with the ZRA immediately she commenced trading in January 2021. She had estimated the taxable profit for the tax year 2021 to be K850,000. She submitted the return of provisional income tax in respect of the tax year 2021 on 10 July 2021. She also paid the provisional income tax for both the first and second quarters of 2021 on 10 July 2021, whilst the third installment for provisional income tax relating to the third quarter was paid on 5 October 2021. The final installment of provisional income tax relating to the last quarter of 2021 was paid on 10 January 2022.

She has informed you that for the year ended 31 December 2021, her business generated a net profit as per accounts of K960,000 and that she calculated the actual amount of income tax for the tax year 2021 based on this net profit figure. She also computed the balance of income tax payable for the tax year 2021, on this basis and paid this on 21 June 2022. She submitted the self-assessment income tax return in respect for the tax year 2021 on 21 June 2022.

She has provided you with the financial statements for the year ended 31 December 2021 and using these, you have established that her actual tax adjusted profit the tax year 2021 was K2,580,000.

You should assume that the Bank of Zambia discount rate is 8% per annum and that the tax regulations for the tax year 2021, apply throughout.

Required:

(a) Discuss four (4) tax audit objectives that a quality tax audit should achieve. (4 marks)

(b) Describe any three (3) audit procedures a tax auditor should carry out to uncover any hidden income when performing a tax audit on the affairs of a tax payer. (3 marks)

(c) Describe any three (3) procedures a tax auditor can perform to assess the true of level income and tax liability of a tax payer in a situation where incomplete records or insufficient financial records are maintained by the tax payer. (3 marks)

(d) Advise Mutowe of her exposure to penalties and interest. Your answer should be supported by calculations of the amount of interest and penalties arising as far as the information provided permits. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

The following summarised statement of profit or loss has been extracted from the financial statements of HCC Mining Corporation for the year ended 31 December 2021. The company is engaged in the mining of copper and is a subsidiary of a foreign based parent entity.

HCC MINING CORPORATION
STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2021

	K'000
Revenue	506,000
Cost of sales	(318,021)
Gross profit	187,979
Operating expenses	(125,959)
Interest expense	(36,000)
Other income	1,200
Profit before taxation	27,220

The following information is available:

(1) The sales revenue represents the norm value of copper sold during the year based on London Metal Exchange cash price which averaged US$6,500 per metric tonne during the tax year 2021.

(2) The mineral royalty tax paid by the company during the year has been accounted for and
included within cost of sales in the statement of profit or loss shown above. Also included in cost of sales are depreciation charges of K1,500,000 and amortisation charges of K500,000.

(3) Included in operating expenses are environmental restoration costs for an old mining site, which was closed a few years ago, amounting to K5,220,000, fines for breaches of health

and safety regulations of K290,000, compensation paid to employees for injuries suffered in a mine accident amounting to K850,000, employee's salaries of K44,500,000, drilling expenses of K35,600,000, expenditure of K1,200,000 incurred on the construction of a police post in the mining township, expenditure of K2,500,000 on upgrading of a hospital in the mine township and expenditure of K2,200,000 incurred on rehabilitations of roads in a council town which is located outside the mining township. The balance represents miscellaneous expenses which are all allowable for taxation purposes.

(4) Investment income comprises dividends of K560,000 (gross) received from non-mining Zambian resident companies which are listed on the LuSE and unrealised foreign exchange gains amounting to K640,000.

(5) During the year the company imported mining equipment at a cost K4,000,000 and Dump trucks at cost of K2,800,000 from foreign based suppliers paying for them in US dollars. All other implements, plant and machinery qualifying for capital allowances were completely written down to zero as at 1 January 2021.

(6) The company incurred a tax adjusted mining loss of US$6 million in the year ended 31 December 2020.

(7) The indexation formula for capital allowances and mining losses, where applicable, is given below:

$$1+\frac{(R_2-R_1)}{R_1}$$

(8) The following Zambian Kwacha per US Dollar (ZMW/US$) average BOZ mid-exchange rates should be used where applicable:

Accounting Period	*Average BOZ Mid-Exchange rate*
	ZMW/ US$
Y/e 31 December 2020	K20.50
Y/e 31 December 2021	K21.32

Required:

Calculate the final tax adjusted mining profit and company income tax payable by HCC Mining Corporation for the tax year 2021.

Your answer should clearly show the amount of the tax loss brought forward at the start of the
year remaining unrelieved at 31 December 2021. (20 marks)

[Total: 20 Marks]

QUESTION FIVE

Kedex Inc is a company that is resident in a country known as Kascovia, where it was also incorporated ten years ago, by three Kascovian resident entreprenuers, Mcdonald, MacDouglas and MacMillan. Macdonald holds 50% of the ordinary shares of Kedex Inc, while MacDouglas and MacMillan each hold 25% of the ordinary shares. The three shareholders have always run the company as full time working directors. Kedex Inc has always prepared accounts to 31 December each year.

Kedex Inc has a branch in Zambia, through which it sells products on the Zambian Market. The market for Kedex Inc's products in Zambia has grown significantly over the years and now sales from the Zambian market have become the single major source of revenue for the company.

In a management meeting held in November 2020, the three directors of the company decided to place Kedex Inc under voluntary liquidation following the steady decline of business the company has been facing on the home market. The last day of trading for Kedex Inc was to be 31 December 2020.

The three (3) entrepreneurs have since then decided to incorporate a new company in Zambia known as MacZed Ltd, preparing accounts to 31 December each year. The whole of the business and property of Kedex Inc, has since been transferred to MacZed Ltd. The whole of the ordinary share capital of MacZed Limited, is held by the three (3) entreprenuers. McDonald holds 50% of the ordinary shares of MacZed Ltd, while MacDouglas and MacMillan each hold 25% of the shares.

MacZed Ltd commenced its operations in Zambia on 1 January 2021 and prepared the first accounts on 31 December 2021, making a final tax adjusted profit of K6,200,000. At 1 January 2020, Kedex Inc had an unrelieved tax loss of K3,200,000, which was incurred in the previous tax year. For the year ended 31 December 2020, Kedex Inc's final taxable profit was K800,000.

The three entrepreneurs have heard that under the provisions of the Zambian Income Tax Act a loss incurred by one company can be transferred to another company in certain circumstances and wish to claim for loss relief in relation to the unrelieved tax loss of K3,200,000 suffered by Kedex under these provisions.

McDonald was appointed the Managing Director of MacZed Ltd. He arrived in Zambia to take up the position on 1 January 2021. McDonald was entitled to a monthly basic salary of K60,000 in the tax year 2021. The company rented an apartment on his behalf paying rentals of K8,500 per month. The company additionally leased a 3000cc Ford Double cab van car on his behalf paying monthly lease rentals of K6,500.

During the year to 31 December 2021 McDonald made various investments in Zambia which generated the following income:

	K
Fixed deposit interest	12,750
Government of Zambia bond interest	25,500
Management consultancy fees	34,000

The above figures represent the actual amounts received by McDonald in each case, withholding tax was charged at the appropriate rate and paid to the ZRA.

McDonald has investments in ordinary shares in a company that is resident in Kascovia, and also holds a fixed deposit account, with a bank in the same country. McDonald additionally, owns commercial property in Kascovia that has been let out to tenants in that country. In December 2021, dividends amounting to US$2,560 and fixed deposit interest of US$1,200 were credited to his Zambian account in respect of these investments. Additionally, rental income of U$28,800 was credited to his Zambian bank account in respect of the commercial property.

The dividends were net of withholding tax at the rate of 36% deducted in Kascovia, whilst the fixed deposit interest and the rental income was net of withholding tax at the rate of 25% deducted in the same country. There is no double taxation convention between Zambian and the foreign Kascovia and double taxation relief is given by means of unilateral relief. An exchange rate of K22.00 per US$1, should be used where applicable.

Required:

(a) Describe the conditions to be met in order for a loss incurred by one company to be surrendered to another company and advise the Directors of MacZed Ltd as to whether the unrelieved tax loss incurred by Kedex Ltd of K3,200,000 can be surrendered to MacZed Ltd. (7 marks)

(b) Assuming that Directors are successful in their claim for loss relief compute the tax payable by MacZed Ltd in the tax year 2021. (3 marks)

(c) Compute the amount of income tax payable by McDonald in the tax year 2021. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA3.4 ADVANCED TAXATION SUGGESTED SOLUTIONS

SOLUTION ONE

(a) (i) TWIZA

COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	K
Net profit as per accounts	1,600,000
Less allowable deductions:	
Mwiza's salary	(220,000)
Mwiza's motoring allowance	(50,000)
Employer's NAPSA contributions	
(K220,000 + 50,000 =K270,000) x 5%	(13,500)
Twizas' motor car running expenses	
(K50,000 x 60%)	(30,000)
Capital allowances on Twiza's Fortuner	
(K350,000 x 20%) x 60%	(42,000)
Final taxable profits	1,244,500
Income Tax	
On first K82,800	9,960
On excess (K1,244,500 – K82,800) x 37.5%	435,638
	445,598

(ii) MWIZA'S

COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	K
Salary	220,000
Motoring allowance	50,000
	270,000
Less	
Motor car running expenses (K50,000 x 60%)	(30,000)
Capital allowances on Toyota Landcruiser	
(K320,000 x 20%) x 60%	(38,400)
	201,600
Income Tax	
On first K82,800	9,960
On excess (K201,600 – K82,800) x 37.5%	44,550
	54,510
Employee's NAPSA Contribution	
(K270,000 x 5%)	13,500

(b) PARTNERSHIP

COMPUTATION OF FINAL TAX ADJUSTED PROFIT

	K
Net profit as per accounts	1,600,000
Less	
Motor car running expenses on:	
Twiza's car (K50,000 x 60%)	(30,000)
Mwiza's car (K50,000 x 60%)	(30,000)
Final tax adjusted profit	1,540,000

ALLOCATION OF PROFITS AND COMPUTATION OF INCOME TAX PAYABLE BY PARTNERS

	Total	Twiza	Mwiza
	K	K	K
Salaries	470,000	250,000	220,000
Motor car allowances	100,000	50,000	50,000
Total appropriations	570,000	300,000	270,000
Balance (3:2)	970,000	582,000	388,000
	1,540,000	882,000	658,000
Capital allowances on:			
Twiza's Fortuner			
(K350,000 x 20%) x 60%	(42,000)	(42,000)	
Mwiza's Prado			
(K320,000 x 20%) x 60%	(38,400)		(38,400)
Taxable profit	1,459,600	840,000	619,600
Income Tax			
On the first K82,800		9,960	9,960
On the excess			
K 757,200/K536,800 x 37.5%		283,950	201,300
		293,910	211,260

(c) (i) PERSONAL INCOME TAX COMPUTATIONS FOR:

	Twiza	Mwiza
	K	K
Salaries	250,000	220,000
Motor car allowances	50,000	50,000
Gross earnings	300,000	270,000
Less allowable deductions		
Motor car running expenses		
(K50,000 x 60%)	(30,000)	(30,000)
Capital allowances on:		
- Twiza's Fortuner		
(K350,000 x 20%) x 60%	(42,000)	
- Mwiza's Prado		
(K320,000 x 20%) x 60%		(38,400)
	228,000	201,600
Income Tax		
On the first K82,800	9,960	9,960
On the excess		
K145,200/K118,800 x 37.5%	54,450	44,550
	64,410	54,510

COMPUTATION OF EMPLOYEE'S NAPSA CONTRIBUTION

(1) Twiza's employee's NAPSA Contributions

K278,256 x 5% = K13,913

(2) Mwiza's employee's NAPSA contributions

K270,000 x 5% = K13,500

(ii) WIZA LTD

COMPUTATION OF COMPANY INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	K	K	K
Net profit		1,600,000	
Less Allowable deductions:			
Directors emoluments			
- Twiza	250,000		
- Mwiza	220,000		
	(470,000)		
Motoring allowances for:			
- Twiza	50,000		
- Mwiza	50,000		
		(100,000)	
Employers' Napsa for:			
- Twiza (K278,256x 5%)	13,913		
- Mwiza (270,000 x 5%)	13,500		
		(27,413)	
Tax adjusted business profit		1,002,587	
Company income Tax (K1,002,587 x 35%)		350,905	

(e) COMPUTATION OF NET INCOME UNDER EACH OPTION

	Sole trader	*Partnership*	*Limited Company*
	K	K	K
Profits before deductions	1,600,000	1,600,000	1,600,000
Total Personal Income Tax Payable	(500,108)	(505,170)	(118,920)
Company income tax	nil	nil	(350,905)
Employer's NAPSA contributions	(13,500)	nil	(27,413)
Employee's NAPSA contributions	(13,500)	nil	(27,413)
Net income	1,072,892	1,094,830	1,075,349

It will be beneficial to run the business as a partnership as this option gives the highest net income of K1,094,830.

SOLUTION TWO

(a) XLT Bank Plc

Income tax payable for the tax year 2021

		K	K
Income before tax			12,220,000
Add:			
Loan note interest		1,320,000	
Increase in general provision	3,220,000		
Depreciation	2,600,000		
Entertaining customers		1,030,000	
Donations to political parties	500,000		
Personal-to-holder car benefit (K40,000 x 2)	80,000		
			8,750,000
			20,970,000
Less:			
Profit on disposal		25,000	
Dividends		34,000	
Royalties		89,250	
Capital allowances:			
Office equipment (0- K40,000)		(40,000)	
Motor cars (K320,000 x 20% x 2)	128,000		
Office building (K7,200,000 x 2%)	144,000		
			(380,250)
Adjusted business profit			20,589,750
Add:			
Royalties (K89,250 x 100/85)		105,000	
Total taxable profits		20,694,750	
Income tax @35%		7,243,163	
Less:			
Provisional income tax paid		(4,150,003)	
Withholding tax on interest income		(1,723,000)	
Withholding tax on royalties (K105,000 x 15%)			(15,750)
Income tax payable		1,354,410	

(b) Grape General Insurance Limited

Income tax payable for the tax year 2021

	K	K
marks		
Gross premiums from customers		33,400,000
Premiums refunded to customers		(2,560,000)
Premiums paid on reinsurance		(1,420,000)
Unexpired premiums reserves at 1 January 2021	1,100,000	
Unexpired premiums reserves at 31 December 2021	(1,500,000)	
		(400,000)
Claims from customers at 1 January 2021	970,000	
Claims from customers at 31 December 2021	(1,020,000)	
		(50,000)

Operating expenses:			
Employees' salary		5,800,000	
Directors emoluments	3,000,000		
general allowable expenses	2,790,000		
			(11,590,000)
Relief for employing differently abled persons			
(K2,000 x 5)		(10,000)	
			17,370,000
Add			
Bank interest		50,000	
Royalties			600,000
Free accommodation benefit (K3,000,000 x 30%)		900,000	
Taxable income			18,920,000
Income tax @35%		6,622,000	
Less:			
WHT- Bank interest (K50,000 x 15%)			(7,500)
WHT – Royalties (K600,000 x 15%)			(90,000)
Income tax payable		6,524,500	

SOLUTION THREE

(a) A quality tax audit should be able to achieve the following audit objectives:

(1) provide assurance that the taxpayer'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 regardless of the source.

(3) provide assurance that the responsibilities of the taxpayer regarding the filing of all tax returns have been ascertained.

(4) ensure that the conclusions reached are expressed and documented in sufficient details to enable the reader to comprehend the process whereby such a conclusion was reached.

(b) Procedures performed to uncover hidden income

In order to uncover hidden income, the auditor will mainly consider third parties who have dealings with the taxpayer. Specifically, the auditor can perform the following procedures:

(1) Request the taxpayer to provide a statement of affairs setting out all of their assets and liabilities on a specified date to help assess the financial position and financial performance of the tax payer.

(2) Request third parties, such as suppliers and customers, to deliver or to make available for inspection any books and records or information and explanations in relation to a taxpayer that may be relevant to the taxpayer's liability to tax.

(3) Request financial institutions to make available details of accounts and financial transactions, of the tax payer, which may be material in determining the taxpayer's liability.

(1 mark for each valid point up to a maximum of 3 marks)

(c) Procedures performed to where insufficient or incomplete records maintained
The following approaches may be undertaken by the auditor in such cases:

(1) An estimated assessment would be made based, for example, on the taxpayer's lifestyle or the level of income that similar business of similar size, similar industry or nature generates.

(2) The auditor can reconstruct statements of financial position based, statements of based on the existing non-current assets, inventories and some information obtained about money owing to suppliers.

(3) Similarly, the tax auditor can use financial ratios, to derive a statement of profit or loss and statement of cash flows may be derived and other relevant financial records, thereby, uncovering some income which a taxpayer would not have voluntarily disclosed during an interview.

(d) Mutowe is exposed to penalties and interest due to late payments of taxes. She is also exposed to penalties for late filling of returns and for filling incorrect returns as explained below:

(1) The Provisional income tax return for the first quarter was submitted on 10 July 2020, when it should have been submitted on 31 March 2020. Penalties are chargeable if the return is filed after 31 March during the year. It was therefore filed late by 3 months and 10 days.

(2) A penalty of 1,000 (K300) penalty units per month or part thereof running from the due date to the date when filed is chargeable as Mutowe is an individual. The amount of penalty will be: 1,000 x 4 = 4,000 penalty units (alternatively K300 x 4 = K1,200).

(3) The first instalment of provisional income tax for the first quarter of 2020 was paid late. It was paid on 10 July 2020, when it should have been paid by 10 April 2020. It was therefore paid late by 3 months.

(4) A penalty of 5% of the tax due per month or part thereof will arise. The amount of penalty payable will be: 5% x K74,415 (W) x 3 = K11,162.

(5) Additionally, interest on the overdue tax will arise. The amount of interest will be 2% above the BOZ policy rate per annum. The amount of interest payable will be:

(8% + 2%) = 10% x K74,415 x 3/12 = K1,860

WORKINGS:
COMPUTATION OF PROVISIONAL INCOME TAX PAYABLE:

		K
Provisional Income	850,000	
Provisional Income Tax		
On the first K82,800	9,960	
On excess K767,200 x 37.5%	287,700	
297,660		
Provisional income tax payable per quarter is:		
(K297,660/4)		74,415

(6) Penalties and interest will be chargeable on the underpaid tax for the tax year 2020 of (K2,580,000 – K960,000) x 37.5% = K607,500 running from 21 June 2021 to the date when the tax will be paid.

(7) Additional penalty: Where the amount of provisional income tax paid i less than the actual total income tax for the tax year by at least one third, then an additional penalty at the rate of 10% of the underpaid income tax will arise.

COMPUTATION OF ACTUAL INCOME TAX PAYABLE FOR THE TAX YEAR 2020

	K
Actual taxable profit	2,580,000
Income Tax	

On the first K82,800	9,960	
On excess K2,497,200x 37.5%.		936,450
		946,410

One third of the actual income tax for the tax year 2020 is:
(1/3 x K946,410) 315,470

Total provisional income tax paid of K297,660 was less than this and therefore the additional penalty will arise. The amount of the additional penalty will be:

(K946,410 – K297,660) x 10% = K64,875

(8) Filing incorrect returns

The self-assessment return was incorrect as the net profit for year was used and not the taxable profit. If the incorrect returns are determined to be fraudulent, a fine for submitting fraudulent returns may be charged which is 3000 penalty units and/or there may be imprisonment.

SOLUTION FOUR

(a) HCC

COMPUTATION OF TAXABLE MINING PROFITS

	K'000	K'000	
Net profit as per accounts		27,220	
Add			
Mineral royalty tax (K506m x 7.5%)	37,950		
Depreciation	1,500		
Amortisation of intangible assets	500		
Fines for breach of safety regulations	290		
Construction of police post	1,200		
Upgrade of hospital	2,500		
Rehabilitation of council road	2,200		
		46,140	
		73,360	
Less:			
Dividends	560		
Unrealised foreign exchange gains	640		
Capital allowances (W1)	2,300		(W1)
		(3,500)	
Taxable mining profit before loss relief		69,860	
Less loss relief (W2)		(34,930)	(W2)
Taxable mining income before interest adjustment		34,930	
Add Disallowed interest (W3)		14,121	(W3)
Final taxable mining profit		49,051	
Company Income Tax payable			
(K49,051,000 x 30%)		14,715	

WORKINGS

(1) COMPUTATION OF CAPITAL ALLOWANCES

	K' 000
Police post	
Wear & tear allowance	
(K1.2m x 20%)	240
Hospital Upgrade	
Wear & tear allowance	500
(K2.5m x 20%)	

Mining equipment

Indexed capital allowance	
(K4m x 20%) = K800,000 x [1 + (21.32 –20.50)/20.50]	832
Dump Trucks	
Wear & tear allowance	
(K2.8m x 25%) = K700,000 [1 + (21.32 -20.50)/20.50]	728
	2,300

(2) LOSS RELIEF FOR THE TAX YEAR 2021

	K' 000
Indexed loss b/f	
US$6m x K20.50 =K123m [1 + (21.32 –20.50)/20.50]	127,920
Less loss relief	
Restricted to (50% x K69,860,000)	(34,930)
Unrelieved tax loss at 31 December 2021	92,990

(3) COMPUTATION OF DISALLOWED INTEREST

	K'000
Taxable income	34,930
Add:	
Interest expense	36,000
Depreciation	1,500
Amortisation	500
Tax EBITDA	72,930
Interest expense as per accounts	36,000
Allowable interest is restricted to (30% of Tax EBITDA)	
(K72,930 x 30%)	(21,879)
Disallowed interest carried forward	14,121

SOLUTION FIVE

(a) The directors will be successful in claiming loss relief. This is because all of the requirements under the provisions of the Income Tax Act have been met. The income tax provides that for a loss incurred by one company to be transferred to another company, the company that has incurred a loss:

(1) Must have been incorporated outside the Republic of Zambia. In this case the company which incurred the loss kedex Inc was incorporated outside Zambia, given that it was incorporated in Kascovia.

(2) The old company must have been carrying on its principal business in the Republic of Zambia. In this case Kedex Inc carried on its principle business in Zambia given that the market for Kedex Inc's products in Zambia had grown significantly over the years and the Zambian market became the single major source of revenue for the company.

(3) The old company should be voluntarily wound up in the country where it is incorporated. In this case the directors of Kedex decided to place the company under voluntary liquidation in the Kaskovia in November 2020.

(4) The purpose of the voluntary winding up of the old company must be for the transfer of its business and property wherever situated to a new company to be incorporated in Zambia. In the case of Kedex Inc the company was put under liquidation and the whole of the business and property of company, has since been transferred to a new company a new company, MacZed Ltd.

(5) The new company to which the loss is being surrendered must have been incorporated in Zambia for the sole purpose of acquiring the business and property of the old company. In this case MacZed Ltd was incorporated in Zambia for the purposes of acquiring the business property of the old company, Kedex Inc.

(6) The only consideration for the takeover or transfer should be wholly the issue to the members of the old company of shares in in the new company incorporated in Zambia in proportion to their shareholdings in the old company.

In this case, the only consideration received by the directors of Kedex inc, the old company, for transferring the property of Kedex Inc to MacZed Ltd has been ordinary shares in MacZed Ltd and the directors shareholdings in MacZed Ltd are being held in the same proportion as their original shareholdings in Kedex Inc, i.e. McDonald holds 50% of the ordinary shares of MacZed Ltd, while MacDouglas and MacMillan each hold 25% of the shares.

(7) The old company must have incurred a loss in the period which is not more than five years earlier than when the new company is being formed. The unrelieved tax loss of K3,200,000, was incurred by Kedex Inc in the year ended 31 December 2019, and therefore meets requirement, as well as this is within the five year time limit.

(8) Once the above requirements have been met the new company will be allowed to relieve the old company's loss as a deduction from its income only, if it is from the same

source as that from which the old company's loss was incurred to the extent that the loss has not been allowed as a deduction for any charge year.

Therefore, MacZed Ltd will be allowed to relieve the loss incurred by Kedex Inc of as a deduction from its taxable income as it is carrying on the same business that used to carried on by Jedex Inc.

(b) MACZED LTD

COMPUATION OF COMPANY INCOME TAX PAYABLE

	K'000
Taxable profit	6,200,000
Less Unrelieved tax loss By Kedex Zambia Ltd	
(K3,200,000 – K800,000)	(2,400,000)
	3,800,000
Company income tax	
(K3,800,000 x 35%)	1,330,000

(c) MCDONALD

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K	
Zambian Employment Income			
Salary (K60,000 x 12)		720,000	
Apartment rentals (K8,500 x 12)		102,000	
		822,000	
Zambian Investment income			
Management consultancy fees			
(K34,000 x 100/85)		40,000	
		862,000	
Income from foreign sources			
Dividends from Kascovia			
($2,560 x 100/64) x K22	88,000		
Fixed deposit interest from Kascovia			
($1,200 x 100/75) x K22	35,200		
		123,200	
Total		985,200	
Income Tax			
On first K82,800		9,960	
On excess (K985,200 – K82,800) x 37.5%		338,400	
Zambian Income Tax charge		348,360	
Less tax already paid			
WHT on management consultancy			
(K40,000 x 15%)		(6,000)	
Less Double taxation Relief on:			
- Dividends from Kascovia	30,587		(W1)
- Fixed deposit interest from Kascovia	8,800		(W2)
		(39,387)	
Final income tax payable		302,973	

WORKINGS

(1) Total assessable income

	K
Income chargeable to income tax	985,200
Gross GRZ Bond interest (K25,500 x 100/85)	30,000
Total assessable income	1,015,200

(2) Total amount of Zambian tax charge

	K
Zambian Income Tax charge	348,360
Withholding tax on GRZ bond interest (15% x K30,000)	4,500
Total Zambian tax charge	352,860

(3) Double taxation relief on the dividends from Kascovia:

This will be the lower of:

(i) The foreign tax paid on the dividends:

K88,000 x 36% = K31,680; and

(ii) The Zambian Tax Charge attributed to the dividends computed as:

$$\left(\frac{K88{,}000}{K1{,}015{,}200}\right) \text{x } K352{,}860$$

= K30,587

DTR will therefore be K30,587 being the lower amount.

(4) Double taxation relief on the fixed deposit interest from foreign sources will be the lower of:

(i) The foreign tax paid on the fixed deposit interest:

K35,200 x 25% = K8,800; and

(ii) The Zambian Tax Charge computed as:

$$\left(\frac{K35{,}200}{K1{,}015{,}200}\right) \text{x } K352{,}860$$

= K12,235

DTR will therefore be K8,800 being the lower amount.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 14 DECEMBER 2021

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)

(a) Trade Queens Plc (TQ Plc) is a multinational consumer goods company that provides fast moving consumer goods. The company's product areas are Personal Care, Refreshment and Home Care. Its Personal Care products include skin care and hair care products, deodorants and oral care products. Its Refreshment products include patra water, maheu, tea-based beverages, weight-management products, and nutritionally enhanced staples sold in developing markets. The company Home Care products include laundry tablets, powders and liquids, soap bars and a range of cleaning products.

The management of TQ Plc is made up of highly qualified people. TQ Plc is known for providing innovative products mentioned above. It has a policy that for all of its products, one salesman will be assigned the task of going to customers' homes to demonstrate how the products are used.

Statistics of TQ Plc for the week before Christmas during which a special discount scheme was run are as follows:

New customers	200
Customers coming on recommendation from existing customers	150
Retention rate of customers	90%
Complaints received from customers	5
Number of complaints solved to the satisfaction of the customers	5

In a survey which TQ Plc conducted last year, 70% of customers felt that the quality of TQ Plc's products was excellent, 15% of customers responded that the quality was good and 15% responded that it needed improvement.

Basic facilities are provided by the company such as air-conditioning, tea/coffee facilities, water-coolers and cold drinks facilities.

TQ Plc's employees are generally punctual and they deal with customers in a very polite manner and respond to all their queries. Their personal appearance is good. All complaints are resolved within 3 days of the complaint being logged. The basic criterion for employing a person is that he should have some knowledge of TQ Plc's products. In addition, 3 months' training is provided to all employees after joining.

However, the performance of employees is measured on the basis of financial performance indicators. At the end of the financial year, all employees are paid bonuses according to their position in the organisational hierarchy.

Required:

(i) Discuss the dimensions for deciding the product quality and service quality (such as demonstration of the product, after sales service, etc.) provided by TQ Plc. (6 marks)

(ii) Evaluate and measure the quality of service provided by TQ Plc on the basis of non-financial indicators. (4 marks)

(iii) Discuss the importance of non-financial performance indicators for the employees of TQ Plc. (4 marks)

(b) Universities have traditionally possessed as their primary objectives the pursuit and the transmission of knowledge. During the 2010's, financial pressures on Zambian universities have greatly increased, all budgets being cut in real terms. The current emphasis on effectiveness and efficiency has naturally led on to a thorough examination of measures of performance. At present, there is a high internal competition caused by the increasing number of universities; the presence of international competition postulated by the Southern Africa Development Community (SADC); the demographic crisis; the introduction of new forms of qualification and re-qualification by the Zambia Qualifications Authority(ZAQA) and new methods and forms of training (including distance learning).

Universities may be regarded as offering three major categories of output, namely, highly qualified manpower, research and scholarship and various other social benefits, e.g. contribution to 'national culture' or valuable contributions to the life of local communities. Clearly some of these outputs are much easier to measure than others.

The University of Kawambwa (UKA), is engaged in teaching business, economics and accounting degree courses. There are 20 other Zambian universities offering the same or similar courses in Zambia. The competition for students (as noted above) is currently intense because the universities sector is well served. To this end there are rumours circulating that some universities which do not meet a minimum number of entrants in the forthcoming year will be closed by the Higher Education Authority (HEA), on the grounds of inefficiency and infrastructure inadequacy.

To respond to the HEA potential threat, the UKA developed performance indicators under three major categories:

- Internal indicators, e.g. first degree graduation rates, success rates of higher degrees and attraction of research funds.
- External indicators, e.g. acceptability of graduates in employment, staff publications and patents.
- Operating efficiency indicators, e.g. unit costs, staff/student ratios and staff workloads.

The UKA has produced the following results for the year:

	Budget this year	Actual this year	Actual last year	Sector Average
Number of Students enrolled	7,500	8,000	7,000	6,000
Number of Students *Passing Exams*	7,500	7,600	6,900	5,940
Number of Students *Dropping out*	0	400	100	60
Number of Students *Gaining above average results*	4,500	3,500	3,850	3,000
Number of Students *Gaining average results*	1,500	1,200	1,050	1,500
Number of staff	500	400	390	375
Fees per course(K)	750	700	725	690
Computers for Student use	1,500	1,400	1,400	1,200
Satisfaction rating from students(%)	75	70	72	75

The UKA evaluates lecturer performance at the end of the year. The results of the evaluation are beneficial in understanding the areas of possible improvement for the lecturer. The student evaluation form covers areas such as Lecturer and Tutor Characteristics(punctuality, class preparation, class organization, willingness to help, delivery by lecturer/tutor), Subject Characteristics(learning outcomes, learning materials and knowledge gained from the subject) and Learning Resources(efficiency and availability of the library resources, classroom and computer facilities that were provided by the UKA). The scores were marked on a scale. E.g. library 4 to 20., subject characteristics - scale ranged from 6 to 30 points.

Student complaints generally centre on the quality of teaching. Comments about teachers vary from very positive for some teachers to very negative about others, due to inexperience, teaching at wrong level and being unavailable to help with course work problems.

Required:

(i) Compute performance measures in the areas of exam results, resource availability and quality provision. (8 marks)

(ii) Explain what the measures mean for assessing the UKA's performance. (6 marks)

(iii) Suggest what measures could be put in place to improve any weaknesses that are inherent in the UKA's performance. (6 marks)

(iv) The UKA has decided to use the exam results of its students as the performance measure to assess the performance of the lecturers. The UKA senate consider that the university staff will put in the time and effort with their students to guarantee that the more acceptable levels of attainment are achieved. This will promote the image of the university as one with good results and will lead to more students being recruited.

Outline possible problems of this approach and assess the likely effect on the behaviour of lecturers. (6 marks)

[Total 40 marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Mpumalanga Ltd (M Ltd) manufactures two products, P and Q, and sells these products throughout the world. Due to increased world -wide demand, M Ltd decided to invest heavily in new manufacturing technology which led to a reduction in its labour force.

Historically, M Ltd absorbs all its fixed overhead costs on the basis of machine hours using a predetermined rate. Currently, M Ltd determines its prices by adding 15% mark up to the total cost of the products. The Management Accountant is concerned about the selling prices derived under the traditional absorption costing basis. He thinks that products are either under-priced or overpriced on this basis. Consequently, he has recommended to the board of M Ltd to move to the Activity Based Costing (ABC) system. Some members of the board were not very comfortable on this proposal and requested for a thorough explanation of the ABC system.

The following financial and operating data for 2020 is available:

	Product P	Product Q	Total
Variable cost per unit(K)	725	627	
Total costs(K)			21,193,560
Budgeted production units	3,984	5,080	
Machine hours per unit	1.5 hours	1.8 hours	

An ABC study by the Management Accountant revealed that the fixed overheads are driven by factors other than machine hours. The result of the study is tabulated below:

Activity cost pool	Fixed overhead(% allocation)	Cost driver
Set up costs	70%	Number of set ups
Stores handling costs	20%	Number of material handlings
Customer invoicing costs	10%	Number of customer orders

The study also revealed the following activity volumes for each of the products for the year 2020.

Product	Number of Set ups	Number of Machine Handlings	Number of customer Orders
P	1,500	3,100	3,930
Q	1,000	3,100	11,790

Required:

(a) Explain the concept of ABC and discuss the benefits of ABC. (5 marks)

(b) Calculate the selling prices per unit for products P and Q using:

(i) The total absorption cost plus basis (3 marks)
(ii) The ABC plus basis (5 marks)

(c) Evaluate the results of the calculated prices in (b) above and suggest with reasons what pricing decisions you would recommend to M Ltd. (4 marks)

(d) Businesses must be ethical. Apart from any moral duty to be ethical, the prime purpose of a business like M Ltd is to maximize shareholder wealth and the chance of this happening is increased by the adoption of ethical behaviour.

Required:

Discuss how the adoption of ethical behaviour by M Ltd can help to assist the maximization of shareholder wealth. (3 marks)

[Total 20 marks]

QUESTION THREE

Bulawayo Ltd (B Ltd) has been in stationery business supply for the past two (2) years and supplies stationery all over Zimbabwe.

Each department of B Ltd is managed by a Manager who is responsible for its day-to-day operations. The management information system is not well developed in B Ltd and consequently there are issues to do with duplication of data, errors, high costs of operating the information system and lack of information of reports. For example, the marketing department uses a customer management system software that was developed by the in house team using the IBM database whilst the accounts department maintained their accounts using the Sage software. The stores department uses the software developed in house using the Oracle database. The production department does not see any need for the technology. Thus the data in each of these departments is recorded and processed differently and is totally non- integrated. B Ltd's data from the systems cannot be easily interchanged to drive reports that could be useful for all departments.

The Directors of B Ltd are currently preparing a financial evaluation of K5 million in a new Information Technology (IT) system. They are concerned that sub-optional decisions are being made because the current system does not provide appropriate information throughout the organization. In addition, a comment from a presenter at a conference in Livingstone on developing Information Systems (IS) strategy was "just as organizations develop visions, mission and strategic objectives, they need to come up with a Strategic Information Systems Planning (SISP) which involves setting up an appropriate management Information System (MIS) and linking this to objectives of the organization. In other words, the IS and IT strategies should complement the overall strategy of the organization. It follows therefore that the IS/IT strategy should be considered whenever organizations prepare other long term strategies. I can analyse information strategy into three elements, namely, information systems (IS) strategy Information Technology (IT) strategy and Information Management (IM) strategy'. Two directors of B Ltd attended this conference.

Required:

(a) Distinguish between information systems strategy, information technology strategy and information management strategy. (6 marks)

(b) Discuss the reason why many major organizations use formal strategies to identify development priorities for Information Systems (IS). (10 marks)

(c) An Enterprise Resource Planning System (ERPS) is way of integrating the data and processes of an organization like B Ltd into a single system, e.g. it allows management accounting information to be integrated within an overall information system.

Explain how the introduction of an ERPS could impact on the role of management accountants. (4 marks)

[Total 20 marks]

QUESTION FOUR

The modern environment is dynamic, complex, fast-changing and highly uncertain. Globalization has also contributed to the diverse nature of this environment. In the modern environment many organisations have adopted firm measures to manage and control costs and operate sustainably. Public Sector organisations have not been spared; those that have not adapted the demands of the modern environment are being privatized. The outbreak of the Covid-19 pandemic has redefined many business' strategies and the extent of the impact the environment has on operations.

"Recently we heard the Government of the Republic of Zambia giving a warning and caution statement to the parastatals and other government managed organisations to be innovative and operate profitably in the new environment." Therefore, many public sector organisations are adopting more efficient budgetary and cost control measures. In addition, more aggressive business models are being considered with new working cultures such as working remotely to cut down on costs and using advanced technology such as integrated enterprise resource planning (ERP) system in place of an old MRP (manufacturing resource planning) system.

In view of this, incremental budgeting is being disregarded in preference to more robust approaches such as output and Performance Based budgeting both in the private and public sectors.

Required:

(a) Discuss the challenges posed by the changes in the environment for traditional budgeting and variance analysis in performance management used in the public sector. (12 marks)

(b) Discuss the changes that are likely to be seen after the implementation of the ERP system in the budget-setting process and the budgetary control process. (8 marks)

[Total 20 marks]

QUESTION FIVE

Some commentators argue that: 'With continuing pressure to control costs and maintain efficiency, the time has come for all public sector organisations to embrace zero-based budgeting (ZBB). There is no longer a place for incremental budgeting in any organisation, particularly public sector ones, whereas zero-based budgeting is far more suitable anyway.'

Required:

(a) Explain the key features of zero-based budgeting, the main stages involved in preparing zero-based budgets and the challenges of implementing the ZBB. (12 marks)

(b) Discuss the view that 'there is no longer a place for incremental budgeting in any organisation, particularly public sector ones. (4 marks)

(c) Discuss four (4) major factors to be considered when setting transfer prices for multi-national companies. (4 marks)

[Total 20 marks]

END OF PAPER

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

CA 3.5 ADVANCED MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

a) TQ Plc

(i) The management of TQ Plc could choose from the following list of criteria relating to service quality. As required by the question, a mechanism for measurement is also provided.

Product quality

The quality of the product can be measured by its appearance and performance.

- Appearance

The weights of personal care products, packaging of product, product presentation, etc. are important factors when it comes to the quality of the product.

- Performance

Performance refers to the speed of homecare products in removing dirt, the capacity of toilet cleansers, sun-screening abilities of body lotion products, long lasting scents of deodorants, effectiveness of oral dental products, etc.

Service quality

The above factors are related to product quality. However, there are certain services provided by TQ Plc such as after sales service and demonstration of the products which cannot be measured in quantitative terms. For these services, the following dimensions can be applied

- Appearance: it is mentioned that the appearance of the staff is very pleasant. This will keep customers satisfied.
- Responsiveness: only a few complaints are received and they are also dealt with properly.
- Comfort: basic facilities are provided by TQ Plc as air-conditioning, tea / coffee, water-coolers and cold drinks facilities
- Availability: complaints are resolved within three days: this indicates that TQ Plc has sufficient staff to deal with customers.
- Courtesy: the employees are dealing with customers in a very polite manner.
- Reliability: quality/satisfaction guarantee is provided (e.g. on disinfectants label says "eliminates 99.99% of germs" for most of the products (with customer care phone numbers indicated if one is not happy with product) and the number of complaints is very low compared to the volume of sales.
- Competence: since only employees with a basic knowledge of TQ Plc's product lines are employed and they are also given three months' training, it can be said that they are competent to perform their work.
- Friendliness: the attitude and behaviour of the employees is friendly and they respond to every customer query.

Customers may be pleased with the home demonstration service. This could be the reason why the complaints are few. The company received few complaints from the customers and they were all resolved to the satisfaction of the customers. This indicates that prompt service is provided to customers and they are satisfied with the service.

(ii) If the above mentioned dimensions are considered when assessing the quality of the product, it will be found that TQ Plc is providing good quality products and its service is also good. This conclusion is made on the basis of the following points.

Customer retention rate
The customer retention rate is 90% which is good and indicates that the customers are satisfied with the quality provided by TQ Plc.

Customer loyalty
About 75% (150/200 x 100) of new customers are referred to TQ Plc by existing customers. This shows that the existing customers are loyal to TQ Plc and are recommending its products (courses) to their relatives and friends. This also indicates that the customers are satisfied with TQ Plc.

Customer satisfaction report
From the survey conducted by TQ Plc, it is evident that the customers are very satisfied with TQ Plc.

(iii) Non-financial performance measures and employees
It is found that the performance of the employees is measured on the basis of financial performance indicators. These indicators are not sufficient for measuring the performance. There are certain aspects of performance which cannot be expressed in monetary terms. For such matters, non-financial performance measures are the best way to measure the performance.

Bonuses are given to all employees irrespective of their performance Le. all employees are rewarded equally. This may demoralise those employees who are performing well. The employees should have knowledge of the product and the necessary skill to demonstrate the product. However, this is not judged by the financial measures.

In addition, the behaviour of the employees towards customers, their morale, etc. cannot be judged using financial measures.

(b) UKA

(i) Performance report

	Budget this year	Actual this year	Actual last year	Sector Average
Students *Passing Exams(%)*	100	95	98.57	99
Students *Dropping out(%)*	0	5	1.43	1.00
Students *Gaining above average results(%)*	60	43.75	55	50
Students *Gaining average results(%)*	20	15	15	25
Staff/Student ratio	1:15	1:20	1:18	1:16
Fees per course(K)	750	700	725	690

Computers/Student ratio	1:5	1:5.7	1:5	1:5
Total income(K'000)	K5,625	K5,600	K5,075	K4,140

(ii) The following are some of the measures for assessing the UKA's performance.

Examination results

Numbers of actual students taking and passing the exams were down sharply on last year due to a much higher drop-out rate than budgeted and a much higher drop-out rate than last year and in the university sector as a whole. Again, results were well below budgeted for the above-average and average results and against last year and the sector. This poor performance may indicate problems with the UKA and its provision or with the students, points which will be referred to below in the section on quality.

Resources Available

The UKA is seriously understaffed (budgeted staff of 500 against only 400 actual). This is reflected in the high staff/student ratio, which is 33% higher than the budget, is worse than last year and is worse than sector average. Given that staff have to do 25% more work than budgeted for no more money and have 33% more students to look after, it is no surprise that some staff are unavailable to assist with problems as they may be tootied up filling in on other teaching and coping with the additional workload.

Computers available to students in absolute and relative terms are below budget, last year and sector, so students are getting a worse level of provision than they could expect in other universities.

Financial performance indicators show that despite the increase in student numbers, total fees have gone down due to a fall in fees per student. This may not be UKA's fault as fees could be set by the government or by the sector. Overall, fees are up on last year due to the increase in student recruitment, but the fall in fees per student could account for the fall in staff and computer provision against budget due to the lack of spare cash resources to pay for these items.

Quality of provision

This is in some ways suspect. Drop -out rates suggest that students are unhappy and the dramatic rise this year suggests the problems are much worse now. Similarly, exam results are so below budget and so down compared to sector and last year that quality of service appears to be falling. Alternatively, the students that have been recruited may be of a much lower standard or much less motivated than in previous years and in other parts of the university sector.

However, it is unlikely that the UKA would produce this kind of difference from the previous year and the sector, so other quality factors may have affected the students' performance. These could be overcrowding as the university seeks to boost its numbers to avoid closure, overcrowding the staff so that they are unable to fit in as much time with the students or be as well prepared for their teaching as they might be, thereby failing to deliver the level of instruction required by the students. In addition, there is a wide variation in both the levels of instruction provided and the experience of lecturers. This, too, suggests that there is a failure of quality provision.

(iii) Ways to improve quality failures would include:

- Introducing training for lecturers to improve overall time management and provision of teaching
- Providing more resources for staffing of the UKA so that staff/student ratios can be improved.
- Providing more resources for improving provision of computers for students
- Providing more counselling for students to find out why students are dropping out and why they are doing less well than expected.
- Introduction of a Total Quality Management(TQM) system to promote the aim of quality throughout the provision of courses and student experience.
- Provision of quality courses to generate adequate numbers of students to fill the courses and guarantee the survival of UKA.

(iv) Problems with the approach adopted will be:

- Students naturally have different abilities to cope with the subjects , and no matter how good a lecturer, some students will not do well.
- Some students are highly motivated but others are lazy and so will not achieve the required grades, no matter how good the lecturer.
- As lecturers are not responsible for recruitment, they have no say in the calibre of students accepted onto their courses, they cannot be assessed on the results of persons whose acceptance they did not review and agree to.
- Exam performance is not necessarily related to intelligence or ability, as some students will suffer from nerves and underperform in the exam.
- No matter how good the teaching, students cannot be forced to listen and understand or even to turn up to lectures and tutorials; the lecturers thus have no control over the students in their charge.
- Lecturers will not want more students unless there is an increase in staff to cope with the extra workload.

The likely behavioural consequences will be as follows:

- Stress and anxiety on the part of the lecturers will grow as they will not feel in control of their situation.
- This stress and anxiety will lead to underperformance, which will reduce the quality of learning experience.
- Lecturers will become demotivated as they perceive that they are not in control of the situation.
- Dysfunctional behaviour may result in that lecturers will only look to promote the good results of their own students rather than the overall reputation of the UKA as a whole.
- Where lecturers mark their own exam papers, wholly inappropriate marks may be given to students to improve their performance.

It can be concluded that demotivation, failure to achieve goals and promoting self-interest at the expense of the organization can result from the incorrect application of performance measures.

SOLUTION TWO

(a) Activity Based Costing (ABC) is an approach to costing that identifies individual activities as fundamental cost objects. It uses the costs of these activities as the basis for assigning costs to ultimate cost objects such as products or services.

The following are some of the benefits that may accrue to M Ltd:

- ABC reveals the appropriate cost of each activity consumed in the organization and can, therefore assist M Ltd to control costs by giving importance to the activities that generate them. E.g. set up costs are the most important cost and are higher than other overheads (K10, 584,000, representing 70% of all overheads). Proper training could be given to the staff to reduce the set up costs. It follows that ABC is the means to cost control.
- ABC calculates the costs of each activity and assigns the activity costs to the products on the basis of activity consumption. This encourages optimum pricing. It is, therefore, more useful in determining the minimum price that M Ltd would charge for its products.
- Under ABC, all the costs are considered and assigned on a more realistic basis. It, therefore, helps when deciding the more profitable product or service.
- ABC provides accurate information about costs to help with decision making; thus helping managers to make correct decisions.
- ABC will be useful where there is intensive competition, non-volume related overheads that are a high proportion of total costs, and a diverse range of products, all-consuming organizational resources in significantly different proportions(i.e. high product diversity)

(b) (i) Product Unit Prices Using Total Cost Plus

	P	Q
	K	K
Variable costs	725	627
Fixed Overheads K1,000(W.3)x1.5hrs/1.8 hrs)	1,500	1,800
Total unit cost	2,225	2,427
Profit @15%	333.75	364.05
Selling Price	2,558.75	2,791.05

Workings.

W.1. Total Fixed Overhead

	K	K
Total costs		21,193,560
Less:		
P: 3,984xK725	2,888,400	
Q: 5,080xK627	3,185,160	
		6,073,560
Total fixed overhead costs		15,120,000

W.2 Budgeted machine hours

P: 1.5hrs x 3,984 = 5,976 hours

Q:1.8hrs x 5,080 = 9,144 hours

15,120 hours

W.3

$$\text{Fixed Overhead Absorption Rate} = \frac{\text{Total Fixed Overhead Cost}}{\text{Total Budgeted Machine Hours}}$$

$$= \frac{K15,120,000}{15,120 \text{ hrs(W.2)}}$$

$$= \text{K1, 000 per hour}$$

(b) (ii) Product Unit Prices Using ABCl Cost Plus

	P	Q
	K	K
Variable costs	725	627
Fixed Overheads(W.5)	2,068.37	1,354.25
Total unit cost	2,793.37	1,981.25
Profit @15%	419.01	297.19
Selling Price	3,212.38	2,278.44

W.4 Fixed overhead cost analysis

Set up related costs	70% x K15,120,000	K10,584,000
Stores handling related costs	20% x K15,120,000	K3,024,000
Customer invoicing related costs	10% x K15,120,000	K1,512,000
		K15,120,000

W.5 Fixed overhead cost allocation

Activity pool	Share ratio	Product P	Product Q	Total Overhead
Set up costs	1.5:1	K6,350,400	K4,233,600	K10,584,000
Material handling	1:1	K1,512,000	K1,512,000	K3,024,000
Customer invoicing	1:3	K378,000	K1,134,000	K1,512,000
		K8,240,400	K6,879,600	K15,120,000

	P	Q
	÷	÷
Production units	3,984	5,080
Fixed overhead cost per unit	K2,068.37	K1,354.25

(c) Comparative table

	P cost	Q cost		P price	Q price
Current system basis(K)	2,225	2,427		2,559	2,791
ABC basis(K)	2,793	1,981		3,212	2,278
Comment(ABC viewpoint)	Lower cost	Higher Cost		Lower Price	Higher Price

The total cost plus method based on machine hours does not consider the activities that drive costs. The activity based information identifies the causes or drivers of costs.

The costs of producing Products P and Q are lower and higher, respectively, under the current system compared to ABC. In reality, since the ABC method is considered to be more accurate, the cost of producing P (K2,793) is higher than the price being charged for it (K2,559). It follows that P is being sold at a loss. As for product Q, a higher price of K2,791 is being charged instead of a more competitive ABC price of K2,278. It is possible that M Ltd is losing business for this product because the price is far above the ABC realistic cost.

It is recommended that M Ltd considers the general market environment before making the final decision. However, on the basis of the information currently available, M Ltd should consider increasing the price of product P and lowering the price of product Q.

SOLUTION THREE

a) Distinction between IS strategy, IT strategy and IM strategy

Information systems (IS) strategy

The information systems strategy is concerned with specifying the systems (in the widest meaning of the word) that will best enable the use of information to support the overall business strategy. In this context, a 'system' will include all the activities, procedures, records and people involved in a particular aspect of the organisation's work, as well as the technology used. The information systems strategy is focused on business requirements, the demands they make for information of all kinds and the nature of the benefits that information systems are expected to provide. This strategy is very much demand-led and business-driven: each business area of a large organisation is likely to have its own information systems strategy.

Information technology (IT) strategy

The information technology strategy is technology focused, technically driven and concerned with supplying technical solutions to the demands made by the information systems strategy. This strategy is likely to be concerned with such matters as standardisation, integration, economies of scale, good practice and architectural coherence. It is likely to be formulated at the corporate apex.

Information management (IM) strategy

The emphasis here is on management: this strategy is oriented towards roles and relationships and covers such matters as the responsibilities and organisation of the IT staff; control and accounting requirements for IT assets; and the 'design of the management processes required across all the IT activities in an organisation'.

In summary, the IS strategy defines what is to be achieved; IT strategy determines how hardware, software and telecommunications can achieve it; and the IM strategy describes who controls and uses the technology provided.

(b) Reason Why Many Major Organizations Use Formal Strategies to Prioritise IS.

There is now a growing recognition amongst organisations of the importance of information as a business resource. It follows, therefore, that the systems manipulating, storing, processing and distributing this resource must not be left to chance.

Information has in the past been collected, stored, processed and dispersed during the course of an organisation's operational activities. However, organisations have seen the introduction of information technology and such systems as management information systems, decision support systems and executive information systems as the means to gain a competitive advantage.

Previously, organisations used computers to perform the mundane tasks (repetitive, boring, unproductive and yet necessary tasks) and computerised data processing has become a routine function. Generally, organisations are now more computer literate and this, together with the low price of hardware and new technology, has made organisations more aware of the competitive advantages to be gained by the correct application of technology and its related systems.

For an organisation to invest in information technology and information systems, it will require some sort of information strategy. The IS/IT strategy would be based upon the corporate strategy, which can be defined by a study of the mission statement.

The mission statement is a statement of purpose by the organisation, and from this, the aims and objectives can be ascertained. The aims and objectives state what needs to be achieved and the strategy outlines how to achieve them.

Therefore, before an IS/IT strategy can be drawn up, the corporate strategy must be studied to ensure that they are aligned.

An information strategy will comprise two parts:
1 Organisational - this is the systems management which is concerned with the collecting, processing and distribution of information.
2 Technical- this is concerned with the means by which the information will be collected, processed and distributed.
Strategic planning for IT ensures:
1. Compatibility between the various systems under development and hardware purchased within an organisation.
2. Commitment from the strategic level of management.
3. Resource allocation - the monetary commitment from the organisation.

(c) Explanation of How ERPS Introduction Could Impact on Role of Management Accountants.

The introduction of Enterprise Resource Planning System (ERPS) has the potential to have a significant impact on the work of management accountants.

- The use of ERPS causes a substantial reduction in the gathering and processing of routine information by management accountants.
- Instead of relying on management accountants to provide them with information, managers are able to access the system to obtain the information they require directly via a suitable electronic access medium.
- ERPS perform routine tasks that not so long ago were seen as an essential part of the daily routines of management accountants, for example perpetual inventory valuation. Therefore, if the management accountant's role is not to be diminished then it is of necessity that management accountants should seek to expand their roles within their organisations.

Management accountants may be involved in interpreting the information generated from the ERPS and to provide business support for all levels of management within an organisation.

SOLUTION FOUR

Part (a)
Planning and control are essential elements of any budgeting system. Plans are made and then actual results are compared against the plan (that is the budget and standards). This is a feedback system. Deviations (variances) from the plan will usually prompt actions to bring results back in line with the plan. However, variances are reported after the event and therefore it is impossible to correct the problem that led to that specific occurrence.
If the recording of the variance over several periods highlights a trend it might be possible to take action that will prevent the deviation becoming material. This is feedforward control. This information can be used by management to set more realistic plans and/or change the method of operation to reduce the variances. Consequently, variance analysis is of use to management in planning operations.

The modern manufacturing environment has characteristics that can question the usefulness of variance analysis. Examples include:
• Under Total Quality Management (TQM), organisations aspire to "continuous improvement" and therefore measuring performance against a static standard would be inappropriate.

• The philosophy of a Just-in-Time (JIT) production system is that units should not be produced to be held as inventory. The fixed overhead volume variance encourages over-production and it clearly motivates managers to act against the principle of JIT.

• TQM focuses attention on quality, whereas variance analysis draws attention to costs.

• In the modern manufacturing environment, the majority of costs are "fixed" and it can be argued are therefore uncontrollable by operational managers. Volume-related costs could be a very small proportion of total costs and setting up a system to control them may not be cost-effective.

• Due to long-term contractual arrangements, for example with suppliers, many companies in the modern manufacturing environment operate under stable conditions and the calculation of variances is unnecessary. For example, if purchasing links are forged with a supplier, there should not be a price variance.

Control and performance measures are needed in the modern manufacturing environment but traditional variance analysis does not provide the "real time" information that is needed to manage the production process or the outward looking measures (for example customer satisfaction) that are compatible with the new environment.

Part (b)
ERPS are integrated IT systems that include all aspects of the operations of a company and the financial accounting system. ERPS may affect the budget setting process in the following ways:
• They are complex planning systems that will show the financial consequences of operational plans, and thus they can significantly improve efficiency in the budget-setting process;
• It is much easier with ERPS to conduct sensitivity analysis and budgets can be flexed with more precision;
• Some complex budget relationships are expensive to model and change, but this cost is reduced with effective ERPS;
• Some have argued that the budget-setting process almost disappears with an effective ERPS as the budget figures are a natural consequence of the planning process.

ERPS also has consequences for the budgetary control process, including:
• Actual data can be calculated and compared with budget data within very short time; periods, in fact virtually in real-time with some systems. This can lead to intensification of the budgetary control process;
• Far fewer resources are needed to operate a budgetary control system, although vast resources may be needed to implement an ERPS;
• Accountants may play a much reduced role as much of the data required for budgetary control is automatically prepared by the ERPS that operational managers are using.

The ERPS shall enable remote access and processing of all business units which makes it ideal in the new environment, although huge investment may be required to implement such system.

SOLUTION FIVE

Part (a)
The main features of Zero Based Budgeting (ZBB) include:

- Each element of cost within the budget has to be explicitly justified each year; this is in contrast to adding an increment to the previous year's budget to allow for inflation;
- ZBB forces judgements to be made on priorities as to whether expenditure should be included in the budget and at what level;
- In practice ZBB often forces an organisation to consider whether activities are best out-sourced or undertaken internally;
- One method of implementing ZBB requires the activities of an organisation to be described as a set of decision packages. For example, in the case of a local government organisation, providing day-care for the elderly could be a decision package. All the decision packages are then ranked in priority order and resources are allocated accordingly;
- ZBB seeks to act as a control to increase efficiency, and so this approach is used particularly in the public sector where competitive markets do not provide a control on efficiency.

There are problems in implementing this approach. Successful implementation of ZBB is extremely difficult. There are very few examples of "successful" implementations of ZBB, and many disaster stories – it is high risk.

- Implementation will only be effective if the staff is convinced of the value of undertaking ZBB. Thus to effect the necessary "culture change", additional problems may arise and additional expenditure is usually required.
- Some of the judgements needed in the ZBB process are very sensitive, particularly regarding reducing indirect costs. These decisions can prove difficult to make and can be divisive.
- It is usually expensive in terms of staff time; empirical evidence indicates this is frequently more so than expected. The business case for implementing ZBB can be prepared.
- ZBB usually needs consultants to aid the implementation. This adds the further problems of managing consultants and may add substantial cost. The benefits of implementing ZBB must be substantial to outweigh these costs and difficulties.
- Important aspects of work can be omitted from the activities included in the ZBB exercise, yet will still have to be undertaken.

Part (b)
With the changing environment, demand for diversity, innovations and resilience has increased. These changes are necessary for both the public and private sectors. It is for these reasons that incremental budgeting is being questioned whether it's still relevant in the modern environment. The questions asked is how innovation, diversity or resilience could be built in in a budget that merely increases previous year's costs by an inflationary percentage. Public sector organisations are now being transformed to operate like private profit making companies while maintaining efficiency to deliver products and services. For example, in China Havic International is a case example of how public sector institutions can change their operations and outperformance many private companies. The notional that public sector companies are inefficient and loss making requires a change of mind set to both the public and management. Public sector companies have vast opportunities and support that they can take advantage of and compete favourably with private companies, however, this may require shifting from traditional budgeting approaches that build slacks in operations.

(c) Four major factors to be considered when setting transfer prices for multi-national companies

When setting transfer prices for an international group, the following points need to be considered:

Taxation - transfer prices must be set so that the tax burden for the group as a whole is minimised.

Repatriation of funds - this is an important factor to consider when dealing with countries with a high inflation rate or stringent foreign exchange regulations. Transfer prices have to be set depending on where and in which currency cash balances should be held.

Currency risk management - decisions concerning in which currency to invoice and in which currency to settle invoice, etc.

Import duties - transfer prices are kept as low as possible when goods are imported into countries with high import duties.

Minority shareholders - transfer prices can be used to reduce the amount of profit paid to minority shareholders.

Profit sharing - profit sharing in different parts of the group can influence the transfer price set.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 17 DECEMBER 2021

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, Annuity and normal distribution tables are attached at the end of the question paper.

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

SECTION A

QUESTION ONE – (COMPULSORY)

You are the Chief Financial Officer (CFO) of Nitrogen Chemicals of Zambia and you have received instructions from the Board to assess a draft of a competitive bid for a contract to supply fertilizer to the Ministry of Agriculture before it can be submitted. The bid and its supporting documents has been prepared by Nitrogen Chemical's sales staff. It called for the company to supply 4 million bags of fertilizer per year for 15 years. The proposed selling price is fixed at K200 per bag. There are two (2) important aspects to this bid. First, if accepted by the Ministry of Agriculture, it would commit Nitrogen Chemicals to a fixed price, long-term contract. Second, producing the required fertilizer would require an investment of K850 million to purchase machinery and to refurbish Nitrogen Chemical's plant in Kafue.
As the CFO, you have the following facts and assumptions about the proposed bid:

1. The plant in Kafue was built in 1970s and is now idle. The plant is fully depreciated on Nitrogen Chemical's of Zambia books, except for the purchase cost of the land (in 1958) of K20, 000. One time the USA Government through its development agency offered to refurbish the plant using a loan at a subsidised interest lower than the domestic rate. But the management of Nitrogen Chemicals declined.

2. Now that the land was valuable, it is estimated that the land and the idle plant could be sold, immediately or in the future, for K150 million.

3. Refurbishing the plant would cost K450 million. This investment would attract capital allowances on a straight line basis at an annual rate of 6.67%. The company has sufficient profits to utilize all capital allowances from the project.

4. The refurbished plant and new machinery would last for many years. However, the remaining market for fertilizer was small considering the increased number of competitors, and it was not clear that additional orders could be obtained once the Ministry of Agriculture contract is finished. The machinery was custom built and could be used only for fertilizer production. The second-hand value of the machinery at the end of 15 years will be insignificant.

5. The cost of production materials are K50 per unit of fertilizer bag and annual labour costs for the project are K15 million for a period of 7 years. Thereafter, production materials and labour costs are expected to increase to K60 per unit and K20 million per year respectively. Other production costs are estimated to be 40% of the cost of production materials. Initial working capital is estimated to average about 10% of the sales per year and will be realised at the end of the project.

The chance of the bid being accepted by the Ministry of Agriculture is 100% because of local job creation in Kafue which is the priority for the Government as indicated by the Republican President of Zambia in a recent newspaper headline. However, Nitrogen Chemicals has also received a firm offer from FGATE International, a multinational company based in China to purchase Nitrogen Chemicals of Zambia land and plant for K45 million in cash.

Corporate tax is at 15% per year payable in the same year. Nitrogen Chemicals has an asset beta of 0.90, with average gearing of 55% equity and 45% debt by market values. The company has a 13% long term redeemable debt issued at a par value of K1,000 per unit and currently trading at K1,100 per unit. The debt is redeemable in 15 years' time at a premium of 8%. The yield on the government bonds is 10% and the return on the market is 21.55%.

Required:

(a) Prepare a report advising whether Nitrogen Chemicals of Zambia should proceed with the bid or not based on the financial evaluations. All relevant calculations should form part of the report as an appendix. (32 marks)

(b) Discuss the advantages of Government subsidies, and disadvantages of the subsidised loan to Nitrogen Chemicals of Zambia offered by the USA Government.

(8 marks)

[Total: 40 marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

You are the Treasurer of HAGY Inc, a UK based Company. It is 1 April and your company expects to receive $1.5 million on the 30 June. The current spot rate is $/£ 1.5270 and you expects that this rate will move in your favour. The Financial Manager has suggested that you can use financial derivatives to hedge against the currency risk. You have purchased from the Bank an option to sell $1.5 million on 30 June at an exercise price of $/£ 1.5310, and the Bank have charged a premium of £45,000. Although you have agreed to use the option, you strongly feel the forward contract would have been a better choice.

Required:

(a) Show the outcome on 30 June if the exchange rate on that date is:
(i) $/£ 1.5280
(ii) $/£ 1.6253

(8 marks)

(b) Discuss the relative merits to HAGY Inc. of using the currency options compared to the forward contracts to hedge against currency risk. (6 marks)

(c) Distinguish between the intrinsic value and time value of an option. (6 marks)

[Total: 20 marks]

QUESTION THREE

A recently incorporated company, TAD Ltd has come up with the following financial objectives as stated below:

(i) To increase market share by 40%
(ii) To under-price any competitors
(iii) To expand profits after tax by 25% per year

You have been appointed as the Chief Financial Officer of TAD Ltd and your first task as directed by the Board of Directors (BOD) is to consider the appropriateness of each of the financial objectives stated above and the role of Treasury Function in the Company. The Directors want to come up with the primary financial objective of the company. In addition, one of the Directors came across an article on Islamic finance and wants to know the merits and demerits of this form of finance to the company.

Required:

(a) Assess the appropriateness of each of the financial objective stated above and the reasons they may not be the primary objective of the company. (8 marks)

(b) Discuss the justification for the use of Islamic finance and its merits as well as demerits as a form of finance to TAD Ltd. (8 marks)

(c) Explain the areas that the treasury policy of a company such as TAD Ltd may cover.

(4 marks)

[Total: 20 marks]

QUESTION FOUR

CGS is a family owned business in the Agriculture Sector. The Company has been in operation for over 30 years and currently employing 220 staff. CGS's top Management consist of five (5) family members who are the Directors and Shareholders each own 20% shares. An extract of the latest management accounts for the period ended 30 September 2020 is shown below:

ZMW (million)	
Operating profit	950
Interest paid	150
Dividends paid	50
Investments in property, Plant and Equipment	500
Depreciation and Amortization	210
Investment in working capital	130

CGS being in the Agricultural Sector pays tax at 10%. The management accounts includes company forecast which has been the basis for decision making. The following forecast assumptions were included in the management accounts;

1. Cash flows are estimated to grow at 6% per year annum cumulatively for the next four (4) years and thereafter at 5% indefinitely;
2. The cost of equity is 15.485% and this is estimated to remain constant;
3. The weighted average cost of capital is 12%, with the gearing (measured as debt/(debt + Equity) of 50% projected to be maintained; and
4. The fully issued shares amount to 1,035,711,111 shares with a nominal value of K1 each and 20% of this is paid up.

The Directors have just come from a meeting where they were discussing an offer by a Foreign Multinational Company of K3.15 per share. The Foreign Multinational Company has offered to buy all the shares of CGS at the offer price. The Directors asked for more time to review the offer as they have never undertaken a valuation of their company. The Director in charge of finance mentioned that one of the best valuation approaches is cash based using the free cash flow and has tasked the management accountant to prepare a company valuation with briefing notes.

Required:

(a) Calculate the free cash flow for CGS showing clearly the free cash flow to equity and the Company. (5 marks)

(b) Using the free cash flow approach, calculate the share price for CGS. (9 marks)

(c) Advise the Directors of CGS whether to accept or reject the offer from the Forum Multinational Company. (6 marks)

[Total: 20 marks]

QUESTION FIVE

MUNGU PLC, a Company that is listed on the Lusaka Securities Exchange is considering diversifying its operations away from its main area of business. The Company's main area of business is maize milling. The company wishes to diversify into chicken feed production.

It wishes to evaluate an investment project, which involves the purchase of a new milling machine that costs K4,500,000. The Company will buy a building at a cost of K2,300,000 and the milling machine will be installed in this building at a cost of K500,000.

The project is expected to produce net annual operating pre-tax cash flows as follows:

Year	1	2	3	4	5
Cash flow (K)	2,200,000	1,900,000	2,650,000	1,800,000	1,750,000

All of the above pre-tax operating cash inflows are in current price terms. Annual inflation is 2.5% and working capital investment at the start of each year will be equivalent to 10% of the pre-tax nominal operating cash inflows for that year.

The assets of the project, including working capital will be financed by debt finance at an annual interest rate of 8%. Half of the loan will be subject to a government subsidy and charged interest at 3% per annum. Issue costs of debt which are tax deductible will amount to 2.5% of the amount raised and the company will raise sufficient funds to cover issue costs and the cost of the project. The loan will be repaid at the end of year five.

The chicken feed production industry has an average equity beta of 1.368 and an average debt to equity ratio of 2 to 5 by market values. MUNGU Plc's current equity beta is 1.8 and 25% of its long term capital is represented by debt by market values.

The risk free rate is 8% pa and the equity risk premium is 6%. Debt should be assumed to be risk free.

Company income tax is at a rate of 35%, payable in the year in which the liability arises. The milling machine will attract capital allowances by way of annual wear and tear allowance at the rate of 25% on cost while capital allowances on the building will be available by way of an initial allowance of 10% on cost and annual wear and tear allowances at the rate of 5% on cost starting in the first year. Thereafter, only wear and tear allowance at the rate of 5% will be achieved.

At the end of the five (5) year period, the milling machine will have a residual value of K450,000 while the building will be sold for K3,000,000. There will be no Property Transfer Tax on the disposal of the milling machine. Property Transfer Tax will be charged at the rate of 5% on the disposal proceeds of the building and it will be payable in the year of disposal. For capital allowances purposes, the amount of disposal proceeds is restricted to the original cost of the machinery or the building disposed off.

MUNGU Plc is certain that it will earn sufficient profits against which to offset the capital allowances.

Required:

(a) Calculate the adjusted present value of the project and recommend whether the project is financially worthwhile. (17 marks)

(b) Discuss the reasons why the adjusted present value method is the appropriate method for use in the evaluation of MUNGU Plc's project. (3 marks)

[Total: 20 marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_oD}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \text{x spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

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

$$s_1=S_0 x\frac{(1+h_c)}{(1+h_b)} \qquad f_0=s_0 x\frac{(1+i_c)}{(1+i_b)}$$

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	0·914	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	0·350	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 3.6: ADVANCED FINANCIAL MANAGEMENT SUGGESTED SOLUTIONS

SOLUTION ONE

To: Nitrogen Chemicals Board
From: Financial Consultant
Date: xxxxxx
Subject: Evaluation of Proposed Investment

This report provides the financial evaluation results of the proposed investment. The financial evaluation show a positive net present value (NPV) of K761 million. Therefore, the investment is financially viable because it would increase the shareholders wealth by K761 million.

The advantages and disadvantages of using Government subsidies are as follows:
Advantages
The main advantage is the subsidised interest rate which makes the finance cheaper. There is no mention if the security was needed for the loan. If none was required, this would leave assets free to be used as security for other debt finance. If a Government is willing to provide subsidised finance, it may offer additional help to the business, for example, training support, obtaining planning permissions or winning public sector contracts.
Disadvantages
The interest rate which was offered by the USA is lower than the domestic rate but this would change over the investment period. The exchange rate could also change during this time. If the dollar strengthens against the kwacha, the interest payments would become more expensive.
There is political risk involved in international investments. In this situation, the USA Government agency may fail to honour its commitment to the project or change the tax position. There may also be terms and conditions attached to the financing package which make it commercially unacceptable.

SIGN

FINANCIAL CONSULTANT

Appendix: Financial Evaluation							
Periods	1 to 7	8 to 15					
Revenue (K'm)	800	800					
Materials cost	200	240					
Labour cost	15	20					
Other production cost	80	96					
Annual taxable cash flow	505	444					

Tax@15%	75.75	66.60				
Net cash flow	429.25	377.40				
Annuity factor@20%	3.605	1.070				
Present Values	1,547.45	403.82				
Total Present Values	1,951.27					
Less: Initial Costs	- 850.00					
Initial working capital (80 x 5.611)	-449					
Working capital realised (1,200*0.065)	78					
Capital allowances (K450m x 0.0667 x 15% x 4.675)	21.05					
Realisable value of Land and plant (150 x 0.065)	9.75					
NPV	761.07					
Cost of capital						
0.90=Be x 0.55/0.55+0.45(1-0.15)						
Be=1.53						
Cost of equity = 10% + 1.53(21.55%-10%) =27.671%						
Cost of debt						
Interest cost after tax= K1,000 x 13% (1-0.15) = 110.5						
Period		CF	Dis@15%	PV	Dis@8%	PV
0	MV	- (1,100)	1.000	- (1,100)	1.000	- (1,100)

1 to 15	Interest	110.5	5.847	649	8.559	950
15	Redeem	1,080	0.123	133	0.315	340
			NPV	- 321		186
Cost of debt = 15% + 190/(190+318) (8%-8%) = 10.62%						
Cost of Capital = (27.67% x 0.55) + (10.63%*0.45) =20%						
Annuities						
1 to 7 @20% = 3.605						
8 to 15 @ 20%= 4.675 - 3.605 = 1.070						

SOLUTION TWO

a) i) Do not exercise option:

$1.5m ÷ 1.5270 = £982,318.27
Less: Premium = <u>£45,000.00</u>
Net receipts <u>£937,318.27</u>

Compared to: $1.5m ÷ 1.5280 = £981,675.39

i) Exercise option

$1.5m ÷ 1.6253 = £922,906.54
Less: Premium = <u>£45,000.00</u>
Net receipts <u>£877,906.54</u>

Compared to: $1.5m ÷ 1.5310 = £981,675.39

b)

Fixed forward exchange contract

1. An immediately firm and binding contract (for example, between a bank and its customer)
2. For the purchase or sale of a specified quantity of a stated foreign currency
3. At a rate of exchange fixed at the time the contract is made
4. For performance at a future time which is agreed upon when making the contract

Advantages of option contracts

Option contracts are attractive when:

1. The date on which the transaction being hedged will take place is uncertain
2. There is uncertainty about the likely movement in exchange rates – the company can take advantage of any favourable movements in exchange rates, while continuing to hedge any unfavourable movements

Main drawbacks to option contracts

1. They are more expensive than fixed contracts, and the premium will have to be paid, whether or not the option is exercised
2. They are traded in standard amounts, and therefore it is difficult to hedge exactly the sum required – in practice, the company will have to carry some of the risk itself, or use two different hedges to cover the transaction fully

c) The intrinsic value of an option is the gain that would be realised if an option was exercised immediately. For a call option, this is simply the cash price less the exercise price of the underlying asset. For a put option it is the strike price less the cash price.

Meanwhile, the time value of an option is the option premium less the intrinsic value and reflects the fact that an option may have more ultimate value than the intrinsic value alone. Thus an option premium is made up of the intrinsic value and the time value.

SOLUTION THREE

a)

(1) Increasing market share by 40% may not necessarily translate into profits if the costs are increasing. Managers may increase the market share just to build an empire and satisfy their interest which may be at the expense of the shareholder interests.

(2) To under-price any competitors. Competitors may have cheaper source of raw materials which can make it difficult to influence their pricing. It can also result in loss making if the company under-price below the cost of production.

(3) To expand profits after tax by 25% per year: Profit maximization is not a well-defined corporate objective because of:

- "Maximizing profits" leaves open the question of "which year's profits?" The company may be able to increase current profits by cutting back on maintenance or staff training, but Shareholders may not welcome this if profits are damaged in future years.
- A Company may be able to increase future profits by cutting this year's dividend and investing the freed-up cash in the firm. That is not in the Shareholders' best interest if the company earns only a very low rate of return on the extra investment.
- Different Accountants may calculate profits in different ways. So you may find that a decision that improves profits using one set of accounting rules may reduce them using another.

b) Advantages of Islamic finance

Islamic finance operates on the underlying principle that there should be a link between the economic activity that creates value and the financing of that economic activity. The main advantages of Islamic finance are as follows.

(1)Following the principles of Islamic finance allows access to a source of worldwide funds. Access to Islamic finance is also not just restricted to Muslim communities, which may make it appealing to companies that are focused on investing ethically.

(2)Gharar (speculation) is not allowed, reducing the risk of losses.

(3) Excessive profiteering is also not allowed; only reasonable mark-ups are allowed.

(4) Banks cannot use excessive leverage and are therefore less likely to collapse.

(5) The rules encourage all parties to take a longer-term view and focus on creating a successful outcome for the venture, which should contribute to a more stable financial environment.

(6) The emphasis of Islamic finance is on mutual interest and co-operation, with a partnership based on profit creation through ethical and fair activity benefiting the community as a whole.

Drawbacks of Islamic finance

The use of Islamic finance does not remove all commercial risk. Indeed, there may even be additional risk from the use of Islamic finance. The drawbacks from the use of Islamic finance are as follows:

(1) There is no international consensus on Sharia interpretations, particularly with innovative financial products. Certain financial products may be acceptable in some markets but not in others. For example, some Murabaha contracts have been criticised because their products have been based on prevailing interest rates rather than economic or profit conditions.

(2) There is no standard Sharia model for the Islamic finance market, meaning that documentation is often tailor-made for the transaction, leading to higher transaction costs than for the conventional finance alternative.

(3) Due to the need to comply with normal financial laws and Sharia restrictions, Islamic finance institutions are subject to additional compliance work which can also increase the costs of developing new products and transaction costs. Information asymmetry between the borrower and institution will also mean that due diligence work is required.

(4) Islamic banks cannot minimise their risks in the same way as conventional banks, as hedging is prohibited.

(5) Some Islamic products may not be compatible with international financial regulation. For example, a diminishing Musharaka contract may not be an acceptable mortgage instrument in law.

(6) Trading in Sukuk products has been limited. Since the financial crisis, issuance of new Sukuk products has decreased.

(7) Corporations may not be able to demonstrate that contracts are effectively debt and they therefore may not attract a tax shield, meaning that their cost of capital will increase.

(8) Because Islamic financial institutions take an active role on some contracts, it may become more complicated for companies to balance the interests of the financial institution with those of other stakeholders.

(9) The longer focus of arrangements may mean Islamic institutions are slower to react to market changes and may lack short-term flexibility. Approval of new products can take time.

(c) The areas that might be covered in a treasury policy document include:

- Counterparty exposure including limits for each counterparty and monitoring of exposures in relation to the limits
- Currency and interest rate risk such as hedging methods, authorised instruments and exposure limits
- Funding risk including limits and targets for different sources of funding
- Liquidity management including permitted banks, netting and inter-group procedures
- Investment management covering sources of funds, authorised counterparties and instruments, and inter-company funding

・Bank relationships specifying criteria for the choice of bank

SOLUTION FOUR

Part (a)

ZMW (million)	
Operating profit	950
Interest paid	(150)
Profit before tax	800
Tax@10%	(80)
Depreciation & Amortization	210
Investment in working capital	(130)
Investment in PPE	(500)
Free Cash flow	300
Interest paid	150
Free cash flow to equity	450

Part (b)

Details	Y1	Y2	Y3	Y4	Y5&beyond
	ZMW'000	ZMW'000	ZMW'000	ZMW'000	ZMW'000
Free Cash flow	318,000	337,080	357,305	378,743	5,681,146
WACC@12%	0.893	0.797	0.712	0.636	0.636
Present values	283,929	268,718	254,322	240,698	3,610,471

Valuation 4,658,138

Details	Y1	Y2	Y3	Y4	Y5&beyond
	ZMW'000	ZMW'000	ZMW'000	ZMW'000	ZMW'000
Free Cash flow to equity	477,000	505,620	535,957	568,115	5,689,274
WACC@15.485%	0.866	0.750	0.649	0.562	0.562
Present values	413,041	379,117	347,979	319,399	3,198,560

Valuation 4,658,096

Value per share = K4.5 (K4,658,138,000/1,035,711,111)

Part (c)

Based on the cashlow valuation, the value per share is K4.5. The offer of K3.15 per share by the Foreign Multinational Company is at a discount of K1.35 per share. The shareholders might not accept this undervaluation of shares. However, only 20% of the share are paid, the company can call the unpaid shares to be paid to raise funds required for any investments. Considering that CGS is a family business, raising K828,568,888 based on the nominal value might not be easy. Therefore, in order to provide finances for investment for the Company, the Shareholder are advised to consider issuing some shares to the Foreign Multinational Company. Multinational companies are usually well diversified, have access to technologies, finances and expertise that CGS could benefit from.
With a discounted price of K3.15 per share for all the shares of CGS, the Shareholder are advised to counter offer for only 50% of the shares, unless if a premium is offered for all shares above the value of K4.5 per share.

SOLUTION FIVE

(a) Adjusted Present Value

	K	K
Base case Net Present Value (W2)		153,391
Side effects of financing		
After tax issue costs (W7)	(125,425)	
Present value of tax saved on interest payable (W8)	593,280	
Present value of subsidy (W9)	500,822	
		968,677
Adjusted Present Value		1,122,068

Workings

(1) Calculation of ungeared cost of equity for use when estimating the base case Net Present Value

ßa = [Ve/ Ve + Vd (1 – T)] ße
= 5/ (5 + 2(1 – 0.35) x 1.638
= 5/ 6.3 x 1.638
= 1.3

Ke′ = Rf + (Rf – Rm) ßa
= 8% + (6% x 1.3)
= 15.8%

(2) Calculation of discounted cash flows and base case Net Present Value (NPV)

	Year 1	Year 2	Year 3	Year 4	Year 5
	K	K	K	K	K
Pretax cash flows (W3)	2,255,000	1,996,188	2,853,760	1,986,863	1,979,964
Taxation at 35%	(789,250)	(698,666)	(998,816)	(695,402)	(692,988)
Tax saved on IBAs (W4)	120,750	40,250	40,250	40,250	(241,500)
Tax saved on CAs(W5)	437,500	437,500	437,500	437,500	(157,500)
Post tax cash flows	2,024,000	1,775,272	2,332,694	1,769,211	887,977
Working capital (W3)	25,881	(85,757)	86,690	690	197,996
Machine scrap value					450,000
Building sale value					3,000,000
Property Transfer Tax					(150,000)
Net cash flows	2,049,881	1,689,515	2,419,384	1,769,901	4,385,973

DCF at 15.8% (W1)	0.864	0.746	0.644	0.556	0.480
	1,771,097	1,260,378	1,558,083	984,065	2,105,267
Base Case NPV					
Sum of Present Values					7,678,891
Less initial outlay					
Machinery				4,500,000	
Installation				500,000	
Building				2,300,000	
Working capital				225,500	
					(7,525,500)
Base case NPV					153,391

(3) Nominal cash flows and working capital investment

Year	Real cash flow	Inflation	Nominal cash flow	Working capital	
				Investment	Change
	K		K	K	K
0				225,500	(225,500)
1	2,200,000	1.025	2,255,000	199,619	25,881
2	1,900,000	1.025^2	1,996,188	285,376	(85,757)
3	2,650,000	1.025^3	2,853,760	198,686	86,690
4	1,800,000	1.025^4	1,986,863	197,996	690
5	1,750,000	1.025^5	1,979,964	0	197,996

(4) Tax saved on capital allowances on building (IBAs)

Year 1 = 10% x K2,300,000 + 5% x K2,300,000 x 35%
= K120,750

Year 2 to year 4 tax saved per annum
= 5% x K2,300,000 x 35%
= K40,250

Tax on balancing charge in year 5

= (K2,300,000 x 10%) + (2,300,000 x 5% x 4) x 35%
= (K230,000 + K460,000) x 35%
= K690,000 x 35%
= K241,500

(5) Tax saved on Capital allowances on the machinery
= 25% x K5,000,000 x Tax rate
= K1,250,000 x 35%
= K437,500 per annum from year 1 to year 4

Tax payable on balancing charge in year 5
= scrap value x tax rate
= K450,000 x 35%
= K157,500

(6) Total amount of loan finance
= 100/(100 – 2.5) x K7,525,500
= K7,718,462

(7) After Tax issue costs
= 2.5% (1 – T) x K7,718,462
= 2.5% x (1 – 0.35) x K7,718,462
= K125,425

(8) Present Value of Tax relief on interest payable
= after tax interest x five year annuity factor at 8%
= [(8% x K7,718,462 x 50%) + (3% x K7,718,462 x 50%)] x T x 3.993
= [(8% x K7,718,462 x 50%) + (3% x K7,718,462 x 50%)] x 0.35 x 3.993
= K148,580 x 3.993
= K593,280

(9) After tax present value of interest saved
= after tax interest x five year annuity factor at 8%
= (8% - 3%) x K7,718,462 x 50% x (1 – 0.35) x 3.993
= 5% x 3,859,231 x 0.65 x 3.993
= K125,425 x 3.993
= K500,822

(b) The adjusted present value method is used to evaluate projects in situations where the use of the net present value method based on the current weighted average cost of capital is not suitable. The above project has been evaluated using the adjusted present value method because it has a complex financing structure, with part of the loan finance raised being subsidized. The net present value method would understate the value of the project. The issue of new debt finance will resultresulted in a change in the company's capital structure and financial risk. Since the project is a diversification away from the current line of business, there is a change in business risk. The changes in both financial risk and business risk imply that the project needs to be evaluated using the adjusted present value method.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 17 DECEMBER 2021

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 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

You are Principal Auditor in the Office of the Auditor General (OAG) and you have been assigned to lead a team of Auditors on the financial, compliance and performance audits of the Muulu District Council.

Muulu District Council received District status three years (3) ago and this will be the first time that the council will be audited by the Office of the Auditor General (OAG). The council has a Treasury Department which is responsible for the preparation of annual financial statements. Although the council has maintained financial records throughout the past three (3) years, no financial statements were prepared for the first two (2) years. In the current year, the Council Treasurer has prepared financial statements for each of the three (3) years which are the subject of the audit by the Office of the Auditor General (OAG). The financial statements were prepared in accordance with the relevant regulations and guidelines issued by the Ministry of Local Government.

In the first year of receiving District status, Muulu District Council received a three (3) year grant of K500 million from Water Aid, a non-governmental organization for the construction of a water reticulation system. A grant agreement was signed between Water Aid and the Muulu District Council and the following information was extracted from the agreement.

1. A bank account to be opened into which grant funds will be deposited and this account shall be for the exclusive use of grand funds. The total grant amount of K500 million shall be deposited into the grant account and drawdowns shall be subject to the council meeting its requirement to contribute 25% of the annual expenditure.

2. An Accountant shall be employed at a monthly salary of K8,000 and other council staff working on the project shall be paid agreed upon rates per hour spent on project activities. All staff working on the project shall complete monthly time sheets which will be sent to the donor for approval before claiming the staff costs. The hours claimed for each staff category for the duration of the grant shall not exceed the budgeted hours.

3. The project is divided into four (4) phases and before proceeding to the next phase, approval of a government certified Consultant shall be sought.

4. At the end of each six (6) month cycle, the Accountant will be required to complete an online financial report to be submitted to the Grant Manager of Water Aid within one (1) month of the end of the six (6) month period. Annually, the project financial statements shall be subject to an audit by independent auditors and subsequent fund withdrawals shall be subject to the issuance of an unmodified audit opinion by the auditors.

5. It is a grant requirement that all project procurements above K500,000 shall be subject to tender and the tender award shall be based on minutes of a duly constituted Tender Committee. A minimum of four (4) bids shall be sought for evaluation by the Tender Committee.

6. All purchases below the tender threshold shall be supported by three (3) quotations and procurement shall be made only from the list of approved suppliers and contractors.

7. All expenditure shall be in line with the approved budget. The approved budget is sufficient to see the project to its conclusion to have a functioning water reticulation system in place.

The water reticulation project is in its third year of the project duration. According to the project agreement and the planned budget. The project is supposed to be 75% at the end of the third year. The certificate of work performed at the end of year two (2) indicates that works amounting to K150 million were below standard and required rectification. The cost of rectification is the responsibility of the Muulu District Council. The council has not received its monthly grants from the central government for the past six (6) months and the council internally generated funds are not sufficient to go towards rectification of the substandard works.

Required:

(a) (i) Describe the objective of the financial audit of Muulu District Council that will be performed. (4 marks)

(ii) Briefly describe the work that will be performed by the public sector auditor at each of the three (3) stages of planning, conducting the audit and reporting the outcome of the financial audit of Muulu District Council. (6 marks)

(b) (i) Describe compliance auditing in the context of the audit of the Muulu District Council. (4 marks)

(ii) Describe four (4) audit procedures in the compliance audit of Muulu District Council. (8 marks)

(c) (i) Describe performance auditing in the context of the audit of Muulu District Council. (4 marks)

(ii) Describe four (4) audit procedures that should be performed in the performance audit of Muulu District Council. (8 marks)

(d) Describe the relationship between Parliament, the Supreme Audit Institution (SAI) and the Executive in relation to the audit of Muulu District Council. (6 marks)

[Total: 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt any three (3) questions.

QUESTION TWO

(a) Mopani is a country that recently got its independence and a new Government was put in place three (3) years ago. Prior to the country getting its independence, the public knew very little with regards to the use of public funds, most of which were internally generated through taxes and income generated from mining houses owned by the government. Further, it was noted that whenever there were allegations of misuse of public funds, the suspects were simply transferred to take up other government positions.

In the last two (2) years, the new government has been contemplating introducing a body that would monitor the use of public funds because it had been observed that there continued to be gross misuse of public funds. Cabinet is divided with regards to introducing oversight on public expenditure with a majority of members not supporting the setting up of such a body. Those opposing the setting up of a Supreme Audit Institution (SAI) suggest that a Committee of Parliament will provide oversight on public expenditure.

On request from the Government of Mopani, you have been appointed by the International Organization of Supreme Audit Institutions (INTOSAI) to go and present to the Cabinet of Mopani the arguments in favor of setting up of a Supreme Audit Institution (SAI) in Mopani.

Required:

Explain four (4) arguments for the introduction of a Supreme Audit Institution (SAI) in Mopani. (4 marks)

(b) You have been appointed to lead a three (3) man team on an evaluation of the operations of the Supreme Audit Institution (SAI) of another country as part of peer reviews conducted by the International Organization for Supreme Audit Institutions (INTOSAI) amongst member countries.

The Supreme Audit Institution (SAI) was established four (4) years ago as a department under the Ministry of Finance. Each year, the Supreme Audit Institution (SAI) prepares and submits its budget for the following year to the Ministry of Finance. The Ministry of Finance consolidates this budget with its own when submitting budget estimates for the following year to parliament for approval. Most of the staff that are employed in the Supreme Audit Institution (SAI) are experienced civil servants who have vast experience in the public service. Only a few have requisite professional qualifications to carry out public sector audits. Although the Supreme Audit Institution (SAI) has the power to carry out investigations of financial impropriety, this is only done with the authority of the President if the impropriety involves senior government officials. During the performance of audits, the public sector auditors obtain comments of the audited entities before finalizing the audit reports. All valid comments form part of the audit report issued by the Supreme Audit Institution (SAI).

During your initial entry meeting with the Head of the Supreme Audit Institution (SAI), you established that there is no legal backing on establishment and existence of the Supreme Audit Institution (SAI). The Head of the Supreme Audit institution (SAI) reports to a Committee of Cabinet which is also responsible for the employment of the Head of the Supreme Audit Institution (SAI) and for the renewal of the contract of service. The argument for the requirement that the Head of the Supreme Audit Institution (SAI) reports to a Committee of Cabinet is because of the sensitivity of some of the audited public institutions. The Supreme Audit Institution (SAI) requires clearance of the Committee of Cabinet to access any documents that hinge on the security of the country. By so doing, it is hoped that sensitive documents will not end up in wrong hands thereby threatening state security.

Required:

(i) Distinguish between the provisions of the Lima and Mexico declarations of the International Organization for Supreme Audit Institution (INTOSAI).
(4 marks)

(ii) Evaluate the operations of the Supreme Audit Institution (SAI) in the scenario against the concepts and principles of the Lima and Mexico Declarations.
(12 marks)
[Total:20 Marks]

QUESTION THREE

You have recently been appointed Lead Auditor in the Office of the Auditor General (OAG). You joined the Office of the Auditor General (OAG) three (3) months ago through a ministerial transfer from the Ministry of Finance where you worked as Principal Accountant in charge of Revenue Expenditure.

You are planning to undertake a financial audit of the Ministry of Finance for the year 2020. You recently held a meeting with the Permanent Secretary at which various matters were discussed. The Permanent Secretary requested that you assign Chanda as team leader on this audit because he has a good relationship with the Minister of Finance. The Permanent Secretary informed you that the audit team that will be assigned to this audit will be provided with office accommodation for the duration of the audit and that the Ministry will meet the cost of refreshments as well as lunch during the period of the audit. He informed you that the cost of the refreshments and the lunch will be met by the entertainment budget of the Minister of Finance. You were informed, by the person who led the audit team to the Ministry of Finance the previous year that the Ministry paid each of the audit team members an allowance at half the normal rates for each day worked.

As part of planning for the audit, you reviewed the minutes of the Public Accounts Committee (PAC) for the year 2019. You observed that there were concerns by members of the Public Accounts Committee (PAC) that there was rampant misapplication of funds by the Ministry of Finance and that this was observed in previous audit reports issued by the Office of the Auditor

General (OAG). When you brought up this matter to the attention of the Permanent Secretary, he informed you that there is political pressure exerted to misapply funds to activities that were not budgeted for. The argument for doing so is that misapplication of funds is not as serious as misappropriation of funds.

You are about to set up an audit team that will undertake the audit at the Ministry of Finance. To your amazement, you discover that most of the staff who had been on this audit in the past are no longer in employment in the Office of the Auditor General (OAG). On enquiry from the Human Resource Manager, you learnt that most of the staff who are assigned to the Ministry of Finance are redeployed to other ministries soon after the sittings of the Public Accounts Committee (PAC). This has prompted you to assign new staff on this audit who will require close supervision because they lack experience in public sector accounting systems.

Required:

(a) Explain the role of the Public Accounts Committee of parliament in public sector auditing. (4 marks)

(b) Distinguish between misapplication of funds and misappropriation of funds in the administration of public funds. (4 marks)

(c) Identify and explain six (6) ethical and professional matters in the audit of the Ministry of Finance by the Office of the Auditor General (OAG) and suggest suitable responses. (12 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The purpose of public sector audits is to enhance transparency and accountability in the collection of revenues and in the use of public funds and other resources by providing independent third party assurance.

The above objective is achieved through public sector audits being conducted by the Supreme Audit Institutions (SAIs).

Required:

Explain the principles of transparency and accountability for the public sector institutions and the Supreme Audit Institution (SAI). (8 marks)

(b) In the Republic of Lithia, there is a Supreme Audit Institution (SAI) which is mandated to carrying out of audits of public sector institutions.

There has been growing concern about the relevance of the Supreme Audit Institution (SAI) in Lithia largely because misuse of public funds has been going on unabated over the years and despite audits being conducted and audit reports issued, there has been no significant improvement in terms of transparency and accountability in how public funds are used.

The government of Lithia requested for a peer review of the operations of its Supreme Audit Institution (SAI) and a three (3) man team of experts appointed by the International Organization of Supreme Audit Institutions (INTOSAI) was sent to carry out a peer review.

The following information was extracted from the report of the peer review that was conducted:

1. There are no quality control systems in place in the Supreme Audit Institution (SAI) resulting in there being no standards in terms of the work that is carried out. Quality control for audits is the responsibility of the Lead Auditor.
2. The Supreme Audit Institution (SAI) has no ethical values that it follows. An interview by the peer review team of selected Supreme Audit Institution (SAI) staff revealed that a majority of the staff had no knowledge of ethical values and their importance resulting in many instances of unethical behavior.
3. A majority of the staff in the Supreme Audit Institution (SAI) did not have requisite qualifications, with many having been transferred to the institution from line ministries based on the number of years served in the public sector. This lack of qualifications results in poor standard of work and reports lacking substance.
4. The peer review team was not availed with standard operating procedures by staff in the Supreme Audit Institution (SAI) resulting in there being no standard of work and each audit team performed audits according to the dictates of the team leader.
5. The peer review team observed and concluded that the Supreme Audit Institution (SAI) did not produce financial statements on how it conducted its operations for last three (3) years. Despite increased computerization of government institutions, the Supreme Audit Institution (SAI) did not budget for training of staff who could undertake IT Audits resulting in most planned audits remaining undone.

During the period that the peer review team spent in Lithia, there was public outrage in the country on a contract that the government awarded to construct a hydro power station at a cost of US$150 million. The private media reported that the contract amount was far in excess of the amount that should have been spent on this project. It was further reported that government tender procedures were not followed and the tender was awarded to the highest bidder leaving out a reputable contractor who bid a lower amount. A news item on one of the media outlets reported that when questioned on why the Supreme Audit Institution (SAI) has not responded by carrying out an investigation, the Head of the Supreme Audit Institution (SAI) stated that the institution decides its own programs and is not influenced by anyone.

Required:

(i) Describe the extent to which the Supreme Audit Institution (SAI) of Lithia is not compliant with the provisions of ISSAI 12: *Value and benefits of SAIs.* (6 marks)

(ii) Evaluate the operations of the Supreme Audit Institution (SAI) against the provisions of ISSAI 40 *Quality Control for SAIs* and make recommendations as necessary. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) The Ministry of Transport reported a fraud involving millions of Kwacha in relation to under-banking of funds collected at a number of toll gates across the country.

The fraud came to the attention of the Auditor General (AG) who decided that a forensic investigation should be carried out with a view to establishing the extent of the fraud and identifying the fraudsters.

You have been appointed to lead a team of three (3) auditors to carry out the investigation and you are the only one (1) of the three (3) who has experience in carrying out forensic investigations.

You are preparing a meeting with the Auditor General (AG) who requested you to summarize the key stages that you will follow in the forensic investigation.

Required:

Describe the work that will be carried out in the following four (4) key stages of the forensic investigation on the toll fee collection fraud.

(i) Defining the scope of the investigation. (2 marks)
(ii) Securing and safeguarding information. (2 marks)
(iii) Gaining an understanding. (2 marks)
(iv) Interviewing staff and others. (2 marks)

(b) You are a Principal Auditor in the Office of the Auditor General (OAG). The audit of the financial statements of Chemical Industries, a government owned company is almost complete.

You are reviewing the working papers for this audit and as a result arrive at an appropriate audit opinion. The following matters are contained in the working papers of the audit of Chemical Industries.

1. The Board of Directors of Chemical Industries carried out an assessment of the going concern ability of the company and concluded that there was a material uncertainty. In Management's view, the use of the going concern basis for the preparation of the financial statements is appropriate and adequate disclosure was made in the financial statements.
2. Chemical Industries disposed hazardous substances in the main source of drinking water contrary to the provisions of the environmental laws. The

company was taken to court and at the year-end no provision was made in the financial statements. This matter was communicated to those charged with governance of the company and after consultations with legal experts, it was resolved that a provision amounting to K700 million should be made in the financial statements. The provision was made as agreed and appropriately disclosed and the public sector auditor is of the view that this matter should be included in the audit report.

3. A material amount of K230 million that did not meet the criteria for capitalization as research and development was capitalized instead of being written off to the Profit or loss account. There was a disagreement with Management on correcting this and Management declined to reverse the capital expenditure and write the amount of in the Profit or loss account.
4. The public sector auditors were unable to obtain sufficient appropriate evidence with regards to inventory amounting to K450 million due to the fact that the inventory counting records were destroyed in a fire. The amount is material to the financial statements and any misstatement will impact on decisions made by users of the financial statements.

Required:

(i) Discuss the impact on the audit opinion of each of the four (4) matters above. (8 marks)

(ii) Describe the impact on the audit report of modifying the audit opinion.

(4 marks)
[Total: 20 Marks]

END OF PAPER

CA3.7 PUBLIC SECTOR AUDITS AND ASSURANCE SUGGESTED SOLUTIONS

SOLUTION ONE

(a) (i) <u>Objectives of the financial audit of Muulu District Council:</u>

ISSAI 1200 and the related Practice Note on ISA 200 gives guidance on the objective of financial audits in the public sector.

The overall objectives of conducting an audit of financial statements are as follows:

- o For the public sector auditor to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error and by so doing,
- o Enable the public sector auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with the applicable financial frameworks for councils and
- o To report on the financial statements in accordance with the findings of the auditors.

(ii) Planning the Audit:

ISSAI 1300: Planning an audit of Financial Statements and the related Practice Note gives guidance to public sector auditors on work during the planning stage of financial audits.

During this stage, the public sector auditors will establish the audit strategy and the audit plan on how the audit will be conducted. Further, the auditors will carry out the risk assessment processes as guided by ISSAI 1315: *Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and its Environment* in order for the auditor to respond appropriately to the assessed risks as they carry out the audit.

Conducting the audit:

During this stage of financial audits in the public sector, the auditors perform audit procedures with a view to gather sufficient appropriate evidence which will form the basis of the conclusion reached.

The auditor will gather evidence on the assertions contained in all material figures in the financial statements. The auditors will evaluate the effect of uncorrected misstatements on the financial statements during the stage of conducting the audit.

Reporting the outcome:

This is the stage of the audit where the auditor concludes on the financial statements based on the evidence that has been obtained. The public sector auditors will issue an appropriate opinion. The public sector auditor is required to report in accordance with the applicable standards on reporting the outcome of audits.

The public sector auditor will issue an opinion based on whether or not they have gathered sufficient appropriate audit evidence. The opinion will be contained in the auditor's report that will be issued.

(b) (i) Description of compliance audit in the audit of Muulu District Council:

The compliance audit in the audit of Muulu District Council will be in relation to whether the council has complied with the relevant criteria which is the signed agreement between Water Aid and the council. The objective of the compliance audit is for the public sector auditor to report on whether the council has complied with the conditions contained in the agreement.

Among the conditions that will be considered in the compliance audit are:

- Whether a separate dedicated bank account has been opened for use of project funds.
- The salary paid to the accountant shall be K8,000 per month as per agreement.
- Whether online financial reports have been completed and submitted and
- Whether procurements above K500,000 have been subjected to tender as per agreement.

(ii) Compliance audit procedures:

1. Confirm that a dedicated bank account was opened for project activities and review cash book and bank reconciliations to ensure account used solely for water reticulation project.
2. Confirm that the Project Accountant is paid a sum of K8,000 as per agreement.
3. Evaluate payments made to other staff involved in the project and confirm that the payments are supported by completed and approved time sheets.
4. Revaluate and confirm that six (6) monthly online financial reports have been submitted and review audited financial statements for the previous years. It is a requirement of the project that financial statements should be audited by independent auditors.
5. Review expenditure incurred for project activities and confirm it is within agreed budget.
6. For a sample of expenditure above K500,000 confirm that a Tender Committee awarded the contract and that four (4) bids were obtained.
7. For project expenditure below K500,000, review a sample and confirm that three (3) quotations were obtained before procuring.

(c) (i) Description of performance auditing in the audit of Muulu District Council:

Performance auditing also referred to as value for money auditing is performed with a view to establish whether programs are performed in accordance with the principles of economy, efficient and effectiveness.

Economy relates to whether the best and economic prices have been paid.

Efficiency is a comparison of inputs with the related output considering whether the same output could have been achieved using less resources.

Effectiveness is the establishment of whether the intended objectives have been met from the program or project.

(ii) Performance audit procedures:

1. Evaluate the award of selected tenders and confirm that the process was transparent per agreement and that the award was for the best price not compromising on quality.
2. For procurement below tender confirm that the best price was chosen and that this is in line with market prevailing prices.
3. Evaluate the outcome of the work carried out and determine whether this could have been done with less inputs.
4. Evaluate the stage reached compared to the stage expected to be completed to date and determine whether the intended objective will be met. Compare the work completed with what should have been completed to date per agreement with Water Aid.

(d) The relationship between Parliament, the Supreme Audit Institution (SAI) and Muulu District Council:

Parliament appropriates funds to the executive through approving budget estimates. Through the approved budget to the Ministry under which Muulu District Council falls, Parliament has appropriated funds to be used in the running of the council. Authority has been conferred on the council administration to spend the money in accordance with the approved budget following the principles of economy, efficiency and effectiveness.

The administration of Muulu District Council is required to be transparent and accountable on how it has administered the funds appropriated to it. This is done by preparing accountability reports which are subject of audit by the Supreme Audit Institution.

Parliament confers responsibility to the Supreme Audit Institution (SAI) to carry out audits on the accountability reports prepared by the council and to report to it through audit reports issued after the audit. Based on the independent audit reports, Parliament holds Muulu District Council accountable on how it has used the public funds appropriated to it.

SOLUTION TWO

(a) <u>Arguments for introduction of Supreme Audit Institution(SAI)</u>

The following arguments support the need for establishing a Supreme Audit Institution (SAI) in Mopani:

1. The establishment of a Supreme Audit Institution (SAI) in Mopani will make it possible for the citizens to know how public funds are spent in the country. This will be facilitated by audit reports which will be issued by the Supreme Audit Institution (SAI).
2. Through the establishment of a Supreme Audit Institution (SAI), those responsible for the administration of public funds will be more careful on how they use public funds knowing very well that they will be subject to independent audits.
3. The establishment of the Supreme Audit Institution (SAI) will enhance the principles of transparency and accountability on the part of the custodians of public funds.
4. A Supreme Audit Institution (SAI) is an independent body and by performing audits they will bring their independence to bear because of the objectivity that the Supreme Audit Institution (SAI) will have because of its independence.
5. The introduction of a Supreme Audit Institution (SAI) will help the Committee of Parliament who have the responsibility to oversee how public funds are used.

(b) (i) <u>Distinction between Lima & Mexico Declarations:</u>

The Lima Declaration is a declaration issued by the International Organization for Supreme Audit Institutions (INTOSAI) which contains concepts that are required in establishing an effective Supreme Audit Institution. It contains various concepts including the distinction between internal and external audits, the independence of the SAI and its members, constitutional requirements regarding appointment of the Head of the SAI and powers of the SAI.

The Mexico Declaration was issued subsequent to the Lima Declaration. It contains principles that are required for ideal conditions that should apply for the SAI to be independent. This declaration recognizes the fact that in order for the SAI to be objective in the performance of its duties it should maintain its independence from the audited entities and others. The principles contained in the Mexico Declaration deal with the independence of the institution and its staff, management independence and financial independence.

(ii) <u>Evaluation of adherence to Lima & Mexico Declarations</u>:

1. Both the Lima and the Mexico declarations provide that the Supreme Audit Institution (SAI) should be independent of the audited entities. In this case, the Supreme Audit Institution (SAI) is a department of the Ministry of Finance which is subject to audits by the Supreme Audit Institution (SAI) contrary to the provisions of the two declarations.

2. One of the principles of the Mexico Declaration is that the Supreme Audit Institution (SAI) is that the institution should have financial independence and funded directly from the treasury. In the case at hand, the Supreme Audit Institution (SAI) is funded through the Ministry of Finance and it may not be allocated all the funding that it requires to carry out its work.
3. One of the concepts of the Lima Declaration is that the staff of the Supreme Audit Institution (SAI) should have the necessary qualifications to carry out their tasks. The experience in public sector operations by staff of the Supreme Audit Institution (SAI) while lacking the necessary qualifications is contrary to the provisions of the Lima Declaration.
4. The Lima Declaration requires that the Supreme Audit Institution (SAI) should have power to make any investigations they deem necessary. In the scenario, the Supreme Audit Institution (SAI) can only carry out investigations subject to presidential consent in some cases which is contrary to the precepts of the Lima Declaration.
5. The taking into account of the comments of the audited entities in the reports by the Supreme Audit Institution (SAI) is in line with the provisions of the Lima Declaration which states that consideration of the points of view of the audited entities should be taken into account.
6. Both the Lima and Mexico Declarations require that the establishment of the Supreme Audit Institution (SAI) and the appointment of the Head of the Supreme Audit Institution (SAI) should be enshrined in the constitution. The fact that there is no legal framework on the establishment of the Supreme Audit Institution (SAI) is contrary to the provisions of these two declarations.
7. The Lima Declaration and the Mexico Declaration on the independence of the Supreme Audit Institutions (SAI) require that the institution and the staff should be independent of the audited entities. In the situation where the Head of the Supreme Audit Institution (SAI) reports to a Committee of Cabinet which is also responsible for the renewal of the contract is contrary to the provisions of these declarations.
8. The Mexico Declaration provides that the Supreme Audit Institution should have unrestricted access to all documents required in the discharge of its duties. Restriction of access to documents considered of a security nature is contrary to this provision.

SOLUTION THREE

(a) The role of the Public Accounts Committee:

The role of the Public Accounts Committee is to monitor the implementation of the budget by the executive on behalf of parliament. This follows the appropriation of funds by Parliament per approved budget to the executive. The Public Accounts Committee seeks to ensure that the recommendations made by the Office of the Auditor General (OAG) are followed by the Executive.

(b) Distinction between misapplication and misappropriation of funds:

Misapplication of funds in the public sector is where funds appropriated for a specific purpose are used for another purpose not originally intended.

Misappropriation of funds on the other hand relates to misuse or theft of funds for personal gain.

(c) Ethical matters in the audit of the Ministry of Finance:

(i) Lead Auditor assigned to audit of Ministry of Finance:

Having joined the Office of the Auditor General (OAG) three months ago and subsequently assigned as Lead Auditor will result in a self-review and familiarity threats. Having been involved in the systems at the Ministry, objectivity will be compromised.

Safeguard:

A different Lead Auditor with no previous connection with the Ministry of Finance should be assigned to this audit.

(ii) Assignment of Chanda as Team Leader:

The request by the Permanent Secretary that Chanda should be assigned Team Leader on account of his having a good relationship with the Minister of Finance is an ethical matter that must be addressed. The relationship can cause both a familiarity threat and intimidation threat resulting in Chanda losing his objectivity. The Office of the Auditor General (OAG) has full mandate to choose staff to be assigned on audits that they perform.

Safeguard:

The Lead Auditor should explain to the Permanent Secretary that the office will assign staff to the audit based on competences and skills they possess and that the relationship between Chanda and the Minister of Finance will not form the basis and justification for assigning Chanda to this audit. The relationship is reason enough that Chanda should not lead the audit team on this audit.

(iii) Provision of refreshments and lunch:

The provision of refreshments and lunch by the Ministry of Finance to the audit team must be carefully thought of. Unless the amounts involved are clearly insignificant, the offer should be declined. Such provisions could give rise to a self-interest by member of the audit team who will subsequently lose their objectivity.

The provision of lunch charged to the entertainment budget of the Minister of Finance may be material.

Safeguard:
The offer of lunch to the audit team should be declined. Refreshments such as tea may be accepted if considered insignificant.

(iv) Assignment of audit staff:
The assignment of new staff with no public sector auditing experience is an ethical matter that must be resolved. This could give rise to lack of professional competence and due care by the audit team members. It is a requirement that staff with necessary skills and competences should be assigned to audits.

Safeguard:
There should be close supervision of the new staff assigned to this audit and reviews of the work done by someone who was not involved in the audit could be an additional safeguard.

(v) Payment of daily allowance:
The payment of a daily allowance to the audit team members will give rise to a self-interest threat. It will result in the audit team losing objectivity in the performance of the audit.

Safeguard:
This allowance should be declined. All expenses of performing the audit should be met by the Office of the Auditor General (OAG) and not the entity being audited.

(vi) Political pressure applied to staff:

Political pressure can lead to staff doing what they could not ordinarily do. The fact that there is political pressure to staff in the Ministry of Finance may instill fear in the mind of the public sector auditors fearing that the same pressure may be applied to them. This may result in the public sector auditors not to comply with the ethical and professional values. It is most likely that the staff in the Ministry of Finance may refer matters raised by the auditors to those exerting pressure on them.

Safeguard:
Review governance structures and hold serious discussions with those charged with governance over the matter.

(vii) Fear of transfer to other ministries:
The fact that audit team members are usually transferred to other ministries after the hearings of the Public Accounts Committee (PAC) will instill fear in staff assigned to audits. The staff may not adhere to ethical values for fear

that if they did that would result in them being transferred to other ministries. Staff will be more likely to want to please the superiors in order to avoid transfer from the Office of the Auditor General (OAG).

Safeguard:
Hold serious discussions with the Public Accounts Committee (PAC).

SOLUTION FOUR

(a) Transparency & accountability in public sector and the SAI:

Transparency in connection with the receipt and use of public funds involves openness with regards to the collection and use of public funds. It is a requirement that recipients and users of public funds should be open regarding the receipt and use of these funds.

Accountability relates to being answerable on the public resources that public officials are entrusted with. The recipients of public funds are required to be accountable on how those funds were utilized.

All recipients of public funds are required to be transparent and accountable for the funds appropriated to them. Public sector auditors enhance transparency and accountability by performing audits and reporting on the results of the audits.

The Supreme Audit Institution (SAI) if financed by public funds for its operations, and is also required to be transparent and accountable for the funds appropriated to it for its operations. ISSAI 20: *Transparency and accountability* guides the Supreme Audit Institutions (SAI) with regards to transparency and accountability of the funds used for its operations.

(b) (i) SAI of Lithia adherence with ISSAI 12

ISSAI 12: *Value and benefits of SAIs* gives the Supreme Audit Institution (SAI) guidance on how it determines its value and benefits to the citizens. An evaluation of the operations of the Supreme Audit Institution (SAI) of Lithia has revealed the following:

- o The fact that the Supreme Audit Institution (SAI) of Lithia has not produced financial statements for three (3) years showing how it has used public funds appropriated to it is not in line with the provisions of ISSAI 12. One of the objectives of Value and Benefits is that of the Supreme Audit Institution (SAI) being a role model. One of the principles under this objective requires that the Supreme Audit Institution (SAI) should be transparent and accountable in its operations.

  Not preparing annual financial statements of its activities is contrary to the principle of transparency and accountability of the Supreme Audit Institution.

  The Supreme Audit Institution (SAI) of Lithia should prepare annual financial statements highlighting how the funds appropriated to it have been used. The financial statements should be subject to external audit in order to enhance their credibility.
- o The increased levels of computerization by the government suggests that new risks will arise in the use of public funds. The Supreme Audit Institution (SAI) should have the necessary skills and competences to perform audits in a computerized environment. The fact that the

Supreme Audit Institution (SAI) has not budgeted for training suggests that they will not have the staff with the required skills to carry out audits in a computerized environment and this is contrary to the provisions of ISSAI 12 in the objective of being a role model by having staff with requisite skills to carry out their work.

The Supreme Audit Institution (SAI) of Lithia should budget for training of staff in skills required to audit in computerized environment. The institution should always respond to new risks that arise.

- The fact that there is public outrage over the award of a contract to construct a hydro power station suggest concern by the citizens over the management of public funds. The argument by the Supreme Audit Institution (SAI) that it operates independently and not subject to direction of anybody suggests that it is not responding to public expectations. One (1) of the objectives under ISSAI 12 is that of strengthening accountability, integrity and transparency by the Supreme Audit Institution (SAI). The Supreme Audit Institution (SAI) has the power of investigations and should listen to public opinion and has the power to carry out audits or investigations.

  The Supreme Audit Institution (SAI) should respond when there are reasonable grounds to suspect misuse of public funds by carrying out investigation and reporting on the outcome of the investigation in line with the principles in ISSAI 12.

(ii) Quality controls & recommendations:

The evaluation of the quality control systems of the Supreme Audit Institution (SAI) of Lithia reveals the following:

1. Whereas quality control is the responsibility of the Lead Auditor on each assignment, the requirement of ISSAI 40: Quality control requires that there should be leadership responsibilities for quality control at the level of the Supreme Audit Institution which appears not to be the case in this situation.

   Recommendation:

   The Head of the Supreme Audit Institution (SAI) should appoint someone with knowledge of the provisions on quality control to be the champion on quality control in the institution.

2. The lack of knowledge on ethical values by staff of the Supreme Audit Institution (SAI) is not in line with the requirements for quality control in the institution. The Supreme Audit Institution (SAI) is required to have its own code of ethical values which must be followed by all its staff. The ethical values should be those that as a minimum meet the requirements of ISSAI 30 *Code of Ethics*.

Recommendation:

The Supreme Audit Institution must develop a code of ethical value which should be made available to all staff. The code should state the sanctions that will be meted out for non-compliance with its provisions.

3. The skills and competences possessed by staff in the Supreme Audit Institution (SAI) will have a bearing on the quality of work that will be carried out. In the case of the Supreme Audit Institution (SAI) of Lithia, a majority of the staff do not have the necessary qualifications to enable them carry out quality audits. This is contrary to the provisions ISSAI 40 Quality control which requires that the SAI should have policies that provide reasonable assurance that it will only carry out audits when it has the competences to carry out the work.

   Recommendation:

   The Supreme Audit Institution (SAI) should put in policies in Human Resources to ensure that it only recruits staff with the necessary qualifications to carry out audits. Further, the institution should have policies on continuous staff development.

SOLUTION FIVE

(a) Key stages in a forensic investigation:

(i) Defining the scope of the investigation:

This stage of the forensic audit involves determining the scope of the audit. Establishing the extent of the fraud and whether the investigation will cover all the toll gates around the country or it will be restricted to specific toll gates affected by the fraud.

It will also be necessary to establish the period involved and whether there are any suspects involved in the fraud.

(ii) Securing & safeguarding information:

This stage of the investigation involves securing any information that may be available and necessary for the investigation. Fraudsters will wish to destroy any evidence that may implicate them and so it is necessary that information is secured to ensure it is not tampered with which could jeopardize investigations.

In this case the forensic investigators will wish to safeguard any documents whether in hard copy form or electronic form which may require restricting the savers.

(iii) Gaining an understanding of the matter:

This stage of the investigation involves the forensic investigators to get details and gain an understanding of the fraud and how it was carried out. There will be need to find out how it was carried out and how it has gone undetected up until now. This will involve discussions with responsible management and interviews of people.

The forensic auditors require to understand the matter to enable them carry out the investigation effectively.

(iv) Interviewing staff and others:

This is the stage at which the forensic investigator gathers evidence concerning the fraud that has occurred. It involves interviewing suspects in the fraud if any and also staff to gather information. The interviews are mainly information seeking interviews and also admission seeking interviews.

The forensic investigators will interview staff and others in the process of gaining an understanding of the fraud as a way of information seeking. The investigators will also interview any suspects that may be there to seek their admission of having committed the fraud.

(b) (i) Impact on the audit opinion:

Going concern ability of Chemicals Industries:

The fact that there is a material uncertainty with regards to the ability of Chemicals Industries and that:

- o The historical basis of preparing financial statements is appropriate and
- o The material uncertainty has been adequately disclosed in the financial statements,

The public sector auditors will issue an unmodified opinion in the auditor's report.

Disposal of hazardous substance in water source:
The information in the scenario suggests that the company may be found liable and the conditions in ISA 37 for establishing of a provision have been met. The accounting treatment of creating a provision is correct and the financial statements are not misstated and an unmodified opinion will be appropriate.

Since the public sector auditors would like to include this matter in the auditors report, this could be done by way of including the matter in the Key Audit Matters paragraph as guided by ISSAI 1701 *Communicating key audit matters in the independent auditor's report.* The matter meets the definition of key audit matters having previously been communicated to those charged with governance.

Capitalization of development expenditure:
There appears to be a disagreement between the public sector auditor and the Management of Chemicals Industries with regards to the treatment of development expenditure incurred.

The impact on the audit opinion will depend on the materiality and pervasiveness of the matter of concern. If the impact of the incorrect capitalization of the development costs is considered material but not pervasive to the financial statements, the public sector auditors will issue a qualified opinion. If on the other hand, the public sector auditors conclude that the matter is both material and pervasive, an adverse opinion will be appropriate.

Non-availability of inventory records:
In the case that the inventory records were not made available to the public sector auditors, it means that there was a limitation of scope and the public sector auditors did not obtain sufficient appropriate audit evidence on which to base the opinion.

The form of opinion will depend on the materiality and the pervasiveness of the amounts involved. In event that the public sector auditors conclude that the amount is material but not pervasive to the financial statements, then a qualified opinion will be appropriate. If on the other hand, the public sector auditors conclude that the matter is both material and pervasive, then a disclaimer of opinion will be the appropriate opinion.

(ii) Impact of modification of opinion on the audit report:
ISSAI 1700 *Forming an opinion and reporting on financial statements* and the related Practice Note gives the elements of a standard unmodified opinion and the Supreme Audit Institutions are required to use the format in the standard to prepare the audit report.

In the event that the opinion of the public sector auditor is modified, this results in changes in the names of some elements. If for example the opinion is modified by way of a qualified opinion, the following elements will change as follows:

The heading "Opinion paragraph" will change to read "Qualified Opinion" signifying the form of modification.

The heading "Basis for Opinion" will similarly be changed to "Basis for Qualified Opinion".
In the paragraph for the Auditor responsibility, the auditors should state that they obtained sufficient appropriate audit evidence upon which the modification is based in the case of a qualified or adverse opinion.

In the case of a Disclaimer of opinion, the auditors should state in the Auditor responsibility paragraph that they were not able to obtain sufficient appropriate audit evidence hence the disclaimer of opinion.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 17 DECEMBER 2021

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. 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

A Government parastatal is considering investing in solar energy as a way of improving its revenue. The project will involve purchase of solar panels at a cost of K60,000,000. Once the solar panels are installed the following are the estimates which have been made:

Year	1	2	3	4
Average unit sales of Power	250	300	350	400
Average VC of Power	175	175	140	140
Sales Volume	110,000	145,000	165,000	100,000

Fixed cost are K800,000 per annum. The sales price allows for expected price increases over the period. However, cost estimates are based on current costs and do not allow for expected inflation in costs.

The company uses four (4) year project appraisal period, but it is expected that the equipment will continue to be operational and in use for several years after the end of the first four (4) year period. The company's cost of capital for investment appraisal purposes is 15%. Capital projects are expected to pay back within two (2) years of non-discounted basis and within three (3) years on a discounted basis.

Required:

(a) Calculate the Net Present Value of the project and advise management on whether they should proceed with the investment. (ignore inflation) (7 marks)

(b) Describe how the following measures of capital investment viability are calculated:

- (i) Pay back Method (4 marks)
- (ii) Accounting Rate of Return (ARR) (3 marks)
- (iii) Internal Rate of Return (IRR) (4 marks)

(c) Justify to Management on the use of Net Present Value to measure capital investment as opposed to other methods. (6 marks)

(d) Explain how uncertainty and risk could be considered before undertaking an investment. (8 marks)

(e) Advise Management in which ways they could use risk transfer to manage implementation of the project. (8 marks)

[Total: 40 marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

The Republic of OMEGA has embarked on a number of capital expenditure projects across the Country. This has resulted in the Country borrowing over and above the Gross Domestic Product (GDP) approved threshold. As a result of borrowing over and above the approved threshold the government has not been able to meet expenditure for its social sector. This has resulted in citizens, outcry and wondering why Government has continued borrowing to spend on capital project investments.

Required:

(a) You are a Director at the Ministry of Finance. The Minister has requested that you prepare a paper explaining:

(i) Reasons for undertaking capital projects by the Government of OMEGA. (4 marks)

(ii) Best practice that should be in place before Government embarks on project implementation. (6 marks)

(iii) The composition of five (5) steps business case model. (10 marks)

[Total: 20 marks]

QUESTION THREE

The Government of the Republic of Zambia has enacted legislation aimed at improving its Public Financial Management systems. Among the key pieces of legislation that have been revised are the Republican constitution and The Public Financial Management (PFM) Act, No. 1 of 2018. Some of the key sections in the PFM Act speak to internal governance structures such as the Internal Audit units in Ministries and the Audit Committees. Despite all these pieces of legislature stakeholders are still wondering why there are so many irregularities that are being reported by the Auditor General.

Required:

(a) Outline:

(i) The responsibilities of internal Audit in Line Ministries as outlined in the Public Finance Act no. 1 of 2018. (6 marks)

(ii) The functions of the Audit Committee as outlined in the Public Finance Act No. 1 of 2018. (4 marks)

(iii) Responsibilities of the Auditor General as outlined in the Constitution of the Republic of Zambia. (4 marks)

(b) In the context of Public Financial Management (PFM), explain ways in which National Assembly oversees the performance of the executive. (6 marks)

[Total: 20 marks]

QUESTION FOUR

The Government of Country Z has rejected proposals from stakeholders to take up an emergency financial relief measure despite a projected budget over run.

In 2019, the Government in its financial report reported a year end budget over run of K2.800 million and has projected K14.500 million budget overrun in 2020. The financial report published by the Ministry of Finance showed that the largest budget overrun was on debt service. In response to this budget over run, the Government approved a supplementary of K60m.

The K60m will be drawn from the reserves which are currently at K61.7m. Despite this, the government spokesperson said during a cabinet meeting that "The country is not under any fiscal stress. The Government Spokesperson further said they had plans on how to rebuild the reserves. They said that work was underway to reduce the predicted over spending and build on the reserves. The Ministry of Finance further supplemented the comments of the government Spokesperson by saying that "Their financial report was accurate and they believed in transparency."

You are Director of Finance at the Ministry of Finance, the Minister is aware of the issues being discussed by the government spokesperson and he is interested in the issues and as to whether the ministry should issue a statement to clarify the issues raised by the government spokesperson. The Minister is newly appointed and He is concerned with the issues raised by the government spokesperson. He is keen to understand the role of the Director of Finance in leadership and governance in the public sector compared with the private sector. In addition he wants to understand why effective management of resources is critical.

Required:

(a) You are Director of Finance at MoF, prepare a presentation to Senior Management explaining the role of Director of Finance regarding leadership and Governance in the public sector in comparison with the private sector. (10 marks)

(b) Explain to Senior Management why effective management of reserves is a critical activity of any government. (10 marks)

[Total: 20 marks]

QUESTION FIVE

Government of country Y has embarked on a new Health policy to invest in construction of Health Posts in order to provide health services as close to the people as possible. The risk analysis has highlighted that there is uncertainty around these benefits being realized. There are four possible outcomes that are now being considered possible with the following NPV and probabilities analyzed.

Out Come	NPV	Probabilities	Benefits Expected
Low	K50	0.2	10
Medium	K100	0.4	40
High	K150	0.2	30
Highest	K200	0.2	40
			120

Costs of implementing the policy have an expected value of K60m resulting in expected net benefits of K40m.

Required:

(a) Explain to the Policy Makers in the above scenario, the considerations that should be taken before the policy is implemented. (4 marks)

(b) What specific actions Policy Makers should ensure are in place to manage the risk within the project. (16 marks)

[Total: 20 marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \text{x spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

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

$$P_o=\frac{D_0(1+g)}{(r_e-g)}$$

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

$$s_1=S_0 x\frac{(1+h_c)}{(1+h_b)} \qquad f_0=s_0 x\frac{(1+i_c)}{(1+i_b)}$$

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	0·914	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	0·350	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

SOLUTION ONE

(a)

Year	0	1	2	3	4
Contribution		8,250,000	18,125,000	34,650,000	26,000,000
Fixed Costs		(800,000)	(800,000)	(800,000)	(800,000)
Investment	(60,000,000)				
Net Cashflow	(60,000,000)	7,450,000	17,325,000	33,850,000	25,200,000
DCF 15%	1	0.870	0.756	0.658	0.572
PV	(60,000,000)	6,481,500	13,097,700	22,273,300	14,414,400

NPV = (3,733,100)

The NPV is negative, therefore the project should not be undertaken.

Workings

Year	1	2	3	4
Average Sales	250	300	350	400
Average VC	175	175	140	140
Contribution per unit	75	125	210	260
Sales volume	110,000	145,000	165,000	100,000
Total Contribution	8,250,000	18,125,000	34,650,000	26,000,000

(b)

S/N	
	b)Describe how the following measures of capital investment viability are calculated: i. Internal Rate of Return ii. Accounting Rate of Return iii. Pay back Method • Payback: The payback method of capital investment appraisal measures how long it takes for the cash inflows from a project to pay back the original cash investment. It is calculated by accumulating the cash flows year after year until they become positive. The payback is measured in years and months. • Accounting rate of return: The accounting rate of return is a measure of the profit generated by an investment in relation to the capital invested. It is expressed as a percentage and is calculated by the following formula: sum of profits after depreciation) ÷ (life of investment in years) × 100% [(initial investment + terminal value of the investment) ÷ 2] • Internal rate of return: The internal rate of return (IRR) method is also based on discounting cash flows but in comparison with the NPV method the IRR is expressed as a percentage rather than an absolute monetary amount. The IRR of an investment is that discount rate (found by trial and error) which results in an investment project having an NPV of zero i.e. where the total present value of the stream of cash inflows from an investment is equal to the initial investment sum. An investment is worthwhile if IRR% > cost of capital %.
	c) Justify to management on the use of Net Present Value to measure capital investment as opposed to other methods • Justification of discounted cash flow methods: The payback and accounting rate of return methods share a major drawback: they do not take into account the time value of money in their measurement of capital investment project viability. Cash flow expected at some future time is given the same weighting as cash flow now. As a result it is difficult to assess the viability of an investment using these traditional methods. • The timing of cash flows has an important influence on the real value of an investment because capital has a cost, either in the form of interest paid on borrowed funds or because owner's capital has an opportunity cost. The discounted cash flow methods (NPV) recognize, and reflect, the time value of money providing measures of investment worth in relation to the cost of capital to a business.
	d) Explain how uncertainty and risk could be considered before undertaking an investment Uncertainty • Set a minimum payback period • Make prudent estimates of cashflows to assess the worst possible situation

	• Assess both best and worst possible situations to obtain a range of NPVs • Use sensitivity analysis to measure margin of safety in the put data Risk • Make use of Expected value calculations • Use simulation models • Include adjusted pay back period period. • Include risk adjusted discount rates
	e) Advise management in which ways they could use risk transfer to management implementation of the project. • **Insurance** Insurance is a transference method that shifts the responsibility of specified risks to an insurance company. Typically, insurance companies provide monetary coverage for losses that result from such things as legal liability, fire damage, theft, or vandalism. • **Performance bonds** Performance bonds shift the financial responsibility for poor performance back to the contractor. These bonds are usually issued by a financial institution, such as a bank, and force contractors to pay out a specified sum of money if their performance is unacceptable. .• **Warranties** Warranties are written guarantees that purchased project equipment will be of good quality. This transference method shifts the cost and responsibility for repair or replacement of defective parts to the manufacturer. • **Contracts** A contract is a binding and legally enforceable agreement between two or more persons or parties. During risk response planning, project managers can use contracts to help eliminate or minimize the impact of identified project risks

SOLUTION TWO

S/N	
	a) Reasons for undertaking capital projects by the Government of OMEGA • Governments undertake expenditure in order to address economic inefficiencies and meet equity objectives. This included spend on public goods and services that would not be otherwise provided by the market. • This spend will include capital spending such as investment in property, equipment, infrastructure and other assets that are essential to enable both the production of public goods and services and to deliver improvements to the wider economy.
	b) Best practice that is in place before government embarks on project implementation • Scope the scheme and prepare an initial Strategic Case – this confirms the strategic context of the proposed project and makes a robust case for change and indications of a way forward that can be tested with stakeholders. Individual activities can include a SWOT analysis on an initial long-list of possible options, and the development of an initial short list with high level costs and benefits. • Plan the scheme and prepare the Outline Business Case – this provides additional analysis in order to identify a preferred option that demonstrates public value, the expected procurement model and delivery method, the affordability of the project and the management arrangements to ensure successful delivery. • Procure the solution and prepare a Full Business Case – following market testing and negotiations with potential suppliers, this revisits earlier analysis, recommends the most economic, efficient, and effective offer and delivery method, confirms that funding is in place and the project is affordable, and provides detailed management plans that demonstrate how it will be implemented and eventually evaluated.
	c) The composition of five steps business case model. • The 'strategic case' – that the intervention is supported by a case for change which provides a rationale for why the project is required, what the outcomes will be, and how this fits with wider national, regional and/or local priorities. • The 'economic case' – that the intervention represents best public value. This demonstration requires the identification and appraisal of a range of alternatives with a view to producing a short list of options that are subjected to detailed cost-benefit analysis. The preferred option is then further subjected to sensitivity and other analysis.

	• The 'commercial case' – required to demonstrate that the preferred option put forward in the economic case will result in a viable procurement process. This includes the need to specify service requirements and outputs, delivery models and risk allocation, and any anticipated charging regime. • The 'financial case' – demonstrates that the preferred option is affordable and can be funded. This requires the demonstration of capital and revenue expenditure for the proposal over the life of the project, including an assessment of the impact on the public sector entity's budgets. • The 'management case' – this demonstrates that there is the capacity to deliver the preferred option successfully, in accordance with sound project management methodologies and with robust monitoring and evaluation, change management, risk identification and mitigation and other processes in place.

SOLUTION THREE

<table>
<tr><td>S/N</td><td></td></tr>
<tr><td></td><td>Outline:

a) The responsibilities of the
i. Internal Audit in Line Ministries as outlined in the Public Financial Management Act no. 1 of 2018
• Ascertain that risk management and internal control systems are in place and continually being improved and optimized in response to an ever changing environment;
• Provide reasonable assurance to controlling officers and the Secretary to the Treasury that internal controls exist and are being complied with as required by this Act;
• Ascertain, evaluate and recommend improvements on governance processes put in place by management;
• Review and appraise the appropriateness, adequacy and application of authorization of financial and non-financial controls;
• Promote effective controls at reasonable cost; and
• Ascertain the extent of compliance with established policies, plans, procedures in this Act and any other law

ii. Functions of the Audit Committee as outlined in the Public Financial Management Act of 2018
• Receive reports from internal auditors;
• Review audit policy and audit plans;
• Evaluate the management procedures regarding— internal controls; financial reporting; external audit reports; risk management; ethics and governance; and
• Make recommendations to the Secretary to the Treasury or a controlling body.

iii. Responsibilities of the Auditor General as outlined in the Constitution of the Republic of Zambia
• Audit of the accounts of (i) state organs, state institutions, provincial administration and local authorities, and (ii) institutions financed from public funds;
• Audit of the accounts that relate to the stocks, shares and stores of the Government;
• Conducting financial and value for money audits, including forensic audits and any other type of audit, in respect of a project that involves the use of public funds;
• Ascertain that money appropriated by Parliament or raised by the Government and disbursed (i) has been applied for the purpose for which it was appropriated or raised, (ii) was expended in conformity with the authority that governs it, and (ii) was expended economically, efficiently, and effectively.</td></tr>
</table>

	b) In the context of Public Financial Management (PFM), explain ways in which National Assembly oversees the performance of the executive.
	• Ensuring equity in the distribution of national resources amongst the people of Zambia; • Appropriating funds for expenditure by State organs, State institutions, provincial administration, local authorities and other bodies; • Scrutinising public expenditure, including defence, constitutional and special expenditure; • Approving public debt before it is contracted.

SOLUTION FOUR

S/N	a) You are Director of Finance at MoF, prepare a presentation to Senior Management explaining the role of Director Finance regarding leadership and Governance in the public sector in comparison with private sector.
	In both the Public and Private Sector , is expected to guiding principles and roles the Finance Director: • Be an effective organizational leader and a key member of senior management; • Balance the responsibilities of stewardship with business partnership; • Act as the integrator and navigator for the organization; • Be an effective leader of the finance and accounting function; and • Bring professional qualities to the role and the organization.
	b) Explain to Senior Management why effective management of reserves is a critical activity of any government.
	• Managing reserves is a key activity for financial managers in all types of organsiations. Making decisions or recommendations regarding when to hold reserves (and where to invest them), and when to spend, are especially important when formulating strategies to cope with volatile funding. • 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. • Organisations 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. • Organisations should also be investigating where investment in assets or projects should be undertaken to generate revenue income going forward. • Need to allow for contingencies such as unexpected demand for services. Might be as a result of a natural disaster, epidemic, or some other crisis.

SOLUTION FIVE

S/N	
	a) Explain to the policy makers the scenario above , the considerations that should be taken before the policy is implemented. • The analysis highlights that there is a 10 percent chance of a net cost to the policy (Low outcome) but a 30 percent chance of net benefits of K60m or greater (medium, high and highest outcomes). The question therefore is whether this project should go ahead given the risk of net costs or low benefit realization. • Decision makers will need to weigh up such considerations as to what extent this is an essential policy area (for example was this part of the government's election manifesto commitments) and whether there are other projects with similar expected outcomes but which are more certain.
	b) What specific actions policy makers should ensure are in place to manage the risk within the project. • To manage risk within a project there are a range of specific actions that can be undertaken, including: • Consult with stakeholders early to ensure requirements are properly identified; • Avoid decisions that are irreversible and restrict alternative courses of action; • Use pilot studies to gain greater information on costs and benefits; • Ensure there is flexibility designed into the project so that uncertainties can be adapted to; • Take a precautionary approach against risks with catastrophic outcomes; • Utilise simpler technology and methods; • Consider alternative options that are less inherently risky even if they have lower expected benefits (for example a maximin approach); • Abandon the project if the risks are just too inherently great; • Look for contractual arrangements to enable risk transfer.

END OF SOLUTIONS