CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 22 JUNE 2020

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

<u>QUESTION ONE</u>

There are 10 multiple choice questions in this section. Attempt all of them by selecting your best answer from the options given.

1.1 Which of the following is the correct double entry in the proprietor's books, when he permanently changes the use of a personal car from personal errands to business use?

A. Dr Motor Car Cr Bank
B. Dr Bank Cr Motor Car
C. Dr Capital Cr Motor Car
D. Dr Motor Car Cr Capital

(2 marks)

1.2 MK statement of financial position shows the following extract for the years ended

	31 December 2019	31 December 2018
Interest payable	370	690

In addition, MK had a 10% K8,000 debenture outstanding throughout the year to 31 December 2019.

How much interest paid will appear in the statement of cash flows of MK for the year ended 31 December 2019?

A. K690
B. K1,120
C. K370
D. K800

(2 marks)

1.3 A statement of changes in equity extract for XY Ltd for a particular year is as follows:

	Retained earnings K'000
Balance b/f	150
Profit for the year	600
Balance c/f	380

During the year, XY Ltd non current assets were revalued upwards leading to a revaluation surplus of K80,000 and interim dividends of K70,000 were paid to equity shareholders.

Calculate the amount of final dividends XY Ltd. Directors declared to its equity holders prior to the year end.

A. K830,000
B. K380,000
C. K220,000
D. K300,000

(2 marks)

1.4 The trainee book-keeper of Mo. Co has prepared the following bank reconciliation statement:

		K
Overdraft per bank statement		77,200
Add deposits not credited		82,400
		159,600
Less unpresented cheques		(6,600)
Overdraft per cash book	153,000	

Assuming the bank balance of K77,200 to be correct, what should the cashbook balance be?

A. K153,000 overdrawn
B. K11,800 overdrawn
C. K1,400 overdrawn
D. K11,800 cash at bank

(2 marks)

1.5 At 1 January 2017, a company had an allowance for receivables of K52,600. At 31 December 2017, it had receivables of K578,000

It was then agreed:

- To make a specific allowance of 70% of Monica's debt of K60,000;
- To write off K90,000 debt as irrecoverable
- To make a general allowance of 7% of net receivables.

What would be the total charge to the profit and loss account with respect to receivables expense?

A. K90,000
B. K109,360
C. K179,960
D. K127,360

(2 marks)

1.6 JKC bought an assetfor K850,000 on 1 April, 2010. The asset had an expected useful life of 10 years at the time and an expected residual value of K24,000. It is being depreciated at 30% per annum reducing balance basis. JKC charges a full year's depreciation in the year of purchase and none in the year of disposal.

On 1 October 2017, the asset was sold for K49,000.

The profit or loss on disposal to be recognized in the financial statements for the year ended 31 December 2017 is ……………

A. K10,500 loss
B. K21,000 profit
C. K21,000 loss
D. K10,500 profit

(2 marks)

1.7 Which of the following costs will not be included in the factory cost of goods completed for a manufacturing entity?

A. Administrative expenses
B. Prime cost
C. Change in Work in progress.
D. Indirect factory overheads

(2 marks)

1.8 Tinase made sales of K200,000 for the current financial year. She sells her goods at a markup of 25%.

During the year, a fire broke out and most of the goods were completely damaged. Goods remaining after the fire which were fit for sale were valued at around K1,800. Tinase had opening inventory of K7,500 and purchases made during the year were K165,000.

What is the value of inventory that got damaged in the fire?

A. K10,700
B. K158,200
C. K1,800
D. K6,800

(2 marks)

1.9 Which of the following is not a book of prime entry?

A. The petty cash book
B. The sales returns day book
C. The trade receivables ledger
D. The cash book

(2 marks)

1.10 A credit balance on a nominal ledger account will NOT represent a/an……….

A. Sales account
B. Capital account
C. Insurance account
D. Bank overdraft account

(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 questions.

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

Kingsley Company Limited is a business set up by a group of recent graduates from a local university who are involved in the purchase and supply of electrical appliances to the local market. The business is in the process of seeking finance from a local bank and preliminary inquiries are that the local bank will require a statement of cashflows as part of the basis for eligibility assessment.

In view of this, Kingsley Company Limited has approached you for assistance with the preparation of the statement of cash flows. However, the Finance Clerk of Kingsley Co has told you that fire swept through the finance department and only a hard copy of statements of financial position for the past two years was recovered in full but only part of the data from the statement of profit or loss was retrieved and the data is presented to you as follows:

Partial statement of profit or loss for year ended 30 September 2020:

		K'000
Finance cost		(40)
Profit before tax		375
Income tax	(175)	
Profit for the year	200	

The statements of financial position of Kingsley Company Limited at 30 September 2019 and 30 September 2020 respectively are given below:

	2019	2020
	K'000	K'000
Non current assets		
Property, plant and equipment	1,900	2,450
Current assets		
Inventory	405	450
Receivables	400	430
Bank	70	35
Total current assets	875	915
Total assets	2,775	3,365

Equity and liabilities

Ordinary share capital of K1 each.	500	650
Share premium	250	400
Revaluation reserve	--	250
Retained earnings	880	1,015
Total equity	1,630	2,315
Non current liabilities		
10% loan notes	500	250
Current liabilities		
Trade payables	330	360
Bank overdraft	65	90
Tax payables	250	350
Total current liabilities	645	800
Total equity and liabilities	2,775	3,365

The following additional information is relevant:

(i) Loan notes interest is due half yearly on 31 March and 30 September each year and was paid on the due dates. 50% of the loan note outstanding on 30 September 2019 was paid on 30 September 2020.

(ii) On 1 August 2020, a piece of equipment that had a cost of K500,000 and a carrying amount of K100,000 was sold for K125,000.

(iii) Shares were issued for cash during the year ended 30 September 2020.

(iv) Details of property, plant and equipment on the dates indicated were as follows:

30 September 201930 September 2020

	K'000	K'000
Cost	3,000	3,650
Accumulated depreciation	(1,100)	(1,200)
Carrying amount	1,900	2,450

(iv) Kingsley Co. Ltd paid dividends during the year.

Required:

(a) Prepare a statement of cash flows for Kingsley Co Ltd for the year ended 30 September 2020 as requested by the Company Directors. (16 marks)

(b) Explain two advantages of cashflow accounting to various users of accounting information. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Tana is a retailer of home deco accessories who has been operating for three years now. However, the business has not kept an up to date record of its business transactions. There is no record of Tana's capital at the start of the year ending 31 March 2020, neither is there a record for his sales, purchases and other charges to the profit and loss account.

The following summaries have been provided to you for Tana's accounting period to 31 March 2020:

Bank account summary

Receipts		**K**
Trade Receivables		105,600
Cash banked		16,400
Payments		
Trade payables		74,000
Rent	5,600	
Machinery		30,000
Insurance		5,800
Wages	24,400	
Dishonouredcheque1,000		
Loan interest		1,600
Drawings		38,000

Bank account balance at 1 April 2019 was K33,200(Dr) with no opening cash balance.

The following additional information is relevant for Tana for the year to 31 March 2020:

(i) Cash sales during the year under review amounted to K56,000 from which repairs and electricity bills of K1,200 and K3,000 respectively were paid, this was in addition to the cash banked.

(ii) Tana had inventory of home deco accessories of K16,400 on 1 April 2019 and K12,800 on 31 March 2020.

(iii) On 1 April 2019, Tana owed suppliers of home deco accessories K9,600 and K10,000 on 31 March 2020. Prior to the reporting date, Tana made drawings of goods just after making purchases for his own home's decoration amounting to K1,200. When paying supplier during the year he received discount for prompt payment of K1,400.

(iv) Tana recalls that he issued to his customers credit notes to the value of K4,800, wrote off debts amounting to K1,600 on 10 January2020 and his receivables had decreased from K25,200 to K20,000 between 1 April 2019 and 31 March 2020.

(v) In order to finance his business expansion, Tana obtained a loan from his bankers in 2018 amounting to K20,000 which had not been repaid by 31 March 2020. Tana had Machinery valued at K50,400 on 1 April 2017 and K63 600 on 31 March 2018 and provided for depreciation of K16,800 for the year under review.

(vi) Tana had rent prepaid of K800 on 1 April 2019 and rent owing of K1,000 on 31 March 2020.

Required:

(a) Prepare Tana's computation of his capital at 1 April 2019. (3 marks)

(b) Prepare Tana's statement of profit or loss for the year ended 31 March 2020.

(12 marks)

(c) Calculate closing balances on the bank and cash accounts. (5 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

(a) You are a trainee accountant for Cure Ltd and you have just returned from the workshop that was organized by the International Accounting Standards Board (IASB). The workshop, among other things tackled the issue of "qualitative characteristics of financial information".

Required:

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

(i) Relevance (2 marks)
(ii) Faithful representation (2 marks)
(iii) Comparability (2 marks)
(iv) Understandability (2 marks)
(v) Verifiability (2 marks)

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

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

The partners' accounting period ends 31 March 2020 and the following transactions took place during the year under review:

(i) Mazuba's capital contribution on 1 April 2019 was K600,000 and a further K250,000 was introduced on 1 July 2019. On the other hand, Mutinta's capital contribution was introduced into the business on 1 October 2019 amounting to K400,000.

(ii) On 1 October 2019, Mazuba and Mutinta made drawings of K80,000 and K100,000 respectively.

(iii) Mutinta's salary was to be paid to her effective 1 July 2019 when her responsibilities were enhanced.

(iv) The partnership business made profits for the year ending 31 March 2020 amounting to K350,500. This was before taking any of the above items into consideration.

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

Required:

Prepare for the partnership, for the year ended 31 March 2020:

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

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

[Total: 20 Marks]

QUESTION FIVE

You are the accountant for Milumbe, a supplier of farm produce. Milumbe buys farm produce from various farmers in Chibombo district and supplies various super markets mainly on short term credit terms.

On 28 February 2020, the balance on payables control account of Milumbe in the nominal ledger was K240,390 and the total of the list of payables from the payables ledger was K241,320.

Investigation of the reason for the difference indicated the following:

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

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

(iii) A payment to a supplier Muzo of K30,500 for a cash purchase of vegetables had been correctly recorded in the cash book, but was posted to his account in the payables ledger.

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

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

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

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

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

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

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

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

Required:

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

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

(8 marks)

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

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

(5 marks)
[Total: 20 Marks]

QUESTION SIX

The following trial balance was extracted from the books of Musongole Plc as at 31 March 2020:

	'K'	'K'
10% Debenture		300,000
Land and buildings (land cost K90,000	390,000	
Accumulated depreciation – Buildings		90,000
Plant and machinery (cost K1,044,000)	787,500	
Motor vans at cost	420,000	
Accumulated depreciation – motor vans		170,400
Retained earnings balance 1 April 2019	60,000	
Share premium		180,600
Inventory 1 April 2019	105,000	
K1 Ordinary shares		600,000
8% K1 irredeemable preference shares		210,000
Debenture interest	21,000	
Interim dividends paid: ordinary dividends	30,000	
Preference dividends	8,400	

Receivables and payables	144,000	81,000
Sales		1,038,300
Bank	17,400	
Purchases	498,300	
Distribution costs	54,000	
Administrative expenses	134,700	
	2,670,300	2,670,300

The following additional information is relevant for the year under review:

(i) A motor van that cost K48,000 three (3) years ago when purchased was sold for K21,000 on 1 January 2020. The proceeds from this sale had not yet been received on 31 March 2020. No record of this transaction was made in Musongole's books.

(ii) Depreciation of non current assets is to be provided for as follows:

Motor vans	20% per annum on cost
Buildings	5% per annum on cost
Plant and machinery	10% per annum on reducing balance basis.

Depreciation of buildings and motor vans to be charged to administrative expenses and that of plant and machinery to be charged to cost of sales.

Musongole's depreciation policy is to charge a full year's depreciation in the year of purchase and none in the year of disposal.

(iii) Land and buildings were revalued upwards by K15, 000 on 31 March 2020.

(iv) Musongole's inventory on 31 March 2020 was valued at K153,000.

(v) Final dividends were declared on 20 March 2020 by directors on all shares in issue on the date as follows:

Ordinary final dividends 5%.
Preference final dividends.

(vi) Corporation tax for the year has been estimated at K54,000.

(vii) On 1 October 2019, Musongole PLC made a rights issue of 3 for every 2 equity shares for a price of K5 per share. This issue has not yet been recorded in Musongole's accounting records.

Required:

(a) Explain what a bonus issue is and what a rights issue is, clearly stating reasons, which one would be appropriate to consider by an entity that has expansion plans.
(4 marks)

(b) Prepare astatement of profit or loss and other comprehensive income of Musongole Plc for the year ended 31 March 2020. (10 marks)

(c) Prepare a statement of changes in equity for the year ended 31 March 2020 for Musongole Plc. (6 marks)

[Total:20 Marks]

END OF PAPER

SET A CA1.1 SUGGESTED SOLUTION

SECTION A

SOLUTION ONE

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

SOLUTION TWO

Kingsley Co Ltd statement of cash flows for the year ended 30 September 2020

	K'000		K'000
Cash flows from operating activities:			
Profit before tax			375
Add depreciation expense (w3)			500
Add interest expense			40
Less profit on disposal (w4)			(25)
Cash generated from operations before working capital adjustments			890
Increase in inventory	(45)		
Increase in receivables	(30)		
Increase in payables	30		(45)
Cash generated from operations			845
Interest paid			(40)
Tax paid (w5)			(75)
Net cash inflow from operating activities			730
Cash flows from investing activities:			
Proceeds from the sale of property, plant and equipment	125		
Cash paid to acquire property, plant and equipment (w2)	(900)		(775)
Cash flows from financing activities:			
Proceeds from the issue of shares (1,050 – 750)	300		
Loan repaid	(250)		
Dividends paid (w6)	(65)	(15)	
Decrease in cash and cash equivalents			(60)
Cash and cash equivalents at start (w1)			5
Cash and cash equivalents at end (w1)		(55)	

Workings

1) Cash and cash equivalents

	2019	2020
	K'000	K'000
Bank	70	35
Bank overdraft	(65)	(90)
Cash and cash equivalents	5	(55)

Therefore, decrease in cash and cash equivalents is 60

2) Property, plant and equipment at cost account

	K'000		K'000
Balance b/f	3,000	disposal	500
Revaluation surplus	250		
Bank (balance)	900	balance c/f	3,650
	4,150		4,150

3) Depreciation expense for the year:

	K'000
Accumulated depreciation c/f	1,200
Add: dep'n of disposed off plant	400
Less depreciation b/f	(1,100)
Profit and loss	500

4) Profit or loss on disposal of PPE

Carrying amount of disposed asset	100
Proceeds of disposal	(125)
Profit on disposal	(25)

5) Income tax paid:

Balance b/f	250
Add charge to profit or loss	175
Less balance c/f	(350)
Tax paid	75

6) Dividends paid

Retained earnings b/f	880
Add profit for the year	200
less retained earnings c/f	(1,015)
dividends paid	65

b)

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

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

— Easier to understand and to audit

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

SOLUTION THREE

a)

Assets on 1 April 2019

	K	K
Bank balance	33,200	
Inventory	16,400	
Rent prepaid	800	
Receivables	25,200	
Machinery	50,400	
Liabilities on 1 April 2019		
Loan		20,000
Payables		9,600
Capital (balancing fig)	----------	96,400
	126,000	126,000

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

	'K'	'K'
Sales		161,800
Less returns inwards		(4,800)
Turnover		157,000
Less cost of sales:		
Opening inventory	16,400	
Purchases	75,800	
Less drawings of goods	(1,200)	
Less closing inventory	(12,800)	
		(78,200)
Gross profit		78,800
Add discount received		1,400
		80,200

Less expenses		
Rent (5,600 + 1,000 + 800)	7,400	
Insurance	5,800	
Wages	24,400	
Loan interest	1,600	
Repairs	1,200	
Electricity	3,000	
Irrecoverable debts written off	1,600	
Depreciation expense	16,800	
Total expenses		(61,800)
Net profit		18,400

Workings

1. Credit sales computation:

	'K'
Closing receivable balance	20,000
Plus: irrecoverable debts w/o	1,600
Plus: receipts from customers	105,600
Plus credit notes issued (returns in)	4,800
Less dishonouredcheque	(1,000)
Less opening balance b/f	(25,200)
Equals: credit sales	105,800
Plus cash sales	56,000
Total sales	161,800

2. Credit purchases computation

Closing payables c/f	10,000
Plus: Payments to suppliers	74,000
Plus: discount received	1,400
Less: opening balance b/f	9,600
Equals purchases	75,800

c) i) Bank account

	Dr		Cr
	'K'		'K'
Balance b/f	33,200	trade payables	74,000
Cash banked	16,400	rent	5,600
Trade receivables	105,600	machinery	30,000
Balance c/f	25,200	insurance	5,800
		Interest on loan	1,600
		Wages	24,400
		Dishonouredcheque	1,000
	----------	Drawings	38,000
	180,400		180,400
		Balance b/d	25,200

ii) Cash account

	'K'		'K'
cash sales	56,000	bank	16,400
		electricity	3,000
		repairs	1,200
	---------	balance c/f	35,400
	56,000		56,000
Balance b/d	35,400		

SOLUTION FOUR

a) i) relevance

It is one of the fundamental qualitative characteristics of financial information. It states that financial information is relevant when it is capable of influencing the economic decisions of users by helping them evaluate past, present or future events or confirming as well as correcting their past evaluations.

Relevance of financial information can be affected by its nature and materiality (the threshold quality of information)

According to the conceptual framework, information is material if its omission or misstatement could influence the decisions of users.

ii) faithful representation

it is another fundamental qualitative characteristic that requires financial transactions to be presented according to their substance and economic reality and not merely according to their legal form.

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

iii) comparability

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

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

iv) understandability

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

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

It is assumed that users have:

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

v) Verifiability

-

b) i) MazubandMutinta’s appropriation account for the year ended 31 March 2020

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

ii)

Partners current accounts

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

SOLUTION FIVE

a) Adjusted Payables Control account

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

b) Reconciliation of list of payables to Control account

Balance per list of payables	241,320
Purchases mispost (2 x k1,314)	2, 628
Debit balances omitted	(25,700)
Cash purchase wrongly posted	30,500
Discount received omitted	(1,000)
Credit note omitted	(450)
Invoice overstated (K15,320 – K13,250)	(2,070)
Credit note reversal + invoice recording (46,000 x 2)	92,000
Debit balance listed as credit (K20,565 x 2)	(41,130)
Balance per adjusted control account	296,098

c)

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

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

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

d) Journal entries

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

SOLUTION SIX

a) Bonus issue is an issue of shares to existing shareholders for free, that is, they do not pay for the shares and the shares are issued in proportion to their existing holding. It is merely a way for the entity to capitalize its reserves and increase the number of shares in issue.

A rights issue is an offer by the entity to issue shares to current shareholders on a prorate basis in relation to their existing shareholding. Rights issues are made at less than their market value.

An entity that has expansion plans needs to make a rights issue as it raises cash for the entity whereas bonus issue would not raise the needed cash for expansion.

b) Musongole Plc.
Statement of profit or loss and other comprehensive income for the year ended 31 March 2020.

	'K'
Sales	1,038,300
Less cost of sales	(529,050)
Gross profit	509,250
Administrative expenses	(222,300)
Distribution costs	(54,000)
Operating profit	232,950
Finance cost	(30,000)
	172,950
Corporation Tax	(54,000)
Profit for the year	118,850
Other comprehensive income:	
Revaluation surplus	15,000
Total comprehensive income	133,950

c) Musongole's
Statement of changes in equity for the year ended 31 March 2020

	Preference Share Capital	Equity share capital	share premium	revaluation reserve	retained earnings
	'K'	'K'	'K'	'K'	'K'
Balances b/f	210,000	600,000	180,600	-------	(60,000)
Issue of shares	-------	900,000	3,600,000	-------	--------
Toyal comprehensive Income				15,000	133,950

Dividends paid	--------	----------	---------------	--------	(121,800)
Balances c/f	210,000	1,500,000	3,780,600	15,000	(47,850)

WORKINGS

1)

	Cost of sales Administrative	Distribution	
	'K'	'K'	'K'
Per trial balance	------	54,000	134,700
Opening inventory	105,000		
Purchases	498,300		
Closing inventory	(153,000)		
Depreciation:			
Buildings (5% x 300,000)			15,000
Plant & equipment			
(10% x 787,500)	78,750		
Motor van (20% x 372,000)			74,400
Profit on disposal	----------	---------	(1,800)
	529,050	54,000	222,300

2) Depreciation of motor van

Cost brought forward	420,000
Less disposal	(48,000)
Cost c/f	372,000

3) Profit or loss on disposal

	'K'
Cost of disposed motor vehicle	48,000
Less accumulated depreciation	(28,800)
Carrying amount	19,200
Profit on disposal	1,800
Proceeds	21,000

4) Rights issue of shares:

No of existing shares = K600,000/K1 = 600,000 shares
Rights issue = 600,000 shares/2 shares x 3 shares = 900,000 shares

To share capital = 900,000 shares x k1 = K900,000

To share premium = 900,000 shares x K4 = K3,600,000

5) Total final dividends paid:

	ordinary	preference
Ordinary interim per trial balance	30,000	8,400
Final declared (5% x 1,500,000 [600+900])	75,000	8,400
Total paid and payable	105,000	16,800

END OF SOLUTIONS

Zambia Institute of Chartered Accountants

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.2: BUSINESS STATISTICS

WEDNESDAY 24 JUNE 2020

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 to you. **Request for one if not given by the Invigilators**.

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

SECTION A – (COMPULSORY)

Attempt all the ten (10) multiple choice questions.

<u>QUESTION ONE</u>

Each of the following questions has only ONE 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 If the odds ratio favouring an event is 4:5, the probability of an event occurring is:

A. $\frac{5}{9}$
B. $\frac{4}{5}$
C. $\frac{4}{9}$
D. Indeterminate

(2 marks)

1.2 Which of the following is not a measure of central location of a set of numerical data?

A. Mean
B. Median
C. Mode
D. Variance

(2 marks)

1.3 The summary statistics of the data for monthly output, x , and labour cost, y , of a factory.

Monthly output(tons $\times 10^3$)	68	76	80	72	83	92	89	87
Labour cost ($K \times 10^3$)	52	55	61	54	66	87	79	70

Calculate Pearson's correlation coefficient r.

A. -0.95
B. 0.90
C. 0.95
D. 1

(2 marks)

1.4 Data that is collected by someone from another one other than the user is called:

A. Primary data
B. Secondary data
C. Continuous data
D. Discrete data

(2 marks)

1.5 A new tax law is expected to benefit "middle income" families those with incomes between K20 000 and K30 000. If family income is normally distributed with mean K25 000 and variance K10 000 000, what percentage of the population will benefit from the law?

A. 61.7%
B. 19.15%
C. 38.3%
D. 30.85%

(2 marks)

1.6 How does the computation of a sample variance differ from the computation of a population variance?

A. μ is replaced $\bar{x}$
B. N is replaced by $n-1$
C. $N$is replaced by n
D. A and B but not C

(2 marks)

1.7 The frequency below shows the distribution in a sample mixed nuts.

Brazil	5
Walnuts	8
Almonds	7
Chestnuts	12
Cobnuts	8

What fraction of the nuts were Walnuts?

A. $\frac{3}{5}$
B. $\frac{1}{8}$
C. $\frac{1}{5}$
D. $\frac{2}{5}$

(2 marks)

1.8 The scores of the mathematics examination results at Lukashya Trades for 12 students is as follows:

65	90	57	71	57	83	59	82	66	70	82	90

Calculate the mean score to the nearest whole number.

A. 73
B. 72
C. 82
D. 872

1.9 A sample of five firms showed the following percentage changes in earnings per share in the current year compared with the previous year: 17, 16, 20, 14, 25. Compute the standard deviation of this set of sample results of earnings per share.

A. 4.27
B. 18.40
C. 17
D. 92

(2 marks)

1.10 Which of the following measures is affected by extreme values?

A. Variance
B. Median
C. Mode
D. Quartile deviation

(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.

QUESTION TWO - (COMPULSORY)

(a) A firm specialised in banking introduces village banking. Community members are enrolled to contribute funds towards village banking. The specialised firm manages the fund and re-invest the money through various community based projects attracting more funding from other interested organisation. The following data review the income (in thousand kwacha) made by the village banking firm in the years 2016, 2017, and 2018 as follows:

Source	Income per year		
	2016	**2017**	**2018**
Interest	K350	K300	K220
Commission income	K850	K900	K500
Other income	K600	K450	K600

(i) Present this data in a bar chart. (5 marks)

(ii) What was the total amount obtained in the year 2018? (3 marks)

(iii) What percentage of the total income was obtained from interest? (3 marks)

(b) A sample of ten filling stations showed variations in prices of unleaded petrol. The following were prices for a liter of unleaded petrol in Zambian kwacha:

10	14	17	13	12	16	19	16	10	16

Calculate each of the following:

(i) The average value of a liter of unleaded petrol (2 marks)
(ii) The range (2 marks)
(iii) The median (2 marks)
(iv) Standard deviation (3 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Index of output of coal mining in Maamba 2015 – 17
(2012=100)

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2015	100	93	85	74
2016	96	83	72	88
2017	92	83	68	88

By means of a moving average, estimate the trend and seasonal movements. (12 marks)

(b) A proposal, to put more emphasis on improved superannuation rather than increases, was put by the union executive to the members. The following results were received:

Opinion				
Members	In favour	Opposed	Undecided	Total
Skilled	900	300	350	1,150
Unskilled	200	700	250	2,700
Total	1,100	1,000	600	2,700

Calculate the probability that a member selected at random will be:

(i) Skilled and in favour of the proposal; (2 marks)
(ii) Opposed; (2 marks)
(iii) Either skilled or in favour of the proposal. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The table below shows the Chief executive officer (CEO) compensation, industry classification, annual sales, and the CEO compensation versus shareholder return rating data for 10 companies. A CEO compensation versus shareholder return rating of 1 indicates that the company is among the group of companies that have the best ratio of CEO Compensation to shareholder. A rating of 2 indicates that the Company is similar to companies that have a very good, but not the best, ratio of CEO compensation to shareholder return. Companies with the worst ratio of CEO compensation to shareholder return have a rating of 5.

Company	CEO Compensation (K1000s)	Industry	Sales (K million)	CEO Compensation Vs Shareholder Return Rating
Barclays	9,866	Banking	8,800	5
Coca Cola	4,654	Beverages	23,957	5
Toyota (Z) Ltd	2,375	Automotive	238,219	1
Intel	3,184	Electronics	9,782	3
Motorola	2,736	Electronics	26,963	4
Mission Press	2,708	Publishing	3,821	4
Sears	4,095	Retailing	60,838	3
Zamtel	2,692	Telecomm	21,368	3
Shoprite	2,145	Retailing	9,498	2
Stanbic	3,125	Banking	5,854	2

(i) How many elements are in this data set? (1 mark)

(ii) How many variables are in this set? (2 marks)

(iii) Which variables are quantitative or qualitative? (4 marks)

(b) The data given below is a sample of numbers (in thousands) of farms in each of the 50 districts of Zambia in the year 2000, given in order of increasing number of farms.

2	2	3	4	4	5	5	7	8	9
9	10	10	15	15	18	22	25	25	28
29	34	37	37	38	39	40	43	47	50
51	51	53	58	58	62	71	72	74	79
80	83	88	89	94	97	100	110	116	161

Compute the following:

(i) the median (2 marks)

(ii) the mean (2 marks)

(iii) the standard deviation (4 marks)

(iv) Inter – quartile range

(3 marks)

(v) Quartile deviation (2 marks)

[Note : $\sum x^2 = 168\,925, \quad \sum x = 2267$]

[Total: 20 Marks]

QUESTION FIVE

(a) The amounts of time spent by a random sample of 200 students studying in the week before the final examination are summarized in the table below:

Study time (Hours)	Number of students (f)
0 – 10	40
10 – 20	60
20 – 30	70
30 – 40	30

Determine

(i) The mean, (3 marks)

(ii) The Standard deviation (3 marks)

(iii) The median, (3 marks)

(iv) The mode, (3 marks)

(v) The coefficient of variation. (2 marks)

(b) A company services home refrigerators. It is known that the period of time taken for service calls follows a normal distribution with average of 50 minutes and variance of 100.

(i) What is the probability that a single service call takes more than 55 minutes.

(2 marks)

(ii) What is the probability that a single service call take between 45 and 65 minutes? (4 Marks)

[Total: 20 Marks]

QUESTION SIX

(a) A sample of eight employees is taken from the production department of a light engineering factory. The data below relate to the number of weeks' experience in the wiring of components, and the number of components which were rejected as unsatisfactory last week.

Employee	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Week of experience(X)	5	6	8	10	11	12	13	15
Number of rejects (Y)	22	23	16	19	15	15	12	14

(i) Calculate a coefficient of correlation for the data and interpret its value. (8 marks)

(ii) Calculate the coefficient of determination and interpret its value. What is your conclusion about the relationship between week of experience and the number of rejects? (3 marks)

(b) A market survey of 600 people found the following facts about the ability to recall a television commercial for a product and the actual purchase of the product.

	Recalled	**Did Not Recall**	**Total**
Purchased	100	40	140
Did Not purchase	200	260	460
Total	300	300	600

Let R denote the event that a person could recall the television commercial, and let P denote the event that a person purchase the product.

(i) What is the probability that a person who recalled seeing television commercially actually purchased the product? (4 marks)

(ii) Are R and P independent events? Use the values in the table to explain. (3 marks)

(iii) Does the commercial seem to help sell the product? (2 marks)

[Total: 20 Marks]

END OF PAPER

SECTION A

SOLUTION ONE

1.1 C

If the odds in favour are 4:5 then $P(event\ occuring) = \frac{4}{9}$

1.2 D

1.3 C

$$r = \frac{8(43087) - 647(524)}{\sqrt{[8(52827) - (647)^2][8(35432) - (524)^2]}} = \frac{5668}{5965.078373} \approx 0.95$$

1.4 B

Secondary data is collected by someone who is someone other than the user.

1.5 C

$$\mu = 25000, \sigma = \sqrt{10\ 0000} = 3162.27766$$

$$P(20000\ < X < 3000) = P(-1.58 < Z < 1.58)$$
$$0.4429 + 0.4429 = 0.8858$$

1.6 B

N is replaced by $n - 1$

1.7 C

Fraction of the nuts which walnuts $\frac{8}{40} = \frac{1}{5}$

1.8 B

$$\bar{x} = \frac{872}{12} = 72.67 \approx 73$$

1.9 A;

$$SD = \frac{1}{n-1}\sqrt{(x-\bar{x})^2}$$

$$= \frac{1}{4}(\sqrt{(17-18.4)^2 + (16-18.4)^2 + (20-18.4)^2 + (14-18.4)^2 + (25-17.4)^2} = 4.27$$

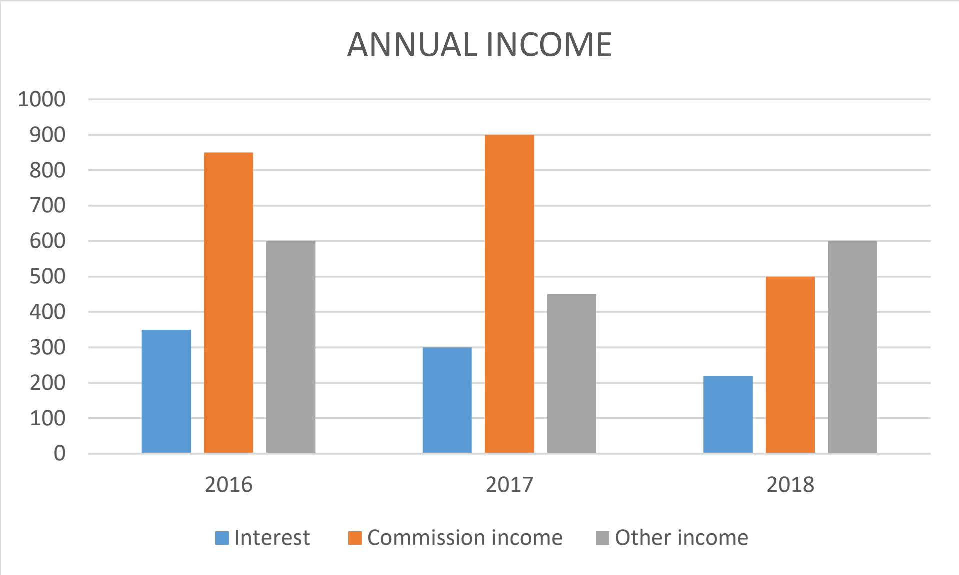
The correct answer is A

1.10 A; the Variance.

SECTION B

SOLUTION TWO

a. i. the bar chart is as follows



ii. Total for 2018 is K220 + K500 + K600 = K1320

iii.

Source	Income per year			
	2016	**2017**	**2018**	**TOTAL**
Interest	K350	K300	K220	870
Commission income	K850	K900	K500	2250
Other income	K600	K450	K600	1650
				4770

Percentage from interest was $\frac{870}{4770} \times 100 = 18.23\%$

b. i.

10	14	17	13	12
16	19	16	10	16

Average $= \frac{10+14+17+13+12+16+19+16+10+16}{10} = \frac{143}{10} = 14.3$

ii. Range $=\max value - minimum\ vale = 19 - 10 = 9$

iii. Median

10,10,12,13,14,16,16,16,17,19

Md = $\frac{14+16}{2} = 15$

iv. Standard deviation

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

$$s = \sqrt{\frac{2127 - 10(14.3)^2}{10-1}}$$

$$s = \sqrt{\frac{82.1}{9}}$$

$$s = 3.02$$

SOLUTION THREE

(a)

Year	Quarter	output(y)	$\hat{y}$	$y - \hat{y}$
2015	1	100		
	2	93		
	3	85	87.5	-2.5
	4	74	85.75	-11.75
2016	1	96	82.875	13.125
	2	83	83.0	0
	3	72	84.25	-12.25
	4	88	84.5	3.5
2017	1	92	84	8.0
	2	83	82.75	0.25
	3	68		
	4	88		

	I	II	III	IV
2015			-2.5	-11.75
2016	13.125	0	-12.25	3.5
2017	8.0	0.25		
Average seasonal variation	10.6	0.1	-7.4	-8.3
Adjusted seasonal variation	11.9	1.4	-6.2	-7.1

(b)

(i) $P(skilled\ and\ in\ favour\ of\ proposal) = \frac{900}{2700} = \frac{1}{3} \approx 0.3333$

(ii) $P(opposed) = \frac{1000}{2700} = \frac{1}{27} \approx 0.037$

(iii) $P(skilled\ or\ in\ favour) = P(skilled) + P(in\ favour) - P(Skilled\ \cap Favour)$

$$= \frac{1550}{2700} + \frac{1100}{2700} - \frac{900}{2700} = \frac{1750}{2700} = \frac{35}{54} \approx 0.6481$$

SOLUTION FOUR

(a)

(i) 10 elements

(ii) 4 variables

(iii) Industry and compensation Vs. Shareholder Return Rating Qualitative; CEO compensation and sales, Quantitative

(b) (i) The median (M) is between the 25th and the 26th observations.

$$M = \frac{38+39}{2} = 38.5$$

(ii) $\bar{x} = \frac{\sum x}{n} = \frac{2267}{50} = 45.34$

(iii) $S^2 = \frac{\sum fx^2 - \frac{(\sum xf)^2}{\sum f}}{\sum f - 1} = \frac{168925 - \frac{(2267)^2}{50}}{49} = 1349.78$

$S = \sqrt{1349.78} \approx 36.74$

(iv) Position of $Q_1 = 38th$ observation $Q_1 = 10$ and position of $Q_3 = 38th$ obsrevation $Q_3 = 72$

IQR= $Q_3 - Q_1 = 72 - 10 = 62$

(v) Quartile deviation (QD)=$\frac{Q_3 - Q_1}{2} = \frac{62}{2} = 31$

SOLUTION FIVE

Study time (Hours)	Mid point x	Number of students (f)	f.(x)	$f(x-\bar{x})^2$	Commulative frequency
0 – 10	5	40	200	8410	40
10 – 20	15	60	900	1215	100
20 – 30	25	70	1750	2117.5	170
30 – 40	35	30	1050	7207.5	200
TOTAL		200	3900	18950	

i. The mean $= \frac{1}{n}\sum f.x = \frac{1}{200}(3900) = 19.5$

ii. The standard deviation = $\sqrt{\frac{f(x-\bar{x})^2}{n-1}}$

$$= \sqrt{\frac{18950}{200-1}} = 9.76$$

iii. The median

$median = l_k + w/f_k(\frac{n}{2} - cf_{k-1}).$

$= 10 + 10/60(\frac{200}{2} - 40)$

$= 20$

iv. The mode

$mode = l_k + w\frac{f_k - f_{k-1}}{f_k - f_{k+1}}$

$mode = 20 + (10)\frac{70-60}{70-30}$

$mode = 20 + 2.5 = 20.25$

$CV = \frac{s}{\mu} = \frac{9.76}{19.5} = 0.5$ x 100 = 50%

b). i. $Z = \frac{X-50}{10}$

$$P\left[\frac{X-50}{10} < \frac{55-50}{10}\right]$$
$$= P[Z < 0.5]$$
$$= 0.2420$$

ii.

$$P\left[\frac{X-50}{10} < \frac{X-50}{10} < \frac{x-50}{10}\right]$$
$$= P\left[\frac{45-50}{10} < \frac{X-50}{10} < \frac{65-50}{10}\right]$$

$$P[-0.5 < Z < 1]$$
$$P[Z > -0.5) - P[Z > 1]$$
$$= (1 - 0.3085) - 0.1587$$
$$= 0.5328$$

SOLUTION SIX

(a)

(i) $r = \frac{8(1277)-(80)(136)}{\sqrt{[8(884)-(80)^2][8(2420)-(136)^2}} = \frac{10216-10880}{\sqrt{(672)(864)}} = -0.87141809 \approx -0.87$

There is a strong negative linear relationship between week of experience and the number of rejects.

(ii) $r^2 = (-0.87141809)^2 \approx 0.759$. Therefore 75.9% of the variability in y can explained by the independent x variable.

(b)

(i) The required probability is given by $P(P|R) = \frac{100}{300} = \frac{1}{3} \approx 0.3333$

(ii) By definition R and P independent events if and only any one of the following holds
$P(P|R) = P, P(R|P) = R$ and also $P(P \cap R) = P(P)P(R)$
Since $(P|R) = \frac{1}{3} \approx 0.3333$ and $P(P) = \frac{140}{600} = \frac{7}{30} \approx 0.2333$ are not equal R and P are not independent.

(iii) Yes, since the events are dependent, then commercial seem to help sell the product.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.3: BUSINESS ECONOMICS

TUESDAY 23 JUNE 2020

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
   Section B: One (1) compulsory scenario question.
   Plus Four (4) scenario questions. Attempt any Three (3) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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

Section A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

<u>QUESTION ONE</u>

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

1.1 In a circular flow of income, which one of the following is NOT an injection?

A. Exports
B. Imports
C. Investment
D. Government spending

(2 marks)

1.2 In a layman's language, inflation is defined as, 'too much money chasing too few goods'. Which of the following causes of inflation is described by the definition given above?

A. Demand pull factors
B. Excessive growth of money supply
C. Cost push factors
D. Hyperinflation

(2 marks)

1.3 According to Adam smith, which of the following canons of taxation means that a tax should be based on the people's ability to pay?

A. Equity
B. Certainty
C. Convenience
D. Economy

(2 marks)

1.4 The value of price elasticity of demand for a product whose demand is perfectly elastic is ………………………….

A. 0
B. ∞ (infinite)
C. 1
D. Less than 1

(2 marks)

1.5 Which of the following statements is/are TRUE about a perfect competitor that is maximizing profits:

(i) MC = P
(ii) TR = TC
(iii) MR = MC
(iv) MR > MC

A. (i) and (ii)
B. (i), (ii) and (iii)
C. (i) and (iii)
D. Only (iii)
(2 marks)

1.6 In a banking system as a whole in Zambia, if one bank receives a cash deposit of K10, 000 and the required reserve ratio or cash ratio is 16%, find the increase in money supply.

A. K62, 500
B. K52,500
C. K1,600
D. K11,9051

(2 marks)

1.7 To economists, the main difference between the 'short-run' and the 'long-run' are that:

A. The law of diminishing returns applies in the long run and not in the short run
B. In the short run all resources are fixed, while in the long run all resources are variable
C. In the long run all resources are variable, while in the short run at least one resource is fixed
D. Fixed costs are less important to decision making in the long run than they are in the short run

(2 marks)

1.8 Which one of the following goods/products is most likely to be price inelastic?

A. Sugar
B. Fuel
C. Food
D. Tuition fees

(2 marks)

1.9 Refer to the table below:

Price (K)	Quantity demanded
1	50 = 50
2	40 = 80
3	30 = 90
4	20 = 80
5	10 = 50

What is the price with the maximum total revenue?

A. K2
B. K3
C. K4
D. K5

(2 marks)

1.10 Which of the following would normally result from a fall (depreciation) in the kwacha exchange rate (other things being equal)?

A. A fall in Zambia's rate of inflation
B. A rise in the volume of Zambia's exports
C. A worsening in Zambia's balance of payments
D. A rise in the volume of imports

(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).

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

Retailers in Zambia have embraced the notion of **Black Friday** where they lower the prices of their goods and services in anticipation of increased sales volume and hence total revenue. This is based on the assumption that customers respond strongly to a change in price. However, they also know that other factors can change demand and supply for goods and services.

(a) Using supply and demand analysis, graphically explain the effect of each of the following events on the market price and quantity traded for pork:

(i) An outbreak of pig disease (swine fever) leading government to have a large proportion of the country's stock of pigs destroyed. (5 marks)

(ii) A fall in the price of beef. (5 marks)

(b) Suppose that an increase in the price of product B from K25 to K30 reduces the quantity of the product sold from 20,000 to 10,000 units and the price is inversely related.

(i) Calculate the price elasticity of demand for the product using the midpoint formula. (6 marks)

(ii) Is demand for product B elastic or inelastic? Explain your answer. (4 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

During the 2018 Teacher Recruitment exercise, 27,000 qualified teachers applied for teaching jobs but only 2009 applicants were successful. The Teaching Council of Zambia (TCZ) stated that consideration was given to those teachers who graduated in 2015 or before 2015. All unsuccessful applicants are qualified as they hold TCZ membership. This is just a tip of an iceberg as far as the problem of unemployment is concerned in Zambia.

(a) Define the term 'unemployment rate'. (2 marks)

(b) Briefly explain any four (4) different types of unemployment. (8 marks)

(c) Explain any three (3) consequences of unemployment to a country like Zambia. (6 marks)

(d) Briefly explain any four (4) options that the Zambian government can use to create jobs or reduce unemployment. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Shortage of formal employment is the main reason why Zambian youths venture into entrepreneurship. They set up their own small businesses as sole traders. This form of business has its own advantages and disadvantages. One of the perennial problems in entrepreneurship in Zambia is that of limited access to credit facilities or lack of seed capital.

(a) List any five (5) advantages of sole trader form of business organization. (5 marks)

(b) List any five (5) disadvantages of sole trader form of business organization. (5 marks)

(c) Explain any four (4) principal sources of short term capital/funds for a business. (8 marks)

(d) Outline any two (2) reasons why encouraging graduates to venture into entrepreneurship is important to the Zambian economy. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

Fiscal sustainability is critical for macroeconomic stability and sustainable growth. Large fiscal imbalances and rapid increase in government's debt since 2011 have raised concerns about the sustainability of fiscal policies in Zambia. After several years of prudent fiscal stance (i.e., average deficit of 1.6% of GDP in 2007-11), loose fiscal policies in the form of excessive spending in the face of relatively low and flat revenues began emerging in 2012 and by 2018 the fiscal deficit reached 7.4% of GDP. To finance the growing fiscal deficit, the government relied heavily on external sources of finance resulting in an increase in public external debt from 20% of GDP at end-2014 to 43% of GDP at end-2015 but later declined to 34.7% of GDP as at end-June 2018 (IMF Country Report, 2017; 2019 Budget Speech). In order to reduce the fiscal deficit and public external debt, government proposed to cut expenditure and increase domestic resource mobilization in 2019.

Required:

(a) Briefly explain any three (3) negative consequences of high fiscal deficits. (6 marks)

(b) Outline any two (2) debt instruments issued by the Government of Zambia to finance its fiscal deficit. (4 marks)

(c) Name the institution which is in charge of issuing debt instruments on behalf of the Government of Zambia. (2 marks)

(d) Explain any four (4) disadvantages of high public external debt in developing countries such as Zambia. (8 marks)

[Total: 20 Marks]

QUESTION SIX

In recent years, there has been a proliferation of financial institutions such as commercial banks, micro-finance institutions and insurance companies in Zambia which has led to numerous financial innovations by both depository and non-depository institutions in their quest to enhance their intermediary roles. These innovations have most undoubtedly been seen as a consequence of the desire by financial institutions to grow and increase their market share sustainably. The growth of the financial sector as triggered by the economic reforms implemented in the 1990s has opened up significant opportunities for the private sector and this has contributed significantly to Zambia's Gross Domestic Product (GDP).

Required:

(a) Distinguish between a depository and non-depository financial institution, giving an example of each. (4 marks)

(b) Define the term GDP. (2 marks)

(c) Explain any four (4) functions of financial intermediaries. (8 marks)

(d) Outline three (3) ways through which the Zambian consumers have benefited from the growth in the financial sector. (6 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SECTION A: MULTIPLE CHOICE

SOLUTION ONE

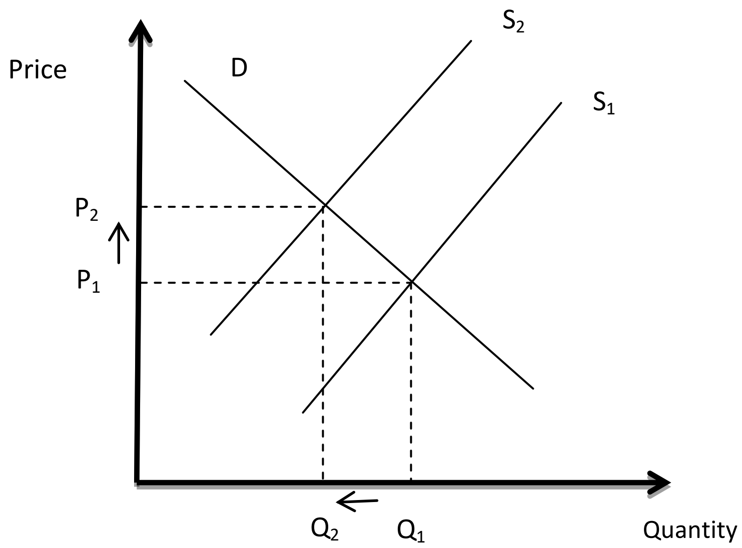
1.1	**B**
1.2	**B**
1.3	**A**
1.4	**B**
1.5	**C**
1.6	**B**
1.7	**C**
1.8	**C**
1.9	**B**
1.10	**B**

SECTION B

SOLUTION TWO

a) (i) An outbreak of a pig disease or swine fever and ultimate action by government to destroy a large proportion of the country's stock of pigs reduces pork in the country and hence a reduction in supply. Given the initial demand curve D and supply curve S for pork in the diagram below, the market is in equilibrium with price P1 and quantity traded Q1. A reduction in the country's pig stock will cause the supply curve for pork to shift left wards to S1. This leads to an increase in the market price from P1 to P2 and decreases to the quantity traded of pork from Q1 and Q2.

Note: It is also possible that demand for pork might shift to the left if consumers become concerned about eating pork as a result of the swine fever. The overall effect on quantity would still be negative.



(ii) Beef and pork are substitutes. Therefore a fall in the price of beef would reduce demand for pork.

Given the initial demand curve D and Supply S for pork in the diagram below, the market is in equilibrium at price P1 and quantity traded Q1. A fall in the price of beef will cause demand curve for pork to shift left wards to D1.

This leads to a decrease in both the market price and quantity demanded of pork, which at the new equilibrium are given by P2 and Q2 respectively.

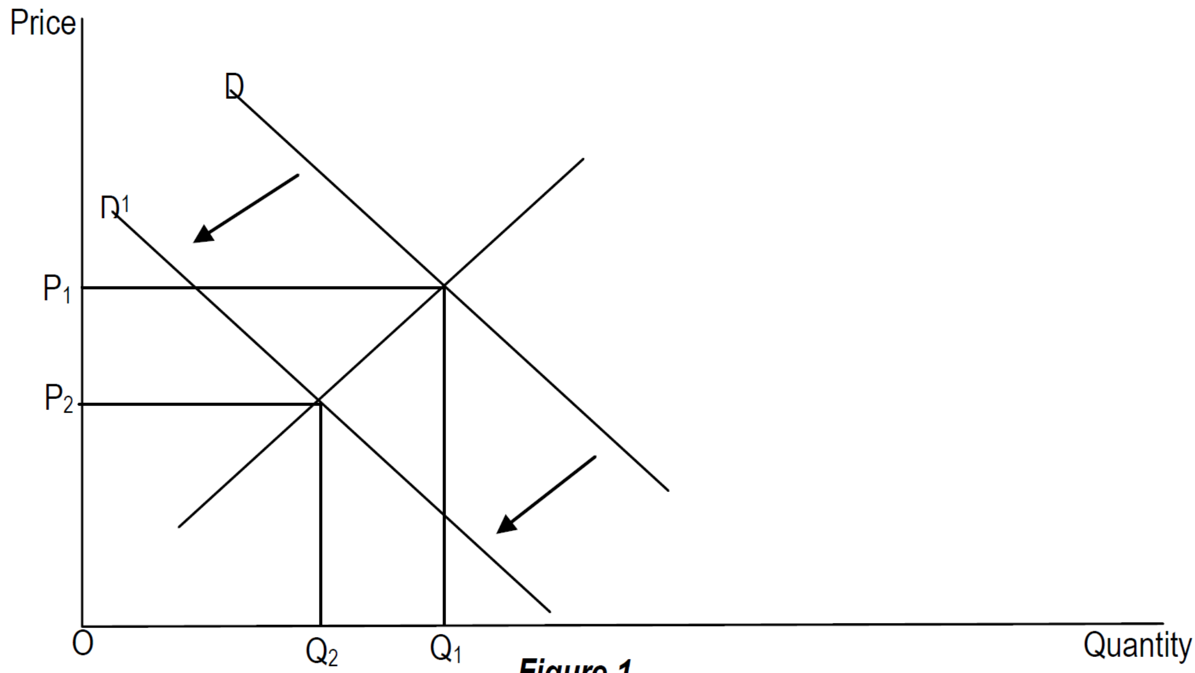


Figure 1

b) (i) The **price elasticity of demand (PED)** is a measure of the sensitivity of the quantity which will be demanded by consumers of a good to changes in the price at which it is available to them.

Change in quantity demanded = 10, 000 – 20, 0000 = **-10,000**

Average quantity demanded = $\frac{10,000 + 20,000}{2}$ = **15,000**

Change in price = 30 – 25 = **5**

Average price = $\frac{30 + 25}{2}$ = **27.5**

$$PED = \frac{percentage\ change\ in\ Quantity\ demanded}{Percentage\ change\ in\ price}$$

$$= \frac{\%\Delta Q}{\%\Delta P} = \frac{33\%}{9\%} = \mathbf{3.7}$$

(ii) Demand is elastic since the elasticity value is greater than 1. Buyers are very responsive to a change in the price of product A.

SOLUTION THREE

a) Unemployment rate is the percentage of people in the labour force who are without jobs and are actively seeking jobs

b) The following are the types of unemployment:
   - **Frictional unemployment** – this type of unemployment is as a result of people being in between jobs. It is mainly caused by people leaving their current jobs in search of better ones. Since there is a time lag between leaving a current job and getting one the number of people unemployed by this method would be high especially where mobility is encouraged.
   - **Structural unemployment** – This is unemployment caused by long term changes in the conditions of the industry, for example, mining
   - **Cyclical unemployment** – This is unemployment caused by deficiency in aggregate demand. It is called the Keynesian unemployment. When the economy is in a recession the services. Employers seeing that there isn't adequate demand for their goods and services will cut down the number of employees to reduce costs. This will increase the number of cyclically unemployed people.
   - **Seasonal unemployment** –This is unemployment caused by changes in seasons. Changes in seasons will lead to more demand for worker in certain seasons and less in the others.
   - **Regional Unemployment –** This is unemployment concentrated in one region
   - **Residual or voluntary unemployment** – This is where people are unwilling to work at existing wage rates
   - **Technological unemployment** – This is unemployment due to changes in production techniques.

c) The following are the consequences of unemployment:
   - **Lost output** – the nation has loses the output of goods and services that the unemployed would have produced. This means that when unemployment is high the nation will be operating inside its production possibilities curve. This indicates loss of potential output which could be realized at full employment.
   - The government losses the **tax revenue** that the unemployed people would have paid in the form of PAYE
   - High levels of unemployment lead to **low living standards** of the unemployed which may even affect the next generation creating a circle of poverty.
   - High levels of unemployment have also been attributed to be responsible for an increased number of admissions to mental hospitals, prisons, crime rates, drug abuse and other related vices.
   - There is loss of human capital. Trained people who do not find jobs may lose their skills. Alternatively, this may lead to brain-drain as the unemployed migrate to other countries in search of employment opportunities.
   - Unemployment also leads to increase in inequalities in income distribution

d) The government has several options to create jobs or reduce unemployment namely:
   - Spending more money directly on jobs
   - Encouraging growth
   - Encouraging training in job skills
   - Offering gran assistance to employers
   - Encouraging labour mobility

- Reviewing minimum wage regulations, to assess whether the level set for the minimum wage is preventing employers taking on new staff.

SOLUTION FOUR

a) The following are some of the advantages of this type of business:-

- One of the chief advantages lies in the self-interest of the owner. He has every incentive to make his business as efficient as possible by minimizing or preventing waste. He is his own 'boss' and devote as much of his time and energy as much as he wishes to his business.
- There is no need for him to consult anyone else when embarking upon a new line of policy his decisions can be put into effect immediately without the necessity of having to convince other that they are in the best interest of the business and so attain a high standard of efficiency. This is because he buys needed materials, hires help and undertakes to pay the bill. The profits belong to the owner and are shared by no one – except the government which collects income taxes when the owner declares the profits as part of his personal income.
- The smallness of the business allows the sole trader to maintain a closer and more personal contact with both his employees and his customers.
- Sole trader is a convenient type of business unit where special lines are being produced for a limited market.
- A sole proprietor enjoys a certain degree of privacy. This is because he is not obliged to declare the balance sheet at the end of the trading year to anyone as opposed to corporations.
- This form of business is also the easiest to start and the easiest to wind up, if things are not promising!

b) Sole trade is simple and flexible, but have the following major disadvantages:
- **A proprietor has unlimited liability for all debts of the business**. This means that if the business runs into difficulty, the owner can lose more than his initial investment.
- **There is a problem of continuity**. When a single proprietor dies, the business may also die, although an heir may take over the shop or farm and continue to run it.
- **There is also problem of financing growth**. Sole traders have difficulty borrowing the money needed for expansion. Because of the risk that the business will be unable to repay, banks are reluctant to lend large amounts to a struggling new enterprise.
- **This type of business is unsuitable for a form of production where economies of scale are available**, that is where the costs fall as the volume of production increases. It cannot enjoy the economies of large-scale production.
- **No first-rate business can be built up in this way.**
- **Also, one man feels very much handicapped in looking after the many sides of his business.**

c) The following are the principal sources of short term capital for a business:
- **Short Term Bank Loan:** it can be accessed by both account and non-account holders. It can be used for both working capital and fixed assets. Security is normally required for the facility. There is an arrangement fee charged by the lenders.

Interest rate charged is normally fixed. Interest is charged on the whole amount agreed upon whether used or not. If any adjustment is made to increase the amount a fresh application is required.

- **Bank Overdraft:** this is available to current account holders only. Interest is charged on the outstanding balance that is on the actual amount overdrawn. Interest is normally floating or variable. The overdraft is payable on demand. Generally no security is required for the facility. it is highly flexible as long as the amount needed fall within the agreed overdraft limit, that is there is no need for fresh application when the overdraft limit is not exceeded
- **Trade Creditors:** This is a free spontaneous source of funding. It is spontaneous because if depends on the volume and value of credit, purchases, the higher the volume and value of credit purchases the higher the amount of funding from this source. It is free because there is no interest charged as it arises from the normal trading activities. It is the major source of funding for super markets.
- **Accruals:** Accruals represent the liabilities which have already been incurred and not yet paid for: The common sources here include salaries delayed for a month and a tax liability to ZRA which are paid quarterly semi-annually and sometimes annually, thus the company is able to borrow from the employees and ZRA at no cost.
- **Delayed Payments:** Delayed payments as a source of finance involves the exceeding the specified period for settlement. Delayed payments must be at the consent of the other party. E.g. the supplier. It is a free source of fiancé and the company can have huge amounts available for other purposes, however delaying payment namely have negative effects to the company for example suppliers may no longer be interested in extending credit to the company and the company may also lose out it may receive bad publicity.
- **Factoring:** This is financing from the debtors accounts; the factor will make an advance payment to the firm and change a certain percentage as commission. The factor will then undertake sales ledger administration monitoring of debtors accounts as well as actual collection from the debtors. The factoring service may be with or without recourse. The major advantage with company is that it is able to receive immediate cash from credit sales as well as some cash servings involved in sales ledger administration and collection cost. The major drawback is that the debtors will perceive that the company is experiencing a financial crisis for it to hand the debtors to the factor.
- **Invoice Discounting:** This is similar to factoring except that the company continues with its responsibilities with sales ledger administration and debt collection.
- **Commercial Paper:** This is a short term unsecured source of funding involving large corporations, a large corporation can borrow immediate funds by issuing commercial paper which is sold to other corporations, the company issuing commercial paper must be of good credit standing.
- **Banker's Acceptances (Bills of exchange):** This is a source of funding involving discounting bills of exchange. Banks are able to accept the bill pay an amount less than the face value and recover the amount with commission when the bill matures.

- **Retained earnings:** An existing business can also rely on retained earnings to finance short term requirements. This is the profit made in previous years but not used up by the business.

d) The role that sole traders play in Zambia cannot be overemphasized. Small businesses are a;
   - Source of employment for many,
   - source of income,
   - Source of revenue for government through taxation and fees,
   - and its means of reducing poverty.

SOLUTION FIVE

(a) **Reduced levels of credit for private sector growth** – as government will resort to borrowing from the domestic markets. Since the government is considered as a less risky borrower, financial institutions will prefer lending to government than the private sector.

Higher inflationary pressures – high fiscal deficits result in high inflation which creates uncertainty in the economy.

Volatility in exchange rate – in a case where the deficit is financed through external debt, it puts pressure on the exchange rate as debt repayments have to be made in foreign currency. Such consequences affect the poorest members of society disproportionately.

(b) **i) Government Bonds** – A government bond is a long-term debt instrument issued by the Government in order to borrow money from the purchasers of the instrument, generally with a promise to pay periodic interest payments and to repay a face value on maturity date.

ii) Treasury Bills – A treasury bill is a short-term debt instrument that the Zambian Government issues in order to borrow money for a period of one year or less.

(c) The **Bank of Zambia** is in charge of issuing debt instruments on behalf of the Government.

(d) **High interest payments** made in foreign currency which exert pressure on the exchange rate.

Challenge to political freedom – external debt in most cases, is made available to the government having more often a political or diplomatic motive behind it. Generally, the lender country or institution starts meddling with the national or foreign policies of the debtor country, hence the challenge to political freedom.

Hampers economic conditions – to repay, government resorts to more and more taxes which reduces the ability of the people to produce and save more because it brings nothing to them if the government fails to raise revenue from taxes; it adopts cheap monetary policies which may result in instability in the financial system of the nation.

National wealth flows out: if repaid in cash, valuable foreign exchange leaves the nation. If it is repaid in terms of goods and services, it will reduce the availability of these goods and services within the country and increase inflationary pressures in the economy.

SOLUTION SIX

(a) A depository financial institution is one that accepts deposits and makes loans whereas a non-depository institution is one that does not take deposits. An example of a depository institution is a commercial bank such as ZANACO; a micro-finance institution such as Express Credit is a non-depository institution.

(b) GDP is the market value of all final goods and services produced within the boundaries of a nation during a given period of time, usually a year.

(c) Functions of financial intermediaries

- **Encourage savings**: they are a safe and convenient place for savers to put money and to get a return.
- **Provide lending and credit**: borrowers can obtain credit to finance investment, homebuilding, and consumption.
- **Aggregation**: a financial intermediary can parcel up the small savings balances of many households and make them into larger loans, perhaps to business.
- **Maturity transformation**: individual households and firms may deposit their funds for only a few weeks which would be too short a time to make into a loan. However a financial intermediary will have a constant flow of short term deposits and therefore can lend for a longer time because if one depositor spends or withdraws their money there is a good chance the person receiving it will deposit it back into the same institution.
- **Risk transformation:** financial intermediaries will use expert knowledge and will invest funds widely in lots of investments. This spreads and manages risks.
- **Security of lender's capital**: Provided that the financial intermediary is itself financially sound, the lender or depositor's money will be very safe regardless of the losses incurred by the financial intermediary in its re-lending activities.

(d) **Benefits from the growth of financial sector**

- Variety of financial products to choose from;
- Affordable financial products due to competition;
- Easier access to financial services due to improved technology in the financial sector.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 26 JUNE 2020

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 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 gives the hierarchical order of the sources of law in Zambia?

A. Constitution, Legislation, Judicial Precedent, Common Law and Equity, Customary Law.

B. Acts of Parliament, Legislation, Case Law, Equity, Common Law

C. Customary Law, Constitution, Delegated Legislation, Constitutional Conventions.

D. Constitutional supremacy, parliamentary sovereignty, common law and equity, customary law.

(2 marks)

1.2 Which of the following must not be included on a statement of written particulars of employment?

A. Names of employer and employee

B. Date on which employment began.

C. Pay rate and intervals at which it is paid

D. Last salary scale of previous employment

(2 marks)

1.3 Which of the following remedies is **not** available for a breach of a contract to provide personal services?

A. Damages

B. A decree of specific performance

C. An injunction

D. An action for the price

(2 marks)

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

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

(2 marks)

1.5 Which of the following statements describes an attribute of incorporating a company?

A. Separate legal personality
B. Payment of tax
C. Holding of a statutory meeting
D. Acquisition of a Certificate of Incorporation

(2 marks)

1.6 Which of the following statements is/are **incorrect**?

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

A. (i) only
B. (ii) only
C. (i) and (iii)
D. (ii) and (iii)

(2 marks)

1.7 Which of the following types of resolutions requires a third of the votes to be passed?

A. Ordinary resolution only
B. Extra-ordinary resolution and special resolution
C. Ordinary resolution and special resolution
D. None of the above

(2 marks)

1.8 Which of the following statements is true?

A. The benefit of being a sole trader is that you have no personal liability for the debts of your business.

B. For organisations that have limited company status, ownership and control are legally separate.

C. Ordinary partnerships offer the same benefits as limited companies, but are usually formed by professionals such as doctors and solicitors.

D. Limited company status means that a company is only allowed to trade up to a predetermined turnover level in any one year.

(2 marks)

1.9 Which of the following statements contains the correct definition of a contract of sale.

A. This is acontract where the seller goods to the buyer.

B. This is a contract where the buyer can exchange goods for goods with the seller.

C. This is where one makes an offer and the other accepts unconditionally.

D. This is where the seller agrees to transfer the property in the goods to the buyer for money consideration known as the price.

(2 marks)

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

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

B. A partnership must have a written partnership agreement.

C. A partnership is subject to the Partnership Act.

D. Each partner is an agent of the firm.

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

<u>QUESTION TWO</u> -(compulsory question)

With the enactment of the Companies Act No. 10 of 2017, Hamabubu was happy to incorporate a new business with Patent and Companies Registration Agency on the 7 day of December, 2018. On the 14 day of March, 2019 Hamabubu received new consignment of goods which included a type of riffle blades which he displayed in his shop. The said blades had a price tag of K 130.00 each displayed on it.

On the 24 day June, 2019 Charly entered Hamabubu's shop and picked one of the riffle blades displayed therein.

Unknown to Hamabubu, there was a law restricting the sale of riffle blades without the authority of the Zambia Police Service through the Offensive Weapons Act. Section 17 (9) of the Offensive Weapons Act made it an offence to sale riffle blades to the public.

Hamabubu was arrested yesterday and will soon appear in court for offering to sale the said blades.

A student has approached you and has argued that the law of contract also provides for a scenario like that only that they are distinguished principles that apply.

Required:

(a) With reference to the above scenario, explain to Hamabubu on whether an offer existed in the given scenario. (8 marks)

(b) Assuming there was binding contract above, explain the four (4) major elements that validates a contract. (8 marks)

(c) Discuss the difference between criminal and civil law (4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Lewis runs a car delivery agency business from Nakonde and Chirundu for clients who would have bought vehicles from Japan, he strictly instructed his drivers not to carry passengers. However, one driver by the name of Malambo carried passengers and was involved in an accident. The employers deny liability.

Required:

Given the scenario above, advise Lewis on his legal obligation or liability. (4 marks)

(b) Explain any three (3) ways in which agency would come to an end. (6marks)

(c) Discuss what a pre-incorporation contract is, and in doing so, explain the rights and liabilities arising from such. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Mundia is employed as a pilot of XYZ ltd. Chisenga is employed as an engineering contractor engaged in carrying out excavations and installations at XYZ ltd. On 20 August 2017 at about 19:30 hours, the Plaintiff Mundia, while in the course of employment fell into an unlit and unguarded ditch excavated by the defendant Chisenga. The Plaintiff sustained severe injuries and suffered loss and damage. The defendant denied negligence and asserted that the plaintiff suffered wholly or in part by his own negligence. He pleads the defense ***volenti-non fit injuria***.

Required:

(a) Advise the defendant on whether he will succeed on his defense. (10 marks)

(b) Explain also to him any 2other defenses available. (6 marks)

(c) Define the term agency. (2 marks)

(d) Explain delegated legislation as a source of law in Zambia (2 marks)

[Total: 20 Marks]

QUESTION FIVE

Rose Limited, a company incorporated in Zambia, owns a dolls factory. The company's articles state that the company has been formed solely in order to produce and sell dolls and anything related to that particular business. The articles further provide that the Board must secure a shareholder resolution approving any contract to commit the company for more than K300,000.00. Annually, the Board of Directors approves a list of personnel authorized to enter into contracts on behalf of Rose Limited with third parties.

During its last meeting, the Board appointed Phiri as Managing Director of Rose Limited. Phiri then appointed Mwale as his Head of Sales. Phiri's first idea for the company is to produce and sell toy guns. He held a meeting with Mr. Dube the Managing Director of Vic Limited, a company that deals with the production of parts for toy guns. He tells him to negotiate the matter further with Mwale. Mwale subsequently enters into a contract committing Rose Limited to the purchase of K350,000.00 worth of parts for toy guns from Vic Limited. The Board discovers the existence of the contract only when Phiri presents it to them for ratification. Tom, a small shareholder, is furious about the production of toy guns. He believes that it is not compatible with the company values, that the price agreed is far too high and that Rose Limited will lose money on the matter. He wants to cancel the contract and stop the company from entering into similar contracts in the future.

Required:

(a) Advise Tom and Mr. Dube as to their respective positions against Phiri, Mwale and Rose Limited. (11 marks)

(b) In the event the company decides to wind up to avoid a lot of negative publicity, advise them on various modes of winding up a company. (9 marks)

[Total: 20 Marks]

QUESTION SIX

James and Chanda are good music performers. They recently partnered with MazengoMazengo entertainers of Chibolya Compound. The Stage was set for Friday night gig along Los Angels road. They sold more than 5000 tickets and were smiling all the way to the day. The organiserschipaz promoters paid the performers in advance. On the day of the performance, James and Chanda had all their music equipment stolen and they failed to perform due to the same. The Promoters had to refund the funs all the money realized. The director of programs approaches you with the view of understanding the legal issues if any, in the matter at hand.

Required:

(a) With reference to the above scenario, advise the director accordingly. (10marks)

(b) Debango Chileshe is a chicken trader and has since been requested to deliver chickens in Malabo constituency for the aspiring candidate to boost his campaign. The Secretary to the aspiring candidate did sign the contract and took delivery of the said chickens on behalf of the aspiring candidate, one MrKwendomuzhila. The note of receipt, read" **property in the goods is to pass after the general election results are published ".** Unfortunately, Kwendomuzhila has lost the elections and is refusing to pay. He says, he never hired his secretary to order chickens but only for secretariat work only. Debango is furious and approaches you for guidance.

Required:

Given the facts above, advise the parties on their legal obligations. (10marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

QUESTION ONE

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

SOLUTION TWO

(a) An offer is a proposal made on certain terms by the offeror together with a promise to be bound by that proposal if the offeree accepts the terms. An offer may be made expressly, or implied by conduct.

On the other hand, an invitation to treat is where a person holds himself out as ready to receive offers, which he may then either accept or reject. Examples of invitations to treat include the display of goods with a price tag in a shop window or on a supermarket shelf. An invitation to treat is not an offer to sell but an invitation for customers to make an offer to buy.

In the case of Hambubu, he picked the blade alright but he was enticed by an invitation to treat and not an offer. His picking the blade did not amount to the shop making an offer to him but merely inviting him to make the offer. In this case the offer was to be made by Hamabubu at the counter on presentation.

Therefore, there was no offer that existed only an invitation to treat by way of display of goods in the shop. The offer was to be made at the counter which was not the case.

(b) The 4 major elements that validates a contract are:

Offer: An offer is a proposal made on certain terms by the offeror together with a promise to be bound by that proposal if the offeree accepts the terms. An offer may be made expressly, or implied by conduct. An offer must be distinguished from an invitation to treat which is where a person holds himself out as ready to receive offers, which he may then either accept or reject.

Acceptance: Acceptance can be defined as a positive act by a person to whom an offer has been made which, if unconditional, brings a binding contract into effect. The contract comes into effect once the offeree has accepted the terms presented to them. This is the point of no return. After acceptance the offeror cannot withdraw the offer and both parties will be bound by the terms that they have agreed. Failure to abide by the contract will entitle the other party to claim for damages or terminate a contract depending on what has been breached.

Consideration: Consideration has been defined as a valuable consideration in the sense of the law may consist either in some right, interest, profit or benefit accruing to one party, or some forbearance, detriment, loss or responsibility given, suffered or undertaken by the other. This consideration just needs it to be sufficient and not adequate.

Intention to create legal relations: Intention to create legal relation is the other element that is needed to validate a contract. After all, if you invite a friend round for a social evening at your house, you would not expect legal action to follow if the occasion has to be cancelled.

For the purpose of establishing the intention of the parties, agreements are divided into two categories:
1 Business/commercial agreements -where there is an intention to create legal relations
2 Social/domestic agreements-Where there is no intention to create legal relations as a general rule.

(c)

Criminal law governs the relationship that subsist between the state and its citizens. A citizen who commits a criminal act offends the state, representing the whole of society. The law is strictly written under **Penal Statutes**, for example the Penal Code Chapter 87 of the Laws of Zambia. Examples of acts that are punishable under the criminal law are treason, unlawful wounding, theft, rape or murder.

Civil law regulates the interaction between citizens in society only. Examples of acts which are actionable under the civil law are breach of contract, defamation, malicious prosecution and being a nuisance to others. Branches of civil law include tort, contract, company law, commercial law and property law.

SOLUTION THREE

(a) This issue borders on Vicarious liability. This a form of a strict, secondary liability that arises under the common law doctrine of agency, the responsibility of the superior for the acts of their subordinate or, in a broader sense, the responsibility of any third party that had the "right, ability or duty to control" the activities of a violator.

Employers are vicariously liable, under the *respondeat superior* doctrine, for negligent acts or omissions by their employees in the course of employment (sometimes referred to as 'scope and course of employment'). To determine whether the employer is liable, the difference between an independent contractor and an employee is to be drawn. In order to be vicariously liable, there must be a requisite relationship between the defendant the tortfeasor, which could be examined by three tests: Control test, Organisation test and Sufficient relationship test. An employer may be held liable under principles of vicarious liability if an employee does an authorized act in an unauthorized way. In the case at hand, Lewis is vicariously liable for the tort committed by Malambo. This principle is so fortified at common law. Malambo was acting withing course of duty and as such the principal is liable. The principal will at law, pay for damages and recover for any loss suffered from the agent Malambo.

(b) Agency can come to an end in the following ways:

(i) Agreement: the parties would come to a com[promise and agree that it is not possible to continue. Thus, they will agree to part ways.

(ii) Frustration: here, a frustrating event will occur making the future performance of the contract to be impossible hence terminating the agency relationship.

(iii) The death of either party: Once a party dies, their duties under a contract are terminated. Therefore, after the death of a party the contract terminates. Note also that the obligations incurred before death do not terminate.

(iv) Insanity of either party: for there to be contract, parties must have the capacity known at law to contract. Once party becomes insane or bankruptcy, the contractual relations must terminate.

(v) Bankruptcy: for there to be contract, parties must have the capacity known at law to contract. Once a party becomes insane or bankruptcy, the contractual relations must terminate.

(c) A pre-incorporation contract is a contract entered into in the name of a company that is yet to be incorporated by the sponsors of the company as agents of the company. Such contracts are provided for under the Companies Act 2017. 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. 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 FOUR

(a) **Volenti Non Fit Injuria** is a Latin maxim which refers *to a willing person, an injury is not done.* It is a common law doctrine, according to this doctrine the person who voluntarily gives consent for any harm to suffer would not be liable to claim any damages for the same and this consent serves as a good defence against the plaintiff. The person who himself voluntarily waived or abandoned his right cannot have any claim over it.

In the case at hand, this defence cannot stand as was seen in the case of **Nash v. Maintenance & Installation Company Zambia Limited (1975).** The Court in this matter pointed out the issue of consent. The Plaintiff in this matter never consented to the injuries suffered. The Plaintiff never consented to the incident at hand.

The following elements must be satisfied for the defense to stand;

- The consent must be free
- Consent should not be obtained by fraud
- Mere knowledge does not imply assent
- Negligence of the defendant

(b) **Contributory negligence**-contributory negligence is a defense to a tort claim based on negligence. If it is available, the defense completely bars plaintiffs from any recovery if they contribute to their own injury through their own negligence.

Statutory Justifications-Satisfaction is a defense by which a defendant who committed the tort as defined, claims they did no wrong, because committing the crime advanced some social interest or vindicated a right of such importance that it outweighs the wrongfulness of the tort. Justification and excuse are related but different defenses

Necessity-Although necessity may seem like a defense that would be commonly invoked by defendants seeking to avoid criminal charges, its application is limited by several important requirements:

- The defendant must reasonably have believed that there was an actual and specific threat that required immediate action.
- The defendant must have had no realistic alternative to completing the criminal act.
- The harm caused by the criminal act must not be greater than the harm avoided.
- The defendant did not himself contribute to or cause the threat

Illegality-"defense of illegality" is a common defense for breach of contract and if you have breached an agreement that is illegal, you will not be held liable since the agreement itself is prohibited by law. You will also not receive any restitution or financial relief.

(c) Agency is a relationship that subsist when a person called the agent is empowered by another called the principal to represent him with another person called the third party, and brings the principal into a legal relationship with a third party.

(d) Delegated legislation is law made pursuant to Acts of Parliament. When parliament has passed legislation, it further gives power to other institutions pursuant to article 80(i) of the constitution, to make laws. Delegated legislation is made by local authorities (by-laws) and ministers (statutory instruments) and the law they make is supposed to conform to the laws in the enabling Act.

SOLUTION FIVE

(a)The Zambian company law spell out duties and obligations of company directors. Under section 86 and 87 of the Companies Act, a system of checks and balances is established by the law. The Directors are empowered to act on behalf of the company but this empowerment is only in so far as the law permits. In the case in casu, Rose limited is bound by the decision taken by Phiri and Mwale. The company is bound by the decisions of the directors under the law of agency. It is immaterial that the Articles of association did not permit transanctions beyond k300,00 which were undertaken by Mwale at the instance of Phiri. The company is still bound. This falls under the indoor management rule in Zambian Company Law. Mr Dube and Tom have a sustainable cause of action against Rose Limited. It is immaterial that the directors acted ultra-vires, they are still bound. The Law is in this manner so as to protect third parties.

(b) Voluntary (which is by a shareholders' resolution) or compulsory (by a court order).

Liquidations are also classified according to whether the company is solvent or insolvent.

Solvent and insolvent liquidations

If the company is insolvent, this means it is unable to pay its debts as they fall due. In this situation there is potential conflict between creditors (those to whom money is owed), as there will be insufficient assets for all creditors to be paid in full.

Voluntary liquidation (by shareholders' resolution)

Voluntary liquidation refers to the process whereby the shareholders appoint a liquidator, who is then answerable to the creditors or shareholders. It is not necessary to make any application to the court for this; however, the liquidator may apply to the court for directions and the court has power to remove a liquidator.

A voluntary liquidation may also by commenced by the board of directors if an event specified in the company's constitution has occurred.

Voluntary liquidation may be in one of two forms, depending on whether or not the company is solvent. If the company is solvent the shareholders can supervise the liquidation. However, if the company is insolvent, the creditors may take control of the liquidation process by applying to the court. The court will require proof of solvency or insolvency to determine this matter.

Compulsory liquidation (by court order)

Compulsory liquidation of a company requires obtaining a court order. This process starts with an application to the court alleging that one or more of the required grounds exist. The application may be brought by the company or a majority of its directors, or by the Registrar of Companies, or by a creditor. Applications by creditors are by far the most important and common.

SOLUTION SIX

(a) In advising the directors, a contract may be **discharged by frustration**. A contract may be **frustrated** where there exists a change in circumstances, after the contract was made, which is not the fault of either of the parties, which renders the contract either impossible to perform or deprives the contract of its commercial purpose. Where a contract is found to be **frustrated**, each party is discharged from future obligations under the contract and neither party may sue for breach. The allocation of loss is decided by the **Law Reform (Frustrated Contracts) Act 1943. The subject matter was destroyed in this case as was seen in the case of Taylor v. Caldwell.Destruction of the subject matter vitiates a contract.**

Personal incapacity will generally render the contract frustrated:

Condor v Baron Knights [1966] 1 WLR 87

Where the contract becomes illegal to perform it will frustrate the contract:

FibrosaSpolka v Fairbairn [1943] AC 32

(b) Agency can therefore be defined in the relationship which arises when one person (an agent) acts on behalf of another person (the principal) in a manner that the agent has power to affect the principal's legal position with regard to a third-party. An **agency agreement** is a legal contract creating a fiduciary relationship whereby the first party "the principal" agrees that the actions of a second party ("the agent") binds the principal to later agreements made by the agent as if the principal had himself personally made the later agreements. The power of the agent to bind the principal is usually legally referred to as authority. Agency created via an agreement may be a form of implied authority, such as when a person gives their credit card to a close relative, the cardholder may be required to pay for purchases made by the relative with their credit card. Many states employ the equal dignity rule whereby the agency agreement must be in writing if the later agreement would also necessarily be written, such as a contract to buy thousands of dollars worth of goods.

An agency relationship between an agent and a principal can be created in any one of the following three ways:

a. By consent
b. By operation of the law

c. By the doctrine of apparent authority or agency by estoppels

In the above scenario, there was express authority as was the case in **GarnacCo.Inc. V. H.M.E. Faure and Fairdough Limited (1968) A.C. 1130, 1137; 2All E.R. 353, 358** where Lord Pearson stated that express authority is given by express words such as is evidenced in a power of attorney. Implied authority can be inferred from the conduct of the parties and the circumstances of the case

Another example of the existence of an agency agreement at issue in a 2006 court case arose when a tennis tournament sponsor sued Venus and Serena Williams for not participating. The sponsor argued that their father, Richard Williams had committed to their participation in the tournament. The Williams sisters argued that their father did not have the authority to bind them to such an agreement. If their father did commit the sisters to play, the issue for the court to decide is whether a valid agency agreement existed between the Williams sisters and their father. If not, then they likely were not bound to his agreement under the law of agency. It can therefore be concluded that agency relationship was formed in this case between Debango Chileshe and MrKwendomuzhila.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 22 JUNE 2020

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.

<u>QUESTION ONE</u>

Each of the following questions has only one 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 The goal of corporate governance and business ethics education is to:

A. Teach students their professional accountability and to uphold their personal Integrity to society.

B. Change the way in which ethics is taught to students.

C. Create more ethics standards by which corporate professionals must operate.

D. Increase the workload for accounting students.

(2 marks)

1.2 The internal audit function is least effective when the department:

A. Is non-independent.

B. Is competent.

C. Is objective.

D. Exhibits integrity

(2 marks)

1.3 An independent Director is one who:

A. Did not attend a school supported by the company.

B. Does not have outside relationships with other Directors.

C. Does not have any other relationships with the company other than his or her Directorship.

D. Did not attend a school supported by the company.

(2 marks)

1.4 A board that is elected in a classified system is known as a:

A. Diversified board.

B. Staggered board.

C. Rotating board.

D. Declassified board.

(2 marks)

1.5 Employees may resist change for which of the following reason(s)?

A. Self-interest

B. Habit and personal inertia

C. Fear

D. All of the above

(2 marks)

1.6 Which of the following is one of Drucker's seven (7) tasks for managers?

A. Communicate quickly and clearly.

B. Manage by objectives.

C. Take strategic decisions.

D. All the above (2 marks)

1.7 Theory Y assumes which of the following?

A. People are committed to organizational activities.

B. People seek to avoid work.

C. People dislike work.

D. People achieve little satisfaction from work.

(2 marks)

1.8 Which of the following is reward power?

A. Leader can punish staffs who do not comply with instructions.

B. Leader is able to exercise power because of their charisma and reputation.

C. Leader has power because of their expert knowledge.

D. Leader can reward staff who complies with instructions.

(2 marks)

1.9 Needs and expectations at work are sometimes divided into two (2) types:

A. Extrinsic/intrinsic

B. External/internal

C. Social/spiritual

D. Effort/reward

(2 marks)

1.10 Maslow suggests that human needs are arranged in a series of levels, a hierarchy of importance. Which of the following statements are relevant to Maslow's hierarchy of needs theory?

A. The hierarchy is not necessarily in a fixed order

B. A satisfied need is no longer a motivator

C. A need is not necessarily fully satisfied before a subsequent need arises

D. All of the above

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

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

(a) Culture is the collective programming of the mind which distinguishes the members of one category of people from another. Schein suggested that there are different levels at which culture can be understood.

Required:

Explain the determinants of culture as postulated by Schein. (12 marks)

(b) Describe four (4) main features of a Public Limited Company and list four (4) advantages of establishing this form of business. (8 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

A project is 'an undertaking that has a beginning and an end and is carried out to meet established organisational goals within cost, schedule and quality objectives' (Haynes, Project management). The main difference between project planning and other types of planning is that a project is not generally a repetitive activity. Every form of the business whether Partnership, limited company and or Public organizations have mission statements of their existence and they set goals to be achieved through proper planning or through project implementation.

Required:

(a) State three (3) general characteristics of a project. (9 marks)

(b) Describe the following, <u>Mission statement</u>, <u>organisational Goals</u> and <u>Objectives</u>. (6 marks)

(c) List five (5) benefits of the Partnership form of the business. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The management of company X is planning to expand its business to neighboring countries. In this regard, they have asked you to advise them on what factors will be of influence to their business as they plan to expand internationally.

Describe five (5) of these factors. (10 marks)

(b) A business organization operates in an external and internal environment in which there are many factors that affect its performance.

Required:

(i) State the Six (6) factors of the external environment. (6 marks)

(ii) Mention Two (2) factors of the internal environment. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Nowadays many changes have occurred in the management of business Organizations. This is because of many scandals which have rocked the business world in the recent past. Many Chief Executive Officers of large corporations have embezzled funds from their business organizations. This has resulted in emphasis being laid on Ethical behavior.

(a) Identify the four (4) ethical principles outlined by the International Federation of Accountants (IFAC). (8 marks)

(b) Describe the four (4) ethical principles outlined by the International Federation of Accountants (IFAC). (12 marks)

[Total: 20 Marks]

QUESTION SIX

According to Cadbury report (1992), 'Integrity means straightforward dealings and completeness. What is required of financial reporting is that it should be honest and that it should present a balanced picture of the state of the company's affairs………'

(a) Explain any other five (5) principles that can be applied in an organization to enhance good governance. (10 marks)

(b) Explain the Five (5) Cs of moral duties according to the Kings report (1994) (10 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SECTION A

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

SECTION B

SOLUTION TWO- COMPULSORY

The following are the determinants of culture as postulated by Schein:

I. The first level constitute the observable expressions of culture which include;

- **Behaviour:** People behave in similar ways and have similar ways of dealing with each other. There are established norms of behavior and customs and rules about behaviours that are acceptable.

- **Artefacts**: Culture may also be expressed in terms of the architecture of the buildings in which the organization is located, interior design of office premises, dress codes and other symbols.

- **Attitudes**: These are patterns of collective behavior such as greeting styles, business formalities, social courtesies and ceremonies.

II. The second level beneath these observable aspects of culture are values and beliefs which are the professed culture of the organization. Values and beliefs give the behaviors and attitudes of employees their special meaning and significance. Values and beliefs may also be expressed in slogans or the mission statement.

III. The third level: Beneath values and beliefs lie assumptions: these are unspoken rules that are no longer consciously recognized or questioned, but which programme the ways in which the organization and the people in it think or behave.

(b) The following are the four (4) characteristics of Public Limited companies.

(i) Its name must end with the words Public limited company (Plc).

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

(iii) The day to day management of the firm is in the hands of the Managing Director.

(iii) The shares of public limited companies are generally quoted on the Lusaka Stock Exchange

Advantages of Public Limited Companies

(i) The shares of Zambian Public Limited Companies are traded on the Lusaka Stock Exchange making it easier for businesses to recapitalize.
(ii) The large size of Plc's means that banks are willing to lend them money.
(iii) Investors are able to buy shares in a company without having to become involved in managing its business operations.
(iv) Large companies are also able to invest in modern equipment and technology.
(v) The size of the company enables it to benefit from economies of scale.

Disadvantages of Public Limited Companies

(i) Public limited companies are regulated more strictly than other types of business organisations.
(ii) It may be difficult to grow a company to the size where it can become a public limited company with a listing on the stock exchange.
(iii) There is little secrecy because the audited accounts of listed companies must be published annually. This is a legal requirement.
(iv) Large may be difficult to manage because of their size and complex organisation. Important decisions may be delayed because of administration and bureaucracy.

SOLUTION THREE

A project is 'an undertaking that has a beginning and an end and is carried out to meet established organisational goals within cost, schedule and quality objectives' (Haynes, Project management). The main difference between project planning and other types of planning is that a project is not generally a repetitive activity. Every form of the business whether Partnership, limited company and or Public organizations have mission statements of their existence and they set goals to be achieved through proper planning or through project implementation.

a) Explain three general characteristics of a project.

1. A project has a specific start and end
2. A project has well defined objectives
3. A project cuts across organisational and functional boundaries since members comes from different functional departments.

b) Explain the following, Mission statement, organisational Goals and Objectives.

i. **Mission statement-**this is the organizations overriding purpose. It reflects the values and expectations of stakeholders and answers the question 'what business are we in?

ii. **Organisational Goal-** Statement of general aim or purpose that supports the mission. It may be qualitative in nature.

iii. **An Objective-** is a more specific aim or purpose and must be SMART. They can be expressed as specific targets.

c) List down five (5) benefits of the Partnership form of the business.

i. Easy to set up
ii. Easy to share tasks and manage tasks
iii. Enhance skill sharing and combined knowledge
iv. More capital raised through membership contributions
v. Enhanced business continuations.

SOLUTION FOUR

A. The Five factors to consider when making the decision of expanding the business internationally are:

   i) Financial factors. For an international expansion, an organization needs to have enough capital to be able to successfully invest it in another country's business market. Time and money are needed to take your business to the next level across geographical borders.
   ii) Country alliances. Trade alliances encourage trade between member countries providing a much larger market to sell goods to and make larger profits and also help to safeguard the industries of member countries.
   iii) Legal factors. Every government has its own set of rules and regulations that companies need to follow when they are importing their goods into a foreign country. There are tax laws and legal considerations that must be taken care of before the expansion and production process can go underway.
   iv) Markets. Companies must consider whether the product or service they produce has a demand in the targeted foreign market in addition to monitoring them product and service quality. Factors such as the suitability of the product in the market and its demand and availability of similar products locally at cheaper rates could be considered
   v) Culture / religions. Companies must consider the culture and religions of the international territory they are trying to enter

B. A business organization operates in an external and internal environment in which there are many factors that affect its performance. You are required to describe:

i) The five factors of the external environment are:
   a) Political factors. These factors determine the extent to which a government may influence the economy or a certain industry. Political factors include tax policies, Fiscal policy, trade tariffs that a government may levy around the fiscal year and it may affect the economic environment to a great extent.
   b) Economic Factors. These factors determinate an economy's performance that directly impacts a company and have resonating long term effects. Economic

factors include inflation rate, interest rates, foreign exchange rates, economic growth patterns.

c) Social Factors. These factors scrutinize the social environment of the market, and determinants like cultural trends, demographics, population analytics etc. These factors are of particular interest as they have a direct effect on how marketers understand customers and what drives them.

d) Technological Factors. These factors pertain to innovations in technology that may affect the operations of the industry and the market favorably or unfavorably. This refers to technology incentives, the level of innovation, technological change. By knowing what is going on technology-wise, you may be able to prevent your company from spending a lot of money on developing a technology that would become obsolete very soon due to disruptive technological changes elsewhere.

e) Environmental Factors. Environmental factors have become important due to the increasing scarcity of raw materials, pollution targets and carbon footprint targets set by governments. These factors include environmental aspects such as weather, climate, environmental offsets and climate change which may especially affect industries such as tourism, farming, agriculture and insurance. Growing awareness of the potential impacts of climate change is affecting how companies operate and the products they offer.

ii) The Two factors of the internal environment are:

a) Financial factors. Lack of money can determine whether your company survives or dies. When a company's cash resources are too limited, it affects the number of people it can hire, the quality of its equipment, and the amount of advertising it can buy.

b) Employees. A company's employees are a major part of its internal environment. Employees have to be good at their jobs, whether it's writing code or selling products to strangers. Managers have to be good at handling lower-level employees and overseeing other parts of the internal environment.

SOLUTION FIVE

a. Identify the four (4) ethical principles outlined by the International Federation of Accountants (IFAC).
   - Integrity
   - Objectivity
   - Professional Competence and Due Care.and describe the four ethical principles
   - Confidentiality.
   - Professional Behavior.

b. Describe the four (4) ethical principles outlined by the International Federation of Accountants (IFAC).

   Integrity.

   A professional accountant should be straightforward and honest in all professional and business relationships

   Objectivity.

   A professional accountant should not allow bias, conflict of interest or undue influence of others.

   Professional Competence and Due Care.

   A professional accountant has a continuing duty to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques. A professional accountant should act diligently and in accordance with applicable technical and professional standards when providing professional services.

   Confidentiality.

   A professional accountant should respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose any such information to third parties without proper and specific authority unless there is a legal or professional right or duty to disclose. Confidential information acquired as a result of professional and business relationships should not be used for the personal advantage of the professional accountant or third parties.

Professional Behavior.

A professional accountant should comply with the relevant laws and regulations and should avoid any action that discredits the profession.

SOLUTION SIX

a) Explain any other five (5) principles that can applied in an organization to enhance good governance

   i. **Probity/Honest-** this relates to being principled not to take bribes and not to mislead the shareholders and stakeholders.
   ii. **Fairness**-taking a balance application is the management without prejudice and taking into account minority views in making decisions
   iii. **Responsibility**- management able to accept responsibility for credit or blame over governance decisions.
   iv. **Transparency-** having an open and lear disclosure of relevant information to shareholders and other stakeholders
   v. **Accountability-** corporate accountability means being answerable and account for the actions and consequences.

b) Explain the Five Cs of moral duties according to the Kings report (1994)

   i. **Conscience-** intellectual honest and avoiding conflict of interest.
   ii. **Care-** Directors exercising care in the affairs of the company
   iii. **Competence-** Directors having the knowledge and skill required
   iv. **Commitment-** Directors should be diligent
   v. **Courage-** Directors should have the courage to take decisions regardless of the risk.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 24 JUNE 2020

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 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 is a feature for windows?

A. It is reliable
B. It has a recycle bin
C. It has internet
D. It opens and closes files.

(2 marks)

1.2 Choose one feature that is **NOT** a quality of good information

A. Timely
B. Cost effective
C. Relevant
D. User friendly.

(2 marks)

1.3 A suitable method of input for processing credit card applications would be:

A. Magnetic Ink Character Recognition (MICR)
B. Optical Mark Recognition (OMR)
C. Optical Character Recognition (OCR)
D. Smart Card reader (2 marks)

1.4 What software controls access to a Database?

A. An operating system
B. An enterprise resource planning system
C. A database management system
D. A data warehouse (2 marks)

1.5 Which of the statements below best describes RAM cache?

A. A small amount of fast memory between main memory and the processor
B. Memory reserved for use by the operating system
C. The computer's main random access memory for storing programs and data
D. Memory used by the VDU for storing the screen image

(2 marks)

1.6 Which of the following is **NOT** one of the factors that influence the choice of medium?

A. Urgency of the message
B. Confidentiality of the message
C. Prestige
D. Availability of the medium

(2 marks)

1.7 What is an appendix?

A. It has to do with extra material
B. Detailed information that are referred to in the main body of a report
C. A document that shows where extra information is found
D. Details that show readers not to be distracted.

(2 marks)

1.8 Which of the following is **NOT** a meeting document?

A. A Notice for a meeting
B. An Agenda
C. Minutes
D. Deliberations (2 marks)

1.9 What do the Abbreviation C.C. mean in a business letters?

A. An enclosure
B. Signing off
C. Any third parties to whom copies of their letters are sent
D. Copies made to other people (2 marks)

1.10 Which of the following statements best describes a line graph?

A. It is useful for showing the relationships between two variables
B. it is useful for conveying large amounts of data
C. Displays data used in a range of spread sheets
D. It is useful for showing the relative sizes of component elements of the total value.

(2 marks)
[Total: 20 Marks]

SECTION B

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

Attempt any three (3) questions from the remaining four

QUESTION TWO - (COMPULSORY QUESTION)

The emergency of Information Communication and Technology (ICT's) has created both positive and negative effects in most organizations. You recently conducted a research on the advantages and disadvantages of using mobile phones and some of the findings were as follows:

User friendly, source of cybercrime, communication is very fast, cannot be used where there is no power and where there is no network, it is portable and customers can easily be contacted, unproductive work culture and abuse of social media.

Required:

Using the information above and creating your own, prepare a shortformal report which includes recommendations on the use of mobile phones in organization.

[Total: 20 Marks]

QUESTION THREE

Your manager has recently read a report on ICT. Most of the technical terms in the report are defined in a glossary. However, he does not fully understand the following extract and he has asked you for your help.

'It is important that the systems integrator understands the structure and role of the processor (CPU). They have to be particularly aware of the size of the RAM and the clock speed, as these critically affect what software can be effectively run on the system. It is also absolutely essential that anti-virus software is installed on the delivered hardware'.

Required:

(a) Briefly describe the structure and function of the CPU (8 marks)

(b) Explain why the clock speed of the CPU and the size of the RAM critically affect the software that can be used on the system (6 marks)

(c) Briefly explain the meaning and significance of 'antivirus software. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

You have been recruited as an accounts assistant. You have noticed that your supervisor is struggling using MS Office packages, especially MS Office Word and MS Office Excel.

(a) Explain to your supervisor how he could use **mail merge** when dealing with debtors.

(4 marks)

(b) You see your supervisor trying to add a lot of values using a formula but you feel he could easily have used a function.

(i) Differentiate between a **formula** and a **function** in excel (4 marks)

(ii) Write the format for entering a function (3 marks)

(c) Consider the spreadsheet below and answer the questions that follow.

	A	B	C	D	E	F	G	H	H
1	Quarterly Sales								
2		Qtr1	Qtr2	Qtr3	Qtr4	Total			
3	Ndola	1000	1200	2000	1500	a			
4	Kabwe	2500	2100	2400	1500	b			
5	Choma	3100	2300	2100	1600	c			
6									
7									

(i) Write the formulae to find a, b and c (3 marks)

(ii) Write down the steps you would take to add a new worksheet and rename it.

(6 marks)
[Total: 20 Marks]

QUESTION FIVE

As a supervisor, you wish to include matters about Transport, low cash inflows, Budget for employee's awards in your agenda items. Place the issue of new printers under any other business for a meeting that will soon be held in your department.

Required:

(a) Using the information as above, prepare a standard agenda for the meeting.

(10 marks)

(b) Briefly explain any five (5) examples of established procedures that govern formal meetings such as board meetings and annual general meetings. (10 marks)
[Total: 20 Marks]

QUESTION SIX

You work as supervisor at Malaika Limited. One of the challenges that staff face in your department is that of ineffective communication. Recently one of your potential clients contacted your organization about a great business opportunity. Unfortunately, the company lost that great opportunity due to lack of effective communication skills among staff in your organisation.

Required:

Write a memo to members of staff highlighting on any five (5) possible ways to minimize the barriers to effective communication. **[Total: 20 Marks]**

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

1.1	B	It has a recycle bin
1.2	D	User friendly
1.3	D	Smart Card
1.4	C	Database Management System
1.5	A	A small amount of fast memory between main memory and the processor
1.6	D	Availability of the medium
1.7	**B**	Detailed information that are referred to in the main body of a report
1.8	**C**	Any third parties to who copies of their letters are sent
1.9	**D**	Deliberations.
10.0	**A**	It is useful for showing the relationships between two variables

SECTION B

SOLUTION TWO – COMPULSORY

Report on the Advantages and Disadvantages on the Use of Mobile Phones in Organisations

1.0 Terms of Reference/Introduction

This report highlights the advantages and disadvantages of the use of mobile phones in organisations. The research was requested by the Director finance and was conducted over a three months period at the beginning of the second quota of the year 2017.The report includes procedures, findings, conclusions and recommendations.

2.0 Procedures

The procedures that were used to conduct the research were as follows:

(a) Interviews to both senior and junior employees

(b) Literature review

(c) Observations were made on members of staff regarding the use of mobile phones

3.0 Findings

The facts found in the field had both advantages and disadvantages on the use of mobile Phones.

3.1 Advantages

(a) Mobile phones were a fast mode of communication

(b) They were user friendly

(c) Customers were easily contacted

(d) They were very portable

(e) They had multiple functions that were very helpful

3.2 Disadvantages

(a) Mobile phones were a source of cyber crime

(b) They cannot be used where there was no power

(c) Mobile phones created unproductive work culture.

(d) The social media was abused

(e) Could not be used where there was no network and one had to be Knowledgeable on how to use them.

4.0 Conclusions

It was concluded that the emergency of information technology and communication had

Both Positive and negative effects particular the use of mobile phones in organisations. While organisation enjoy most of the advantages of mobile phones such as fast communication and other multiple functions, mobile phones had other negative effects such as abuse of the social media leading to unproductive work culture in most organisations

5.0 Recommendations

(a) It was therefore recommended that management should remind and sensitize people onthe use mobile phones to be used responsibly.

(b) Staff resist from abuse of the social media

(c) Staff should be more conscious of the positive aspects of mobile phones and try by all means to avoid the negative aspects

Report prepared by

Signature

Mr. J. Mulamba

Assistant Accountant

Date………

SOLUTION THREE

a) CPU stands for Central Processing Unit, which is the collection of circuitry and registers that performs the processing in a computer system. The CPU is divided into three areas:
   - The ALU is used for logical and mathematical operations
   - CU coordinates the CPU activity by taking data from input devices, storing it in RAM, submitting it to the ALU and receiving and outputting the processed data
   - The main memory stores data and programs during CU operations. There are two types of memory. Random Access Memory (RAM) can be written to and read by the control unit. ROM can be read but not changed

b) Different types of software require different amounts of processing power to run efficiently. The more complex the software package, the more processing power will be required to run it efficiently. The amount of RAM available to the CPU is one major factor in processing power, because significant parts of the program have to be held in RAM while the CPU accesses it. RAM is measured in megabytes (Mb), which is a million bytes, a byte is the smallest unit of storage on a system. Software packages usually specify a recommended amount of RAM for efficient operation.

   Another major factor in processing power is the clock speed of the CPU. The speed of the CPU is measured in megahertz (MHz). the faster the clock speed, the greater the number of instructions per second the CPU can perform. Powerful, fast machines are required for efficient operation of complex software and for faster communication links when using the internet. Many software packages specify a recommended clock speed for efficient operation.

c) Meaning

   The term 'anti-virus software' is used to describe programs that check computer systems for known viruses. A virus is a program that is loaded onto a computer system without the user's knowledge. Most viruses can replicate themselves. Some viruses damage systems. The most dangerous viruses are capable of transmitting themselves across networks. Most anti-virus programs include an update feature, so the program can be updated to recognise and neutralise new viruses.

Significance

The report states that it is essential that it is essential that anti-virus software is installed on the hardware, because it will save the company the time and expense of purchasing and installing anti-virus software. The anti-virus software must be ‘active’ at all times that the system is operational. All files entering the system whether via floppy disk, e-mail or the internet must be checked for viruses before being stored in the system. The anti-virus package must be regularly updated to counter new viruses.

SOLUTION FOUR

a) Mail merge is a feature in MS Office Word and many word processing software that enables one to create personalised letters from one standard letter. It enables one to write a standard letter and add personalised content such as recipients' name, amounted due etc. the personalised information is stored in the database and is merged with the document.

b) A formula is a statement generated by the user to carry out some calculation while a function is a predefined set of instructions built into spreadsheet that carries out some type of operation (not only calculations)

c) Format of a function

=Function Name(start of range:end of range) eg

=SUM(a1:D4)

d)

i) = B3+C3+D3+E3 OR = SUM(C3:E3)

ii) Click on the new worksheet tab

iii) Right click on the worksheet name and choose rename from the menu that appears

SOLUTION FIVE (a)

(a) Opening remarks
(b) Minutes of the last meeting
(c) Matters arising
(d) Transport
(e) Low cash in flows
(f) The Budget for employee awards
(g) Any other business
    a. New printer
(h) Date of next meeting
(i) Closing remarks

SOLUTION FIVE (b)

(i) Attendance rights (for members of the public ,shareholders)
(ii) Frequency with which a meetings are held
(iii) Adequate notice of a for coming meeting
(iv) The quorum, The minimum number of members required to start a meeting
(v) The timings of the meeting
(vi) The type of business to be discussed
(vii) The binding power of decisions made upon the participants

SOLUTION SIX

MALAIKA LIMITED

MEMORANDUM

Ref : 132 /012/01

DATE…………

TO………….To all staff in accounts department

FROM……..Assistant Accountant

SUBJECT………Ineffective communication among staff

It has been observed that there is a serious challenge in the way staff communicates

To clients resulting into barriers to effective communication. Recently the company lost a

Great business opportunity from a potential client would have assisted in cash inflows for

For our company.

In view of that management has decided to remind you on some of the ways of minimizing some of the challenges to ineffective communication. Some of these ways are as follows:

- Avoid technical language. Use language which is simple and familiar.
- Avoid information overloading by providing enough information for clients to understand.
- Ensuring that a correct medium of communication is used
- Ensuring that the content you provide to the client is accurate and appropriate detailed.
- Avoid being emotional when talking clients, chance are there communication will not be successful

Applying the above communication strategies would greatly minimize some of the barriers to effective communication. Consideration of the proposed strategies and putting them into practice as you conduct your daily tasks

Signature

Mr. M. Mbewe.

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.1: FINANCIAL REPORTING

MONDAY 22 JUNE 2020

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

Panama Plc acquired 80% of Sanava Limited equity share capital on 1 January 2020.The purchase consideration was K51,400,000. On the same date it also acquired half of Sanava 10% loan notes at par. The financial statements of both companies are shown below.

On 1 April 2020, Panama acquired 40% of Amaka Limited equity share capital in a share exchange of 1 share in Panama for every 2 shares in Amaka.Amaka had 50,000,000 equity shares valued at K1 each at the date of acquisition. Panama's shares had a stock market value of K7 each at the date of acquisition.Amaka profit for the year to 30 September was K20,000,000 and investment in Amaka was impaired by K1,000,000.

The acquisition of Amaka has not been recorded by Panama in its financial statements.

STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 30 SEPTEMBER 2020

	PANAMA K'000	SANAVA K'000
Sales revenue	300,000	120,000
Cost of sales	(210,000)	(100,000)
Gross profit	**90,000**	**20,000**
Distribution costs	(20,000)	(800)
Administrative expenses	(10,000)	(200)
Loan interest received	375	-
Loan interest paid	-	(1,000)
Profit before tax	60,375	18,000
Income tax expense	(15,000)	(3,000)
Profit for the year	**45,375**	**15,000**

STATEMENT OF FINANCIAL POSITION AS AT 30 SEPTEMBER 2020

	PANAMA		SANAVA	
Assets:	K'000	K'000	K'000	K'000
Tangible non-current assets		96,600		40,000
Investments		56,400		-
		153,000		40,000
Current assets:				
Inventory	35,000		15,000	
Trade receivables	25,000		13,000	
Bank	15,000		12,000	
		75,000		40,000
Total assets:		**228,000**		**80,000**
Equity and Liabilities				
Equity				
Equity share capital of K1 each	50,000		10,000	
Retained earnings	128,000		42,000	
		178,000		52,000
Non-current liabilities:				
10% Loan note		-	10,000	
Current liabilities				
Trade payables	50,000		18,000	
		50,000		28,000
Total Equity and Liabilities		**228,000**		**80,000**

The following additional information is relevant:

(i) Sanava's retained earnings at 1 October 2019 were K27, 000,000

(ii) The fair value of Sanava's assets were equal to their carrying values on the date of acquisition with the exception of property, which had a fair value of K16,000,000 in excess of its carrying value. The property had 4 years useful life at that date and depreciation is charged on the straight line basis to cost of sales. Sanava has not incorporated the fair value adjustment in its financial statements.

(iii) In the post-acquisition period Panama sold goods to Sanava. These goods had cost Panama K45, 000,000 and Panama's profit margin is 25%. Sanava had goods from Panama valued at K10, 000,000 in inventory on 30 September 2020.

(iv) Sanava sent a cheque for K5, 000,000 which Panama did not receive and record on 30 September 2020. Sanava recorded the cheque payment in its financial statements.

(v) Sanava owed Panama K3, 750,000 on 30 September 2020.

(vi) Goodwill had suffered an impairment loss of K1, 500,000 at the end of the reporting period. Goodwill impairment losses are charged to administrative expenses.

(vii) It is group policy to value the non-controlling interest at acquisition at fair value. At that date, Sanava's shares had a stock market value of K6.25 each and this can be deemed to represent the fair value of the shares held by the non-controlling interest.

(viii) Revenues and profits should be deemed to accrue evenly throughout the year.

(ix) No entity paid or declared dividends during the year.

Required:

(a) Prepare the consolidated statement of profit or loss for year to 30 September 2020. (15 marks)

(b) Prepare the consolidated statement of financial position as at 30 September 2020. (20 marks)

(c) After Panama acquired 40% of Amaka Limited equity share capital, the finance director reported that Panama will have significant influence and not control. Explain otherindicators of significant influence. (5 marks)

[Total: 40 Marks]

SECTION B

Attempt any three (3) questions in this section

QUESTION TWO

Mukatasha is a Zambian owned private company. Details of its statements of financial position as at 31 March 2020 and 2019 are shown below together with other relevant information.

Statement of financial position as at 31 March:

	2020		2019	
	K	**K**	**K**	**K**
Non-current assets				
Property plant and equipment	4, 950		3,822	
Investment property	700		600	
Development expenditure	1, 740		960	
		7,390		**5,382**
Current Assets				
Inventories	2, 160		1,362	
Trade receivables	1, 644		1,944	
Investments	858		276	
Cash	174		702	
		4, 836		**4,284**
		12,226		**9,666**
Equity				
Share capital – K1 ordinary shares	3, 000		2, 400	
Share premium	2, 100		600	
Revaluation surplus	912		360	
Retained Earnings	1, 522		1, 530	
		7, 534		**4, 890**
Non-current liabilities				
6% loan notes	900		600	
Lease liabilities	600		480	
Deferred tax	288		270	
		1, 788		**1, 350**
Current liabilities				
Trade payables	1, 644	2,112		

Lease liabilities	102	72
Current tax	336	918
Loan note interest	30	0
Bank overdraft 792324		
	2, 904	**3, 426**
	12, 226	**9, 666**

Statement of profit or loss and other comprehensive income for the year ended 31 March 2020

	K
Revenue	8,856
Cost of sales	(5,772)
Gross profit	3,084
Other expenses	(842)
Finance costs	(90)
Profit before tax	2,152
Income tax expense (972)	
Profit for the year	1, 180
Other comprehensive income:	
Gain on revaluation of property, plant and equipment	600
Total comprehensive income for the year	1, 780

The following notes are also relevant:

1. During the year **Mukatasha** made a 1 for 8 bonus issue, capitalising its retained earnings, followed by a rights issue.
2. The new loan notes were issued on 1 April 2019. Finance cost includes loan note interest and lease liabilities charges only.
3. The current asset investments are government bonds which meet the definition of cash equivalents.
4. During 2020 items of property, plant and equipment with a carrying amount of K618, were sold for K660. Depreciation charged in the year on property, plant and equipment totalled K342. **Mukatasha** transfers extra depreciation on revalued property, plant and equipment to retained earnings as allowed by IAS 16. Depreciation based on historical

cost in 2020 is K294. The right of use of assets in respect of leases acquired during the year amounted to K336. These are included in property plant and equipment

5. Investment property is being measured using fair value; the fair value gain of K100 for the year has been credited to other expenses.
6. During 2020 expenditure on development projects amounted to K1, 140.

Required:

(a) Prepare a statement of cash flows for Mukatashain accordance with IAS 7 using the indirect method. (15 marks)

(b) IAS 7 requires that material non-cash transactions are disclosed in the financial statements. Provide example of such transactions and explain why disclosure is important. (5 marks)

[Total: 20 Marks]

QUESTION THREE:

(a) The accounting treatment of foreign currency transactions is prescribed by **IAS 21**, ***the effects of changes in foreign exchange rates.*** This standard addresses some key issues and the practicalities of accounting for transactions in foreign currency.

Required:

(i) Distinguish between **Functional currency** and**Presentation currency.** (2 marks)

(ii) Discuss how foreign currency transactions are translated into the presentation currency of an entity before they are recorded in the financial statements. (2 marks)

(b) Deferred tax is the tax on temporary differences. Temporary differences are identified on individual assets and liabilities in the statement of financial position. Temporary differences arise when the carrying value of an asset or liability differs from its tax base.

Required:

Explain:

(i) How IAS 12 – *Income Taxes* – defines the tax base of assets and liabilities. (2 marks)

(ii) How temporary differences are identified as taxable or deductible temporary differences. (2 marks)

(iii) The general criteria prescribed by IAS 12 for the recognition of deferred tax assets and liabilities. (2 marks)

(c) 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; andthe disclosures that an entity should give about the date when the financial statements were authorised forissue and about events after the reporting period.

Required:

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

(ii) State the accounting treatment for an adjusting event and non-adjusting event. (2 marks)

(d) IAS 23 'Borrowing costs' covers the treatment of borrowing costs relating to qualifying assets among other matters.

Required:

Define a qualifying asset and state three transactions that must be taking place for capitalisation of borrowing costs to be started. (3 marks)

(e) The IASB framework acknowledges that historical basis is the most commonly used measurement basis. Even in times of inflation, published financial statements continue to be prepared under the historical cost convention despite its alleged limitations.

Required:

Explain why historical cost accounting has been criticised and discuss some of the advantages associated with its use. (3 marks)

[Total: 20 Marks]

QUESTION FOUR

You are the Finance Manager for Ostrich, a listed company which prepares consolidated financial statements in accordance with International Financial Reporting Standards (IFRSs). Your Managing Director, who is not an accountant, recently attended a seminar and seeks clarification on the following issues discussed at the seminar:

(a) A delegate was discussing the fact that the entity of which she is a director is relocating its head office staff to a more suitable site and intends to sell its existing head office building. Apparently the existing building was advertised for sale on 1 July 2020 and the entity anticipates selling it by 31 December 2020. The said entity normally prepares its accounts to 30 September. The delegate stated that in certain circumstances, buildings which are intended to be sold are treated differently from other buildings in the financial statements.

Required:

Outline under what circumstances buildings which are being sold are treated differently and also what that different treatment is. (10 marks)

(b) Another delegate at the seminar was a female director of an entity which operates a number of different farms. Your Managing Director stated that the lady informed the gathering that there was a financial reporting standard which applied to farming entities, IAS 41. He would like to know why a special standard is needed for farming entities. He added that given that there was IAS 41 and wondered whether other IFRSs do not apply to farming entities. He further asked for an explanation of the main recognition and measurement requirements of IAS 41 without bothering with details about disclosures. The Managing Director is interested, though, in any areas where the provisions of IAS 41 differ from general IFRSs. He concluded by stating that he believed he correctly heard that farming entities treat grants from the government in a different way from other entities do, adding that he was particularly interested to hear about this.

Required:

Provide answers to the questions raised by the Managing Director. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) IFRS 15 Revenue from Contracts with Customers was issued in 2014 to replace IASs 11 and 18 with regard to accounting for revenue recognition.

Required:

Explain how IFRS 15 is expected to improve the reporting of revenue in financial statements. (5 marks)

(b) Mwata prepares financial statements to 30 September each year. During the year ended 30 September 2020, Mwata entered into the following transactions:
On 1 September 2020, Mwata sold a machine to a customer for which it agreed that the machine would be on free service warranty until 30 November 2022. The total amount payable by the customer for this arrangement was agreed to be:

(i) K560,000, if the customer paid by 31 December 2020.
(ii) K567,000, if the customer paid by 31 January 2021.
(iii) K574,000, if the customer paid by 28 February 2021.

Directors of Mwata consider that it is highly probable the customer would pay for the machine in January 2021. The stand-alone selling price of the machine was K490,000 and Mwata would normally expect to receive K98,000 in consideration for servicing the machine in the service warranty period. The alternative amounts receivable are to be treated as variable consideration.

Required:

Calculate the amount of revenue to be recognized in respect of the above transactions in accordance with IFRS 15. (15 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

W 1 Group structure and Goodwill

Panama: 80% NCI: 20%

Goodwill

		K'000
Purchase consideration: Panama		51,400
NCI fair value 10, 000 x 20% x 6.25		12,500
Less fair value of net assets asset		
Equity share capital	10,000	
Pre acquisitions:		
Retained earnings	27,000	
pre acquisition profit on 1.1.2020 15, 000 x 3/12	3,750	
Fair value gain on Property	16,000	
		(56,750)
Goodwill on 1.1.2020		7,150
Less impairment		(1,500)
SOFP figure		5,650

W2 Intra group sales/Purchases and Unrealised profit on goods (URP)
Panama sold

Cost	45,000
Gross profit 45,000 x 25/75	15,000
Sales	60,000
Unrealised profit 15,000 x 10,000/60,000	2,500

W3 Depreciation on excess fair value of property

Fair value 16,000/4 =4,000 x 9/12: SOPL figure	3,000
SOFP Figure: 16,000 - 3000	13,000

W4 Subsidiary/Sanava post acquisition profit

Sanava PAT (last 9 months) 15,000 x 9/12	11,250
Less unrealised profit	-
Less excess dep on fair value gain	(3,000)
Less goodwill impairment	(1,500)
	6,750
NCI share 6,750 x 20%	1,350
Panama share 6,750 x 80%	5,400

W5 Associate/Amaka Post acquisition profit

20,000 x 6/12 x 40% = 4,000 - 1,000 impairment	3,000

Cost of investment

50,000 x 40% x 1/2 = 10,000 shares x K7	70,000
Post acquisition share	4,000
Less Investment impairment	(1,000)
SOFP figure	73,000
Equity share capital	10,000
Share premium	60,000
	70,000

W6 Group retained earnings

Figure given in SOFP	128,000
Less unrealised profit	(2,500)
Share of post acquisition profit from Sanava w4	5,400
Share of post acquisition profit from Amaka w5	3,000
SOFP figure	133,900

W7 NCI figure in SOFP

Fair value at acquisition	12,500
Share of post acquistion retained earnings w4	1,350
SOFP figure	

	13,850

W8 Finance Costs

Given amount; Sanava (last 9 months)	9/12X1000	750
Less intra – group	1/2X9/12X1000	(375)
Group P/L		375

W9 Finance Income

Given amount; Panama		375
Less intra – group	1/2X9/12X1000	(375)
Group P/L		-

(a) **PANAMA GROUP CONSOLIDATED SOPL FOR THE PERIOD TO 30 SEPTEMBER 2020**

	K'000
Sales revenue 300,000 + (120,000 x 9/12) - 60,000 w2	330,000
Cost of sales 210,000 + (100,000 x 9/12) - 60,000 w2 +2,500 w2 +3,000 w3	(230,500)
Gross profit	99,500
Distribution costs 20,000 + (800 x 9/12)	(20,600)
Administrative exp 10,000 + (200 x 9/12) + 1,500 (iv)	(11,650)
Finance cost w8	(375)
Profit from Amaka/Associate w5	3,000
Profit before tax	69,875
Income tax expense 15,000 + (3,000 x 9/12)	(17,250)
Profit for the year	52,625
Profit for the year attributable to NCI (w4)	1,350
Profit for the year attributable to owners of the parent (balancing figure)	51,275
	52,625

(b) **PANAMA GROUP CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 30 SEPTEMBER 2020**

Assets		K'000
Non-Current assets		
P.P.E (96,600 + 40,000 + 13, 000 W3)		149,600
Goodwill (w1)		5,650
Investment in Associate (w5)		73,000
		228,250
Current assets		
Inventory (35,000 + 15,000 -2,500 w2)	47,500	
T/Receivables (25,000 + 13,000 - 5,000 (iv) - 3,750 (v))	29,250	
Bank (15,000 + 12, 000 + 5,000)	32,000	
		108,750
Total assets		**337,000**
Equity and Liabilities		
Equity		
Equity share capital 50,000 +10,000 w5	60,000	
Share premium w5	60,000	
Group retained earnings w6	133,900	
Equity Attributable to owners of parent		253,900
		13,850
NCI (w7)		267,750
Non-Current liabilities		
10% Loan notes (10,000 - 5,000)	5,000	
Current liabilities		
T/Payables (50,000 + 18,000 - 3,750 (v))	64,250	
		69,250
Total Equity and Liabilities		**337,000**

(c)Indicators of significant influence

(i) Investor holds20% or more the investee's equity share capital unless it can be demonstrated that this is not a case.
(ii) The power to participate in the financial and operating policy decisions.
(iii) Interchange of key personnel between the investor and investee.
(iv) Provision of technical advice or information by the investor.
(v) Material transactions between the investor and the investees.
(vi) Representation on the board of the investee.

SOLUTION TWO

(a) STATEMENT OF CASH FLOWS FOR YEAR ENDED 31 MARCH 2020

Cash flows from operating activities	**K**	**K**
Profit before taxation	2,152	
Adjustments for:		
Depreciation	342	
Amortisation (W1)	360	
Less fair value gain on investment property	(100)	
Interest expense	90	
Profit on disposal of assets (660 – 618)	(42)	
2,802		
Increase in inventories (W4)	(798)	
Decrease in trade receivables (W4)	300	
Decrease in trade payables (W4)	(468)	
Cash generated from operations	1, 836	
Interest paid (W3)	(60)	
Income taxes paid (W3)	(1,536)	
Net cash from operating activities		240
Cash flows from investing activities		
Development expenditure (w1)	(1, 140)	
Purchase of property, plant & equipment (W1)	(1,152)	
Proceeds from sale of property, plant & equipment	660	
Net cash used in investing activities		(1, 632)
Cash flows from financing activities		
Proceeds from issue of shares (W2)	1,800	
Proceeds from issue of debentures	300	
Payment of lease liabilities (W3)	(186)	
Dividends paid (As given or see W2)	(936)	
Net cash from financing activities		978
Net decrease in cash and cash equivalents		(414)
Cash and cash equivalents at beginning of period (W5)		654
Cash and cash equivalents at end of period (W6)		**240**

Workings

1 Assets	Property, plant and equipment	Development expenditure
	K'	**k'**
B/d	3,822	960
Disposals	(618)	
P/L	(342)	
OCI Revaluation gain	600	
Purchase under F/L	336	
Additions (β)		1, 140
Amortisation		(360)
Cash additions (β)	1, 152	
C/d	**4, 950**	**1, 740**

2 Equity

	Share capital and Premium	Revaluation surplus	Retained earnings
	K	K	K
B/d	3,000	360	1, 530
P/L			1, 180
Transfer of depreciation		(48)*	48*
Revaluation gain (β)/OCI		600	
Bonus issue	300**		(300) **
Rights issue (β)	1,800		
Dividend paid (given)	–	–	(936)
C/d	**5,100**	**912**	**1, 522**

*Extra depreciation transferred (342 – 294) = K48
** Bonus issue = 1/8 x 2,400 = K300

3 Liabilities

	Debentures	leases	Taxation	Interest
	K	K	K	K
B/d	600	552***	1,188****	–
SPLOCI			972	90
New lease		336		
Cash received (paid) (β)	300	(186)	(1, 536)	(60)
C/d	**900**	**702**	**624**	**30**

***Non-current + current lease liabilities
****Deferred + current taxation

4 Working capital

	Inventories	Receivables	Payables
	K	K	K
B/d	1, 362	1, 944	2,112
Movement (β)	798	(300)	(468)
C/d	**2,160**	**1, 644**	**1, 644**

5. Cash and cash equivalents at beginning of period
(276+702-324) 654

6. Cash and cash equivalents at end of period
(858+174-792) 240

b) Examples of non-cash transactions may include

- Conversion of debt to equity
- Bonus issues of shares (capitalising reserves)
- The acquisition of non-current assets by way of leases or financing agreement

Disclosure of material non cash transactions will enable users appreciate the extent to which an entity can settle its transactions without using cash. This will highlight to the users that the entiy does not entirely depend on cash in settling those transactions. Users will therefore be in a position to assess the extent to which they should depend on cash flow information in making decisions about the entity's liquidity and financial flexibility.

SOLUTION THREE

(a)**IAS 21**, ***the effects of changes in foreign exchange rates.***

i. **Functional currency**; the currency of the **primary economic environment** in which an entityoperates. In **most cases** this will be the **local currency**. Results and position must be **measured** in this currency. While as, **Presentation currency** is the currency in which the financial statements are presented. If the presentation currency is different from the function currency, then the financial statements must be translated into the presentation currency.

ii. **Initial transactions**
When an entity enters into a transaction, this should initially be translated using the **historic** rate (the spot rate) prevailing at that date. An average rate for a period may be used if exchange rates do not fluctuate significantly.

Settled transactions
When a transaction is **settled** (when payment or receipt of cash occurs), this is translated at the historic rate prevailing at the date of settlement. Any exchange gain or loss is then recorded in the statement of profit or loss at that date.

Unsettled transactions
If a transaction is unsettled at the reporting date (meaning the amount is unpaid or a balance in a different currency is outstanding), then the **treatment depends on whether the item is a monetary or non-monetary item**. **Monetary items** are assets or liabilities to be paid in a fixed amount, or a unit of currency held, e.g. trade receivables, trade payables, cash, overdrafts, and loan notes. If the item is a monetary item, the balance will be **retranslated at the closing rate** (the exchange rate at the reporting date), with any gain or loss being recorded in the statement of profit or loss. **Non-monetary items** (such as inventory or property held under the cost model) are **not retranslated**. Instead, they are accounted for at the rate that existed at the date of the **initial** transaction.

(b) **IAS 12 – Income Taxes**

(i) The tax base of an asset is the tax deduction which will be available in future when the assetgenerates taxable economic benefits. If the future economic benefits will not be taxable, the tax base of an asset is its carrying value.

The tax base of a liability is its carrying value, less the tax deduction which will be available when the liability is settled. For revenue received in advance (or deferred income), the tax base is its carrying value, less any amount of the revenue which will not be taxed in future periods
.

(ii) A taxable temporary difference arises when the carrying value of an asset exceeds its tax base or the carrying value of a liability is less than its tax base.
A deductible temporary difference arises in the reverse circumstances (when the carrying value of an asset is less than its tax base or the carrying value of a liability is greater than its tax base).

(iii) IAS 12 – Income Taxes requires that (with specific exceptions) deferred tax liabilities are recognised on all taxable temporary differences. IAS 12 allows deferred tax assets to be recognised on deductible temporary differences when future taxable profits are expected to be available against which to offset the future tax deductions the deductible temporary differences are expected to generate.

(c)**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 to 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 relate 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.

(d) Definition of a qualifying asset
This is an asset that takes substantial time to be ready for its intended use or sale.
Events or transactions to effect capitalisation of borrowing costs
i) Expenditure on the asset is being incurred

ii) Borrowing costs are being incurred

iii) Activities are in progresses that are necessary to prepare the asset for its intended use or sale.

(e)Historical cost accounting (HCA) has been criticised on the following grounds.

(i) Reported results may be distorted as a result of the matching of current revenues with costs incurred at an earlier date. The full distribution of profits calculated on that basis may result in the distribution of sums needed to maintain capital. A distribution which appears well covered when measured against historical cost profit may appear much less well covered when compared with a measurement of profit that takes account of changing prices.

(ii) The amounts reported in a statement of financial position in respect of assets may not be realistic, up-to-date measures of the resources employed in the business.

(iii) As a result of (a) and (b), calculations to measure return on capital employed may be misleading.

(iv) Because holding gains or losses attributable to price level changes are not identified, management's effectiveness in achieving operating results may be concealed.

(v) There is no recognition of the loss that arises through holding assets of fixed monetary value and the gain that arises through holding liabilities of fixed monetary value.

(vi) A misleading impression of the trend of performance over time may be given because no account is taken of changes in the real value of money.

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:

(a) 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.

(b) HCA is well established with users aware of its limitations when they make decisions from accounts drawn up under this basis.
(c) 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.

(d) 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.

SOLUTION FOUR

(a) The accounting treatment of buildings to be sold is governed by IFRS 5: *Non-Current Assets Held for Sale and Discontinued Operations.*

A building would be classified as held for sale if its carrying amount will be recovered principally through a sale transaction, rather than through continuing use.

For this to be the case, the asset must be available for immediate sale in its present condition. Also management must be committed to a plan to sell the asset and an active programme to locate a buyer must have been initiated. Further, the asset must be actively marketed for sale at a reasonable price. In addition, the sale should be expected to be completed within one year of the date of classification as held for sale (although there are certain circumstances in which the one-year period can be extended). Finally it should be unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Immediately prior to being classified as held for sale, assets should be stated (or re-stated) at their current carrying amount under relevant International Financial Reporting Standards. Assets then classified as held for sale should be measured at the lower of their current carrying amount and their fair value less costs to sell. Any write down of the assets due to this process would be regarded as an impairment loss and treated in accordance with IAS 36: *Impairment of Assets*.

Assets classified as held for sale should be presented separately from other assets in the statement of financial position

(b) It is not true that, given the existence of IAS 41: *Agriculture* – other IFRSs do not apply to farming companies. The general presentation requirements of IAS 1: *Presentation of Financial Statements*, together with the specific recognition and measurement requirements of other IFRSs, apply to farming companies just as much as others.

IAS 41 deals with agricultural activity. Two key definitions given in IAS 41 are biological assets and agricultural produce.

A biological asset is a living animal or plant. Examples of biological assets would be sheep and fruit trees.

The criteria for the recognition of biological assets are basically consistent with other IFRSs, and are based around the Framework definition of an asset.

A key issue dealt with in IAS 41 is that of measurement of biological assets. Given their nature (e.g. lambs born to sheep which are existing assets), the use of cost as a measurement basis is impracticable.

The IAS 41 requirement for biological assets is to measure them at fair value less costs to sell. Changes in fair value less costs to sell from one period to another are recognised in profit or loss.

Agricultural produce is the harvested produce of a biological asset. Examples would be wool (from sheep) or fruit (from fruit trees).

The issue of measuring 'cost' of such assets is similar to that for biological assets. IAS 41 therefore requires that 'cost' should be fair value less costs to sell at the point of harvesting. This figure is then the deemed 'cost' for purposes of IAS 2: Inventories.

A consequence of the above treatment is that government grants receivable in respect of biological assets are not treated in the way prescribed by IAS 20: Government Grants. Where such a grant is unconditional, it should be recognised in profit or loss when it becomes receivable. If conditions attach to the grant, it should be recognised in profit or loss only when the conditions have been met.

The IAS 20 treatment of grants is to recognise them in profit or loss as the expenditure to which they relate is recognised. This means that recognition of grants relating to property, plant and equipment takes place over the life of the asset rather than when the relevant conditions are satisfied.

SOLUTION FIVE

(a) The IASB issued IFRS 15 because the existing criteria for revenue recognition outlined in IASs 11 and 18 were considered to be very subjective. Therefore it was difficult to verify the accuracy of the reported figures for revenue and associated costs.

One of the fundamental qualitative characteristics of useful financial information which is referred to in the IASB Conceptual Framework is faithful representation. Information needs to be verifiable in order to ensure it meets this fundamental characteristic. IFRS 15 provides a more robust framework upon which to base the revenue recognition decision, thus increasing the verifiability of the revenue figure and hence its usefulness.

(b) Mwata has TWO performance obligations: to provide the machine and provide the servicing.

The total transaction price consists of a fixed element of K560,000 and a variable element of K7,000 or K14,000.

The variable element should be included in the transaction price based on the probability of its occurrence. Therefore a variable element of K7,000 should be included and the total transaction price will be K567,000.

The transaction price should be allocated to the performance obligations based on their stand alone fair values. In this case, these are K490,000:K98,000 or 5:1.

Therefore K472,500 (K567,000 x 5/6) should be allocated to the obligation to supply the machine and K94,500 (K567,000 x 1/6) to the obligation to provide two years' servicing of the machine.

The obligation to supply the machine is satisfied fully in the year ended 30 September 2020 and so revenue of K472,500 in respect of this supply should be recognised.

Only 1/27 of the obligation to provide the servicing is satisfied in the year ended 30 September 2020 and so revenue of K3,500 (K94,500 x 1/27) in respect of this supply should be recognised.

On 30 September 2020, Mwata will recognise a receivable of K567,000 based on the expected transaction price. This will be reported as a current asset.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 23 JUNE 2020

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.

<u>QUESTION ONE</u> – (COMPULSORY)

(a) Chambix Ltd (C Ltd) wishes to buy a manufacturing business on 1 July 2020in the Chambeshi Economic Zone area of the Copperbelt Province. The purchase price has been agreed at K1.575 million. The price can be broken down as K0.6 million for plant and equipment, K0.225 million for raw materials and finished goods inventory and K0.75 million for goodwill. As soon as the purchase of the business is concluded, C Ltd will buy a distribution vehicle for K0.075 million. This vehicle will be paid for in full in August 2020.

Details of the forecasts following the acquisition of the business are given below:

(i) Sales revenues (before discounts) of the product will be:

Month	Sales revenues (K'000)
July	480
August	480
September	460
October	480
November	500
December	520

It is company policy to add a markup of 60% on the production cost. 25% of sales will be for cash whilst the remainder will be on credit, for settlement in the month following that of the sale. A discount of 10% upon sale will be given to selected credit customers who represent 25% of gross sales.

(ii) Production cost is forecast to be K25 per unit and it will be made up of:

Raw materials	K 12.50
Direct labour	K 7.50
Fixed overheads	K 5.00
	K 25.00

(iii) Production will be such that closing inventory at the end of the month is sufficient to meetsales requirement in the following month. A value of K150,000 is placed on the finished goods inventory, which was acquired on purchase of the business. This evaluation is based on the estimated production cost in (ii) above; it is expected that 5% of the output will be wasted.

(iv) Inventories of raw materials at the end of each month are required to be 50% of the materials required for the following month's production. A reasonable value of K75,000 is placed on the raw materials, which was acquired on the purchase of the business and this valuation is based on cost details in (ii) above. Raw materials will be purchased on credit and paid for in the month after purchase. One unit of finished product requires one unit of raw material.

(v) Direct labour costs are paid for in the month in which they are incurred.

(vi) The fixed production overhead absorption rate of K5.00 per unit is based on a forecast of the first year's production of 75,000 units. This rate includes depreciation of plant and equipment on a straight line basis over the next five years. The fixed production overheads are paid for in the month they are incurred.

(vii) Selling and administration overheads are all fixed and are estimated at K1,040,000 in the first year. These overheads include depreciation on the distribution vehicle on a straight line basis over the next 4 years. The selling and administration overheads will be paid for on a monthly basis with the exception of rent. Rent of K125,000 for the year is payable in advance in July 2020.

(viii) Cambix Ltd intends to obtain a K150,000 bank loan in July 2020on which it will pay interest at 8% per annum to be paid quarterly in September, December, March and June.

(ix) The company expects to have a bank balance of K150,000 at the beginning of July.

Required:

(i) Prepare a monthly production budget for July to October 2020. (6 marks)

The production budget should be stated to the nearest 1,000 units.

(ii) Prepare a cash budget for July to October 2020.(18 marks)

The cash budget should include the purchase price of the business as well.

(iii) Comment on the cash flow position of Cambix Ltd. (2 marks)

(b) Jones Kashuta has just been employed as the Finance Director by Katema Teaching Hospital (KTH) a government institute with responsibility for health services and medical professionals training in Katema, in the country of Sansa. Like all health services in Sansa, KTH is funded out of general taxation. Jones Kashuta was previously the Finance Director of a large private company making various chemicals. Jones Kashuta had successfully held a similar position in an international not for profit organisation. He was appointed to bring successful private sector practices and procedures to KTH.

Required:

(i) Explain the major differences between the private sector and public sector organisations. (6 marks)

(ii) Explain four (4) difficulties in measuring performance in the public sector organisations.

(8 marks)

[Total: 40 Marks]

SECTION B

Attempt any Three (3) out of Four (4) Questions

QUESTION TWO

Luitumezi Limited (Luitumezi Ltd)is a Zambian based company that manufactures plastic bottle containers. LuitumeziLimited has a single factory located in the heavy industrial area of the capital city, Lusaka. The company currently uses an absorption costing system and products pass through three production departments, A, B and C. L limited normally produces 120,000 plastic bottles per year and has established the following direct costs:

Material costs	K15 per unit
Machine costs	K5 per hour
Labour costs	K7 per hour

Overheads costs, which are fixed in nature, are absorbed into production using appropriate absorption rates and the table below provides more information on the budgeted overheads and activity of the company.

Details	**Dept. A**	**Dept. B**	**Dept. C**	**Service Dept. 1**	**Service Dept. 2**
Overheads	K3,000,000	K1,200,000	K600,000	K600,000	K400,000
Service Dept. 1	40%	30%	20%	-	10%
Service Dept. 2	50%	20%	20%	10%	-
Machine hours	581,818	178,600	140,000	-	-
Labour hours	556,221	185,859	164,444	-	-

LuitumeziLtd has established that the service departments work for other departments and when re-apportioning servicecentre costs,management of LuitumeziLtd uses a method that fullyrecognises the reciprocal service arrangements in the factory.

During the year ended 30 June 2020, LuitumeziLtd produced a total of 137,000 plastic bottles and K9,100,000was incurred as overheads. However, only 41,600 units were sold at the price of K195 per plastic bottle. The Marketing Manager has attributed the low sales to the current costing method of absorption costing, in that the overheads are being charged to the plastic bottles more leading to high cost of production per unit and subsequently high prices set for the plastic bottles. The manager proposes that if marginal costing is used and prices set to earn a contribution of about 41.32%, he could sell all the units produced in a given period.

Required:

(a) Calculate appropriate overhead absorption rates for each production cost centre. (8 marks)

(b) Prepare a profit statement for the year ended 30 June 2020. (7 marks)

(c) Using appropriate calculations, explain the impact on the profit if the Marketing Manager's proposal of changing to a marginal costing system is implemented. (5 marks)

[Total: 20 Marks]

QUESTION THREE

Mbombolelwa limited (M ltd) is a restaurant that has also a bakery that makes cakes. The bakery normally produces 650 cakes each period.

The standard cost card for a cake contains the following information.

	K Per unit
Ingredients 12 litres @ K40 per litre	480
Direct labour 3 hours @ K90 per hour	270
Variable production overhead 3 hours @ K20 per hour	60

During the latest period 670 cakes were produced. The actual results recorded were as follows:

Ingredients purchased and used 8,015 litres	K336,630
Direct labour 2,090 hours	K177,650
Variable production overhead	K54,340

Required:

(a) Calculate the following variances:

(i) Ingredients price variance
(ii) Ingredient usage variance
(iii) Labour rate variance
(iv) Labour efficiency variance
(v) Variable overheads expenditure variance
(vi) Variable overheads efficiency variance

(9 marks)

(b) Prepare a suitable operating statement. (6 marks)

(c) Prepare a report that explains the importance of conducting variance analysis and the interdependence of variances. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) For the year to 31March 2020, Chama Ltd intends to operate at a normal level of activity of 80%. The statement below gives basic details of cost and sales at three operating levels of activities.

Level of Activity

70%80%90%

K KK

Direct materials	35,560	40,640	45,720
Direct labour	89,600	102,400	115,200
Production Overhead	61,000	64,000	67,000
Administration Overhead	34,000	34,000	34,000
Total cost	**220,160**	**241,040**	**261,920**

In view of the depressed market in the industry in which the company operates, Chama Ltd's Production Manager believes that it may be necessary to operate at 60% level of activity.

Required:

(i) Prepare a budget flexed at 60% level of activity and state the resulting budget cost allowance. (6 marks)

(ii) Explain the advantages of encouraging employees of Chama Ltd participating in budget setting. (6 marks)

(b) Dhene Plc (D Plc) is considering using linear programming to improve its planning and control systems. The company wishes to produce three other products called Aye (A), Bee (B) and Cee (C) in three departments, namely, departments 1, 2 and 3. It is aware that it will face production constraints.

Each unit of A requires 4 labour hours in department 1, 2 hours in department 2 and 6 hours in department 3. Each of the unit of B needs 10 labour hours in department 1, 2 hours in department 2 and 2 hours in department 3. Each unit of C needs 2 labour hours in each of the three departments.

Variable costs and selling prices per unit are.

Products	A	B	C
Selling price per unit	K20	K17	K25
Valuable cost per unit	K15	K14	K19
Monthly fixed costs *	K15,000	K40,000	K24,000

*Total monthly fixed costs were allocated to products using monthly product volumes

Dhene Plc can sell all it can produce but SADC (the Southern African Development Community) quotas restrict the sale of C to a maximum 150 units per week. The maximum hours available in each department per week are 800,200 and 400 in departments 1, 2 and 3, respectively.

Required:

(i) Describe situations when it may be appropriate to use linear programming, clearly stating two limitations and two uses of linear programming. (3 marks)

(ii) Formulate a linear programming model to establish the profit maximising budget for production and sales. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Pride Ltd will produce and sell two products in its factory, namely the Boom (B) and the Doom (D). The expected variable cost will be K15 and K30, respectively. Budgeted selling prices have been forecast to be K30 and K36, respectively. Annual costs of making and marketing these two products are expected to be K1,684,800.

Pride Ltd is faced with two production and sales options. Option 1: Sell Products B and D in the ratio 2:3. Option 2: Sell Products B and D in the ratio 1:2.

Required:

(a) Determine the optimal mix of products B and D by evaluating options 1 and 2. Clearly state the better mix, giving reasons why the chosen mix is better. (8 marks)

(b) State five (5) assumptions underlying the Cost Volume Profit Model. (5 marks)

(c) Explain the importance of cost behavior. (3 marks)

(d) Explain two (2) purposes of management accounting systems in an organisation such as Pride Ltd. (4 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

a) i) Production Budget For the Period July to Oct 2019

	Jul	**Aug**	**Sept**	**Oct**	Nov	Dec
Production units	('000)	('000)	('000)	('000)	('000)	('000)
Sales (Sales Revenue ÷ Selling Price)						
[480|480|460|480|500|520] ÷ K40	12	12	11.5	12	12.5	13
Add: Closing Inventories	12	11.5	12.0	12.5	13.0	
Less Opening Inventories (K150/K25)	(6)	(12)	(11.5)	(12)	(12.5)	
Net Production	18.0	11.5	12.0	12.5	13	
Add 5% Wastage (5/95)	0.95	0.61	0.63	0.66	0.68	
Gross production	18.95	12.10	12.63	13.16	13.68	
Production Budget	19.0	12.0	13.0	13.0	14	14

W.1: Selling Price Per Unit

K25 x 1.6 = K40

a) ii) Cash Budget for the Period July to October 2019

	Jul	Aug	Sept	Oct
				K'000
	Jul	**Aug**	**Sept**	**Oct**
Cash Receipts				
[K480|K480|K460|K480] x 25%	120	120	115	120
Credit Sales	–	360	360	345

[K480|K480|K460] x 75%				
Discount				
[K480|K480|K460] x 25% x 10%	–	(12)	(12)	(11.5)
Loan	150			
	270	468	463	453.5
Payments				
Business Purchase	1,575	–	–	–
Distribution Vehicle		75.0		
Material Suppliers (W1)	–	237.50	156.25	162.50
Direct Labour [19|12|13|13] x K7.5	142.50	90	97.50	97.50
Fixed Overheads (W2)	21.250	21.250	21.250	21.250
Selling & Admin Overheads (W3)	74.688	74.688	74.688	74.688
Rent	125	-	-	-
Bank Interest	–	–	3.0	–
Total Payments	1,938.438	498.438	352.688	355.938
Net Cashflow	(1,668.438)	(30.438)	110.312	97.562
Opening Cash Balance	150.0	(1,518.438)	(1,548.876)	(1,438.564)
Closing Cash Balance	(1,518.438)	(1,548.876)	(1,438.564)	(1,341.002)

W.1 Raw Materials Purchases (‘000) units

	Jul	Aug	Sept	Oct
Material Usage	19	12	13	13
Add: Closing Inventories (0.5 x Next Month’s production)	6	6.5	6.5	7
Less: Opening Inventories (K75,000/K12.50)	6	6.0	6.5	6.5
	19	12.5	13.0	13.5
	x	x	x	x
Purchase Price per unit	K12.5	K12.5	K12.5	K12.5

Total Cost (K'000)	K237.50	K156.25	K162.50	K168.75

W.2 Fixed overheads

Total Overheads

Total FOH (K5 X 75,000) =	K375,000
Less: K600,000/5	(K120,000)
FOH per annum	K 255,000
	÷
12 months	
FOH per month	K 21,250

W.2 Selling and administration overheads

Total Overheads	K1, 040,000
Less: Distribution Vehicle dep'n	
(K75, 000/4)	(18,750)
Rent advance	(125,000)
K 896,250	
	÷
	12 months
Overheads per month	K74,687.50

(a) (iii) Comment on cashflow position

- The purchase of the business and the distribution vehicle adversely affected cashflow. Longer term finance for these two should be considered.
- A cash shortage occurs in July and August. Should it not be possible to arrange long term finance, a bank overdraft should be considered.
- Month September and October indicate excess receipt over payment though closing balances are still negative.
- Greater use of credit finance should be made (though for new businesses this may not be possible).

(b)i. A private sector organisation has as its primary objective the making of sufficient profits to
provide a satisfactory return for its owners and to keep the business operating.
So, it is the job of senior management to **maximise the market value** of the company. Specifically, the main financial objective of a company should be to maximise the wealth of itsordinary shareholders. Within this context, the financial manager seeks to ensure thatinvestments earn a **return**, for the benefit of shareholders. Part of this job will involve attractingfunds from the market, such as new investors, but as with public sector

organisations it is alsoimportant that the operations of the company are run economically and efficiently.

Public sector organisations are generally set up with a prime objective which is not related to
making profits. These organisations exist to pursue non-financial aims, such as providing a service to the community. However, there will be financial constraints which limit what any such
organisation can do. A not-for-profit organisation**needs finance** to pay for its operations, and themajor financial constraint is the amount of funds that it can obtain. Having obtained funds, a notfor-profit organisation should seek to get **value for money** from use of the funds:

(i) **Economy**: not spending K2 when the same thing can be bought for K1
(ii) **Efficiency**: getting the best use out of what money is spent on
(iii) **Effectiveness**: spending funds so as to achieve the organisation's objectives

Since managing in the public sector (for example) is different from managing a company, a different framework is needed for **planning and control**. This is achieved by:

- **Careful planning** of public expenditure proposals
- Emphasis on getting **value for money.**

(b)ii. Performance measurement in the public sector has traditionally been perceived as presenting**special difficulties** including the following:

(i) Lack of profit measure

Since most public sector organisations cannot be judged by their success against competition norby profitability, other methods of assessing performance have to be used. If an organisation is notexpected to make a profit, or if it has no sales, indicators such as return on investment aremeaningless.

(ii) Multiple objectives and different expectations

Non profit seeking organisations tend to have multiple objectives, so that even if they can all beclearly identified it is impossible to say which is the overriding objective. **Different stakeholdershold different expectations** of public sector organisations.

Schools have to reconcile the possibly conflicting demands made on them but to make explicitstatements of objectives might show that they are favouring one group of stakeholder at theexpense of another.

(iii) Political, social and legal considerations

Given the role of government in public sector organisations, long-term organisational objectivesare sometimes sacrificed for short-term political gains.

Unlike commercial organisations, public sector organisations are subject to strong politicalinfluences. Local authorities, for example, have to carry out central government's policies as wellas their own (possibly conflicting) policies.

(iv) Measuring outputs

Outputs (meaning the results of an activity) can seldom be measured in a way that is generallyagreed to be meaningful. (For example, are good exam grades alone an adequate measure of thequality of teaching?) Data collection can be problematic. For example, unreported crimes are notincluded in data used to measure the performance of a police force. It is difficult to assign amonetary value to many non profit seeking entity outputs. For example, in a state hospital, whatis the monetary value of a hip replacement? Is a hip replacement on an old age pensioner worthmore than a knee operation on a 35 year old?

(v) Nature of service provided

Many not for profit organisations provide services for which it is difficult to define a cost unit. For example, what is the cost unit for a local fire service? This problem does exist for commercial service providers but problems of performance measurement are made simple because profit can be used.

(vi) Financial constraints

Although every organisation operates under financial constraints, these are more pronounced innot for profit organisations. For instance, a commercial organisation's borrowing power is effectively limited by managerial prudence and the willingness of lenders to lend, but a local authority's ability to raise finance (whether by borrowing or via local taxes) is subject to strict control by central government.

SOLUTION TWO

Part a

Let service dept 1 be Y and service dept 2 be X
The total overheads for Y would be; Y = 600,000 + 0.1X
The total overheads for X would be; X = 400,000 + 0.1Y
Therefore solving the equations simultaneously;
Y = 646,465 and X = 464,646
The service department overheads are apportioned to the production departments as follows;

	A	B	C
Allocated	K3,000,000	K1,200,000	K600,000
From Y	K258,586	K193,940	K129,293
From X	K232,323	K92,929	K92,929
Total overheads	K3,490,909	K1,486,869	K822,222

OAR is based on the intensity of the work in each department;

OAR	K6/machine hr	K8/labourhr	K5/labourhr

Part b

The hours per unit in each production department is determined by dividing the total hours for either labour or machine with the normal production of 120,000 units

	A	B	C
Machine hour per unit	4.85 hrs	1.49 hrs	1.17 hrs
Labour hours per unit	4.64 hrs	1.55 hrs	1.37 hrs

Calculation of prime cost and full cost per unit;

		Cost per unit
Material costs		K15
0.5		
Machine costs; K5 x (4.85 + 1.49 + 1.17)		K37.55
0.5		
Labour costs; K7 x (4.64 + 1.55 + 1.37)		K52.92
0.5		
Prime cost		**K105.47**
Overheads;	A (K6 x 4.85)	K29.10
	B (K8 x 1.55)	K12.40
	C (K5 x 1.37)	K6.85
Full cost		**K153.82**

Profit statement

	K		K
Revenue (K195 x 41,600)			8,112,000
0.5			
Production (K153.82 x 137,000)	21,073,340		
Closing stock (K153.82 x 95,400)	(14,674,428)	1	
Cost of sales			6,398,912
Profit before adjustment			1,713,088
Actual overheads	9,100,000		
Absorbed overheads (K48.35 x 137,000)	6,623,950		
Less; under absorption			2,476,050
Adjusted profit/(loss)		**(762,962)**	

Part c

If marginal costing was used as suggested by the marketing manager, the price per bottle would be; K105.47/0.5868 = K179.74

Contribution per unit would be; K179.74 – K105.47 = K74.27

Total contribution (K74.27 x 137,000)	K10,174,990
Overheads	K9,100,000
Profit	**K1,074,990**

From the above calculations it is clear that a change to marginal costing would result in a lower price being charged as a result more units would be sold, thereby increase the profit for the company. The product has elastic demand, therefore, a price reduction results in increased demand. It is recommended therefore, to shift to marginal costing.

SOLUTION THREE
Part a)

		K
8,015 litres should cost (x K40)		320,600
But did cost		336,630
Ingredients price variance		16,030 adverse

Litres		
670 cakes produced should use (x 12)		8,040
But did use	8,015	
Variance in litres		25 favourable
Standard price per litre x K40		
Ingredients usage variance		K1,000favourable

2,090 hours should cost (x K90)		188,100
But did cost		177,650
Labour rate variance		10,450favourable

670 cakes produced should take (x 3)		2,010
But did take	2,090	
Variance in hours		80 adverse
Standard labour rate per hour x K90		
Labour efficiency variance		K7,200 adverse

2,090 hours should cost (x K20)	41,800
But did cost	54,340
Variable overhead expenditure variance	12,540 adverse

Variance in hours (from labour efficiency variance)	80 hours adverse
Standard variable overhead rate per hour (K20)	
Variable overhead efficiency variance	K1,600 adverse

b) Operating Statement

		A	F	K
Budgeted variable costs	670 x 810			542,700
Variable cost variances				
		A	F	
Ingredients price variance		16,030		
Ingredients usage variance			1,000	
Labour rate variance			10,450	
Labour efficiency variance		7,200		
Variable overhead expenditure variance		12,540		

Variable overhead efficiency variance 1,600

37,370 A 11,450 F

25,920 A

Actual variable costs 568,620

Part c

REPORT
TO: Chief Accountant
FROM: Management Accountant
DATE: 23rd June 2020
SUBJECT: Variance analysis

Introduction
A variance is 'the difference between a planned, budgeted, or standard cost and the actual cost incurred. The same comparisons may be made for revenues'.

Importance of variance analysis
Variance analysis is defined as the 'evaluation of performance by means of variances, whose timely reporting should maximise the opportunity for managerial action. One of the most important purposes of variance analysis is to identify potential problems where an interrelationship exists between different variances.

Inter-relationships between variances

Materials price and usage
It may be decided to purchase cheaper materials for a job in order to obtain a favourable price variance, possibly with the consequence that materials wastage is higher and an adverse usage variance occurs. If the cheaper materials are more difficult to handle, there might be an adverse labour efficiency variance too. If a decision is made to purchase more expensive materials, which perhaps have a longer service life, the price variance will be adverse but the usage variance might be favourable.

Labour rate and efficiency
If employees in a workforce are paid higher rates for experience and skill, using a highly skilled team to do some work would incur an adverse rate variance, but should also obtain a favourable efficiency variance. In contrast, a favourable rate variance might indicate a larger-than-expected proportion of inexperienced workers in the workforce, which could result in an adverse labour efficiency variance, and perhaps poor materials handling and high rates of rejects too (adverse materials usage variance).

I hope you find this information helpful.

Yours faithfully,

Management Accountant

SOLUTION FOUR

(a) i.

Flexible Budget At 60%

	K per unit	K
Direct Material	508	30,480
Direct Labour	1,280	76,800
Variable production overhead	300 (W.1)	18,000
Fixed production overhead	(W.2)	40,000
Administration Overhead		34,000
Budget Cost Allowance		K199,280

W.1 Variable Overhead

VOH per 1% $= \frac{K67,000 - K61,000}{90 - 70}$

= K 300

W.2 Fixed overheads

K 67,000 – (90 X K 300)

=K 40,000

ii. **Advantages of encouraging employee participation in budget-setting**

Generally , participative budget-setting will result in :

1. An informed budget-setting process , such that management are aware of the detail of budgeted activities as provided by the people who work daily within the budgeted activity.
2. Avoiding the criticism that budgets are unrealistic
3. Reducing the adverse effects of budget imposition when difficult management decisions have to be made (e.g staff reduction).
4. Employees become aware and more involved in the management activities of the organisations. To the extent that they become more aware, then a greater understanding of the needs of the organisation as a whole is reached
5. Co-ordinating within an activity might be improved . If activities are jointly budgeted , or are part of the same process , then co-ordination between activities might be improved.
6. Budget slack may be reduced as management become more aware of the operational activities within an activity.
7. Achievable budgets are more likely to be set.
8. When budgets are not met management are more likely to have a deeper knowledge of the operational issues involved.
9. There is less risk that budgets will be undermined by subordinates.

(b) (i) Situations when used

Conventional limiting factor analysis should be used when there is only one scarce factor. Linear programming can be used to determine the production programme that maximizes total contribution when there is more than one scarce input factor.

Limitation of Linear Programming (LP)

- It assumes linearity in value ,i.e. all relevant relationships can be expressed by linear functions, i.e. straight lines
- Optimal solution may produce fractions of units. In real life, fractions of shoes or houses cannot be produced. In other words, LP assumes divisibility
- Certainty: LP assumes all variables are known with certainty.

Uses of LP

- In budgeting (which products to produce and not)
- To decide maximum payment for obtaining extra scarce resources
- Capital Budgeting (i.e. in capital rationing)

(ii) Define variable

Let:

'a' be units of product A
'b' be units of product B
'c' be units of product C

Construct objective function

Maximize

$5a + 3b + 6c$

Establish constraints

$4a + 10b + 2c \leq 800$ (maximum Dept 1 labourhours)
$2a + 2b + 2c \leq 200$ (maximum Dept 2 labour hours)
$6a + 2b + 2c \leq 400$ (maximum Dept 3 labour hours)
$c \leq 150$ (maximum product C demand)

$a,b,c \leq 0$ (Non-negativity constraint)

SOLUTION FIVE

(a)

contribution per unit per product

Boom (B) = K30- K15= K15

Doom (D)= K36-K30=K6

Option 1

Break-even point sales mix = Total Fixed costs / Weighted average contribution mix

= K1,684,800 / (K15 X 2 + K6 X 3)

= K 1,684,800 / K48/five units

= 35,100 units, i.e 35,100 units in sets of 5.

Total Break-even point sales revenue

B: 35,100 X 2 X K30 = K2,106,000

D: 35,100 X 3 X K36 =K3,790,800

Total **K5,896,800,**

Option 2

Break-even point sales mix = K1,684,800 / K15 X 1 + K6 X 2

= K1,684,800 / K 27/ per 3 units

= 62,400 units, i.e 62,400 units in sets of three.

Total Break-even point-sales revenue

B: 62,400 X 1 X K30 = K1,872,000

D: 62,400 X 2 X K36 =K4,492,800

K6,364,800

Comment

Option 1 is better than option 2 because the break-even sales revenue is lower. In other words, the average contribution per mix is higher in option 1 than in option 2, i.e. K9.6 (K48/5)
compared to K9 (K27/3).

(b)**Assumptions on which cost-volume analysis is based.**

Cost-volume –profit analysis is based on the following assumptions:

(a) All variables, other than volume, remain constant;

(b) The sales mix remains constant ;

(c) Total cost and revenue are linear functions of output;

(d) Profits are calculated on a variable costing basis;

(e) The analysis applies only on the relevant range;

(f) Costs can be accurately divided into their fixed and variable elements;

(g) The analysis applies only to a short-term horizon, and

(h) Complexity related fixed costs do not change.

(c) **Cost behaviour**is defined as, 'the way in which costs per unit of output are affected by fluctuations in the level of activity' and is of vital importance in management accounting. The management accountant's examination of costs must go beyond the recording of actual costs. The reason for this is that cost information will be used for **planning, decision-making** and **control**. Hence when planning the cost accountant must be aware of the likely ways costs will behave; when taking decisions, which costs will be dependent on that decision; for control, what level of costs would have been expected in the circumstances.

(d) Purpose of management accounting

1. Decision making
   The management accounting system provides relevant financial information to managers to help them make better decisions. Information is required relating to the profitability of various segments of the business such as products, services and customers, in order to ensure that only profitable activities are undertaken. Information is also required for making resource allocation and product/service mix and discontinuation decisions. In some situations information extracted from the costing system also plays a crucial role in determining selling prices.

2. Planning and control
   Management accounting systems should also provide information for planning, control, performance measurement and continuous improvement. Planning involves translating goals and objectives into the specific activities and resources that are required to achieve them. Companies develop both long-term and short-term plans and the management accounting function plays a critical role in this process. Short-term plans, in the form of the budgeting process, are prepared in more detail than the longer-term plans and are one of the mechanisms used by managers as a basis for control and performance evaluation. The control process involves the setting of targets or standards (often derived from the budgeting process) against which actual results are measured.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

2020

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional 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

Mopani Food Manufacturers Plc.manufactures a wide range of canned food products which it sells on credit to leading supermarkets. The company has shelf space at two of the leading supermarkets. The company employs merchandisers who are stationed at these supermarkets whose role is to ensure availability of stocks and place orders for more stocks. The inventory held in the stores belongs to Mopani Food Manufacturers Plc. and the company invoices the supermarkets at the end of each month for sales made the previous month.

Sales to the other supermarkets are made on credit and the company gives a one-month credit period. In order to reduce the risk of bad debts, it is company policy that credit customers make a deposit equivalent to one month's sales which is repayable at the end of the business relationship.

The draft financial statements for MopaniFood ManufacturersPlc.for the year ended 31 December 2019 show a significant increase in the receivables days from an average of 32 days to 60 days. In addition, the company has significant inventory of finished goods and work in progress.

The company has a policy of revaluing its properties every five years. Revaluations of all the company property were done by an established Estate Agent and the revaluation adjustments were made during the year under review.

The production equipment that is in use is old and the company experienced frequent breakdowns in the last few months. The Board of Directors approved a five-year loan of K5million which is intended for the procurement of modern production equipment. During the year, there were major repairs and refurbishment of equipment aimed at reducing disruptions in production due to frequent breakdown of equipment.

MopaniFoods Manufacturers Plc. employsmostly hourly paid workers and a few members of staff in supervisory positions who are paid fixed monthly salaries.

Production is twenty-four(24) hours and workers work in shifts. All shift workers are given electronic identification cards. At the beginning of the shift, the workers 'clock in' the electronic card and the time recording system identifies the worker and logs them in as being at work. At the end the shift, the workers 'clock out' and the system records the time that they leave and computes the total number of hours worked per shift.

Each shift is under the supervision of a Shift Foreman who assigns work to staff and also verbally authorizes overtime to staff.Overtime is dependent on the workload which sometimes demands that more staff than those on the shift are required to meet the production targets. Shift Supervisors have authority to engage workers as need dictate. They maintain a register which is used to record details of any staff engaged and the staff number allocated.

The Payroll Accountant in finance is responsible for calculating the gross wages and working out the net pay. He prepares the total net pay cheque and has it approved by the Human Resource

Officer. The Payroll Accountant obtains the cash from the bank and prepares the pay packets for all staff.

Staff get their pay packets from the Payroll Accountant at specified times during the day. Workers are able to collect the pay-packets for friends as long as they identify themselves and present the national registration card to the Payroll Accountant.

There is a high staff turnover of hourly paid workers. Some workers simply stay away and in most cases the Human Resources Officer comes to learn of leavers much after they have left.

You are the Audit Senior on the audit of Mopani Food Manufacturers Plc. During the planning stage of the audit you established that a group of hourly paid employees who worked for Mopani Food Manufacturers Plc. took legal action against MopaniFood Manufacturers Plc. They are claiming that the company breached legal provisions which require that gratuity should be paid to all workers who work for the company for a period exceeding six months. The company did not pay these workers any gratuity and the case is outstanding at the period end and no provision had been made in the financial statements. The Finance Director informed the audit team that no provision has been made because the company believes that it will not lose the case and instead the issue will be disclosed in the financial statements as a contingent liability.

Required:

(a) In respect of the payroll system for Mopani Food Manufacturers Plc:

(i) Identify and explain five (5) deficiencies in the payroll system of Mopani Ltd. (5 marks)

(ii) Explain the possible implications of each deficiency in (i) above. (5 marks)

(iii) Provide a recommendation to address each deficiency. (5 marks)

(b) Describe any six (6) audit risks in the audit of the financial statements for Mopani Food Manufacturers Plc. (12 marks)

(c) Discuss the importance of assessing risks at the planning stage of the audit of Mopani Food Manufacturers Plc. (3 marks)

(d) Describe six (6) substantive audit procedures that should be performed in the audit of provisions. (6 marks)

(e) Describe four (4) audit procedures that should be performed in the audit of contingencies in the financial statements of Mopani Food Manufacturers Plc. (4 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

(a) Hippo Plc. was a government owned company until recently when the Government sold its majority stake to a private investor and retained a minority interest.

The new majority shareholder is concerned with the way the company has been run over the years by the Government. Your firm has been engaged to offer consultancy services to Hippo Plc. The company was recently listed on the Lusaka Securities Exchange (LuSE).

The company arranged a two-daycorporate governance induction course for the Board of Directors, and you were one of the resource persons. During one of the sessions, one of the Directors asked you why you were proposing the introduction of the Audit Committee. He does not understand why there should be an Audit Committee chosen from among the Board Members. He is of the view that this will be an extra cost for the company and strongly believes the work of the proposedAudit Committee could be done by the full board.

Required:

Explain any six (6) advantages and two (2) disadvantages of the proposed Audit Committee to Hippo Plc. (8 marks)

(b) Going concern is simply the ability of a company to continue operating for the foreseeable future. Most financial statements are prepared on the assumption that the company is a going concern.

Required:

(i) Explain four (4) reasons why auditors are concerned with the going concern status of client companies. (4 marks)

(ii) State four (4) examples of financial indicators of going concern problems. (4 marks)

(iii) State four (4) examples of operating indicators of going concern problems. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Audit fee determination for clients is a topical issue in the modern world. Zebra Ltd, one of your long standing clients has informed you that the company is not considering renewing the contract for audit services. At a meeting with one of the Partners of your firm,Management stated that the company experienced sales volume reductions over the past four (4) years. Despite this fact, the audit fees have been increasing annually adversely affecting the company's liquidity levels. Management of Zebra Ltd suggested that the company enters into a review engagement with the auditors rather than an audit engagement and this would result in a reduction in the fee but still achieve the objective of an audit.

The Engagement Partner indicated to the Management of Zebra Ltd that the firm would like to continue offering audit services to it and that he would come up with a proposal which will see a significant reduction in the audit fees resulting in a win-win situation for the firm and Zebra Ltd. The Engagement Partner went further into suggesting that Zebra Ltd enhances its internal controls.

Required:

(a) Explain four (4) ways in which Zebra Ltd can reduce the external audit costs through legitimate ways. (4 marks)

(b) Explain the meaning of a review engagement and discuss the level of assurance given in a review engagement. (6 marks)

(c) Explain how effective internal controls may result in a reduction in the audit fee that the firm will charge. (4 marks)

(d) Explain four (4) tasks that the auditors usually perform during the interim audit stage; clearly stating how these tasks affects the work performed at the final audit stage. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Chisamba Plc is a company that provides specialist radiology services to all hospitals in Zambia. It was formed by Charles Nyoni in 1993 following the liberalization of the economy. and is based in Lusaka. It was listed on the Lusaka Securities Exchange (LuSE) on 1 June 2019. Your firm of chartered accountants, Sekeleti & Co. was appointed as external auditors for Chisamba Plc.

Chisamba Plc employs 300 staff, and has an average annual turnover of K400 million. The company is proud to offer the very highest levels of customer service. However, much of the equipment used is quite old and as a result, components are no longer available from the original equipment manufacturers. At the moment, the company uses a local company to manufacture low quality components in order to keep the machines in working condition. The Board of Directors have authorized the purchase of modern equipment.

You are an Audit Senior in Sekeleti & Co. and the audit of the financial statement for Chisamba Plc for the year ended 30 September 2019, is about to commence. The Engagement Partner had a planning meeting with the Chairman of the Audit Committee and a number of issues were discussed as follows:

1. In May 2019, an investigation was carried out by the internal auditors which revealed that the technical staff were giving wrong results to customers mainly due to the malfunctioning of equipment. This is contrary to the radiation laws and regulations and Chisamba Plc risk losing its licence. The failure to detect the breaches of laws and regulations led to the dismissal of the external auditors.

   The Engagement Partner suspects that non-compliance with laws and regulations still exists in Chisamba Plc and he would like this to be addressed in detail at the next meeting, with the audit team.

2. The Board of Directors wants Sekeleti & Co. to use the work of the internal auditors so that the audit fees can be reduced. The Audit Manager evaluated the extent to which the Internal Audit's objective is supported by its organizational status, relevant policies and procedures; and the application of a systematic and disciplined approach, including quality control. The Engagement Partner has requested you to evaluate the level of competence of the Internal Audit Department since the Audit Manager is attending a Continuous Professional Development (CPD) workshop at the ZiCA headquarters.

   The Managing Director noticed that internal auditors are increasingly adding value to Chisamba Plc. He now wants to know how the Internal Audit Department can help Chisamba Plc deal with the risk of fraud and error.

   Required:

   (a) Explain the responsibilities of management and auditors regarding compliance with relevant laws and regulations. (6 marks)

   (b) Discuss the actions the auditors of Sekeleti & Co. will take regarding the suspected non-compliance with laws and regulations. (4 marks)

   (c) Explain the matters to consider when evaluating the level of competence of the Internal Audit Department of Chisamba Plc. (4 marks)

   (d) Explain how the Internal Audit Department for Chisamba Plc can help in dealing with the risk of fraud and error. (6 marks)

   [Total: 20 Marks]

QUESTION FIVE

Mafuta Chartered Accountants has been in existence for many years. It employs one thousand (1,000) audit staff in various countries. The Zambian office has five (5) partners, twelve (12) managers and sixty (60) employees at various lower levels.

You are one of the Audit Managers in Mafuta Chartered Accountants and you are responsible for the audit of the financial statements of Mungwi Ltd for the year ended 28 February 2019. Mungwi Ltd provides cleaning services to schools, colleges and universities. It has been an audit client for four (4) years and the Engagement Partner has not been changed.

A new Board of Directors was appointed in October 2018. The Chairperson is a professional accountant who has promised the shareholders of Mungwi Ltd improved accountability and transparency. He was at the same university with the Engagement Partner from 1 January 2012 to 31 December 2015.

During the interim audit carried out in November 2018, Management discovered that the company had excess cleaning materials which may go to waste if not used within a period of six months. The company offered the excess cleaning materials to the audit team members at a reduced price of 1% of the cost price.

The son to the Finance Director of Mungwi Ltd recently joined Mafuta Chartered Accountants as an Assistant Accountant in charge of the general ledger. He completed CA Zambia with five (5) awards to his name.

The tax authorities carried out a tax audit in December 2018 and a number of irregularities were identified. An assessment of the additional tax together with the penalties and interest was received on 5 January 2019 and the Finance Director notified the Commissioner General of his objection on 16 January 2019. The Commissioner General informed the Finance Director that the objection was unsuccessful. The Finance Director requested Mafuta Chartered Accountants to file an appeal and represent Mungwi Ltd at the Tax Appeals Tribunal (TAT). The amounts involved are material to the financial statements.

During a management meeting held last week, the Partner-in-Charge of Quality and Risk expressed concerned about the following:

(1) The poor quality of audit documentation by junior auditors.

(2) The office space taken up by the audit files. He wants most of the audit files to be destroyed.

The Partners want you to conduct training for the junior auditors on the matters that affect the form and content of audit documentation and advise the Partner-in-Charge of Quality and Risk regarding the recommended retention period for audit files since too much paperwork is a serious fire hazard.

Required:

(a) Explain what is meant by audit documentation and give two (2) examples of matters that affect the form and content of audit documentation. (4 marks)

(b) Advise the Partner-in-Charge of Quality and Risk on how to proceed with the destruction of audit documentation. (6 marks)

(c) Explain four (4) ethical threats which may affect the independence of Mafuta Chartered Accountants' audit of Mungwi Ltd. (6 marks)

(d) For each threat explain how it might be mitigated. (4 marks)

[Total: 20 Marks]

END OF PAPER

SOLUTION ONE

(a) (i)/(ii)/(iii) Deficiencies, implications of deficiencies & recommendations in Mopani Food Manufacturers Plc.

1. **Deficiency:**

   The clocking in using identification cards is a deficiency in that workers can clock in and out for someone who is not at work.

   Implication:

   Workers will be paid for work not done resulting in a loss of money by the company.

   Recommendation:

   The Shift Foreman should maintain a record of employees who have reported for work which should be compared to the report from the electronic identifications system. Alternatively use can be made of Closed Circuit Television (CCTV) so that at the point of entry.

2. **Deficiency:**

   Verbal authorization of overtime by the Shift Foreman is a control deficiency.

   Implication:

   Verbal authorization of overtime can result in overtime that has not been worked for being paid.

   Recommendation:

   All overtime should be authorized in writing by the Shift Foreman and a record maintained. Staff could also be required to sign in a register for any overtime that they have worked.

3. **Deficiency:**

   The authority given to Shift Supervisors to engage workers when need arises is a control deficiency. The Shift Supervisor could engage workers who may not be required.

   Implication:

   The company will incur extra wage costs which will result in an increase in production cost.

Recommendation:
Recruitment of workers should be the responsibility of an independent person preferably the Senior Human Resources Officer if any.

4. **Deficiency:**
The Payroll Accountant is responsible for preparing the wages, prepares the cheques, draws the cash and pays the wages to the workers. There is clearly a lack of segregation of duties. The Payroll Accountant performs all the tasks related to wages.

Implication:
Lack of segregation of duties will result in errors and fraud not being detected and prevented. This will result in the loss of funds by the company.

Recommendation:
The Payroll Accountant should not perform all the tasks that he currently performs. Another person should be responsible for the collection of the cash and paying the workers.

5. **Deficiency:**
Collection of pay packets on behalf of friends is a control weakness.

Implication:
Collection of pay-packets may result in disputes if the money was not given to the beneficiary.

Recommendation:
All workers should collect the pay packets in person and all funds not collected should be banked and drawn at a later stage when the workers are available.

6. **Deficiency:**
With a high staff turnover, there is no control over records of staff that leave with the Human Resources Officer learning of leavers later after they leave employment.

Implication:
Poor record keeping on staff that leave employment can result in the company paying workers even after they have left employment.

Recommendation:

A record of staff that leave employment should be maintained and the Human Resources Department should be informed in writing as soon as this occurs.

(b) Audit risks in in Mopani Food Manufacturers Plc.:

1. Mopani Food Manufacturers Plc. is in the food production industry. The company faces a risk of being sued by consumers in case of suspected or actual food poisoning. There a risk that provisions or contingencies may be understated.
2. The food industry is highly regulated in order to protect consumers. There is a risk that Mopani Food Manufacturers Plc. will not comply with laws and regulations which could result in the company facing the penalties and possible withdrawal of operating license which has going concern implications.
3. Risk of misstatement of inventory of Mopani Food Manufacturers Plc.:
   The risk of misstatement of inventory is twofold as follows:
   - There is a risk that the inventory held at the two outlets where Mopani Food Manufacturers Plc. has shelf space may be stolen and efforts made to conceal the shortages.
   - There is a risk that stocks that may have been expired are valued at cost and yet should be written off.
4. The deposit that credit customers pays Mopani Food Manufacturers Plc. is repayable at the end of the business relationship. There is a risk that Mopani may treat such deposits made as revenue instead of payables in the financial statements.
5. There is a risk that receivables that are not recoverable will not be written down. The increase in receivables days from 32 days to 60 days may result in increased bad debts and receivables may be misstated.
6. There is a risk that the revaluations that have been carried out in the year have not been done in accordance with accounting standards. Further, the determination of the revaluations may not have been done correctly resulting in misstatements of the financial statements.
7. Impairment of equipment:
   There is a risk that the old equipment has not been tested for impairment, resulting in overstatement of profits due to non-recognition of any impairment loss.
8. Major repairs and refurbishment:
   There is a risk of misstatement which may arise because of misclassification of expenditure between revenue and capital expenditure.

(c) Importance of assessing risk at planning stage:

Assessing risk at the planning stage of the audit of Mopani Food Manufacturers Plc. is important because of the following:

1. By assessing and identifying risk at the planning stage the auditors will know at the earliest stage in the audits the areas where material misstatements may arise.
2. The auditors can deal promptly with matters of concern during the early stages of the audit with Management.
3. Risk assessment will enable the auditor determine the human resource requirements that are needed to perform the audit in an efficient and effective manner.
4. Risk assessment enables the auditor to respond appropriately to the risks identified in accordance with ISA 330 *The auditor's responses to assessed risks* guidelines.
5. The risk assessment conducted at the planning stage will assist the auditor to assess the internal controls and control environment of the client and this will help the auditor decide what type of audit approach he will follow.
6. The nature, timing and extent of audit procedures are in response to the risks identified at the planning stage of the audit.

(d) Audit procedures to audit provisions:

1. Obtain a schedule giving the breakdown of the provisions figure in the financial statements.
2. Cast the schedule of the make-up of the provisions to ensure accuracy.
3. Confirm that each of the figures contained in the provisions amount meets the criteria in IAS 37. This will be done by reviewing the provisions and seeking management's explanations concerning this.
4. Confirm that the assumptions used to determine the provisions are reasonable under the circumstances.
5. Examine any post year end transactions that may give evidence of the provision that should have been made at the period end.
6. Assess management's ability to make provisions and avoid any bias by reviewing the previous year provisions and compare with the actual amounts.
7. Review the schedule of provisions and ensure that provisions have been made for the items common in the relevant industry and from prior knowledge of the auditors.
8. Where necessary obtain written representations from management regarding provisions that have been made.

9. Confirm that adequate disclosure has been made in the financial statements.

(e) Audit procedures for contingencies:

1. Obtain details of all contingencies that have been disclosed from Management.
2. Evaluate the reasons why specific items have been classified as contingent liabilities and not provisions.
3. Evaluate the provisions made and for those that it was not possible to estimate the amount ensure they are treated as contingencies.
4. Consider the adequacy of the disclosure for contingent liabilities and ensure they discloses are adequate.
5. Enquire from Management and in-house Legal Advisers of any legal cases outstanding which may give rise to contingent liabilities
6. Review minutes of meetings of the Board and Management and review any correspondence between the entity and external Legal Advisors.

SOLUTION TWO

(a) Advantages of the proposed Audit Committee to Hippo Plc:

1. By reviewing the financial statements, the Audit Committee improves the quality of financial statements.
2. Reduces the opportunity for fraud because of the very existence of the Audit Committee.
3. Enables Non-Executive Directors to contribute positively in running the company by exercising their independence.
4. The Audit Committee acts as a forum to which the Financial Director can refer matters of concern he is unable to resolve through other means.
5. Recommends to the main board the nomination of statutory auditors for referring to the Annual General Meeting.
6. Strengthens the position of the external auditors by providing a channel through which they can raise matters of concern.
7. Strengthens the position of the internal audit department which reports to the audit committee on matters pertaining to their work.

Disadvantages of the proposed Audit Committee:

1. The Executive Directors may not appreciate the role of the Audit Committee and may perceive it as interfering with their work.
2. There may be problems in selecting suitable members with the required skills of the Audit Committees.
3. Costs may increase because members of the Audit Committee are paid for being members.

(b) (i) Reasons why auditors are concerned with going concern:

Financial statements are usually prepared on the basis that the company is a going concern and has the ability to continue to operate as a going concern and has no intention to significantly scale down its operations.

In the event that a company is not a going concern, the financial statements are prepared on an alternative basis the break up basis. Under this method non-current assets are reclassified as current assets. If the wrong basis of preparing financial statements is used, then it means that the financial statements are misstated.

The role of the statutory auditor is to obtain sufficient appropriate evidence on the ability of the company to continue as a going concern. This is important because the auditor has to ensure that the correct basis of preparation of financial statements has been used by the client company.

(ii) Examples financial indicators of going concern problems:

1. The company failing to pay its debts as they fall due.
2. Adverse financial rations.
3. Change from credit to cash-on-delivery transactions with suppliers.
4. Inability by the company to comply with terms of loan agreements.
5. Negative operating cash flows.
6. Fixed term borrowings approaching maturity without realistic prospects of renewal or repayment.

(iii) Example of operating indicators of going concern problems:

1. The company having labor difficulties.
2. Intentions of Management to liquidate the company or cease operations.
3. Facing shortages of important supplies necessary for production.
4. The emergence of a highly successful competitor.
5. Loss of a major market share, key customers, license or major suppliers.

SOLUTION THREE

(a) Ways that can be used to reduce audit fees:

- Putting the provision of audit services to tender so that those who wish to offer these services submit bids.
- For group companies to reduce the number of audit firms and negotiate lower fees because of the business given to the firm appointed.
- Introduce an internal audit department which will monitor the internal control enabling the auditors to rely on the effectiveness of the controls and reduce the cost of audits.
- For groups of companies by selling off subsidiary companies leaving a simplified group structure.
- Entering into a long term relationship with the audit firm considering ethical matters regarding independence and familiarity.

(b) Meaning of review engagements:

A review engagement is one that is entered into with a client where the practitioner performs work that does not enable him give a reasonable assurance. This is done in situations where an audit is not required by law and is a cost-effective alternative to an audit.

The amount of work that is conducted in a review engagement is less than that which is done in an audit.

The objective of a review engagement is to enable the auditor to state whether anything has come to their attention that causes them to believe the financial statements are not prepared, in all material respects, in accordance with the applicable financial reporting framework.

Level of assurance in a review engagement:

The level of assurance that is gained from a review engagement is not as high as the one obtained from an audit. This is because of the amount of work that is carried out in a review. Although the procedures that are performed may be similar to those of an audit, much less work is performed in a review compared to that of an audit.

(c) How good internal control impact audit and the audit fee:

Internal controls are put in place by Management with the objective of helping in preventing and detecting error and fraud.

If internal controls are operating as required, the risk that errors and fraud will not be detected or prevented is reduced. In planning an audit, external auditors assess risk through gaining an understanding of the entity and its environment in accordance with ISA 315. Among other matters that the auditors gain an understanding of are the internal controls that exist in a client company.

Once the auditors have recorded the internal controls systems of the client, they perform tests of controls whose objective is to test the operating effectiveness of the controls throughout the period under audit. If the results of the internal controls are satisfactory, the auditor will use a combined approach and may reduce the extent of substantive tests. This means that the auditors will do less detailed work and save on time and cost.

(d) Tasks performed at interim audit stage:

A number of tasks can be done at the interim audit stage visit including the following:

- Most of the work that is carried out at the planning stage of the audit such as risk assessments can be done at the interim audit stage.
- Tests of transactions that have taken place to the date of the interim audit visit can be done so that only testing of the remaining period is done at the final audit stage.
- Limited substantive tests can also be performed at the interim audit stage although most of the work on account balances can only be done at the final audit stage. For example, work on additions and disposals of assets up to the date of the interim audit can be done at the interim audit visits stage.
- Work on internal control and tests of controls to the period of the interim audit can be done at that time. At the final audit stage only the remaining period will be covered.

Impact of interim audit work on the final audit:

The auditors will just perform tests on the remaining period for transactions and the balances at the period end. Doing work at an interim audit stage helps the auditor reduce the amount of work and time done and spent at the final audit stage.

SOLUTION FOUR

(a) Responsibilities of management and auditors regarding compliance with laws and regulations

The primary responsibility for ensuring compliance with the relevant laws and regulations lies with Management. Management must put effective systems in place to ensure compliance with relevant laws and regulations. The Company Secretary or any Senior Manager with the required legal knowledge and experience can be given the responsibility of ensuring Chisamba Plc is in compliance with all relevant laws and regulations.

Internal Auditors can also assist Management especially in detecting non-compliance with relevant laws and regulations. It is not the auditor's responsibility to prevent or detect non-compliance with laws and regulations.

The auditor's responsibility is to obtain reasonable assurance that the financial statements are free from material misstatements, and in this respect, the auditor must take into account the legal and regulatory framework within which Chisamba Plc operates.

ISA 250 *Consideration of laws and regulations in an audit of financial statements* distinguishes the auditor's responsibilities in relation to compliance with two different categories of laws and regulations:

- Those that have a direct effect on the determination of material amounts and disclosures in the financial statements
- Those that do not have a direct effect on the determination of material amounts and disclosures in the financial statements but where compliance may be fundamental to the operating aspects, ability to continue in business, or to avoid material penalties

For the first category, the auditor's responsibility is to obtain sufficient appropriate audit evidence about compliance with those laws and regulations.

For the second category, the auditor's responsibility is to undertake specified audit procedures to help identify non-compliance with laws and regulations that may have a material effect on the financial statements. These include inquiries of management and inspecting correspondence with the relevant licensing or regulatory authorities.

(b) **Actions the auditors for Sekeleti& Co. will take regarding the suspected non-compliance with laws and regulations**

The auditors for Sekeleti& Co. shall communicate with Management, but if the auditor suspects that Management is involved, the auditors shall communicate to those charged with governance, preferably the Audit Committee.

The auditors for Sekeleti& Co. shall also determine whether suspected non-compliance has to be reported to the regulatory and enforcement authorities. Although the auditor must maintain the fundamental principle of confidentiality, in some jurisdictions the duty of confidentiality may be overridden by law or statute. Legal advice may be required at this point.

Finally, the auditors for Sekeleti& Co. shall consider the impact on the auditor's report if they conclude that the non-compliance has a material effect on the financial statements and has not been adequately reflected or is prevented by management and those charged with governance from obtaining sufficient appropriate audit evidence to evaluate whether non-compliance is material to the financial statements.

(c) **Matters to consider when evaluating the level of competence of the Internal Audit Department**

The matters to consider include whether:

1. The Internal Audit Department is adequately resourced
2. The internal auditors are members of relevant professional bodies
3. The internal auditors have adequate technical training and proficiency
4. There are established policies for hiring and training, whether internal auditors possess the required knowledge of financial reporting/the applicable financial reporting framework.

(d) **How the internal audit department can help Chisamba Plc in dealing with the risk of fraud and error**

Internal auditors are employees of Chisamba Plc and therefore their role in respect of fraud and error will be decided by Management and is likely to include some of the following:

- Risk assessment – the internal audit department may carry out risk assessments to identify the main risks of fraud and error or may review that process if it is carried out by Management.
- Control recommendations – internal audit reports may recommend controls to address the risks of fraud and error identified by Management.
- Control procedures – the internal audit department may be involved in carrying out certain control functions such as counting cash or inventories and comparing to book records. It may be Management's objective to detect even low value frauds and misappropriations.
- Monitoring controls – the internal audit department may perform procedures to monitor whether the control procedures implemented by Management are operating effectively. This could involve inspecting documents for evidence of appropriate authorization or using test data to check the operation of computerized controls.

The existence of an internal audit function within an entity is likely to act as a deterrent against fraud and error.

SOLUTION FIVE

(a) **Audit documentation**

Audit documentation is the record of audit procedures performed, relevant audit evidence obtained and conclusions reached. The terms 'working papers' or 'work papers' are also sometimes used.

ISA 230 *Audit documentation* states that the auditor shall prepare audit documentation on a timely basis.

The form and content of working papers are affected by matters such as:

- The size and complexity of the entity
- The nature of the audit procedures to be performed
- The identified risks of material misstatement
- The significance of the audit evidence obtained
- The nature and extent of exceptions identified
- The need to document a conclusion or basis for a conclusion not readily determinable from the documentation of the work performed or audit evidence obtained
- The audit methodology and tools used

(b) **Destruction of audit documentation**

Destruction of audit documentation must be done properly, otherwise Mafuta Chartered Accountants could be in breach of relevant laws and regulations. ISA 230 states that the auditor must not delete or discard audit documentation of any nature before the end of its retention period. The ISA also makes reference to the requirements of ISQC 1 *Quality control for firms that perform audits and reviews of financial statements and other assurance and related services engagements* regarding the retention of engagement documentation.

ISQC 1 requires that firms establish policies and procedures for the retention of engagement documentation. It states that 'the retention period for audit engagements ordinarily is no shorter than five years from the date of the auditor's report, or, if later, the date of the group auditor's report.'

It seems Mafuta Chartered Accountants has not established policies and procedures for the retention of audit documentation. If this is true, the Partners must as a matter of urgency, develop and implement policies and procedures for the retention of audit documentation. These must be in line with the relevant laws and regulations. Professional Judgement is also needed before finalizing the policies and procedures.

At the moment, the Zambia Institute of Chartered Accountants (ZiCA) could be consulted regarding destruction of the audit documentation.

(c) & (d)

Ethical threats	Safeguards
(1) Mungwi Ltd has been an audit client for four (4) years and the Engagement Partner has not been changed. There is a possibility of familiarity and self-interest threats. The Engagement Partner may not be seen to be independent. He may display undue sympathy towards Mungwi Ltd.	Mafuta Chartered Accountants should monitor the relationship by involving second Partners to carry out reviews and obtaining independent quality control review using the Partner-in-Charge of Quality and Risk. For the future, Mafuta Chartered Accountants must rotate the Engagement Partner.
(2) The Chairperson of the new Board of Directors was at the same university with the Engagement Partner from 1 January 2012 to 31 December 2015. This could result in a familiarity threat. The Engagement Partner may want to please an old colleague resulting in questionable decisions.	The Chairperson of the new Board of Directors is unlikely to be personally involved in the preparation of the financial statements and as such no safeguards are recommended.
(3) The company has offered the excess cleaning materials to the audit team members at a reduced price of 1% of the cost price. The discount of 99% is likely significant and this is likely to result in a self-interest threat. The audit team members may want to return the favour by deliberating not pursuing any controversial issues further. The gesture could impair objectivity.	Since the value is not likely to be trivial and inconsequential, the audit team members should decline the offer.
(4) The son to the Finance Director of Mungwi Ltd recently joined Mafuta Chartered Accountants as an Assistant Accountant in charge of the general ledger. This may result in a familiarity threat. Mafuta Chartered Accountants may not exercise the required levels of professional scepticism.	No safeguards are recommended since the son is not in the audit department and his indirect influence could be minimal.
(5). The Finance Director has requested Mafuta Chartered Accountants to file an appeal and represent Mungwi Ltd at the Tax Appeals Tribunal (TAT). An advocacy threat may arise as the Finance Director is expecting Mafuta Chartered Accountants to support MungwiLtd's position at all costs. This could be contrary to the provisions of the tax laws. In addition, Mafuta Chartered Accountants may be faced with high reputational risks.	There are no safeguards which could be put in place to mitigate this threat and so the Mafuta Chartered Accountants must decline to file an appeal and represent Mungwi Ltd in this tax dispute.

END OF SUGGESTED SOLUTIONS

CHARTERED ACCOUNTANT ZAMBIA

APPLICATION LEVEL

CA 2.4: TAXATION

THURSDAY 25 JUNE 2020

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 sections:

   Section A: ONE (1) 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

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		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	30%
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 –	Standard wear and tear allowance	25%
	Used in manufacturing and leasing	50%
	Used in farming and agro-processing	100%

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**	**Tax per day**
	K	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 the realized value on the transfer of intellectual property	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

Motor vehicles for the transport of ten or more persons, including the driver	Aged less than 5 years		Aged 5 years and over	
	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

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	Aged less than 5 years		Aged 5 years and over	
	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 less than 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%
Mininum specific customs duty	K6,000	

SECTION A

This question is compulsory and must be attempted

QUESTION ONE

The following extract of the statement of profit or loss has been obtained from the accounts of KLN Plc, a manufacturing company for the year ended 31 December 2020.

	Note	K	K
Gross Profit			95,189,400
Add: Other income			
Profit on disposal of non – current assets	(1)		988,200
Investment income:			
- Royalties (net)	(2)		76,500
- Dividends (net)	(2)		282,600
- Fixed deposit interest (net)	(2)		102,000
			96,638,700
Less: Expenses			
Depreciation		248,000	
Legal and professional fees	(3)	1,724,000	
Bad debts expense	(4)	334,000	
General operating expenses	(5)	46,606,600	
Income tax expense	(6)	13,515,700	
			(62,428,300)
Profit for the year			34,210,400

The following information is available:

Note 1: Disposals of non-current assets

The profit on disposal of non-current assets of K988,200 shown in the statement of profit orloss arose from the disposal of the following assets during the year:

(i) Sale of old business premises for total proceeds of K1,960,000, being the market value on that date (with K1,100,000 of the value relating to land and the remaining K860,000 relating to the buildings which are commercial buildings for capital allowances purposes). The premises were bought and brought into use in March 2010 at a cost of K1,550,000 (with K950,000 of the original cost being attributed to the land and the remaining K600,000 to the commercial building).

(ii) Sale of old office equipment for K28,600 being the market value of the equipment on that date. The equipment was acquired at cost of K36,000. The income tax value of the equipment was K18,000 and the net book value was K21,600.

(iii) Sale of a pool car for disposal proceeds of K56,000 being its market value on that date. The car was acquired at cost of K70,000. The income tax value of the car on disposal was K42,000 and its net book value was K44,800.

(iv) Sale of 150,000 shares (with a nominal value of K0.50 each) in DLT Plc a non-mining company listed on the LuSE for K15 per share being the market value of each share on the date of disposal. The carrying value of the shares on the date of disposal was K2,100,000.

(v) Sale of 120,000 shares (with a nominal value of K1 each) in TRC Ltd a private limited company for a total proceeds of K500,000 being their market value on the date of disposal. The carrying value of the shares in the financial statement on the date of disposal was K420,000.

Note 2: Investment income

The investment income comprising royalties, dividends and fixed deposit interest is net of withholding tax which was deducted at source.

Note 3: Legal fees and professional fees

These include legal fees in connection with registration of patents of K563,000, a premium paid on the acquisition of a fifty year lease on land of K500,000, licence renewal fees of K55,000, audit fees of K250,000, fees in connection with anaction brought against a supplier for breach of contract of K320,000 and a court action brought against KLN Plcfor a misleading advert of K36,000.

Note 4: Bad Debt expense

	K		K
Bad debts written off	284,000	Balance b/d	
Staff loans written off	150,000	- Specific allowance	67,000
Supplier's loans written off	53,000	- General allowance	561,000
		Bad debts written off recovered	92,000
		Staff loans written off recovered	33,000
Balance c/d		Profit or loss	334,000
- Specific allowance	90,000		
- General allowance	510,000		
	1,087,000		1,087,000

Note 5: General operating expenses

These include employee's wages and salaries of K33,793,600, expenses on staff party of K60,400,entertaining major suppliers of K69,600,donations of K360,000 made to approved public benefit organisations, donations of K160,000 made to political parties, gifts of KLN Plc pens to customers (costing K10 each) totalling K8,000, gifts of KLN Plc (diaries costing K300 each) totalling K5,000 and miscellaneous allowable operating expenses of K12,150,000.

Note 6: Income Tax Expense

The income tax on profits charged in the statement of profit or loss was made up as follows:

	K
Provision for tax on the profits for the year (paid)	14,307,900
Less: Under provision of previous year's tax on profits	(1,022,200)
Add: Increase in the deferred tax provision for the year	230,000
	13,515,700

Note 7: Buildings

The company completed the construction of a new building on 28 May 2020, whichwas brought into use on 1 June 2020 at a total cost of K2,500,000. This comprised land with a cost ofK500,000, a staff canteen with a cost of K450,000, a showroomwith a cost of K120,000, and a factory with a cost of K1,300,000 and administrative offices with a cost of K130,000.

Note 8: Implements, plant and machinery

During the year ended 31 December 2020, the company bought a Toyota Prado motor car with a cylinder capacity of 3000cc for the Managing Director at a cost of K350,000 and Toyota Camry car (2000cc) for the Marketing Manager at a cost of K280,000. The cars are used by each official on a personal holder basis.

The only otherimplement, plant and machinery held by the company at 1 January 2020, used in the business qualifying for wear and tear allowances was manufacturing equipment which was acquired at a cost of K960,000 and had an Income Tax Value of K480,000.

Note 9: Unrelieved Tax loss

KLN Plc had an unrelieved tax loss of K5,214,500 at 1 January 2020, which was the balance of a tax loss which was suffered in the tax year 2018.

Required:

(a) Explain the property transfer tax implications of the disposal each of the assets in note (1) and compute the amount of any property transfer tax arising on each disposal. (7 marks)

(b) Compute the maximum amount of capital allowances claimable by KLN Plc in the tax year 2020 on:

(i) Buildings. (9 marks)

(ii) Implements, plant and machinery. (5 marks)

(c) Calculate for KLN Plc in respect of the tax year 2020 the:

(i) Final taxable business profit (14 marks)

(ii) Final amount of company Income Tax payable (5 marks)

[Total: 40 Marks]

SECTION B

Attempt any Three (3) Questions out of four (4)

QUESTION TWO

Sombo imported a second hand 28 seater (inclusive of the driver) coach from Japan in January 2020 at a list price of $30,000. She paid insurance of $2,000 and shipping costs of $2,500. Other incidental costs she paid were $1,500. The coach was manufactured in January 2011.

The coach arrived at Nakonde border post on 20 January 2020 and all import taxes were paid by Sombo on that date. The exchange rate provided by the Commissioner General was K11.50 per $; however, she used a forward contract so that the exchange rate which she actually paid was K10.90 per US$.

Required:

(a) State the requirements Sombo needs to meet for a complete customs and excise clearance of the coach under the Customs and Excise Act. (4 marks)

(b) State any four documents which Sombo must present to the customs offices when clearing the imported coach. (2 marks)

(c) Explain any four (4) methods for determining the transaction value (V.D.P) of an imported motor vehicle. (8 marks)

(d) Calculate the customs value and import taxes paid by Sombo on the importation of the coach. (6 marks)

[Total: 20 Marks]

QUESTION THREE

For the purposes of this question assume that today's date is 31 December 2020

Louisa Doumay was born in a country known as Bascovia in 1975. She had always lived in Bascovia, where she is also domiciled and has been employed by FHC International, a company which was incorporated and resident in Bascovia. On 20 November 2020, FHC International, incorporated a 100% owned subsidiary company in Zambia known as FHC Zambia Ltd. Louisa was immediately appointed the Chief Executive Officer for FHC Zambia Limited, on a three-year contract commencing on 1 December 2020. She will relocate back to Bascovia permanently on the expiry of her contract after three years.

Louisa arrived in Zambia to take up the position on 1 December 2020. Her annual salary was K840,000 and she was paid a relocation allowance of K60,000. She was provided with a personal to holder motor car with a cylinder capacity of 3000cc, which the company acquired at a cost of K260,000 in November 2020. The company also paid for all the motor car running expenses which amounted to K4,000 per month.

Louisa was accommodated in a company owned house which the company purchased at a cost of K1,150,000 in November 2020. The commercial rate of rentals for houses of a similar type is K8,500 per month. The company additionally undertook to pay the following expenses in relation to her living accommodation:

Electricity bills	K1,500 per month
Garden boy's wages	K1,200 per month
Security Guard's wages	K1,800 per month
House Keeper's wages	K2,000 per month

Louisa holds various investments in Bascovia. These include properties that are let out on a commercial basis in Bascovia, shares in Bascovian resident companies and fixed deposit accounts with Bascovian resident banks. The currency of Bascovia is known as the Bascovian dollar (BV$). On 31 December 2020, the following investment income was credited to her Zambian bank account in respect of these investments:

Dividends from Bascovian companies	BV$4,480
Fixed deposit interest from Bascovian Banks	BV$3,200
Rental income from property let out in Bascovia	BV$40,000

The amount of the dividends was net of withholding tax at the rate of 36% deducted in Bascovia and the amount of the fixed deposit interest and rental income was net of withholding tax at the rate of 20% deducted in Bascovia.

There is no double taxation agreement between Zambia and Bascovia. When computing Zambian income tax payable, credit is available for any foreign tax paid in Bascovia. An exchange rate of K11.50 per BV$1 should be used where relevant.

Required:

(a) Explain the reasons, why Louisa will be regarded as being resident and ordinary resident in Zambia in the tax year 2020. (2 marks)

(b) Explain three (3) methods of giving double taxation relief to a Zambian resident individual like Louisa receiving income from foreign sources. (6 marks)

(c) Calculate the amount of income tax payable, by Louisa for the tax year 2020. (12 marks)

[Total: 20 Marks]

QUESTION FOUR

Supiwe and Zepiwe have been trading in partnership preparing their financial statements for years ending on 31 December. Their partnership agreement provides for annual partnership salaries of K160,000 and K140,000 for Supiwe and Zepiwe respectively. The balance of profits and losses are shared between Supiwe and Zepiwe in the ratio of 2:1 respectively.

On 1 July 2020, Memiwe joined the partnership and the partnership agreement was changed. Annual partnership salaries for Supiwe, Zepiwe and Memiwe were K250,000, K200,000 and K180,000 respectively. The balance of profits and losses were to be shared between Supiwe, Zepiwe and Memiwe in the ratio of 5:3:2 respectively.

For the year ended 31 December 2020, the partnership's estimated taxable business profit was K360,000, before the partners' appropriations. On this basis, provisional income tax was calculated and paid correctly on the normal due dates.

After the financial statements of the partnership were finalised for the year ended 31 December 2020, the turnover for the year was K960,000 and the taxable partnership's profit, before the partners' appropriations was K420,000.

Neither Supiwe, Zepiwe nor Memiwe has any other income apart from the partnership profits.

Required:

(a) Calculate, the provisional income tax paid for the tax year 2020 by:

(i) Supiwe
(ii) Zepiwe
(iii) Memiwe

Note: For this part of the question, you are not required to show the due dates and the amount payable on each due date. (10 marks)

(b) Calculate the balance of income tax that is payable for the tax year 2020 by:

(i) Supiwe
(ii) Zepiwe
(iii) Memiwe (10 marks)

[Total: 20 Marks]

QUESTION FIVE

Charles Hanseluka has worked for Lukanga Manufacturing Ltd as a Sales Representative for many years. He is married and has five school going children. His employment conditions provided that either party should give one-month notice before termination of employment. His annual basic salary was K144,000 in the tax year 2020. He was paid monthly on the last day of each month. Hanseluka was declared redundant effective 30 November 2020. In the tax year 2020, Hanseluka was also entitled to the following allowances:

Housing allowance:	20% of basic salary
Transport allowance	5% of basic salary
Education assistance allowance:	K500 per month per child
Domestic utility allowance:	K400 per month

The above allowances were all paid to him on a monthly basis, on the last day of each month.

Throughout the period of his employment in the tax year 2020, Charles used his personal motor car which he acquired at cost K70,000 in January 2020 and has a cylinder capacity of 2,000cc for the duties of the employment. His employment use of the motor car in the tax year 2020 was 40%. He incurred motor car running expenses of K5,000 per month.

Upon his redundancy, the company made the following payments:

	K
Accrued leave pay	3,000
Salary in lieu of notice	12,000
Compensation for loss of office	72,000
Withdrawal of employer's pension contributions	86,400
Refund of employee's pension contributions	86,400

His payments in the tax year 2020 included the following:

	K
Trade Union subscriptions per annum	1,800
Life insurance premiums per annum	6,000
Donation to an approved charitable organization	3,000
Pay As You Earn	43,498

Hanseluka paid NAPSA contribution at the rate of 5% of his earnings and a further 5% of his earnings into a pension scheme operated by the employer. Contributions were also paid by the employer into both the NAPSA and the employer's pension scheme at the rate of 5% of his earnings in each case. When Hanseluka was declared redundant, the contributions paid into the employer's pension fund by Hanseluka and the employer were paid to Hanseluka. The amounts are stated above under the payments made when Hanseluka was declared redundant.

Other Income

Hanseluka received the following investment income during the tax year 2020:

	K
Dividends from MCM mining company	10,200
Dividends from CFH Ltd, a private limited company	21,250
Dividends from GNC Plc, (a LuSE listed manufacturing company)	25,500
Fixed deposit bank interest	2,400
Income from letting of property in Zambia	28,080
Royalties	34,000
Interestfrom Government of Zambia bonds	42,500
Treasury Bill discounts	12,750

The above amounts of investment income represent the actual amounts received by Hanseluka, withholding tax was deducted at source.

Required:

(a) Calculate the total withholding tax paid on investment income received by Hanseluka during the tax year 2020. You should clearly show the amount of withholding tax paid on each type of investment income. (8 marks)

(b) Compute the income tax payable by Hanseluka for the tax year 2020. (12 marks)

[Total: 20 Marks]

END OF PAPER

SOLUTION ONE

(a) The property transfer tax implications will be as follows:

(i) Property transfer tax is chargeable on the transfer of old business premises.

The amount of property transfer tax arising will be:

K1,960,000 x 5% = K98,000

(ii) There are no Property Transfer Tax (PTT) implications on the disposal of the office equipment as chattels are outside the scope of PTT.

(iii) There are no Property Transfer Tax (PTT) implications on the disposal of the pool car as chattels are outside the scope of PTT.

(iv) There will be no PTT implications on the transfer of the shares in DLT Plc as the sale of shares in a company listed on the LuSE is exempt from PTT.

(v) Property transfer Tax chargeable on the transfer of the shares in TRC Ltd will amount to:
(K500,000) x 5% = K25,000

(b) (i) COMPUTATION OF CAPITAL INDUSTRIAL BUILDING ALLOWANCES

Computation of the qualifying cost for IBA purposes

Total cost	2,500,000
Less cost of land	(500,000)
	2,000,000
10% of K2,000,000	200,000

The total cost of the non-qualifying part, comprising the showroom and the administration offices of K250,000 (K120,000 + K130,000) exceeds K200,000 and therefore will not qualify for Industrial building allowances and will be classified as commercial buildings.

COMPUTATION OF ALLOWANCES ON BUILDINGS

Staff canteen	K	K
Wear and tear allowance		
K450,000 x 5%		22,500
Initial allowance		
K450,000 x 10%		45,000
Investment allowance		
K450,000 x 10%		45,000
Factory		
Wear and tear allowance		

(K1,300,000 x5%)		65,000
Initial allowance		
K1,300,000 x 10%		130,000
Investment allowance		
K1,300,000 x 10%		130,000
Showroom		
Wear and tear allowance		
K120,000 x 2%		2,400
Administration offices		
Wear and tear allowance		2,600
(K130,000 x 2%)		
Old buildings		
ITV b/f		
[K600,000 – (600,000 x 2% x 10 yrs)	480,000	
Proceeds (restricted to cost)	600,000	
Balancing charge	(120,000)	(120,000)
		322,500

(ii) COMPUTATION OF CAPITAL ALLOWANCES ON IMPLEMENTS, PLANT AND MACHINERY

	K
Equipment	
Balancing charge	
(K18,000 – K28,600)	(10,600)
Pool car	
Balancing charge	
(K42,000 – K56,000)	(14,000)
Toyota Prado car	
Wear and tear allowance	
K350,000 x 20%)	70,000
Toyota Camry car	
Wear and tear allowance	
(K280,000 x 20%)	56,000
Manufacturing equipment	
Wear and tear allowance	
(K960,000 x 50%)	480,000
	581,400

(c) (i) COMPUTATION OF TAXABLE BUSINESS PROFIT

	K	K
Profit before tax		34,210,400
Add		
Depreciation	248,000	

Fees in connection with registration of patents	563,000	
Premium on lease [K500,000 – (500,000/50)	490,000	
Staff loans written of	150,000	
Loans to suppliers written off	53,000	
Entertaining suppliers	69,600	
Donations to political parties	160,000	
Gifts of dairies	5,000	
Personal to holder motor car benefits		
- Managing directors car	40,000	
- Marketing Manager's car	30,000	
Provisional income tax	13,515,700	
		15,324,300
		49,534,700
Less		
Royalties	76,500	
Dividends	282,600	
Fixed deposit interest	102,000	
Decrease in general provision of bad debts	51,000	
Staff loans recovered	33,000	
Profit on disposal of assets	988,200	
Capital allowances on buildings	322,500	
Capital allowances on IPM	581,400	
		(2,437,200)
Taxable business profit before loss relief		47,097,500
Less loss relief		(5,214,500)
Final Taxable business profit		41,883,000

(ii) COMPUTATION OF COMPANY INCOME TAX PAYABLE

	K
Final Taxable business profit	41,883,000
Royalties (K76,500 x 100/85)	90,000
Fixed Deposit interest (K102,000 x 100/85)	120,000
	42,093,000
Company income tax (K42,093,000 x 35%)	14,732,550
Less Tax already paid:	
Provisional income tax	(14,307,900)
WHT on royalties (K90,000 x 15%)	(13,500)
WHT on fixed deposit interest (K120,000 x 15%)	(18,000)
Final income tax payable	393,150

SOLUTION TWO

(a) Complete customs clearance of a motor vehicle is granted only after all the requirements under the customs and Excise Act and other related laws have been fulfilled. The requirements Sombo will have to meet include the following:

(1) Presentation of genuine import documents.

(2) Valuation has been done and agreed.

(3) Payment of duty, VAT and Asycuda fee.

(4) Processing of bills of entry by customs.

(1 mark for each point up to a maximum of 4 marks)

(b) On importation of a motor vehicle, the customs officers at each respective border will be looking for the following documents to validate the purchase transaction:

(1) Letter of sale.

(2) Invoice indicating the price paid.

(3) Bill of lading.

(4) Freight statement (including overland costs from port).

(5) Insurance certificate.

(6) Any other documents relevant to the purchase acquisition, shipment, or importation of the vehicle.

(c) Methods used to determine VDP

(1) Transaction value

This is based on the price actually paid or payable including insurance, freight and other incidental costs to the extent that they are paid.

(2) Transaction value of identical goods

This is the price of identical goods imported by another importer into Zambia from the same source, including insurance, freight and other incidental costs.

(3) Transaction value of similar goods

This is the price of similar goods imported by another importer into Zambia from the same source, including insurance, freight and other incidental costs.

(4) Deductive value

This is the price at which identical or similar goods are sold in their quantity in Zambia.

(5) Computed value

This is the price based on cost of production, insurance, freight and other costs incurred in the delivery of the goods to Zambia.

(6) Residual basis of value (fall-back)
This is the price arrived at by going through the above five methods flexibly.

(d) The VDP for customs duty:

Since the coach is a 28 seater and is more than 5 years old, the VDP and total import taxes will be calculated as follows:

	$
Cost	30,000
Insurance	2,000
Shipping	2,500
Incidental costs	1,500
CIF	36,000

VDP: CIF × exchange rate
$36,000 × K11.50 = K414,000

	K	K
VDP	414,000	
Customs duty (specific duty)	13,840	13,840
	427,840	
Excise duty (specific duty)	0	0
	427,840	
VAT at 16% × K427,840	68,454	68,454
Total value	496,294	
Total import taxes paid		82,294
Surtax charge		2,000
		84,294

SOLUTION THREE

(a) Primarily, an individual is regarded as resident in Zambia if that individual is physically present in Zambia for a period of not less than 183 days, in a charge year. Additionally, individuals who normally live in Zambia are resident and ordinarily resident in Zambia. Similarly, individuals who come to Zambia with the intention of staying for more than 12 months are deemed to be resident and ordinarily resident in Zambia, from the date of arrival.

Therefore, even though Louise was not physically present in Zambia for a period of at least 183 days, in the tax year 2020, having only stayed in Zambia for 31 days in the charge year, she will still be regarded to be resident and ordinarily resident in Zambia from the time of arrival. This is because she has intention of staying in Zambia for a period that will exceed a period of 12 months having taking up the position as Chief Executive officer on a contract that will last for thirty-six months.

(b) Double taxation relief for foreign tax suffered may be available in one the following ways:

(i) Treaty relief

Treaty relief is available in cases where the President of the Republic of Zambia has entered into an agreement with the foreign countries. Where there is a treaty, then DTR is given according to the provisions of that treaty.

In some cases, the treaty may provide that income is only charged to income tax in one of the two countries, or income is charged to tax in one country, with the tax being apportioned between the two countries. A double taxation agreement may well provide for full recovery of any foreign tax covered by the agreement, by means of a tax credit to a Zambian resident taxpayer, against the Zambian tax liability, as long as the relief does not exceed the equivalent Zambian tax charge.

(ii) Unilateral credit relief

This applies where there is no treaty relief because Zambia has not signed an agreement with the foreign country involved.

Relief is given for foreign tax unilaterally in the Republic of Zambia. The relief is given by deducting from the Zambian income tax, the lower amount of the foreign tax paid that is attributed to Foreign income and the Zambian income tax payable on that source.

(iii) Unilateral expense relief

This relief applies where there is no treaty in place and using credit relief is not beneficial.

Relief is given by deducting the foreign tax from the foreign income before including it in the Zambian income tax computation.

(c) LOUISA

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2020

	K	K
Income from Zambian employment		
Salary (K840,000 x 1/12)		70,000
Relocation allowance		60,000
Electricity bills		1,500
Garden boys wages		1,200
Security guards wages		1,800
House Keeper's wages		2,000
		136,500
Income from foreign Sources		
Dividend income		
(BV$4,480 x 100/64) x K11.50	80,500	
Interest		
($3,200 x 100/80) x K11.50	46,000	
		126,500
		263,000
Income Tax		
K39,600 x 0%		nil
K9,600 x 25%		2,400
K25,200 x 30%		7,560
K188,600 x 37.5%		70,725
		80,685
Less: DTR on income from foreign sources		
- Dividends (W1)	24,696	
- Debenture interest (W2)	9,200	
		(33,896)
Income Tax payable		46,789

Workings

1. Double taxation relief on the dividends from foreign sources:

   This will be the lower of:

   (i) The foreign tax paid on the dividends:

   K80,500 x 36% = K28,980; and

   (ii) The Zambian Tax Charge computed as:

$$\left(\frac{K80{,}500}{K263{,}000}\right) x\ K80{,}685$$

= K24,696

DTR will therefore be K24,696 being the lower amount.

2. Double taxation relief on the debenture interest from foreign sources:

   This will be the lower of:

   (i) The foreign tax paid on the debenture interest:
   K46,000 x 20% = K9,200; and

   (ii) The Zambian Tax Charge computed as:

$$\left(\frac{K46{,}000}{K263{,}000}\right) x\ K80{,}685$$

= K14,112

DTR will therefore be K9,200 being the lower amount.

SOLUTION FOUR

(a) COMPUTATION OF PROVISIONAL INCOME AND INCOME SUPIWE TAX FOR THE TAX YEAR 2020

	Total	Supiwe	Zepiwe	Memiwe
	K	K	K	K
01.01.2020 – 30.06.2020 (6 months)				
Partnership salaries	150,000	80,000	70,000	-
Balance (2:1)	30,000	20,000	10,000	
	180,000	100,000	80,000	-
01.07.2020 – 31.12.2020 (6 months)				
Partnership salaries	315,000	125,000	100,000	90,000
Balance (5:3:2)	(135,000	(67,500)	(40,500)	(27,000)
	180,000	57,500	59,500	63,000
Total provisional income	360,000	157,500	139,500	63,000
Provisional Income Tax				
K39,600 x 0%		0	0	0
K9,600 x 25%		2,400	2,400	2,400
K25,200/K13,800 x 30%		7,560	7,560	4,140
K83,100/ K65,100 x 37.5%		31,163	24,413	
		41,123	34,373	6,540

(b) SUPIWE, ZEPIWE AND MEMIWE
COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX SUPIWE YEAR 2020

	Total	Supiwe	Zepiwe	Memiwe
	K	K	K	K
01.01.2020 – 30.06.2020 (6 months)				
Partnership salaries	150,000	80,000	70,000	
Balance (2:1)	(60,000)	(40,000)	(20,000)	
	210,000	120,000	90,000	-
01.07.2020 – 31.12.2020 (6 months)				
Partnership salaries	315,000	125,000	100,000	90,000
Balance (5:3:2)	(105,000)	(52,500)	(31,500)	(21,000)
	210,000	72,500	68,500	69,000
Total provisional income	420,000	192,500	158,500	69,000
Provisional Income Tax				
K39,600 x 0%		0	0	0
K9,600 x 25%		2,400	2,400	2,400
K25,200 x 30%		7,560	7,560	
K19,800 x 30%				5,940
K118,100/K84,100 x 37.5%		44,288	31,538	
		54,248	41,498	8,340
Less Provisional income tax		(41,123)	(34,373)	(6,540)
		13,125	7,125	1,800

SOLUTION FIVE

(a) COMPUTATION OF WITHHOLDING TAX PAID IN THE TAX YEAR 2020

Dividends from MCM (K10,200 x 0%)	nil
Dividends from CFH Ltd (K21,250 x 15/85)	3,750
Dividends from GNC Plc	nil
Fixed deposit Interest	nil
Rental income (K28,080 x10/90)	3,120
Royalties (K34,000 x15/85)	6,000
Interest from Government bonds (K42,500 x15/85)	7,500
Treasury Bill discounts (K12,750 x 15/85)	2,250
Tax payable	22,620

(b) HANSELUKA
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2020

	K	K
Employment income		
Salary (K144,000 x 11/12)		132,000
Housing allowance (K144,000 x 20% x11/12)		26,400
Transport allowance (K144,000 x 5% x 11/12)		6,600
Education assistance allowance (K500 x 5 x 11)		27,500
Domestic utility (K400 x 11)		4,400
Accrued leave pay		3,000
		199,900
Less allowable deductions		
Donation to approved charity	3,000	
Capital allowances on motor car (K70,000 x 20%) x 40%	5,600	
Motor car running expenses (K5,000 x 11) x 40%	22,000	
		(30,600)
		169,300
Investment income		
Royalties (K34,000 x 100/85)		40,000
Total income		209,300

Income Tax	
K39,600 x 0%	nil
K9,600 x 25%	2,400
K25,200 x 30%	7,560
K134,900 x 37.5%	50,588
	60,546
Less tax already paid:	
WHT on royalties	
(K40,000 x 15%	(6,000)
PAYE	(43,498)
Tax payable	11,050

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 26 JUNE 2020

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 THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

Sweet Homes Co is a small manufacturing company. As a Finance Manager of the company, you have been tasked to evaluate the two investment options which are not mutually exclusive.

Option A

Sweet Homes Co is looking to replacing one of the machines used in its production process.

	Old Machine	New Machine
Estimated life	4 years	4 years
Current book value	K4million	Nil
Current selling price	K5million	Nil
Net realizable value at end of year 4	Nil	K3million
Current purchase price	Nil	K20million
Capital Allowance	K1million	K4million

Currently the level of revenue is K30million per year. However since the new machine improves the quality of the product, sales are expected to increase by K1.2million. The old machine's production costs average K15million per year but the new machine is expected to save K700, 000 per year. The current and expected tax rate over the next four years is 30% with the return required by the firm set at 12% per year.

Required:

Evaluate whether the firm should replace the old machine with the new machine.

(18 marks)

Option B

Sweet Homes Co is considering investing K220,000 in a new specialized machine with an expected life of five (5) years. The machine will have no scrap value at the end of five years. It is expected that 25,000 units will be sold each year at a selling price of K6.00 per unit. Variable production costs are expected to be K2.10 per unit, while incremental fixed costs are expected to be K20,000 per year. The company gearing level is 30% which is almost equivalent to the industry average. The asset beta for Sweet Homes Co. is 0.81 and equity premium is 8%. The interest on government treasury bills is 5%. The pretax cost of debt is 9% and tax is payable at the rate of 25% per year. The selling price and variable production cost are expected to increase by 10% per annum and 8% per annum respectively from year two (2) on wards.

Required:

(a) Explain the reasons why risk and uncertainty should be considered in the investment appraisal process. (6marks)

(b) Measure the sensitivity of the project's net present value to a change in the following project variables:

- (i) sales volume;
- (ii) sales price;
- (iii) variable cost; and
- (iv) Cost of capital (10 marks)

(c) Discuss the use of sensitivity analysis as a way of evaluating project risk. (6marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Kwacha Ltd is a privately owned company that is seeking to raise finances in order to fund the construction of a hospital. However, one of the directors argued that a hospital is a public institution that would not meet the objective of Kwacha Ltd which is to maximize the shareholder's wealth. The company expects to issue 10% bonds which are redeemable at their par value of K100 in six (6) years' time. Alternatively, it is expected that each bond may be converted on that date into 20 ordinary shares of the company. The current ordinary share price of Kwacha Ltd is K5.1 and this is expected to grow at a rate of 6% per year for the foreseeable future. Kwacha Ltd has a cost of debt of 8% per year.

Required:

(a) Calculate the following current values for each K100 convertible bond:

- (i) market value;
- (ii) floor value;
- (iii) conversion premium. (12 marks)

(b) Compare the public sector objective of 'value for money' and the private sector objective of 'maximisation of shareholder wealth'. (8 marks)

[Total: 20 Marks]

QUESTION THREE

A company that manufactures cooking oil, Luapula Plc. has the following budgeted income statement for the 2019 financial year:

	K' million
Sales	100
Raw Materials (vegetable oil)	(60)
Other costs	(20)
Net Profit	20

Its financial objectives are stated as follows:

- (i) To reduce inventory costs, by introducing a Just-In-Time (JIT) inventory management system.
- (ii) To reduce bad debts, by formulating a credit control policy.
- (iii) To improve liquidity, by reducing the cash operating cycle.

The company has set the following working capital ratios as its performance measures: inventory days – 35 days, receivable days – 40 days, payable days – 45days.

Monthly demand for raw vegetable oil is 13,000 tons. The purchase price is K1,000/tonne and the company's cost of finance is 15% per annum. Warehouse storage costs per tonne per annum are K300/tonne. The supplier charges K3, 000 per order for delivery.

Required:

(a) Explain three (3) factors that affect the length of the cash operating cycle and compute the expected values for inventory, receivables, payables and working capital. Assume there are 365 days in a year. (7 marks)

(b) Determine the company's Economic Order Quantity (EOQ). (3 marks)

(c) Explain three (3) objectives of Just-In-Time (JIT) techniques and how they may be achieved. (6 marks)

(d) Explain the distinctions between the terms operating gearing and financial gearing. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

The following financial information relates to Livingstone Beverages Company (LBC):

Statement of financial position at the current date (extracts)

	K'000	K'000	K'000
Non-current assets			50,000
Current assets			
Inventory		8,000	
Accounts receivable		12,000	
		20,000	
Current liabilities			
Bank overdraft	8,000		
Accounts payable	6,000		
		14,000	
Net current assets			6,000
Total assets less current liabilities			56, 000

Three (3) months cash flow forecasts from the current date, assuming performance is maintained:

	Month 1	Month 2	Month 3
Cash operating receipts (K'000)	4,500	4,800	4,000
Cash operating payments (K'000)	(3,000)	(4,000)	(3,500)
Quarterly interest on L.T bond(K'000)			(200)
Capital expenditure (K'000)	(2,000)		

LBC has an overdraft facility of K10 million. Interest on the facility is payable at a monthly rate of 1.5%, with payments made based on the opening balance at the start of each month. Credit sales for the current year to date were K60 million and the cost of sales was K36 million. The level of credit sales and cost of sales is expected to remain the same in the coming year.

The Chief Financial Officer (CFO) has revised LBC's working capital management procedures and believes this will improve accounts receivable days to the sector average of 42 days. This reduction would take six (6) months to achieve from the current date, with equal monthly reductions. He also plans to reduce inventory days by twenty (20) days over a four-month period from the current date. Changes in credit terms agreed with LBC's major trade creditors will reduce its accounts payable days to 30 over the next five (5) months. The CFO has also proposed that the capital expenditure be postponed until when additional long term financing is secured.

An annual calendar of 360 days should be assumed.

Required:

(a) Discuss the current working capital financing policies of LBC, explaining each of the following:

(i) Fluctuating and permanent current assets
(ii) Short-term and long-term finance, and the matching principle
(iii) Conservative and aggressive financing policy

(8 marks)

(b) Prepare:

(i) The three (3) months cash flow forecast if its current performance is maintained. (4 marks)

(ii) The three (3) months cash flow forecast if the Chief Financial Officer's proposals are implemented. (4 marks)

(c) Comment on the change in the cashflow position of LBC and recommend a suitable course of action. (4marks)

[Total: 20Marks]

QUESTION FIVE

Zambian Airways Plc is quoted on the Lusaka Stock Exchange (LuSE). The company is considering acquiring an A300 aircraft through a long - term finance lease from a syndicate of banks.

The airline has annual credit sales of K24million and cost of sales of K12 million. The company's current assets are comprised of inventory and accounts receivable. Its current liabilities consist of accounts payable and an overdraft with an annual average interest rate of 15%. The company allows a credit period of one month to its trade receivables and on average is given a credit period of two months by its trade payables. It has a current ratio of 1.4 and an operating cycle of four months.

Required:

(a) Explain two (2) roles financial intermediaries play in providing companies with long -term finance. (4 marks)

(b) Discuss three (3) similarities between the financial objectives of a listed company such as Zambian Airways and the financial objectives of a not-for-profit organization. (6 marks)

(c) Explain four (4) ways the airline could use factoring and invoice discounting to manage its accounts receivables. (4 marks)

(d) Determine the size of its overdraft, the annual cost of the overdraft and its net working capital. (6 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

$$E(r_i)=R_f+\beta_i(E(r_m)\text{-}R_f)$$

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

$$P_o=\frac{D_0(1+g)}{(r_e\text{-}g)}$$

Gordon's growth approximation

$$g=br_e$$

The weighted average cost of capital

$$WACC=\left[\frac{V_e}{V_e+V_d}\right]k_e+\left[\frac{V_d}{V_e+V_d}\right]k_d(1\text{-}T)$$

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. $\dfrac{1-(1+r)^{-n}}{r}$

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 2.5 SUGGESTED SOLUTION

SOLUTION ONE

Option A

Old machine:

Period	0	1	2	3	4
Sales 30000(1-t)		21,000	21,000	21,000	21,000
Costs 15000(1-t)		(10,500)	(10,500)	(10,500)	(10,500)
T.S Depn 1000xt		300	300	300	300
Net Cash flow		10,800	10,800	10,800	10,800

NVP@12% = 32,803
On sale of the old machine in year 4
Salvage = 0
Book value = 0
Book Gain = 0

New Machine

Period	0	1	2	3	4
	K'000	K'000	K'000	K'000	K'000
Sell old mach	5,000				
Tax on profit	(300)				
New mach	(20,000)				
Sales 31,200(1-t)		21,840	21,840	21,840	21,840
Costs 14,300(1-t)		(10,010)	(10,010)	(10,010)	(10,010)
T.S. Depn 4000xt		1,200	1,200	1,200	1,200
Sale value					3,000
T.S. On sale*					300
Net cash flow	(15,300)	13,030	13,030	13,030	16,330

NPV @ 12% = 26,373

Old machine better by 32,803 – 26,373 = 6,430

Old machine	New machine
Salvage value = 5,000	Salvage value = 3,000

Book value = 4,000	Book value = 4,000
Book Gain = 1,000	Book loss = 1,000
Tax on Gain = 1000 x t	Tax on loss = 1,000 x t

Alternatively, candidates can use annuity and credit was given accordingly.

Option B

a) The terms risk and uncertainty are often used interchangeably but a distinction should be made between them. With risk, there are several possible outcomes, which upon the basis of past relevant experience, can be quantified. In areas of uncertainty, again there are several possible outcomes, but with little past experience, it will be difficult to quantify its likely effects. A risky situation is one where we can say that there is a 70% probability that returns from a project will be in excess of K100,000 but a 30% probability that returns will be less than K100,000. If, however, no information can be provided on the returns from the project, we are faced with an uncertain situation. Managers need to exercise caution when assessing future cash flows to ensure that they make appropriate decisions. If a project is too risky, it might need to be rejected, depending upon the prevailing attitude to risk. In general, risky projects are those whose future cash flows, and hence the project returns, are likely to be variable. The greater the variability is, the greater the risk. The problem of risk is more acute with capital investment decisions than other decisions because estimates of cash flows might be for several years ahead, such as for major construction projects. Actual costs and revenues may very well above or below budget as the work progresses.

Year	1	2	3	4	5
Selling price	6	6.6	7.26	7.986	8.7846
Variable costs	(2.10)	(2.27)	(2.45)	(2.65)	(2.86)
Contribution per unit	3.9	4.33	4.81	5.34	5.93
Units	25,000	25,000	25,000	25,000	25,000
Contribution	97,500	108,300	120,264	133,515	148,189
Incremental fixed costs	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Taxable cash flow	77,500	88,300	100,264	113,515	128,189
Tax@25%	(19,375.0)	(22,075.0)	(25,066.0)	(28,378.75)	(32,047.25)
Net cash flow	58,125.0	66,225.0	75,198.0	85,136.25	96,141.75

Dis@11%	0.901	0.812	0.751	0.659	0.593
Present Values	52,370.63	53,774.7	56,473.70	56,104.79	57,012.06
Total PVs	275,735.88				
Less: Initial outlay	(220,000.00)				
NPV	**55,735.88**				
(i) Sales volume					
PV of Sales volume	87,847.50	87,939.60	90,318.26	87,986.46	87,876.27
Total	441,968.10				
Sensitivity	**12.61%**				
(ii) Sales price	135,150	133,980	136,307	131,569	130,232
Total Pvs	667,238				
Sensitivity	**8.35%**				
(iii) Variable Costs	47,302.50	46,040.40	45,988.24	43,582.89	42,355.42
Total Pvs	225,269.44				
Sensitivity	**24.74%**				
(iv) Cost of capital					
Net cash flows	58,125.0	66,225.0	75,198.0	85,136.25	96,141.75
Disc@20%	0.833	0.694	0.579	0.482	0.402
Presents Values	48,418.13	45,960.15	43,539.64	41,035.67	38,648.98
Total Pvs	217,602.57				
Less: initial outlay	(220,000.00)				
NPV	**(2,397.43)**				
IRR	19.62%				
Sensitivity (0.1962-0.11)/0.11	**78.44%**				

Cost of capital

Ba= Be x Ve/Ve+Vd (1-t)

0.81= Be x 0.7/0.7+0.3 (1-0.25)

Be=1.07

Cost of equity = 5% + 1.07(8%)

=13.56%

Cost of Debt = 9%x (1-0.25) = 6.75%

WACC= 13.56% x (0.7) + (6.75% x 0.3) = 11.49%

Round off to say 11% or 12%. Note that even 12% was given credit accordingly.

b) The basic approach of sensitivity analysis is to calculate the project's NPV under alternative assumptions to determine how sensitive it is to changing conditions. An indication is thus provided of those variables to which the NPV is most sensitive (critical variables) and the extent to which those variables may change before the investment results in a negative NPV. Sensitivity analysis therefore provides an indication of why a project might fail. Management should review critical variables to assess whether or not there is a strong possibility of events occurring which will lead to a negative NPV. Management should also pay particular attention to controlling those variables to which the NPV is particularly sensitive, once the decision has been taken to accept the investment. In the case of Sweet homes, the most sensitive variable is the sales price at 8.35% and the least is the cost of capital at 78.44%. Any decrease of sales price by more than 8.35%, the project will have a negative NPV.

SECTION B

SOLUTION TWO

a)

(i) **Dividend growth model method of valuation**

Conversion value = $P_0(1 + g)^nR$

where P0 = current ex-dividend ordinary share price = K5.1

g = expected annual growth of the ordinary share price = 6%

n = number of years to conversion = 6

R = number of shares received on conversion = 20

Conversion value = 5.1 × (1 + 0.06) ^6 × 20 = K144.69

The conversion value is higher than the redemption value of K100 so conversion is expected.

The current market value is the sum of the present value of the future interest payments and the present value of the bond's conversion value.

Present value of K10 interest per annum for six years at 8% = 10× 4.623 = K46.23

Present value of the conversion value = 144.69 × 0.630 = K91.15

Current market value of convertible bond = K46.23 + K91.15 = K137.38

ii) Floor value

The floor value is the sum of the present value of the future interest payments and the present value of the redemption value.
Present value of K9 interest per annum for five years at 8% = 10 × 4.623 = K46.23
Present value of the redemption value = 100.00 × 0.630 = K63
Floor value of convertible bond = K46.23 + K63 = K109.23

i) Conversion premium Conversion premium = current market value – current conversion value Current conversion value = K5.1 × 20 = K102
Current market value = K137.38
Conversion premium = K137.38 – K102 = K35.38
As an amount per share = 35.38/20 = K1.77 per share

b)
Public sector organisations are generally set up with a prime objective which is not related to making profits. These organisations exist to pursue non-financial aims, such as providing a service to the community. However, there will be financial constraints which limit what any such organisation can do. A not-for-profit organisation needs finance to pay for its operations, and the major financial constraint is the amount of funds that it can obtain. Having obtained funds, a not-for-profit organisation should seek to get value for money from use of the funds: (i) Economy: not spending K2 when the same thing can be bought for K1

(ii) Efficiency: getting the best use out of what money is spent on

(i) Effectiveness: spending funds so as to achieve the organisation's objectives

Since managing government (for example) is different from managing a company, a different framework is needed for planning and control. This is achieved by:

- setting objectives for each
- careful planning of public expenditure proposals
- emphasis on getting value for money

A private sector organisation has as its primary objective the making of sufficient profits to provide a satisfactory return for its owners and to keep the business operating. So, it is job of senior management to maximise the market value of the company. Specifically, the main financial objective of a company should be to maximise the wealth of its ordinary shareholders. Within this context, the financial manager seeks to ensure that investments earn a return, for the benefit of shareholders. Part of this job will involve attracting funds from the market, such as new investors, but as with public sector organisations it is also important that the operations of the company are run economically and efficiently.

SOLUTION THREE

(a)

Factors affecting length of cash operating cycle

1. Liquidity versus profitability concerns
2. Management efficiency
3. Industry norms ie construction versus retail

	K'million
Inventory - $^{35}/_{365}$ x 60 =	5.75
Receivables - $^{40}/_{365}$ X 100 =	10.96
Trade payables - $^{45}/365$ X 60 =	(7.40)
Working capital	9.31

(b).

C_o = 3,000

D = 13,000 X 12 = 156,000

C_H = (1,000 X 0.15) + 300 = 450

EOQ = $\sqrt{^{2 \text{ X } 3,000 \text{ X } 156,000}/_{450}}$ = $\underline{1,442}$

(c).

Objectives of JIT

- Reduced manufacturing lead times
- Reduced scrap/rework/warranty costs
- Flexible production process responsive to the customer's requirements.
- Reduction in capital tied up in inventory.
- Improved labour productivity

Measures to achieve JIT

- Elimination of non - value adding activities.
- Reducing batch sizes.
- Delivering materials to point of use.
- Emphasis on total quality.
- Long – term supplier relationships that depend on quality and reliability.
- Making goods to order to reduce inventory of finished goods.

(d) **Operating gearing** is computed as **Contribution/Profit before interest and tax (PBIT)** and may be defined as a measure of the impact of a change in sales upon earnings before interest and tax (EBIT) and is used for measuring **business risk**, while **Financial gearing** which may be computed as **Prior charge capital/Equity capital** compares a company's use of long-term finance relative to equity, and is used for measuring **financial risk**.

SOLUTION FOUR

(a)(i) When discussing the financing of working capital, it is typical to divide current assets into **fluctuating current assets** and **permanent current assets**. Fluctuating current assets represent changes in the level of current assets due to variations in business activities that are not predictable. Permanent current assets represent the core level of investment in current assets needed to support a given level of turnover or business activity. As turnover or level of business activity increases, the level of permanent current assets will also increase. This relationship can be measured by the ratio of turnover to net current assets.

(a)(ii) The financing choice as far as working capital is concerned is between **short-term** and **long-term finance**. Short-term finance is more flexible than long-term finance: an overdraft, for example, isused by a business organization as the need arises and variable interest is charged on the outstanding balance. Short-term finance is also more risky than long-term finance: an overdraft facility may be withdrawn, or a short-term loan maybe renewed on less favourable terms. In terms of cost, the **term structure of interest rates** suggests that short-term debt finance has a lower cost than long-term debt finance.

The **matching principle** suggests that long-term finance should be used for long-term investment. Applying this principle to working capital financing, long-term finance should be matched with permanent current assets and non-current assets. A financing policy with this objective is called a 'matching policy'. LBC is not using this financing policy, since of the K20 million of current assets, K14 million or 70% is financed from short-term sources (overdraft and trade payables) and only K6 million or 20% is financed from a long-term source, in this case equity finance (shareholders' funds) or long-term bonds.

(a)(iii) The financing policy or approach taken by LBC towards the financing of working capital, where short-term finance is preferred, is called an **aggressive policy**. Reliance on short-term finance makes this riskier than a matching approach, but also more profitable due to the lower cost of short-term finance. Following an aggressive approach to financing can lead to over trading (under - capitalization) and the possibility of liquidity problems.

A less risk but less profitable alternative would be a **conservative approach,** where all non-current assets and permanent current assets, as well as part of the fluctuating current assets are financed by long-term financing, which is generally more expensive.

(b)(i)

Cash flow forecast for three months with current performance:

Month	1	2	3
	K'000	K'000	K'000
Opening bank balance	(8,000)	(8,620)	(7,949)
Receipts	4,500	4,800	4,000
Payments	(3,000)	(4,000)	(3,500)

Interest on L.T bonds			(200)
Overdraft interest	(120)	(129)	(119)
Capital expenditure	(2,000)		
Net cash flow	(620)	671	181
Closing bank balance	(8,620)	(7,949)	(7,769)

(b)(ii)

Cash flow forecast for three months with the consultant's proposals implemented:

Month	1	2	3
	K'000	K'000	K'000
Opening balance	(8,000)	(5,887)	(4,442)
Receipts	4,500	4,800	4,000
Payments	(3,000)	(4,000)	(3,500)
Interest on L.T bonds			(200)
Overdraft interest	(120)	(88)	(67)
Capital expenditure	-	-	-
Reduction in receivables	833	833	833
Reduction in inventory	500	500	500
Reduction in payables	(600)	(600)	(600)
Net cash flow	2,113	1,445	966
Closing balance	(5,887)	(4,442)	(3,476)

Overall an improvement in the monthly cash position will be realized as a result of the policy changes, although the company's cash flow position is still negative, Implying that additional cash inflows are required to completely eliminate the negative monthly cash positions. Improvements in monthly cash flow position include:

- A reduction in LBC'S overdraft position for each month
- A reduction in the monthly interest paid on the overdraft
- Long term finance will be used to finance capex and therefore reducing interest expenses
- Reduction in the overdraft facility and charges

Workings:

Reduction in accounts receivable days

Current accounts receivable days = (12,000/60,000) x 360 = 72 days

Reduction in days over six months = 72 – 42 = 30 days
Monthly reduction = 30/6 = 5 days
Each receivables day is equivalent to 60,000,000/360 =K166, 667
0R 12,000,000/72 = K166, 667
Monthly reduction in accounts receivables = 5 x 166,667 = K833, 335

Reduction in inventory days

Current inventory days = (8,000/36,000) x 360 = 80 days
Reduction in days over four months = 20 days
Monthly reduction = 20/4 = 5 days
Each inventory day is equivalent to 8,000,000/80 = K100, 000
OR 36,000,000/360 = K100, 000
Monthly reduction in inventory = 100,000 x 5 = K500, 000

Reduction in payable days

Current payable days = (6,000/36,000) x 360 = 60 days
Reduction in days over five months = 60 – 30 = 30 days
Monthly reduction = 30/5 = 6 days
Each payable day is equivalent to 6,000,000/60 = K100, 000
OR 36,000,000/360 = K100, 000
Monthly outflow due to reduction in accounts payables = 100,000 x 6 = (K600, 000)

Overdraft interest calculations

Monthly overdraft interest rate = 1.5%

If current position is maintained:
Period 1 interest = 8,000,000 x 1.5% = K120, 000
Period 2 interest =8,620,000 x 1.5% = K129, 300
Period 3 interest = 7,949,000 x 1.5% = K119, 235

If working capital proposals are effected:
Period 1 interest = 8,000,000 x 1.5% = K120, 000
Period 2 interest =5,887,000 x 1.5% = K88, 305
Period 3 interest = 4,442,000 x 1.5% = K66,630

SOLUTION FIVE

(a)
The role of financial intermediaries in providing short-term finance for use by the airline would be to act as a financial intermediary or go between with investors who have surplus cash and the company, as a borrower in need of financing.

Financial intermediaries aggregate or parcel up small amounts of cash provided by individual investors, and lend borrowers such as the airline who need large amounts of cash over a long -term. They would therefore provide a convenient and readily accessible means for the company to obtain necessary funds. Where loan amounts are large, as is the case with aircraft acquisition, banks are able to finance the large amounts and manage risk by forming a lending group called a syndicate.

Small investors are averse to losing any capital, so financial intermediaries could also provide risktransformation by assuming the risk of loss on long-term funds borrowed by the airline, either individually or by pooling risks between financial intermediaries.

Financial intermediaries also offer maturity transformation, in that savers can deposit funds with the option of withdrawing them at short notice, while borrowers may require funds for a fixed term and on a long-term basis, and vice versa. The needs of both the airline as a borrower and lenders can therefore be satisfied. Finance leases are commonly used by banks to finance large amounts of non-current assets such as aircraft with cash flows generated by the leased asset and the aircraft itself serving as security or collateral in case of default. Banks can also help the airline put up a long-term bond to raise the required financing.

(b)

A key financial objective for a stock exchange listed company like Zambian Airways is to maximise the wealth of shareholders. This objective can also be translated as maximising the company's total shareholder return, which is the increase in the share price or capital gain and dividends paid. Shareholder wealth is also achieved through maximization of the present value of future dividends.

The market value (market capitalisation) of the airline is equal to number of issued shares multiplied by the share price. Maximising the company's share price is therefore the same as maximising the equity market value of the company. Maximising the market value of a company can be achieved by maximising its cash income and the expected growth in that income, while minimising its cost of capital. Listed companies therefore have maximising net cash income as a key financial objective.

Not-for-profit (NFP) organisations require cash resources when providing their services to the public. They therefore seek to maximise their cash income , which is financed through grants, as is the case with listed companies. Maximising net cash income is therefore a key financial objective for NFP organisations as well as listed companies. NFPs seek to raise as much funds (grants) as possible in order to achieve their charitable objectives, which are non-financial in nature.

Both listed companies and NFP organisations are constrained by budgets, since they need to control the use of their limited cash resources. A common key financial objective for both organisations is therefore to spend within their budgets.

An appropriate objective for NFP organisations is value for money (VFM). This means maximising benefits for the lowest possible cost, and is similar to the concept of profit maximisation except that society's interests are being maximized as opposed to profit. Achieving value for money requires the application of economy, effectiveness and efficiency or the three Es. Economy refers to achieving a certain level of outputs with at lowest cost. Efficiency is the relationship between inputs and outputs. Effectiveness is the extent to which organisational goals are achieved.

A definition of the three Es clearly shows that a listed company like Zambian Airways also seeks to achieve value for money in their business operations, the difference being in how they achieve them. A listed company has a profit motive, and so VFM for a listed company can be related to performance measures linked to maximising the equity market value of the company. On the other hand NFPs have service-related outputs that are difficult to measure in quantitative terms and so they emphasise performance measures linked to minimizing input costs for given levels of outputs.

In managing their performance, both listed companies and NFP organisations can use accounting ratios such as a target return on capital employed, a target level of income per employee, or a target current ratio.

(c)

Factoring can assist with managing receivables in the following ways:

- <u>Administration & debt collection of the company's sales ledger</u>
  Functions such as assessing the creditworthiness of new customers, recording sales, sending out statements and reminders, collecting payments, identifying late payers and collection of debts including taking appropriate legal action to recover debts where necessary.

Financing

- The factor can also offer finance to ZAMBIAN AIRWAYS by advancing up to 80% of the face value of invoices raised for goods sold or services provided. The finance is repaid from the settled invoices (minus finance costs) when debts are collected.
- If factoring is without recourse, the factor provides credit protection to the client against irrecoverable debts. When the service is with recourse, ZAMBIAN AIRWAYS would bear the loss from any irrecoverable debt. The factor's fee (a percentage of credit sales) will be comparatively higher with recourse than with non-recourse factoring to reflect the cost of the insurance offered.

Credit insurance

- The factor insures the irrecoverable debts of the client. The factor then determines to whom ZAMBIAN AIRWAYS offers credit.

Invoice discounting

- Finance would be advanced to ZAMBIAN AIRWAYS against the security of invoices raised, rather than employing the credit management and administration services of a factor.
- A number of good quality invoices may be discounted, rather than all invoices, and the service is usually only offered to companies meeting a minimum turnover criterion.

(d)

Calculation of size of overdraft

Inventory period = operating cycle + payables period – receivables period = 4 + 2 – 1 = 5 months

Inventory = 12 m x 5/12 = K5million

Accounts receivable = 24m x 1/12 = K2million

Current assets = 5 + 2 = K7million

Current liabilities = current assets/current ratio = 7million/1·4 = K5million

Accounts payable = 12m x 2/12 = K2million

Overdraft = 5 – 2 = K3million

Net working capital = current assets – current liabilities = 7 – 5 = K2million
Overdraft financing cost = 3million x 0.15 = K0.45million

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 22 JUNE 2020

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:

   Section A: One (1) compulsory scenario question.

   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

You are the group accountant of Gospel Plc.The following draft statements of financial position relate to Gospel Plc, Luke Plc and John Plc as at 30 September 2019:

	Gospel Plc	**Luke Plc**	**John Plc**
	K'000	K'000	K'000
Assets			
Non-current assets:			
Property, plant and equipment	1, 524,000	370,000	162,000
Investments	423,000	Nil	Nil
	1, 947,000	370,000	162,000
Current assets:			
Inventories	120,000	175,000	160,000
Trade receivables	90,000	66,000	55,000
Cash and cash equivalents	15,000	12,000	10,000
	225,000	253,000	225,000
Total assets	2,172,000	623,000	387,000
Equity and liabilities			
Equity			
Share capital (K1)	1, 140,000	100,000	80,000
Retained earnings	573,000	210,000	90,000
Other components of equity	250,000	10,000	Nil
Total equity	1, 963,000	320,000	170,000
Non-current liabilities:			
Provisions	1,250	Nil	Nil
Long-term borrowings	82,750	90,000	48,000
Deferred tax	45,000	28,000	30,000
Total non-current liabilities	129,000	118,000	78,000
Current liabilities:			
Trade and other payables	60,000	150,000	130,000
Short-term borrowings	20,000	35,000	9,000
Total current liabilities	80,000	185,000	139,000
Total equity and liabilities	2,172,000	623,000	387,000

1. On 1 October 2016, Gospel acquired 80 million shares in Luke by means of a share exchange of one share in Gospel for every two shares acquired in Luke. On 1 October 2016, the market value of Gospel share was K7. Gospel incurred directly attributable due diligence costs of K3 million on acquisition of Luke. The Directors of Gospel included these acquisition costs in the carrying amount of the investment in Luke in the draft statement of financial position of Gospel. There has been no change to the carrying amount of this investment in Gospel's own statement of financial position since 1 October 2016. On the acquisition date, the individual financial statements of Luke showed the retained earnings K150 million and other components of equity K5 million. The Directors of Gospel carried out a fair value exercise to measure the identifiable assets and liabilities of Luke at 1 October 2016. The following matters emerged:

   (a) Property having a carrying amount of K160 million (land component K70 million, buildings component K90 million) had an estimated fair value of K200 million (land component K80 million, buildings component K120 million). The buildings component of the property had an estimated useful life of 30 years at 1 October 2016.

   (b) Plant and equipment having a carrying amount of K120 million had an estimated fair value of K140 million. The estimated remaining useful life of this plant at 1 October 2016 was four years. None of this plant and equipment had been disposed of between 1 October 2016 and 30 September 2019.

   (c) On 1 October 2016, the notes to the financial statements of Luke disclosed a contingent liability. On 1 October 2016, the fair value of this contingent liability was reliably measured at K6 million. The contingency was resolved in the year ended 30 September 2019 and no payments were required to be made by Luke in respect of this contingent liability.

   (d) The fair value adjustments have not been reflected in the individual financial statements of Luke. In the consolidated financial statements the fair value adjustments will be regarded as temporary differences for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%.

   The Directors of Gospel used the proportion of net assets method when measuring the non-controlling interest in Luke in the consolidated statement of financial position.

2. Included in the property plant and equipment of Gospel plc is a property that was acquired on 1 October 2015 at a cost of K700 million. The property is subject to revaluations in accordance with the revaluation model under IAS 16 Property Plant and Equipment. Its total useful economic life is estimated at 100 years. At 30 September 2018, the property was revalued to a fair value of K640 million. The property is yet to be revalued at 30 September 2019 to its fair value of K670 million.

3. No impairment of the goodwill on acquisition of Luke was evident when the reviews were carried out on 30 September 2017 and 2018. On 30 September 2019, the Directors of Gospel carried out a further review and concluded that the recoverable amount of the net assets of Luke at that date was K400 million. Luke is regarded as a single cash generating unit for the purpose of measuring goodwill impairment.

4. On 1 October 2018, Gospel acquired 60 million shares in John making an immediate cash payment of K140 million. The purchase agreement provided for an additional payment on 31 October 2020 to the former holders of the 60 million acquired shares. The amount of this additional payment is dependent on the financial performance of John in the two-year period from 1 October 2018 to 30 September 2020. On 1 October 2018, the fair value of this additional payment was estimated to be K20 million. This estimate was revised to K24 million on 30 September 2019. Gospel has not made any entries in its draft financial statements to record this potential additional payment.

   On 1 October 2018, the individual financial statements of John showed a balance on retained earnings of K75 million.

   On 1 October 2018, the fair values of the net assets of John were the same as their carrying amounts with the exception of some land which had a carrying amount of K50 million and a fair value of K70 million. This land is still owned by John at 30 September 2019. The fair value adjustment has not been reflected in the individual financial statements of John. In the consolidated financial statements the fair value adjustment will be regarded as a temporary difference for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%. No impairment issues arose concerning the measurement of John in the consolidated statement of financial position of Gospel at 30 September 2019.

   The directors of Gospel used the full goodwill (fair value) method when measuring the non-controlling interest in John in the consolidated statement of financial position. On 1 October 2018, the fair value of a share in John was K2:30.

5. Group policy is to clear intra-group balances on a given date prior to each year end. Luke complied with this policy at 30 September 2019 but John was late in making the required payment of K10 million to Gospel. The payment was made by John on 29 September 2019 and received and recorded by Gospel on 2 October 2019.

6. The salaried employees of Gospel Plc are entitled to 25 days paid holiday each year. The entitlement accrues evenly over the year and unused holiday may be carried forward for one year. The holiday year is the same as the financial year. At 30 September 2019, Gospel has 1,800 salaried employees and the average unused holiday entitlement is three days per employee.5% of employees leave without taking their entitlement and there is no cash payment inrespect of unused holiday entitlement when an employee leaves. There are 255 working daysin the year and the total annual salary cost is K38 million. No adjustment has been made inthe financial statements for the unused holiday and there was no opening accrual required for holiday entitlement.

7. On 1 October 2018, Gospel completed the construction of a non-current asset with an estimated useful life of 20 years. The costs of construction were recognised in property, plant and equipment and depreciated appropriately. Gospel has a legal obligation to restore the site on which the non-current asset is located on 30 September 2035. The estimated cost of this restoration work, at 30 September 2035 prices, is K25 million. The Directors of Gospel have made a provision of K1:25 million (1/20 x K25 million) in the draft statement of financial position at 30 September 2019. An appropriate annual discount rate to use in any relevant calculations is 6% and at this rate the present value of K1 payable in 20 years is 31.2 ngwee.

8. The Gospel Plc It has recently appointed a new Chief Executive Officer who is reviewing the draft financial statements for the year ended 30 September 2019. The Chief Executive Officer is intrigued by why the annual report and financial statements contains 'more than just numbers' and questions you as to why it is beneficial to produce so much information.

Required:

(a) Prepare the consolidated statement of financial position of Gospel at 30 September 2019. (35 marks)

(b) Explain the factors which provide encouragement to companies to disclose social andenvironmental information in their financial statements, briefly discussing whether the contentof such disclosure should be at the company's discretion. (5 marks)

[Total: 40 Marks]

SECTION B

Answer any THREE (3) Questions in this section.

QUESTION TWO

IFRS 16 *Leases* establishes principles for the recognition, measurement, presentation and disclosure of leases, with the objective of ensuring that lessees and lessors provide relevant information that faithfully represents those transactions. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value.

Your assistant has a reasonable general accounting knowledge but is not familiar with the detailed requirements of all relevant financial reporting standards. One issue and two transactions on which he requires your advice are shown below:

Issue One
Accounting treatment for the sale and lease back as per IFRS 16 in the books of both seller-lessee and buyer-lessor.

Transaction One
On 1 January 2019, **BMK Plc** sells an item of machinery to **Tamwibusha plc** for its fair value of K6 million. The asset had a carrying amount of K2.4 million prior to the sale. This sale represents the satisfaction of a performance obligation, in accordance with IFRS 15 Revenue from Contracts with Customers. BMK enters into a contract with Tamwibusha for the right to use the asset for the next five years. Annual payments of K1 million are due at the end of each year. The interest rate implicit in the lease is 10%. The present value of the annual lease payments is K3.8 million. The remaining useful economic life of the machine is 12 years.

Transaction Two
On 1 January 2019, **ABC Plc** sells an item of machinery to **XYZ plc** for K9 million. Its fair value was K8.4 million. The asset had a carrying amount of K3.6 million prior to the sale. This sale represents the satisfaction of performance obligation, in accordance with IFRS 15 Revenue from Contracts with Customers. ABC enters into a contract with XYZ for the right to use the asset for the next five years. Annual payments of K1.5 million are due at the end of each year. The interest rate implicit in the lease is 10%. The present value of the annual lease payments is K5.7 million.

Required:

(a) In line with IFRS 16, explain accounting treatment for the sale and lease back in the books of both seller-lessee and buyer-lessor. (8 marks)

(b) Explain how the transaction one will be accounted for on 1 January 2019 by both BMK plc and Tamwibusha plc. (5 marks)

(c) Explain how the transaction two will be accounted for on 1 January 2019 by both ABC and XYZ. (7 marks)

[Total: 20 Marks]

QUESTION THREE

Mulolwa Limited was incorporated several years ago and has established itself as one of the biggest retailers within Zambia.

The following matters have arisen as the company is preparing its financial statements for the year to 31 December 2019.

Purchase of plant

On 1 July 2019, Mulolwa paid USD 15,000 to a foreign supplier as settlement for an item of plant which it had ordered on 1 March 2019. The spot exchange rate on 1 July 2019 was K13.5/USD. The plant was delivered on the date of settlement. Upon ordering the plant on 1 March 2019, Mulolwa also entered a forward currency contract to purchase USD 15,000 from its bank at a forward rate of K13/USD for settlement on 1 July 2019 as a hedge against adverse changes in the Kwacha/USD exchange rate. The company was concerned that Kwacha may depreciate to result in a higher payment in Kwacha terms when settling for the plant. Mulolwa has Kwacha as its functional currency. The spot exchange rate on 1 March 2019 was K12/USD. Mulolwa was charged a transaction fee equal to 1% of the contracted amount translated at the spot rate on 1 March 2019. The plant has a useful life of five years and Mulolwa depreciates this category of plant on a straight line basis (nil residual value) with time apportionment.

The Directors of Mulolwa Ltd would like to use hedge accounting in respect this transaction but are uncertain whether the requirements of IFRS 9 Financial Instruments in relation to the use of hedge accounting have been met. Therefore, they are seeking your advice on what those requirements are and how to account for this transaction assuming that the conditions for hedge accounting have been met and that the hedge qualifies as a cash flow hedge. (10 marks)

Interest Free Loans to Senior Managers

On 1 January 2019, Mulolwa gave interest free loans to its senior Managers amounting to K2 million in total. This total amount is repayable by the managers over five equal annual instalments due on 31 December each year with the initial amount due on 31 December 2019. Mulolwa was in a position to lend the money at a market interest rate of 10%. The loans are interest free as part of the senior managers' conditions of service. Mulolwa's loans to members of staff are not normally transferable to third parties.

The Directors of Mulolwa are seeking advice on how to account for the loans. So far, they correctly identified that the main accounting standards applicable are IFRS 9 Financial Instruments and IAS 19 Employee Benefit Costs. (10 marks)

Required:

Advise the Directors of Mulolwa Limited on how the above transactions must be accounted for in its financial statements for the year to 31 December 2019 in accordance with the relevant accounting standards addressing their concerns. **[Total:20 Marks]**

QUESTION FOUR

(a) Palo Plc has owned 100% of the equity interests in Mano Copper Mining Plc for eight (8) years now. Palo Plc paid cash consideration of K1,300,000 on acquisition date. The fair value of Mano Copper Mining Plc's net assets stood at K1,260,000 and copper ore reserves stood at 50%.

Mano Copper Mining Plc is an under–ground copper mine which has been in operational existence for twenty (20) years. An assessment of copper ore reserves was conducted on 1 January 2019 which revealed that only 25% is yet to be mined. This made Directors of Palo Plc realise that they had to act fast if they were to get something from selling the subsidiary. The Directors of Palo Plc therefore held an extra ordinary Board Meeting on 1 April 2019 to discuss what to do with Mano Copper Mining Plc.

The following were resolved at the meeting:

(i) Mano Copper Mining Plc will only be sold at a price of K1,800,000.
(ii) Mano Copper Mining Plc will be either wound down or abandoned whichever will be more beneficial to the group if it starts making losses.
(iii) Mano Copper Mining Plc will be put on sale on 1 January 2020.

The carrying values of Mano Copper Mining Plc were K1,280,000 and K1,320,000 on 1 April 2019 and 31 December 2019 respectively. The value in use amounted to K1,290,000 on 1 April 2019 and K1,330,000 on 31 December 2019.

The Directors of Palo Plc are thinking of classifying Mano Mining Plc as held for sale in their consolidated financial statements.

Required:
Advise the Directors of Palo Plc the appropriateness of classifying Mano Mining Plc in their consolidated financial statements for the year to 31 December 2019 as held for sale.

(10 marks)

(b) Yana Plc started constructing new business offices on 1 January 2019. The office is expected to be completed on 31 December 2020 at a total cost K1,200,000. Yana Plc decided to borrow in order to finance construction of new offices. The company borrowed K800,000 15% bank loan on 31 December 2018 and K600,000 18% bank loan on 1 October 2019. Both loans are repayable after five (5) years. The company had not contracted any loan before 31 December 2018.

Construction works started on 1 April 2019 and went on throughout the year except for two months from 1 August to September 2019. The stoppage was caused by shortage of cement.

Yana Plc spent K500,000 from 1 April to 31 July and K200,000 from 1 October to 31 December 2019.

The Directors of Yana Plc are not sure on how to treat interest in their financial statements for the year to 31 December 2019.

Required:
Prepare extracts of financial statements of Yana Plc for the year to 31 December 2019, showing accounting treatment of interest cost. (6 marks)

(c) Poka Limited deals in cooking oil. It buys crude oil which is 60% complete and refines it further to produce the final product sold to its various customers.

Poka Limited bought 1000litres of crude oil for a total list price of K400,000 on 1 October 2019. It received a trade discount of 5% of list price.

Poka Limited incurred the following costs in respect of this consignment of crude:
- Transport cost of K40,000
- Refundable duty and taxes of K12,000
- Non–refundable duty and taxes of K28,000

The consignment wasprocessed between 1 October and 31 December. The following costs were incurred in processing the crude:
- Cost of refining crude oil K60,000
- Storage cost of K15,000
- Abnormal waste of K10,000

The Directors of Poka Limited want to know how much inventory cost should be included in their financial statements for the year to 31 December 2019.

The accounts assistant has provided you with the following figures from the draft financial statements for the year to 31 December 2019:
- Cost of sales K2,000,000
- Closing inventory K300,000

The figures from the draft accounts above are before inclusion of the closing inventory in respect of the oil.

Required:
Prepare extracts of financial statements of Poka Limited for the year to 31 December 2019, showing accounting treatment of refined cooking oil. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Nata Plc is a retailer of motor vehicle spare parts. It sells its spares to various customers through its retail outlets. The company was formed ten (10) years ago. The following are the financial statements of Nata Plc for the year to 31 December 2019 and 31 December 2018.

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

	2019 K'000	2018 K'000
Revenue	5,120.00	5,280.00
Cost of sales	(2,016.00)	(1,584.00)
Gross profit	3,104.00	3,696.00
Other income	96.00	132.00
Distribution cost	(940.00)	(924.00)
Administrative cost	(1,680.00)	(1,584.00)
Finance cost	(300.00)	(171.00)
Profit before tax	280.00	1,149.00
Taxation	(56.00)	(230.00)
Profit for the period	224.00	919.00
Other comprehensive income		
Revaluation gain/(deficit)	90.00	(30.00)
Net actuarial gain/(loss)	63.00	(23.00)
Total comprehensive Income	377.00	866.00

Statement of financial position as at 31 December:

	2019 K'000	2018 K'000
Assets		
Non-current assets		
Property, plant and equipment	4,130.00	2,853.00
Investment property	1,099.00	871.00
Other intangible assets	605.00	554.00
	5,834.00	4,278.00
Current assets		
Inventory	198.00	264.00
Trade Receivable	360.00	412.00
Cash & cash equivalents	154.00	61.00
	712.00	737.00
Total Assets	**6,546.00**	**5,015.00**
Equity and liabilities		
Equity		
Equity shares of K2 each	768.00	554.00

Other components of equity	562.00	34.00
Retained earnings	1,049.00	1,145.00
Total Equity	**2,379.00**	**1,733.00**
Liabilities		
Non-current liabilities		
Employee benefits	620.00	813.00
Deferred Tax	495.00	343.00
Unsecured bank loan	2,400.00	1,514.00
	3,515.00	2,670.00
Current liabilities		
Trade payables	312.00	354.00
Taxation	40.00	87.00
Finance cost payable	300.00	171.00
	652.00	612.00
Total Liabilities	**4,167.00**	**3,282.00**
Total equity and liabilities	**6,546.00**	**5,015.00**

Additional information:

1. Nata Plc reduced selling price of spares by 20% effective January 2019. Sales volume of spare parts was 12, 000 and 9, 000 in 2019 and 2018 respectively.
2. Other income relates to rental income received from investment property. Nata Plc lost a major customer in June 2019 and has not been replaced.
3. On 1 October 2019, Nata Plc opened two (2) new outlets in the capital city of the Republic of Zambia. These were in rented buildings. The number of outlets was 8 and 10 in 2018 and 2019 respectively.
4. Nata Plc acquired three (3) generators in January 2019 for use when there is power outage due to load shading by the power utility company. In the second half of the year, load shading was increased from 2 hours to 8 hours every day.
5. Nata Plc imports all its spare parts. Average exchange rate in 2019 accounting period was K13 per United States Dollar compared to K11 per United States Dollar in 2018 accounting period.
6. Nata Plc uses fair value model for its investment property and revaluation model for its property, plant and equipment. There were no disposals of investment property and property, plant and equipment in 2019 and 2018 accounting periods.
7. Nata Plc paid out total dividends of K250,000 in the year to 31 December 2019 and K350,000 in the year to 31 December 2018.
8. Nata Plc issued additional equity shares on 1 January 2019.

Required:

Write a report to the Director that evaluates the position and performance of Nata Plc for the year to 31 December 2019. **(Your answer should include relevant calculations).**

[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

SUGGESTED SOLUTION

SECTION A

SOLUTION ONE

1 Consolidated statement of financial position of Gospel at 30 September 2019

Assets	K'000
Non-current assets:	
Property, plant and equipment (1, 524,000 + 370,000 + 162,000) + [(40,000 (W1) – 3,000 (W1)) + (20,000 (W1) – 15,000 (W1)) + 20,000 (W2) + (7,800 – 390) (W8) +36, 600 (10)]	
	2,162,010
Goodwill (W3)	<u>72,120</u>
	2,234,130
Current assets:	
Inventories (120,000 + 175,000 + 160,000)	455,000
Trade receivables (90,000 + 66,000 + 55,000 – 10,000)	201,000
Cash and cash equivalents (15,000 + 12,000 + 10,000 + 10,000 (cash in transit))	47,000
	<u>703,000</u>
Total assets	**<u>2,937,130</u>**
Equity and liabilities	
Equity attributable to equity holders of the parent	
Share capital	1, 140,000
Retained earnings (W6)	649,817
Other components of equity (W7)	<u>254,000</u>
	2,043,817
Non-controlling interest (W5)	120,470
Total equity	2,164,287

Non-current liabilities:	
Provision (7,800 + 468 (W8))	8,268
Long-term borrowings (82,750 + 90,000 + 48,000)	220,750
Contigent consideration (20,000 + 4,000)	24,000
Deferred tax (W9)	115,400
Total non-current liabilities	368,418
Current liabilities:	
Trade and other payables (60,000 + 150,000 + 130,000 + 425 w11)	340,425
Short-term borrowings (20,000 + 35,000 + 9,000)	64,000
Total current liabilities	404,425
Total equity and liabilities	**2,937,130**

(**b) Social and environmental information**

There are a number of factors which encourage companies to disclose social and environmental information in their financial statements. Public interest in corporate social responsibility is steadily increasing. Although financial statements are primarily intended for present and potential investors, lenders and other creditors, there is growing recognition that companies actually have a number of different stakeholders. These include customers, employees and the general public, all of whom are potentially interested in the way in which a company's operations affect the natural environment and the wider community. These stakeholders can have a considerable effect on acompany's performance. As a result, many companies now deliberately attempt to build a reputation for social and environmental responsibility.

Therefore, the disclosure of environmental and social information is essential. There is also growing recognition that corporate social responsibility is actually an important part of an entity'soverall performance. Responsible practice in areas such as reduction of damage to the environment and recruitment increases shareholder value. Companies that act responsibly and make social and environmental disclosures are perceived as betterinvestments than those that do not.
Another factor is growing interest by governments and professional bodies. Although there are no IFRSs that specifically require environmental and social reporting, it may be required by company legislation. There are now a number of awards for environmental and social reports and high quality disclosure in financial statements.
These provide further encouragement to disclose information.

At present companies are normally able to disclose as much or as little information as they wish in whatever manner that they wish. This causes a number of problems.
Companies tend to disclose information selectively and it is difficult for users of the financial statements to compare the performance of different companies. However, there are good arguments for continuing to allow companies a certain amount of freedom to determine the information that they disclose. If detailed rules are imposed, companies arelikely to adopt a 'checklist' approach and will present information in a verygeneral and standardised way, so that it is of very little use to stakeholders.

WORKINGS – ALL NUMBERS IN K'000 UNLESS OTHERWISE STATED:

Working 1 – Net assets table – Luke plc:

	1 October	30 September
	2016	2019
	K'000	K'000
Share capital	100,000	100,000
Retained earnings:		
Per accounts of Luke	150,000	210,000
Fair value adjustments:		
Property (200,000 – 160,000)	40,000	40,000
Extra depreciation due to buildings uplift ((120,000 – 90,000) x 3/30)		(3,000)
Plant and equipment (140,000 – 120,000)	20,000	20,000
Extra depreciation due to plant and equipment uplift (20,000 x ¾)		(15,000)
Contingent liability	(6,000)	Nil
Other components of equity	5,000	10,000
Deferred tax on fair value adjustments:		
Date of acquisition (20% x 54,000 (see above))	(10,800)	
Year end (20% x 42,000 (see above))		(8,400)
Net assets for the consolidation	298,200	353,600

The post-acquisition increase in net assets is 55,400 (298,200–353,600).

5,000 of this increase is due to changes in other components of equity and the remaining 50,400 to changes in retained earnings.

Working 2 – Net assets table – John plc:

	1 October 2016	30 September 2019
	K'000	K'000
Share capital	80,000	80,000
Retained earnings:	75,000	90,000
Land adjustment (70,000 – 50,000)	20,000	20,000
Deferred tax on fair value adjustment (20% x 20,000)	(4,000)	(4,000)
Net assets for the consolidation	171,000	186,000

The post-acquisition increase in net assets is 15,000 (186,000 – 171,000).

Working 3 – Goodwill on consolidation

	Luke	John
Costs of investment:	K'000	K'000
Shares issued to acquire Luke (40,000 x K7·00)	280,000	
Cash paid to acquire shares in John		140,000
Contingent consideration re: John acquisition		20,000
Non-controlling interests at date of acquisition:		
Luke – 20% x 298,200 (W1)	59,640	
John – 20,000 x K2·30		46,000

Net assets at date of acquisition (W1/W2)	(298,200)	(171,000)
Goodwill before impairment	41,440	35,000
Impairment of Luke goodwill (W4)	(4,320)	Nil
	37,120	35,000

The total goodwill is 72,120 (37,120 + 35,000)

Working 4 – Impairment of Luke plc goodwill

	K'000	
Net assets of Luke as per working 1	353,600	
Grossed up goodwill on acquisition (100/80 x 41,440)	51,800	
		405,400
Recoverable amount of Luke as a CGU	(400,000)	
So gross impairment equals	5,400	
80% thereof equals	4,320	

Working 5 – Non-controlling interest

	Luke plc	John plc
	K'000	K'000
At date of acquisition (W3)	59,640	46,000
Share of post-acquisition increase in net assets per workings 1 and 2:		
Luke – 20% x 55,400 (W1)	11,080	
John – 25% x 15,000 (W2)		3,750
	70,720	49,750

The total NCI is 120,470 (70,720 + 49,750).

Working 6 – Retained earnings	K'000
Gospel	573,000
Fair value gain (w10)	36, 600
Employee benefits (w11)	(425)

Adjustment for acquisition costs	(3,000)
Adjustment for increase in contingent consideration re: John (24,000 – 20,000)	(4,000)
Adjustment for restoration provision (W8)	392
Luke (80% x 50,400 (W1))	40,320
John (75% x (15,000 (W2))	11,250
Impairment of Luke goodwill (W4)	(4,320)
	649,817

Working 7 – Other components of equity

	K'000
Gospel – per own financial statements	250,000
Luke (80% x 5,000 (W1)	4,000
	254,000

Working 8 – Adjustment re: restoration provision

	K'000
Originally required provision (25,000 x 0·312)	7,800
One year's unwinding of discount (7,800 x 6%)	(468)
One year's depreciation of capitalised cost (7,800 x 1/20)	(390)
Original provision incorrectly made	1,250
So retained earnings adjustment equals	392

Working 9 – Deferred tax

	K'000
Gospel + Luke + John	103,000
On fair value adjustments in Luke (W1)	8,400
On fair value adjustments in John (W2)	4,000
	115,400

Working 10.Revaluation of Gospel plc's PPE at 30.9.2019:

FV at 30.9.2019	670	
Carrying amount at 30.9.2019 (640 - (640÷97X1)	(633.4)	36.6

Revaluation gain on A plc's property:	
Cost model carrying amount (700X (96÷100)	672
FV at revaluation	670
Whole gain is within cost model carrying amount.	
Therefore the whole gain must be reported in P/L/ RE	36.6

Working 11 Holiday pay accrual

IAS 19 *Employee Benefits* classifies this type of holiday pay as a short-term accumulating paid absence as any unused entitlement may be carried forward and utilised in the following year. The obligation arises as the employees render services that entitle them to future paid absences. The obligation exists even if the employees are not entitled to a cash payment (non-vesting). This is consistent with the definition of a liability given in the *Conceptual Framework.* The company has a present obligation, as it needs to provide a paid absence, as a result of past events, as the employee has already undertaken employment and accumulated the benefit from which an outflow of resources is expected. Making payments to employees in respect of absences is considered to be an outflow of benefits.

The measurement of the obligation is affected by Gospel's estimate of possible leavers (5%). IAS 19 requires that an accrual be made by Gospel for holiday entitlement carried forward as the current period's entitlement has not been used in full at 30 September 2019. A corresponding increase in the wages and salaries expense will also be recorded in this case retained earnings). The current liability is calculated as follows:

Number of days c/fwd: 1,800 x 3 x 95% = 5,130 days

Number of working days: 1,800 x 255 = 459,000

Accrual = (5,130/ 459, 000) X K38m = K0.425m.

SECTION B

SOLUTION TWO

(a) If an entity (the seller-lessee) transfers an asset to another entity (the buyer-lessor) and then leases it back, IFRS 16 requires that both entities assess whether the transfer should be accounted for as a sale. For this purpose, entities must apply IFRS 15 Revenue from Contracts with Customers to decide whether a performance obligation has been satisfied. This normally occurs when the customer obtains control of a promised asset. Control of an asset refers to the ability to obtain substantially all of the remaining benefits.

If the transfer **is not a sale then IFRS 16 states** that: In simple terms, the transfer proceeds are treated as a **loan**. The **seller-lessee continues to recognise the transferred asset** and will recognise a **financial liability** equal to the transfer proceeds.

The **buyer-lessor will not recognise** the transferred asset and will recognise a financial asset equal to the transfer proceeds.

If the transfer **does qualify as a sale then IFRS 16 states that**:

- The **seller-lessee must measure the right-of-use asset as the proportion** of the previous carrying amount that relates to the rights retained. This means that the seller-lessee will recognise a **profit or loss based only on the rights transferred to the buyer-lessor**.
- The buyer-lessor accounts for the asset purchase using the most applicable accounting standard (such as IAS 16 Property, Plant and Equipment). The lease is accounted for by applying lessor accounting requirements.

If the sales proceeds or lease payments **are not at fair value**, IFRS 16 requires that:

• below market terms (e.g. when the sales proceeds are less than the asset's fair value) are treated as a prepayment of lease payments

• above market terms (e.g. when the sales proceeds exceed the asset's fair value) are treated as additional financing.

(b) BMK plc must remove the carrying amount of the machine from its statement of financial position. It should instead recognise a right-of-use asset. This right-of-use asset will be measured as the proportion of the previous carrying amount that relates to the rights retained by BMK:

- (3.8m/6m) × K2.4 million = K1.52 million

The entry required is as follows

Item	Account	DR K'M	CRK'M
1	Cash	6	
2	Right of use	1.52	
3	Machine		2.4
4	Lease liability		3.8

5	Profit or loss (Gain on disposal)		1.32
	Total	**7.52**	**7.52**

Gain on disposal K3.6 million x (k6 m –K3.8)/K6= K1.32

Tamwibusha plc will post the following:

Debit machine K6 mmillion and credit Cash K6million

Normal lessor accounting rules apply (IFRS 16). The lease is an operating because the present value of the lease payment is not substantially the same as the asset's fair value, and the lease term is not for the majority of the asset's useful life. Tamwibusha will record rental income in profit or loss on a straight line basis.

(c) The **excess** sales proceeds are **K0.6 million** (K9m – K8.4m). These are treated as **additional financing.** The **present value** of the lease payments was **K5.7 million**. It is assumed that K0.6 million relates to the additional financing that ABC has been given. The remaining **K5.1** million (**K5.7-K0.6**) relates to the **lease**.

ABC

ABC must **remove the carrying** amount of the machine from its statement of financial position. It should instead **recognise a right-of-use asset**. This right-of-use asset will be measured as the proportion of the **previous carrying amount** that relates to the rights retained by ABC: (5.1m/**8.4m**) × K3.6 million = **K2.19 million**.

The entry required is as follows:

Debit	**Credit**	
Cash	K9.00m	
Right-of-use asset	K2.19m	
Machine		K3.60m
Lease liability		K5.10m
Financial liability		K0.60m
Cr Profit or loss (bal. fig.)		K1.89m;

Note: The gain in profit or loss is the proportion of the **overall K4.8 million gain** on disposal (K8.4m – K3.6m) that relates to the rights transferred to XYZ. This can be calculated as follows:

((8.4m – 5.1m)/8.4m) × K4.8 million = **K1.89 million**. The right of use asset and the lease liability will then be accounted for using **normal lessee accounting rules**. The financial **liability is accounted for in accordance with IFRS 9** Financial Instruments.

XYZ

XYZ will post the following:

Debit Machine K8.4m; Debit Financial asset K0.60m; Cr Cash K9.00m.

It will then account for the lease using **normal lessor** accounting rules.

Note The payments/receipts will be allocated between the lease and the additional finance. This is based on the proportion of the total present value of the payments that they represent:

- The payment/receipt allocated to the lease will be K1, 342, 104 ((5.1/5.7) × K1.5).
- The payment/receipt allocated to the additional finance will be K157, 896 ((0.6/5.7) × K1.5).

SOLUTION THREE

Purchase of plant

The acquisition of plant will primarily be accounted for in accordance with IAS 16 Property Plant and Equipment. However, the forward currency contract meets the definition of a financial instrument (it is a contract to exchange currencies at terms which are either potentially favourable or unfavourable) and therefore falls within the scope of IFRS 9 Financial Instruments.

With regard to whether mulolwa's directors can apply hedge accounting, IFRS 9 requires that a hedging relationship qualifies for hedge accounting only if all of the following criteria are met:

1. The hedging relationship consists only of eligible hedging instruments and eligible hedged items.

A hedged item can be a recognised asset or liability, an unrecognised firm commitment, a highly probable forecast transaction or a net investment in a foreign operation and must be reliably measurable. [IFRS 9 paragraphs 6.3.1-6.3.3].

A hedging instrument may be a derivative or non-derivative financial instrument measured at FVTPL unless it is a financial liability designated as at FVTPL for which changes due to credit risk are presented in OCI. For a hedge of foreign currency risk, the foreign currency risk component of a non-derivative financial instrument, except equity investments designated as FVTOCI, may be designated as the hedging instrument. [IFRS 9 paragraphs 6.2.1-6.2.2]

2. At the inception of the hedging relationship there is formal designation and documentation of the hedging relationship and the entity's risk management objective and strategy for undertaking the hedge.

3. The hedging relationship meets all of the hedge effectiveness requirements ([IFRS 9 paragraph 6.4.1]. Hedge effectiveness can be reliably measured on a continuing basis and the hedge has been assessed to be highly effective.

Assuming that the conditions for hedge accounting have been met and that the hedge qualifies as a cash flow hedge, the transaction will be accounted for as follows:

Accounting for the Forward Currency Contract (FCC):

The FCC is a derivative financial instrument. It is therefore normally classified as a Fair Value Through Profit or Loss (FVTPL) item. The FCC will therefore initially be measured at fair value of K15,000 (ie 15000X[13-12]) liability. A liability arises because the contracted rate is initially unfavourable to Mulolwa being more than the spot rate. Initial recognition of the liability will require a debit of K15,000 in Profit or loss for the year to 31.12.2019. The transaction costs of K1,800 (ie 1%X15000X12) will also be charged in P/L for the y/e 31.12.2019.

At 1.07.2019, prior to settlement, the FCC had a fair value of K7,500 (ie 15000[13-13.5]) asset. An asset arises because the contracted rate is at this point favourable to Mulolwa being less than the spot rate. A remeasurement gain arises on the instrument on 1.7.2019 equal to K22,500 (ie asset of K7500 less previous liability of K15000). In a cashflow hedge accounting, gains and losses on remeasurement of a hedging instrument that are within the effective part of the hedge are initially reported in OCI and reclassified in P/L for the period when results from the hedged position are reported in P/L. Where the hedge results in recognition of a non monetary asset, the gain or loss previously reported in OCI is reclassified by transferring it to be part of that asset's initial carrying amount. In this case, the hedge results in recognition of the plant on 1.7.2019, therefore the gain within the effective part of the hedge will offset the cost of the plant in arriving at the plant's initial carrying amount on 1.7.2019.

The gain within the effective part of the hedge equals the lower of:

- Total remeasurement gain on the FCC K22,500; and
- Loss (increase Kwacha Cost) on hedged position K22,500 (ie 15000X[13.5-12]).

Therefore, the whole remeasurement gain of K22,500 on the FCC is within the effective part of the hedge and must initially be reported in OCI and reclassified on 1.7.2019 by offsetting the cost of the plant.

Accounting for the Plant

The plant will initially be recognised on 1.7.2019, the date of delivery at the Kwacha cost of the USD15,000 translated at the spot rate of K13.5/USD less the gain on the FCC being reclassified on that date. This gives an initial carrying amount of the plant of K180,000 (ie 15000X13.5-22500).

Subsequently, the plant will be depreciated over a life of 5 years giving a depreciation charge in P/L for the y/e 31.12.2019 of K18,000 (ie 180000÷5X6/12).The plant will therefore be reported at a carrying amount of K162,000 in the SFP at 31.12.2019.

Interest Free Loans to Senior Managers

The loans are a debt instrument asset that Mulolwa holds to maturity (not transferable to third parties). Cash flows from the loans are fixed and receivable on predetermined due dates. The loans therefore qualify to be classified as assets to be subsequently measured at amortised cost.

The loans will initially, on 1 January 2019, be measured at fair value of K1.5163 million computed as the PV of future cash flows discounted at the market interest rate 10% as follows:

Date (31.12)	Cash flow (K'000)	PV factor @10%	PV (K'000)
2019	K2m/5 = 400	1.1^-1	363.6
2020	400	1.1^-2	330.6
2021	400	1.1^-3	300.5
2022	400	1.1^-4	273.2
2023	400	1.1^-5	248.4
Fair Value			1,516.3

Therefore, there is an initial measurement loss on the loans of K0.4837 million. The initial loss can be attributed to the benefit the managers receive in respect of the interest free loans. The loss can therefore be regarded as a cost of providing employee benefits. IAS 19 Employee Benefit Costs requires that the cost of providing employee benefits as a reward for their services must be recognised as an expense for the periods when employee services are rendered and not necessarily when the benefits are paid. The loss should therefore be recognized in P/L over the 5 years giving a charge to P/L of

K96,740 (ie 483700/5) per annum. Therefore, a prepayment of K386,960 (ie 483700-96740) must be reported in Mulolwa's SFP at 31.12.2019.

The loans will subsequently be accounted for at amortised cost using the effective interest rate of 10% as follows:

	K'000
Initial carrying amount 1.1.2019	1,516.3
Finance income at 10%X1516.3	151.6
Less cash received 31.12.2019	(400)
Carrying amount at 31.12.2019	1,267.9

Mulolwa will therefore report the loans at a crying amount of K1.2679 million in the SFP at 31.12.2019 and credit finance income of K151,600 to the P/L for the y/e 31.12.2019 in respect of the loans.

SOLUTION FOUR

a) IFRS 5 '*Non-current Assets Held for Sale and Discontinued Operations'* provides for conditions which must be met for Mano Mining Plc to be classified as held for sale in the consolidated financial statements of Palo Plc. These include,

- management's commitment to a plan to sell
- the disposal group's availability for immediate sale
- initiation of an active programme to locate a buyer
- highly probability of a sale within 12 months of classification as held for sale (subject to limited exceptions)
- disposal group being actively marketed for sale at a sales price reasonable in relation to its fair value
- actions required to complete the plan indicate unlikelihood of the plan being significantly changed or withdrawn

In Mano Mining Plc's case, it seems management is not yet committed to a plan of sale as it has not yet put Mano Mining Plc on sale and they have an option of winding down or abandoning the operations of the mine whichever will be most beneficial to the group. IFRS 5 requires the disposal group to be disposed of only through sale and operations that are expected to be wound down or abandoned would not meet the held-for-sale definition. Further, there has been no active programme to locate the buyer. Adversely, the price of K1,800,000 Palo Plc intends to sell Mano Mining Plc does not look to be realistic. This is because it is way above what Palo Plc paid at 50% copper ore reserves. The selling price is expected to be less than K1,300,00 as the copper ore reserves are about 25% representing 50% depletion from the date of acquisition. In addition, Mano Mining Plc's value in use is only K1,330,000 as at 31 December 2019. Therefore, to make the sale highly probable, management should consider reducing the selling price.

The points above show that Mano Mining Plc should not be classified as disposal group held for sale. The subsidiary should continue being consolidated as a going concern subject to impairment review.

In the financial statements for the year to 31 December 2019, Mano Mining Plc should be consolidated as a going concern. However, Palo Plc should recognise impairment loss of K30,000**W** in its consolidated statement of profit or loss and reduce the carrying value of the net assets of Mano Mining Plc to be recognised in the consolidated statement of financial position by the same amount. Impairment loss of K30,000**W** should first be allocated to an asset(s) which have specifically been impaired, then to consolidated goodwill and any balance prorated to other assets except those which have specifically not been impaired.

b) **Yana Plc**
Statement of financial position (extract) as at 31 December 2019

	K'000	**Marks**
Non - current assets		
Property (500+200+65.88**W3**)	765.88	

Yana Plc
Statement of profit or loss (extract) for the year

ended 31 December 2019

	K'000
Interest expense 147W1 – 65.88W3	81.12

c) **Poka Limited**
Statement of financial position (extract) as at 31 December 2019

	K'000
Current assets	
Inventory (300 + 508**W**)	808.00

Poka Limited
Statement of profit or loss (extract) for the year ended 31 December 2019

	K'000
Cost of sales (2,000 - 508**W**)	1,492.00

W **Part (a) Working - Calculation of impairment loss- Mano Copper Mining Plc**

	K'000
Goodwill (1,300 - 1,260)	40.00
Carrying value	1,320.00
	1,360.00
Recoverable amount - VIU	1,330.00
Impairment loss	**30.00**

Part (b) Workings

W2 **Calculation of Capitalisation Rate**

		Average Loan Bal K'000	Rate	Finance Cost K'000
Old loan	800x12/12	800	15%	120
New loan	600x3/12	150	18%	27
Total		**950.00**		**147**

Average Intrest Rate 147/950x100 = 15.5%

W3 **Calculation of Interest to be capitalised**

	K'000
On K500 (15.5% x K500 x 9/12)	58.13
On K200 (15.5% x K200 x 3/12)	7.75
Total	**65.88**

Part (f) Workings

W **Calculation of Cost of inventory**

	K'000
List price	400.00

Less: Trade discount (5% x 400)	20.00
	380.00
Transport cost	40.00
Non-refundable duty and taxes	28.00
Cost of refining	60.00
Total cost	**508.00**

SOLUTION FIVE

To: The Director – Nata Plc
From: Accountant
Date:
Subject: **Evaluation of position and performance of Nata Plc**

1.0 Introduction

The evaluation of position and performance of Nata Plc for the year ended 31 December 2019 is based on the financial and non-financial information for two years. Ratio analysis used is based on calculations in the workings and additional information provided in the question.

2.0 Evaluation of position and performance

2.1 Profitability

Revenue has decreased by 3%**W1** despite increased sales volume from 9000 to 12000 spare parts representing 33%**W1**. The decrease in revenue was mainly attributable to reduction in selling price by 20% which was not over turned by increased sales volume. The increase in sales volume showed the positive effects of selling price reduction as supported by increased number of spare parts sold per retail outlet from 1125**W1** to 1200**W1**. However, it could also be attributable to two (2) newly opened retail outlets. There is need therefore to establish contribution of newly opened outlets to total sales volume to appreciate the real impact of reduction in selling price.

Gross profit margin reduced from 70% to 61% **W1**. Similarly, operating profit margin reduced from 25% to 11% **W1**. The decrease in the said ratios is owing to 20% reduction in selling price and increased cost of spare parts arising from depreciation of the Kwacha from K11/US$ to K13/US$. In addition, distribution and administrative costs were increase by opening of two (2) retail outlets and increased load shading hours from 2 to 8 which increased amount spent on fuel to run the generators. The new outlets increased rental and wage costs in addition to overhead costs. The profitability ratios have also been adversely affected by a reduction in other income from K132,000 to K96,000 caused by loss of a major customer. Moreover, recalculation of net operating profit, ignoring other income K96,000 in 2019 and K132,000 in 2018 and increase in fair value of investment property of K228,000 (K1,099,000 – K871,000), would give K256,000 in 2019 and K1,188,000 in 2018. This would change net operating profit margin to 5% and 23% in 2019 and 2018 respectively.

Return on capital employed has shown a similar downward trend. It has drastically reduced from 30% to 10% **W1**. This is attributable to investment in property, plant and equipment, their revaluation gain, increase in fair value of investment property and a reduction in the company's profitability.

WORKINGS

	2019	2018
W1 Profitability Ratios		

Percentage increase in revenue = $\frac{\text{Change in revenue}}{\text{Revenue for last year}}$

	2019	2018
= (5,120 - 5,280) / 5,280	(160.00) / 5,280.00	
	-3%	

Percentage increase in sales volume = $\frac{\text{Change in sales volume}}{\text{Volume for last year}}$

	2019	2018
= 12000 – 9000 / ..9000	3 000.00 / 9 000.00	
	33%	

Average sales per outlet

	2019	2018
= Total sales / Number of outlets	5,120.00 / 10.00	5,280.00 / 8.00
	K512.00	**K660.00**

Average sales volume per outlet

	2019	2018
= Total sales volume / Number of outlets	12 000.00 / 10.00	9 000.00 / 8.00
	1 200.00	1 125.00

	2019	2018
Return on capital employed = PBIT / CE = (280+300): (1,149+171) / (6,546-652): (5,015 -612)	580.00 / 5,894.00	1,320.00 / 4,403.00
	10%	**30%**
Operating profit margin = PBIT / Revenue = (280+300): (1,149+171) / 5,120 : 5,280	580.00 / 5,120.00	1,320.00 / 5,280.00
	11%	**25%**
Gross profit margin = GP / Revenue = 3,104: 3,696 / 5,120: 5,280	3,104.00 / 5,120.00	3,696.00 / 5,280.00

	61%	**70%**
Asset turnover = Revenue / Capital employed	5,120.00 / 5,894.00	5,280.00 / 4.403.00
	0.87	**1.20**
Total Expenses as a percentage of sales= Expenses / Revenue	2,920.00 / 5,120.00	2,679.00 / 5,280.00
	57%	**51%**

W2 Liquidity and working capital Ratios

Current ratio = Current assets / Current liabilities	712.00 / 652.00	737.00 / 612.00
	1.09	**1.20**
Quick ratio = Current assets – inventory / Current liabilities	514.00 / 652.00	473.00 / 612.00
	0.79	**0.77**
Inventory days = Inventory x 365 days / Cost of sales	198 x 365 / 2,016.00	264 x 365 / 1,584.00
	36 days	**61 days**
Receivable collection period = Trade receivables x 365 days / Revenue	360 x 365 / 5,120.00	412 x 365 / 5,280.00
	26 days	**28 days**
Payables payment period = Trade payables x 365 days / Cost of sales	312 x 365 / 2,016.00	354 x 365 / 1,584.00
	56 days	**82 days**

W3 Gearing Ratios

Capital gearing = Prior charge capital x 100% / Prior charge capital + Equity	2,400.00 / 4,779.00	1,514.00 / 3,247.00

	50%	**47%**
Debt to Equity ratio = <u>Debt x 100%</u> / Equity	2,400.00 / 2,379.00	1,514.00 / 1,733.00
	101%	**87%**
Interest cover = <u>PBIT</u> / Interest charges	580.00 / 300.00	1,320.00 / 171.00
	1.93	**7.72**
Percentage increase in debt= <u>current debt-debt for last year</u> / debt for last year	886.00 / 1,514.00	
	59%	
Percentage increase in interest= <u>current interest-interest for last year</u> / interest for last year	129.00 / 171.00	
	75%	
Interest rate for additional loan= <u>current interest-interest for last year</u> / additional loan	129.00 / 886.00	
	15%	

W4 Investor Ratios

Earnings per share = <u>Profits attributable to equity shareholders</u> / Weighted average number of shares	224.00 / 384	919.00 / 277
	0.58	**3.32**
Dividend cover = <u>Profits attributable to equity shareholders</u> / Dividends paid	224.00 / 250.00	919.00 / 350.00
	0.90	**2.63**
Dividends per share = <u>Dividends paid</u> / Number of shares	250.00 / 384	350.00 / 277
	0.65	**1.26**

2.2 Liquidity and working capital

Current ratio has reduced from 1.20 to 1.09**W2**. Quick ratio on the other hand has slightly increased from 0.77 to 0.79 **W2**. The change in these ratios is mainly due to decrease in inventory and trade receivables and increase in interest payable. Further, trade receivables' collection period reduced from 28 days to 26 days **W2**. Nata Plc's trade payables' payment period also reduced from 82 days to 56 days **W2.**

Inventory turnover has reduced from 61 days to 36 days **W2**. This is attributable to increased level of business activity. This is because sales volume increased from 9000 to 12000. Moreover, inventory figure also reduced from K264,000 to K198,000. The reduction in inventory turnover was also attributable to increased cost of sales.

2.3 Gearing Ratios

The gearing level in relative terms has increased from 47% to 50%**(W3)** as can be seen from capital gearing ratios and from 87% to 101%**(W3)**. However, in absolute terms debt has increased from K1,514,000 to K2,400,000 representing 59%**(W3)**. This has had the effect of reducing interest cover from 7.72 times to 1.93 times **(W3)**. This is also attributable to reduction in the company's profitability. Adversely, additional loan of K886,000**(W3)** was obtained at increased interest rate of 15%**(W3)** compared to 11%(K171,000/K1,514,000) in 2018. This showed an increase in Nata Plc's risk profile.

2.4 Investor Ratios

Nata Plc's earnings per share has reduced from K3.32 to K0.58 **(W4)**. This is caused by reduction in the company's profitability and increased number of equity shares. Dividend per share reduced from K1.26 to K0.65 **(W4).** The current dividend per share is still not sustainable because of the worsened company's profitability.

3.0 Conclusion

Nata Plc's position and performance has declined drastically. The company's profitability has declined despite increase in sales volume while liquidity and working capital management has shown improvement. The company needs to work on its profitability and manage its debt to sustainable levels. However, it seems Nata Plc considers the decline in position and performance short – term judging by the material investment in property, plant and equipment.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 25 JUNE 2020

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

Motor Manufacturing Ltd. is a car manufacturing company established twenty (20) years ago. The company manufactures cars and lorries that are powered by organic fuels for the local market and export to neighboring countries.

The company imports the bulk of the components used in manufacturing from a jointly owned company with Motor Manufacturing Ltd. based in the United Kingdom. The transactions between Motor Manufacturing Ltd. and the UK based company are on an arm's length basis and Motor Manufacturing Ltd. is given one month credit to pay for its purchases.

Motor Manufacturing Ltd. sells its vehicles on a consignment basis through local dealers and others based in the countries to which it exports. The dealers based outside the country are required to deposit a refundable security deposit of $1million for the cars sent to them. The refundable deposit for local dealers is K500,000.

Currently there is a court case involving a dealer outside the country who sued the company for wrongfully deducting a total of $200,000 from the deposit made at the end of the dealership. Management of Motor Manufacturing Ltd. is of the view that they will win the case and that they will not be held liable. The dealer is claiming the amount of $200,000 plus damages and interest that the court may determine.

The vehicles are sold subject to a two (2) year warranty and at the end of each financial year the company makes a warranty provision.

Zambia is a signatory to the world body on environmental protection and in line with the conventions to which it is committed, legislation was passed three (3) years ago requiring that the manufacturing of Organic fuels propelled vehicles should be phased out in the next five (5)years. Continued manufacture of such vehicles beyond five (5) years will attract heavy taxes and the cost of the motor vehicles will increase which will make them uncompetitive both locally and abroad.

The company has started to phase out some models of such vehicles. There is a large stock of components and spares held for these phased out vehicles and demand for these spares and components will drop because of the phasing out of organic fuel propelled vehicles.

In reaction to the decision that the manufacturing of vehicles using organic fuels should be phased out, Motor Manufacturing Ltd. decided to modernize its manufacturing plant to enable it commence the production of electrically powered motor vehicles. In order to finance this investment, the company obtained a secured bank loan of $10million to enable it to replace its existing vehicle manufacturing equipment with modern equipment.

Your firm of chartered accountants has been appointed auditor of Motor Manufacturing Ltd. This will be the first time that your firm will be auditing a company in this industry. The previous year's financial statements were audited by a different firm of auditors. You are happy that Joseph who previously worked for Motor Manufacturing Ltd. joined your firm as Audit Manager last year. You intend to assign Joseph to the audit of the financial statements of Motor Manufacturing Ltd.

You attended a meeting with the Chief Executive Officer of Motor Manufacturing Plc. at which you were finalizing the agreement on the audit fee. The Chief Executive Officer suggested that the fee should be based on a fixed amount of $60,000. You are of the view that at this rate your firm will not be able to cover the cost of the audit. He stated that he is not in a position to increase the fee above this amount but is willing to enter into an agreement that your firm should get an additional fee of 1%of the turnover based on turnover exceeding the budgeted turnover for the year.

The Chief Executive Officer requested your firm to second a senior member of your audit staff to the company to assist in finalizing the financial statements. This is because Joseph has not been replaced to date and the Financial Accountant is overwhelmed with work and he has not participated in the preparation of financial statements in the past.

You asked the Chief Executive Officer for permission that your firm should communicate with the previous auditors but he declined. He informed you that he will require board approval to allow you to communicate with the previous auditors, but he is doubtful that permission will be granted. He informed you that the previous auditors had differences with management because they wanted to go through the board meeting minutes. He stated that a lot of confidential matters are discussed in the board meetings and so board minutes are confidential and are not given to third parties.

The Chief Executive Officer further informed you that due to poor internal controls, the company suffered losses of inventory through a fraud perpetuated by suppliers and stores staff. The company paid for goods not received in some cases. He has requested that your firm should make recommendations regarding the enhancement of internal controls.

At a meeting of the board of Directors, it was concluded that the company is a going concern despite cash flow challenges being faced.

Required:

(a) Identify and explain seven (7) audit risks in Motor Manufacturing Ltd. (14 marks)

(b) Identify and explain six (6) ethical issues in Motor Manufacturing Ltd. and suggest suitable safeguards that should be put in place by your firm. (12 marks)

(c) Evaluate and explain four (4) matters in Motor Manufacturing Ltd.for which you will request written representations from management. (8 marks)

(d) Discuss the request by the Chief Executive Officer that your firm should take responsibility for enhancing internal controls in Motor Manufacturing Ltd. (6 marks)

[Total: 40 Marks]

SECTION B

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

QUESTION TWO

(a) Analytical procedures are a useful and efficient tool in the performance of audits of financial statements.

Required:

(i) Describe what is meant by analytical procedures. (3 marks)

(ii) Explain the use of analytical procedures at the various stages of an audit. (5 marks)

(b) There has been an increase in money laundering offences in Zambia in the recent past. The Drug Enforcement Commission (DEC) has the responsibility to deal with and investigate money laundering offences. In an effort to curb money laundering offences the agency uses institutions such as banks and professional accountants to detect money laundering offenders.

The banks and accountants have a duty to help identify money launderers and to report any money laundering activities of their customers and clients to the Drug Enforcement Commission (DEC). Accountants need to carry out procedures such as 'know your client' procedures so that they do not offer their professional services to individuals or companies that are involved in money laundering activities.

You work for a firm of chartered accountants and you have recently been asked to set up policies and procedures to deal with and report on activities of money laundering that your clients may be involved in.

Required:

(i) Explain the term 'money laundering' giving examples of money laundering offences, including those that could be committed by the accountant. (6 marks)

(ii) Recommend four (4) suitable policies and procedures that your firm should establish in order to meet the firm's responsibilities in relation to money laundering. (6 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Listed companies are required by the regulations of securities exchange to have the financial statements audited by independent auditors.

Audits are necessary in order for management to be held accountable for its actions in the way they run the company in the interest of all the stakeholders.

Required:

Discuss how the principle of accountability is achieved in listed companies.

(5 marks)

(b) You are the Audit Manager for three (3) of your firm's audit clients. All the three (3) clients have a year end of 31 March 2019.

The audit work of all the three (3) clients has just been concluded by the responsible audit teams under the supervision of the Audit Seniors. You have been presented with audit working paper files for your review. You will be required to pass onthe working paper files to the Audit Engagement Partner for a final review. The Engagement Partner has indicated that he will want a hot review carried outin respect of all the three (3) working paper files before finalizing the audit reports.

The following information relates to the three (3) audit clients whose working papers have been presented to you for review.

Yellow Ltd:
Yellow Ltd is in the pharmaceuticalIndustry and sells drugs to the public. During the inventory count, it was observed that the company had a range of drugs which were nearing expiry.

Inventory worth K13million at cost which was considered material to the financial statements of Yellow Ltd was due to expire in three (3) months after the period end. At the year end, management was of the view that the inventory should be valued at cost because they had received an order which they hoped to fulfill within the first month of the following financial year.

On 15 April 2019 the inventory was sold for K8million. Management has not made any adjustment because the event took place after the year end.

The Audit Senior agrees with the position taken by Management and has proposed that an unmodified opinion should be issued on the financial statements of Yellow Ltd.

Green Ltd:
Green Ltd is a transport company running a fleet of buses. The company has been operating for many years. In the recent past the company experienced liquidity problems.

The company has in the past bought spares and fuel on credit. Due to the liquidity problems that the company is facing, the spares and fuel suppliers have cut credit to Green Ltd. The liquidity problems faced by Green Ltd cast doubt on the ability of the company continuing as a going concern because of the material uncertainty regarding its liquidity. Management made adequate disclosure in the financial statements regarding the material uncertaintyregarding going concern.

Management of Green Ltd has indicated that they are selling 25% of the shares to a foreign investor. It is hoped that the deal will be finalized in the next three (3) months.

In view of the above, the Audit Senior concluded that the basis of preparing the financial statements on a historical basis is appropriate and that the current year audit opinion will be unmodified since management has adequately disclosed the material uncertainty in the financial statements. He has indicated that the explanation of the matter that casts doubt in the ability of GreenLtd. will be included in the Emphasis of Matterparagraph in the audit report.

Purple Plc:
Purple is a publicly listed company which has been your firm's audit client for a long time.

During the cause of the audit there were a number of matters of concern which the Audit Senior communicated to management. These matters were resolved with management making amendments to the financial statements where necessary.

The Audit Senior is of the view that because these matters were important to the audit, the opinion should be modified by inclusion of a Key Audit Matters paragraph in accordance with ISA 701 *Communicating Key Audit Matters in the Independent Auditor's Report.*

Required:

(i) Explain how audit firms conduct reviews of the audit working papers. (4 marks)

(ii) Discuss the meaning and importance of a hot review. (2 marks)

(iii) For each of the three (3) clientsabove, comment on the suitability or otherwise of the recommendations made by the Audit Seniors and support your argument. (9 marks)

[Total: 20Marks]

QUESTION FOUR

Folk &Co, was founded ten (10) years ago by the entrepreneur, Rosette Mwansa. It initially specialized in offering bookkeeping services for the pharmaceutical industry. However, it has expanded into other specialized areas and is the largest provider of auditing, receivership and liquidation services in the country, employing sixty (60) people.

The firm holds quarterly meetings with its clients to discuss various issues of concern and update them on a number of technical developments in the accountancy profession. As a young accountancy graduate you have been asked to explain the importance of narrowing expectation gap at the forthcoming quarterly meeting.

The Managing Partner has also assigned you specific responsibility to consider the following:

1. Recommended audit procedures by an Audit Supervisor following the identification of related parties not disclosed by management in the financial statement of one (1) of the pharmaceutical companies. This was after one (1) of the audit team members conducted an analysis of various accounting records using CAATs. The audit is still in progress.
   Recommended Audit procedures

- Tell the rest of the audit team
- Request management to identify all transactions with identified related party
- Institute controls to ensure all related parties are identified
- Verify terms and conditions of transactions by looking at the invoices
- If non-disclosure appears intentional, and therefore indicative of fraud, evaluate implications for audit

2. An extract from the proposed Key Audit Matter (KAM) paragraph drafted by one of the Audit Seniors who originally joined the firm as an Audit Trainee. The company in question has a 30 September year-end and is currently in receivership. However, the shareholders for the company are seriously considering filing for liquidation. The audit opinion has been modified.

Extract from the proposed Key Audit Matter* (KAM) *paragraph

Key Audit Matters are those that were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do provide separate opinions on these matters.

Revenue recognition

Under IFRS 15 *Revenue from Contracts with Customers* Mubanga Ltd is required to recognize revenue when the performance obligations are satisfied.

Our audit procedures to address the risk of material misstatement relating to revenue, which we considered to be a significant risk, included:

- Detailed analysis of revenue and the timing of its recognition.
- Testing of controls.

In our opinion, the amount of revenue and profit recognized in the year is materially misstated since it includes an amount of K2 million which was intentionally recognized on 30 September 2019 while the goods were only dispatched to the customer on 5 October 2019.

Required:

(a) Explain the importance of narrowing the expectation gap. (5 marks)

(b) Evaluate the five (5) substantive audit procedures suggested by the Audit Supervisor, recommending possible alternatives where necessary. (10 marks)

(c) Evaluate the appropriateness of the extract from the proposed Key Audit Matters paragraph. (5 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

Zalencia International is an investment holding (parent) company of a group of companies which has four (4) subsidiaries – Brent Ltd, Crude Ltd, Oil Ltd and Petrol Ltd. The companies are situated in the Republic of Zambia and they are involved in mining, processing and selling of copper and cobalt. You are an Audit Manager in Merl& Co. and you are responsible for the audit of the consolidated financial statements of Zalencia International for the year ended 31 March 2019.

The audited financial statements for the subsidiaries for the year ended 31 March 2019 show the following:

	Brent Ltd	Crude Ltd	Oil Ltd	Petrol Ltd
	K' million	K' million	K' million	K' million
Turnover	30	647	3	105
Profit before tax	2	211	1	16
Assets	27	615	5	74

There are no intra-company transactions since it is group policy to avoid disputes with taxation authorities regarding transfer pricing.

Oil Ltd is audited by a different audit firm known as Diesel Chartered Accountants. The Engagement Partner is the former classmate of the Chairperson of the Audit Committee for Oil Ltd. The audit opinion was modified due to the fact that Diesel Chartered Accountants were unable to attend the inventory count due to logistical problems. The audit opinions for the other subsidiaries were unmodified.

Zalencia International has an elaborate corporate social responsibility policy. It contributes to the Zambian community in terms of sponsorship of various sports teams and work experience placement of thousands of students from colleges and universities. The board of Directors of Zalencia International is aware of the ageing population in Zambia and wants to acquire Senior Health Ltd, a company involved in health care and nursing homes. Senior Health Ltd will be used to provide affordable health services to senior citizens and generate a minimal return on investment. National statistics indicate that there is great demand for health care and nursing homes.

Your firm has been asked by the board of Senior Health Ltd, a non-audit client of Merl& Co. to prepare profit and cash flow projections for the next two (2) years using the assumptions approved by the board of Directors. This will help in the negotiations with Zalencia International. The Managing Partner is interested in knowing the ethical implications.

Required:

(a) Explain, with reasons, which of the subsidiaries will be considered to be a significant component. (5 marks)

(b) Explain the extent of the work to be carried out by Merl& Co. on Brent Ltd. (5 marks)

(c) Discuss whether the audit opinion on the consolidated financial statements will be modified given that the audit opinion on the financial statements for Oil Ltd was modified. (4 marks)

(d) Evaluate the ethical implications if Merl& Co. was to prepare profit and cash flow projections for the next two (2) years for Senior Health Ltd. (6 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

a) **Audit risks in Motor Manufacturing Ltd.**

1. **Related party transactions:**
   Motor Manufacturing Ltd. trades on a regular basis with a company that it is jointly owned.

   There is a risk that the financial statements may be misstated due to Motor Manufacturing Ltd. not disclosing the related party relationship in the financial statements and there is also a risk that the amounts involved may be misstated.

2. **Consignment sales to dealers:**
   Motor Manufacturing Ltd. transfers its motor vehicles to dealers on a consignment basis. This means that vehicles still being held by the dealers are part of the inventory of Motor Manufacturing Ltd. There is a risk that sales may be misstated in the financial statements through treating transfers of vehicles as sales.

3. **Deposits by local and foreign dealers:**
   At the commencement of dealership, dealers are required to pay a deposit which is refundable at the end of the dealership.

   The deposit made by dealers is a liability due to them. There is a risk that the accounting for the deposits may be incorrect by way of Motor Manufacturing Ltd. treating the deposits as sales in the financial statements. Doing so can result in the misstatement of the financial statements.

4. **Outstanding legal case:**
   At the end of the year under review there is a legal case which has not been concluded.

   Management has not made a provision in the financial statements for the likely liability that might arise. This indicates that management is of the view that there will not be an outflow of funds. There is a risk that the provision may be understated resulting in an understatement of the financial statements.

5. **Warranty provisions:**
   Motor Manufacturing Ltd. undertakes to repair vehicles that are faulty within a period of two years.

   Annually management require to estimate the cost of repairs and make a warranty provision. There is a risk that the provisions may be misstated in the financial statements.

6. **Phasing out of the manufacture of organic fuel propelled vehicles:**
   There is a risk that Motor Manufacturing Ltd. fails to meet the deadline for ceasing the manufacturing of vehicles that are propelled by organic fuels. If the company continues to manufacture these vehicles it runs the risk of reduced sales due to penalties and taxes that will be imposed resulting in prices being uncompetitive. This has going concern implications for the company because it may not generate sufficient income to meet its production costs.

7. **Over valuation of vehicle spares:**
   Motor Manufacturing Ltd. has a large stock of spares to support the manufacture of organic fuel propelled vehicles.

   The demand for these spares has drastically reduced. There is a risk that the net realizable value of these spares may be lower than the cost. There is a risk that inventory may be misstated in the financial statements if valued at cost which might be higher than the net realizable value.

8. **Impairment of tangible non-current assets:**
   Motor Manufacturing Plc. has a lot of equipment used in the production of motor vehicles. Due to the new regulations it is likely that most of the equipment will not be used in the manufacture of battery powered vehicles.

   Such equipment should be tested for impairment and the carrying amounts adjusted as appropriate. There is a risk that no impairment will be carried out or the impairment adjustments may be incorrectly done resulting in a misstatement of the financial statements.

9. **Secured bank loan:**
   Motor Manufacturing Ltd. has obtained a secured bank loan of $10 million. There is a risk that the company may fail to meet the loan conditions which may force the bank to enforce the security. This could have implications on the ability of the company to operating as a going concern.

10. **Opening balances:**
    Being the first audit, there is a risk that opening balances may be misstated in the financial statements for the current year.

b) Ethical issues in Motor Manufacturing Ltd.:

1. **First time audit in the car industry:**
   One of the ethical principles of accountants is that of professional competence and due care. This suggests that the audit firm should have the skills and competence to carry out the audit.

   This will be the first time for the firm to audit a company in the car industry. It is likely that the firm may not have the necessary skills to carry out an efficient audit.

Safeguard:

The firm should respond to this by ensuring that it has such skills or may need to recruit staff with the necessary skills. In the event that the firms does not have the required skills it will be appropriate to decline appointment as auditors.

2. **Refusal by management to communicate with outgoing auditors:**

   It is a professional requirement that incoming auditors should communicate with the outgoing auditors before accepting appointment as auditors. The communication can only be made with the permission of the client company.

   In the case at hand, management of Motor Manufacturing Ltd. has denied the auditors permission to communicate with the outgoing auditors.

   Safeguard:

   The incoming auditors should decline appointment on account of the refusal to communicate with the outgoing auditors.

3. **Assignment of Joseph as audit manager of Motor Manufacturing Ltd. audit:**

   The assignment of Joseph as audit manager of the audit of the financial statements of Motor Manufacturing Ltd. gives rise to a self-review and familiarity threats.

   Joseph who recently worked for Motor Manufacturing Ltd. will have been involved in the preparation of the financial statements and the systems that are in place. Assigning him as audit manager will mean that he will be reviewing his own work and will therefore be unlikely to be objective when doing so.

   Further, Joseph will be familiar with the staff of Motor Manufacturing Ltd. resulting in a familiarity threat. This means that Joseph will be sympathetic to the staff and may not be objective in the performance of the audit.

   Safeguard

   Joseph should not be assigned Audit Manager for this company. If this is not feasible, there should be quality control procedures in the firm whereby the working papers should be reviewed by a person who was not part of the audit team.

4. **Secondment of audit senior to Motor Manufacturing Ltd.**

   The request by management of Motor Manufacturing Ltd. that the firm should second an audit senior to it is an ethical issue. Generally, the auditors should not be involved in the preparation of financial statements which they are going to audit and issue an opinion.

   The audit senior can only be seconded if he will not be involved in the audit. Further, management will need to undertake that it will be responsible for the preparation of the financial statements.

   Safeguard:

   Staff not involved in the audit of Motor Manufacturing Ltd should be the ones who could be seconded to perform the non-audit services of preparing the financial statements.

5. **Confidentiality of matters contained in board minutes:**
   Confidentiality is one of the fundamental principles of professional ethics that auditors are supposed to follow. This simply means that the auditors should not disclose to third parties matters that comes to their attention by virtue of their work without the permission of the client or as permitted by exceptions given in the guidance.

   Management's refusal to let the auditors read through the board minutes may be perceived as a limitation of scope. Auditors have a right to any information that they consider important in carrying out their duty. The auditors may need to reevaluate the integrity of the management of Motor Manufacturing Ltd. because of the refusal to let them go through the board minutes. The auditors should engage management and assure it that the auditors are entitled to read through the minutes and that they observe the principle of confidentiality.

   Safeguard:
   The auditors should discuss with those charged with governance the problem that they are facing. Alternatively auditors should obtain evidence through other means otherwise they should consider the impact the refusal to read through the minutes will have on the audit report.

6. **The suggestion by the CEO of a contingent fee of 1%:**
   The suggestion by the Chief Executive Officer (CEO) of Motor Manufacturing Ltd. that the firm should get an additional fee of 1% of the turnover based on turnover exceeding the budgeted turnover for the year poses a self-interest threat. Entering into contingent fee arrangements with an audit client is prohibited.

   Safeguard:
   The firm should decline the offer by the CEO and should instead negotiate for a fee increase if at the rate of $60 000 the firm would incur a loss. The firm may consider informing the audit committee of Motor Manufacturing Ltd. of the matter.

c) Matters for which written representations will be requested:

1. Written representations from management that it has disclosed to the auditor all details of all companies related to Motor Manufacturing Ltd.

2. Auditors may request for written representations regarding the provision made against the legal case.

   Management will be required to make representations that they believe that the estimate that has been made is adequate to the best of their knowledge.
3. Since this will be the first time that the firm will be auditing the financial statements of Motor Manufacturing Ltd., it will be necessary to obtain written representations on the following:

    - Management’s acknowledgement that they will be responsible for the preparation of the financial statements.
    - That they will be responsible for putting in place internal controls to protect the assets of the company and
    - That they will provide the auditors with all the information that they will require to carry out the audit.

4. Written representations may be obtained from management regarding its assessment that the company is a going concern.

d) Responsibilities for internal controls in Motor Manufacturing Ltd.

The management of Motor Manufacturing Ltd. are responsible for running the company. This includes putting in place risk management systems and designing suitable controls in response to the risks that exists.

The responsibility of the auditors is to obtain sufficient appropriate audit evidence and form an opinion on the truth and fairness of the financial statements.

One of the preconditions for an audit of financial statements is that management should acknowledge its responsibilities for the preparation of the financial statements and the putting in place suitable internal controls. In the event that management do not acknowledge its responsibilities, the auditor should decline the appointment.

The duty of the auditors with regards to internal controls is to obtain sufficient appropriate audit evidence that the financial statements are not misstated due to weaknesses in internal controls.

Auditors are aware that poor internal controls may result in the financial statements being misstated. During the course of the audit the auditors will document any weaknesses in internal controls and also any omissions in internal controls. This will be communicated to management as a byproduct of the audit through a management letter.

Conclusion:

The management of Motor Manufacturing Ltd. should be informed that it is responsible for putting in place suitable controls as well as monitoring the controls.

The auditors will inform management of any weaknesses in controls that come to their attention during the audit and they will do this through a letter to management or a letter of weaknesses.

SOLUTION TWO

a) i. **Meaning of analytical procedures:**

Analytical procedures consist of the evaluations of financial and non-financial data made by a study of plausible or expected relationships.
Analytical procedures encompass the investigation of the identified fluctuations and relationships that are consistent with other information or deviate significantly from predicted amounts.

The use of analytical procedures involves the calculation of ratios and an analysis of the meaning in the changes in the ratios computed.

ii. **Use of analytical procedures in an audit:**

At the planning stage of the audit:

ISA 315(Revised) *Assessing the risk of material misstatement through understanding the entity and its environment* gives analytical procedures as one of the methods that the auditors perform the risk assessment procedures. They are used by the auditor in gaining an understanding of the entity and its environment.

During the substantive stage of the audit:

This is the stage when the auditor gathers evidence which is the basis of the opinion.

Analytical procedures are an efficient and economic tool used in gathering evidence by the auditor where the objective is to detect material misstatement in the financial statements. This is done by the auditor comparing figures in the financial statements with expected figures or trends. Any misstatements that are likely to exist will be highlighted.

At the review stage of the audit:

This is the stage when the final review of the financial statements takes place. It is usually carried out by senior members of the audit team. The objective of the use of analytical procedures is to determine whether the financial statements make sense. Any unusual fluctuations or ratios are investigated further.

b) i. **Meaning of money laundering:**

This is a process by which criminals attempt to conceal the true origin and ownership of the proceeds of crime allowing them to maintain control over the proceeds and, ultimately, providing a legitimate cover for their sources of income.

Example of money laundering offences:

- Handling proceeds of criminal activities.
- Arranging the acquisition or use of criminal property for example becoming involved with tax evasion.

- Tipping off – when someone in the firm such as the Money Laundering Reporting Officer or others within the firm discloses something to a suspect that might prejudice any investigations.
- Failure to disclose money laundering activities to the competent authority by the auditor.

ii. Policies and procedures on money laundering:

The appointment of a money Laundering Reporting Officer (MLRO) and implement reporting procedures.
The MLRO should be a senior member of the firm who has relevant experience in matters relating to money laundering. All staff in the firm should make reports to the Money Laundering Reporting Officer (MLRO) of any money laundering issues they encounter during the cause of their professional duties. The MLRO will then decide whether or not to report such cases to the competent authorities in this case the Drug Enforcement Commission.

Training of staff:
The training policy of the firm should include among other matters training staff and making them aware of the relevant legislation on money laundering.

Staff should be made aware the following:

- How to recognize that there is money laundering when it exists.
- How to deal with any potential and actual money laundering.
- How and to whom money laundering activities should be reported and
- How to identify clients who may be involved in money laundering
- The firm's policies regarding money laundering and the existence of the Money Laundering Reporting Officer (MLRO).

Internal procedures within the firm:
The firm should put in place internal procedures that will prevent money laundering and ensue that staff are made aware of the procedures.
The internal procedures should include the following:

- Client acceptance procedures.
- The gathering of 'know your client' (KYC) information. To ensure that management has integrity.
- Dealing with client funds through the client account the firm may have.
- Any advice and services that the firm could have which could be of use to a money launderer.

Verification of client identities:
The firm should ensure they know their identities well. This means establishing that the clients are who they claim to be. The firm should verify any new clients and also evaluate and verify the identity of existing clients. The firm should have documented identities of the clients on file and this includes copies of passports, driving licenses and utility bills.

Record keeping:

The firm should have policies with regards record keeping and ensure that the firm maintains records of:

- Client identification
- Records of transactions undertaken for or with the client. This is important to the firm in order for the firm to avoid participating in transactions involving money laundering.

SOLUTION THREE

a) Accountability in listed companies:

In the case of listed companies, there is clear separation between management and ownership. This happens in that management are responsible for the day to day running of the company and yet the members of management may not own any shares in the entity. They are supposed to run the company in the interest of the owners who are the shareholders.

Management prepares financial statements showing how it has fulfilled it stewardship role of running the company. The listing rules require that the financial statements prepared by management should be audited by independent auditors.

The shareholders appoint auditors annually who are required to audit the financial statements prepared by management and form an opinion on whether the financial statement show a true and fair view.

The audited financial statements are presented to the shareholders at the annual general meeting where the shareholders hold management accountable for the way that they run the company.

b) i. How reviews of working papers is done.

Using the audit of Yellow Ltd, it should be noted that the audit team will comprise different levels of staff.

At the lower level and carrying out most of the transaction and balances testing are the Audit Assistants. They work under the supervision of the Audit Senior who assigns them work and the Audit Senior reviews the work that the Audit Assistants have carried out.

There is some work which the Audit Senior does not delegate and he does himself. The work is done in accordance with the audit plan that is in place. The work of the Audit Senior together with the work of the Audit Assistants is reviewed by the Audit Manager who makes comments as appropriate and ensures that his review points are cleared.

There is work that is originated by the Audit Manager. This together with the work that is carried out by the audit senior and the audit assistants is passed on to the Engagement Partner for final review. This is a high level review and may be largely by use of analytical reviews.

In some firms there is a policy of peer review as part of quality control whereby all the work performed by an audit team may be subjected to a review by another person who was not involved in the audit work.

ii. Meaning and importance of hot reviews:

Hot reviews are reviews of audit working papers by someone who was not involved in the audit before the audit report is signed.

Hot reviews are important because the review observations made by the reviewer can be taken into consideration before writing the audit report.

iii. Suitability or lack thereof of the proposed recommendations:

Yellow Ltd

The matter of concern in Yellow Ltd is with regards to the valuation of expired drugs.

In accordance with IAS 2, inventory is supposed to be valued at the lower of cost and net realizable value. Any overvaluation of inventory results in overstating profits which could lead to a material misstatement of the financial statements.

The recommendation by the Audit Senior that the opinion should be unmodified is incorrect. The fact that the transaction that took place on 15 April 2019 and outside the period under audit is not valid. The sale at below cost is an adjustable event which gives evidence of conditions that existed at the period end. In this case the sales proceeds are below the cost.

The inventory value at cost should be written down so that it is valued at the net realizable value. If management refuse to adjust the auditor will decide what impact this will have on the audit report which could include modification of the opinion depending on the materiality and pervasiveness of the matter to the financial statements.

Green Ltd.

The matter of concern in Green Ltd is that there is material uncertainty with regards to the ability of Green Ltd continuing as a going concern.
ISA 570 (Revised) *Going concern* gives guidance with regards to going concern in an audit.

The recommendation that the opinion should be unmodified in this case is correct. This is because the historical basis of preparing the financial statements is valid and the material uncertainty with regards to the going concern of Green Ltd has been adequately disclosed in the financial statements.

The suggestion, however, that the explanation concerning the material uncertainty should be included in the Emphasis of Matter paragraph is incorrect. The Emphasis of Matter paragraph is not meant for this purpose but the standard unmodified report provides for a separate paragraph titled 'Material Uncertainty Related to Going Concern' where attention could be drawn to the users of financial statements.

Purple Plc.

The Key Audit Paragraph is mandatory in all audit reports of listed companies.
The paragraph is meant for the auditor to disclose matters that came to his attention during the course of the audit from among matters communicated to those charged with governance during the audit.

The KAM paragraph does not result in a modification of the opinion.
The recommendation by the Audit Senior that the opinion should be modified by inclusion of these matters in the KAM paragraph is incorrect. The KAM paragraph is part of the standard unmodified opinion.

If there are matters that were of concern to the auditor and they were correctly accounted for and disclosed by management, the auditor may wish to mention them in the Emphasis of Matter Paragraph and not the Key Audit Matters paragraph as suggested by the audit senior.

SOLUTION FOUR

(a) **Importance of narrowing the expectation gap**

The 'expectation gap' means the difference between the actual legal duty of an auditor and the common perception of what is reasonable to expect an auditor to do. It is important to narrow the expectation gap for a number of reasons, including the following:

1. Minimize misunderstanding of the auditor's responsibilities in respect of fraud. ISA 240 sets out the current position on the auditor's responsibility to consider fraud, and in recent years has increased the level of work done by applying the audit risk model. There remains a debate as to whether this is sufficient as the area of fraud is a key part of the expectation gap between what users of auditor's reports believe to be purposes of the audit compared with the actual nature of the assurance reported to them by auditors.
2. Avoid unnecessary legal suits which are usually costly. Auditors are in business and expect a reasonable return on their investment. Legal suits do result in increased insurance premiums which further reduces the returns on investment.
3. Reduce negative publicity. The issue of the expectation gap is consistently in and out of the financial press. High profile cases have brought up negative comments about the audit profession as a whole.
4. Attract investment into the auditing industry. Expectation gap is one of the reasons for low investment in the auditing industry. The big four continue to dominate, which is definitely not good for the auditing industry.

(b) **Evaluation of recommended audit procedures**

- Tell the rest of the audit team – this is an important audit procedure which will definitely assist the audit team in the collection of sufficient appropriate audit evidence. Audit team members will be in a position to exercise appropriate levels of professional skepticism.
- Request management to identify all transactions with identified related party – it is management responsibility to identify all transactions with related parties and therefore the audit procedure is appropriate. Such transactions are usually approved by management as they are frequently not at arm's length.
- Institute controls to ensure all related parties are identified – this is an inappropriate audit procedure since auditors are not responsible for instituting controls. The audit team should inquire as to why company controls failed to identify related party and suggest improvement if necessary.
- Verify terms and conditions of transactions by looking at the invoices – this is not an appropriate audit procedure. Invoices cannot have all the terms and conditions of transactions. A look at the contracts will provide more details.
- If non-disclosure appears intentional, and therefore indicative of fraud, evaluate implications for audit – this is an appropriate audit procedure since auditors are required to make suitable responses if fraud is identified. The firm should even consider the need to withdraw from the engagement if he uncovers exceptional circumstances with regard to fraud.

(c) **Evaluation of the appropriateness of the extract from the proposed Key Audit Matters paragraph:**

ISA 701 *Communicating Key Audit Matters in the Independent Auditor's Report* gives guidance in this area. It sets out the auditor's responsibility to communicate key audit matters (KAMs). KAMs are those matters that, in the **auditor's professional judgement**, were most significance in the audit of the financial statements of the current period. This first paragraph is significantly correct. However, it does not mention the aspect of **auditor's professional judgement.**

Key audit matters are selected from matters communicated with those charged with governance. It is unlikely that the material misstatement was communicated with those charged with governance.

Reporting on KAMs aims to improve transparency by helping users to understand the most significant issues the auditor faced. This should enhance the communicative value of the auditor's report. The extract has no details on the audit procedures carried out resulting in poor communicative value.

KAMs do not include matters which have resulted in a modified opinion since any explanations in relation to these issues would already have been included in the 'Basis for Modified Opinion paragraph". The material misstatement has resulted in a modified opinion, hence there is no need to include this under KAMs.

SOLUTION FIVE

(a) **Significant component**

ISA 600 *Special Considerations – Audits of Group Financial Statements (including the work of component auditor)* gives guidance in this area. It states that a significant component can be identified by using a benchmark. For example, if component assets, liabilities, cash flows, profit or turnover (whichever is the most appropriate benchmark) exceeds 15% of the related group figure, then the auditor may judge that the component is a significant component. The turnover, profit before tax and assets for Crude Ltd represent 82%, 82%, and 85% of the group turnover, profit before tax and asset respectively.These significantly exceeds 15% of the related group figures and therefore, Crude could be considered as a significant component.

It is also possible that other subsidiaries could be considered significant components by their nature or circumstance. The question, however, does not provide details which can be used to determine whether any of the other subsidiaries are significant by nature or circumstance.

(b) **Work to be carried out by Merl& Co. on Brent Ltd**

ISA 600 gives detailed guidance in this area. If the component is financially significant to the group financial statements then the group engagement team or a component auditor will perform a full audit based on the component materiality level.

If the component is otherwise significant due to its nature or circumstances, the group auditors will require one of the following:

- A full audit using component materiality
- An audit of specified account balance related to identified significant risks
- Specialized audit procedures relating to identified significant risks

Components not subject to these requirements will be subject to analytical procedures at group level.

According to the information provided, Brent Ltd is not a significant component. The turnover, profit before tax and assets for Brent Ltd represent 3.8%, 0.9%, and 3.7% of the group turnover, profit before tax and asset respectively. Hence, the financial information for Brent Ltd will be subject to analytical procedures at group level.

(c) **Modification of audit opinion**

ISA 600 states that if the opinion on a component is qualified, the group audit opinion may or may not be affected depending on whether the matter is material to the group. The turnover, profit before tax and assets for Oil Ltd represent 0.4%, 0.4%, and 0.6% of the group turnover, profit before tax and asset respectively. Therefore, using the financial information given, Oil Ltd.'s financial information is not material to the group. It is unlikely that the audit opinion on the consolidated financial statements will be modified because of the modified audit opinion on the financial statements for Oil Ltd.

(d) **Evaluation of ethical implications**

Preparation of profit and cash flow projections for an audit client may result in a significant risk of a self-review threat. In this case, Senior Health Ltd is not an audit client and hence this threat is unlikely to arise. There is no independence bar to preparing the profit and cash flow projections.

In addition, the assignment in question is a compilation engagement. In a compilation engagement, the practitioner is engaged to use his accounting expertise (as opposed to auditing expertise) to collect, classify and summarize financial information. No assurance is expressed. The assumptions have already been approved by the board of directors and therefore the task is basically mechanical and does not involve the use of professional judgement.

The possible conflict of interest should be insignificant since the assignment does not involve providing any advice and the two companies are not in direct competition.

However, the situation should be disclosed to those charged with governance in Zalencia International as a matter of courtesy.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.3: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 24 JUNE 2020

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:

   Section A: One (1) compulsory scenario question.

   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted

<u>QUESTION ONE</u>

UNILEVER INTERNATIONAL

Unilever is an Anglo-Dutch multinational corporation with manufacturing activities and markets all round the world including in Zambia. In 1999, half (50 per cent) of Unilever's turnover came from food products, 23 per cent from personal care products (the most popular in Zambia) and the remaining 27 per cent from home care products and dry cleaning services.

In 1999, the corporate portfolio was restructured into 13 categories, with different priorities, and the main brands then included:

Food Products	Wall's ice cream, sausages, etc.; Birds Eye and Findus Frozen Foods; Stork, Flora and other margarines and spreads; Brooke Bond (PG Tips) and Lipton teas.
Personal Care	Timotei and Sunsilk shampoos; Sure deodorants; Signal and SR Toothpastes; Elizabeth Arden, Brut, Karl Lagerfield, Faberge and Calvin Klein fragrances.
Home Care	Persil, Lux, Fairy and Dove Branded products

Many of the products are subject to constant innovation and improvement. Persil washing powder, for example, lost its market leadership position to Procter & Gamble's Ariel brand in the 1980s and Unilever was determined to fight back.

Liquids and concentrates had already taken market share from traditional powders when Unilever launched its new Persil Power in 1994 (branded Omo Power in Continental Europe and Africa). This new powder product was claimed to wash clothes cleaner than rival brands, which it did. Unfortunately, the special cleaning agent was particles of manganese, and Unilever misjudged the amount. Procter & Gamble was able to demonstrate that some clothes were damaged after multiple washes, and finally the product was abandoned. Other Persil products, specifically for colour and fine wool and silk garments, followed before Unilever pioneered its new – and this time very successful – Persil tablets.

In 1998 Unilever had charged 20 of its younger managers (with an average age of 32) to spend 6 months on a special project designed to identify new opportunities in terms of products. This resulted in 13 new product groups which were classified as offering either superior growth (1), steady growth (2) or selective growth only (3), as follows:

Activity	Product Category	Growth Prospects
Food	Tea	1
	Culinary products	1
	Ice cream	1
	Spreads & Cooking products	2
	Frozen foods	3
Personal Care	Hair care products	1
	Skin care products	1
	Deodorants	1
	Toothpaste & Oral products	2
	Fragrances	3
Home Care	Laundry products (soap powders, etc)	2
	Household care products	2
	Professional cleaning	3

In 2000 Unilever announced that it would split its businesses into two separate companies: Foods and Home Products. Unilever then started a new round of acquisitions and divestments.

In 2001 professional cleaning services were divested. Mazola cooking oils also went while Ambrosia (creamed rice) was sold in 2003. At the same time certain brands were being deliberately extended.

Unilever certainly seemed able to slim down its portfolio of brands, shed staff and shut down factories, but its ability to increase sales to the targets it originally set was more questionable. The recorded growth rates for sales of its leading brands were:

1999	3.8 %
2000	3.8 %
2001	5.3 %
2002	5.4 %
2003	3.0 %

The company had been working on plans for a restructuring, which it implemented.

In 2009 a new CEO was appointed who had previously worked for Nestle and Procter & Gamble and he expressed concern at the extent of the decentralization he found and said he wanted to explore how he might ensure the business was controlled effectively whilst capitalizing on the opportunities for synergy across brands. His desire was for fewer new products brought to market faster. He also wanted to promote sales growth, place less emphasis on financial targets and milestones and strengthen performance-related rewards for managers. The target was to be lower price but good value brands.

Source: Adapted from Thompson, J. & Martin, F. Strategic Management – Awareness and Change. Sixth Edition. South-Western CENGAGE Learning, UK, pp. 384 – 386.)

Required:

(a) Use a suitable analytical tool to categorize and describe Unilever's original portfolio of businesses. (12 marks)

(b) Describe the strategy that Unilever has been using, its characteristics, benefits and risks, justifying your answer accordingly. (6 marks)

(c) Describe the source of Unilever's sustainable competitive advantage in its industry sector. (4 marks)

(d) Advise the newly appointed CEO in terms of the appropriate strategy to implement to ensure long-term survival of the company as a market leader. (4 marks)

(e) If the contribution = K50, market value of debt = K50m, PBIT = K100m, market value of equity= K150m, market value of prior charge capital = K200m, calculate the financial and operating gearing ratios for this company. What do these two values tell us about this company? (14 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) from the following questions

QUESTION TWO

Mr. Mutaba recently retired from employment and incorporated a company called Mutaba Investments. Mutaba Investments has decided to purchase an on-going business. Mr. Mutaba had earlier been approached by his former workmate, Mr. Mate, to form a partnership business with him.

Required:

(a) Explain any five (5) risks involved in this undertaking of purchase of an on-going business Mr. Mutaba decided to buy. (10 marks)

(b) Discuss any five (5) positive implications that are involved with Mr. Mate's earlier proposal to Mr. Mutaba. (10 marks)

[Total: 20 Marks]

QUESTION THREE

Mr. Mwikisa Muyumbana, until 31 December of last year worked as Director, Business Development in a privately owned group of companies. The Board recently appointed him to the position of Managing Director and CEO of the organisation. He has been requested to develop a new corporate strategy and winning strategies that must stand a test of time and has since sought your counsel.

(a) Discuss any four (4) functions of corporate strategy. (8 marks)

(b) Three (3) tests can be used to evaluate the merits of one strategy over another and to gauge how good a strategy is. Illustrate how these three (3) tests can be used. (12 marks)

[Total: 20 Marks]

QUESTION FOUR

Mr. Hachondo has been one of those Business Managers working for the Industrial Development Corporation (IDC) and he has now been transferred to a number of state owned companies that have leadership challenges. It has been noted that Mr. Hachondo has used various power bases depending on the nature of personnel at each organisation and has been successful in turning them round.

Analyze any five (5) types of power bases, which Mr. Hachondo could now use to influence the followers to accept his leadership and improve operations. **[Total: 20 Marks]**

QUESTION FIVE

Mwiza and Chiwala are colleagues who recently graduated from a university on the Copperbelt and have been looking for work without success. Mwiza, a young woman of 23 years old graduated with a Credit in marketing while Chiwala aged 25 years obtained a Merit in Business and Project Management bachelor's degree. They have approached you to assist them in coming up with a business plan for their wood buying and selling business.

(a) Describe any five (5) personnel pitfalls, Mwiza and Chiwala should avoid if their business plan is to succeed. (10 marks)

(b) As these partners are quite inexperienced in business strategy, you have been requested to advice on financial strategy in their planned business. Formulate a brief assessment on any five (5) such strategies to ensure success of this business.

(10 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

a) A suitable analytical tool to categorize and describe Unilever's original portfolio of businesses:
Portfolio planning matrices are a set of techniques meant to compare the competitive position of the different businesses in a company's portfolio against each other on the basis of common criteria.

One of the most famous portfolio planning matrices is referred to as the growth-share matrix.

This was developed principally to help senior managers identify the cash flow requirements of different businesses in their portfolio and to help determine whether they need to change the mix of businesses in the portfolio.

The growth-share matrix has three main steps:

i) dividing a company into strategic business units (SBUs) for each economically distinct business area (product markets) in which it competes;
ii) Assessing the prospects of each SBU and comparing them against each other by means of a matrix using two criteria (the SBU's relative market share and the growth rate of the SBU's industry.

The matrix is divided into four cells:

SBUs in cell 1 are defined as stars (leading SBUs in a company's portfolio – Food (4));

SBUs in cell 2 as question marks (SBUs that are competitively weak but based in high-growth industries – Mixed (3), in cell 3 as cash cows (SBUs with high market share in low-growth industries, hence are cost leaders and profitable – Personal Care (4)), and in cell 4 as dogs (SBUs in low-growth industries with a low market share, hence have weak competitive position – Home Care (2)).

High	**Cell 1** Stars – Food (4) ***	**Cell 2** Question Marks – Mixed (3) **???**
Market Growth Rate	**Cell 3** Cash Cows – Personal Care (4)	**Cell 4** Dogs – Home Care (2)
Low	High **Relative Market Share** Low	

(3) developing strategic objectives for each SBU (identify how corporate cash resources can best be used to maximize a company's future growth and profitability).

Hence, cash surplus from cash cows should be used to support development of selected question marks and to nurture stars.

Question marks with weakest or most uncertain long-term prospects should be divested.

If company lacks sufficient cash cows, stars or question marks, it should consider acquisitions and divestments to build a more balanced portfolio.

b) Describe the strategy that Unilever has been using, its characteristics, benefits and risks, justifying your answer accordingly.

Unilever seems to be using an emergent strategy in its operations. This is a strategy which evolves over time and hence its final objective is not clear at the beginning since its elements develop during its life as the strategy proceeds.

The following are the characteristics of an emergent strategy:

i. It can emerge 'bottom up' as a result of a number of ad hoc choices within an organization, usually made lower down the organization by lower-level employees and not just by senior management.
ii. It is developed out of a pattern of behavior rather than being consciously imposed in advance by senior management hence there is a high degree of experimentation to find the most productive route for the organization.
iii. It usually takes longer to develop than planned strategies because they evolve rather than being formally planned in one go at the outset.

iv. It can be seen to be a survival strategy since it is usually used in an environment which is shifting and changing hence it has to be flexible in order to survive the competition.

The benefits of an emergent strategy are:

i. The ability of the strategy to be modified and altered along the way enables an organization to find the most appropriate strategy to become competitive.
ii. The 'bottom up' evolution allows the lower-level employees to have an input in the strategy development process which leads to employee empowerment, motivation and enhanced productivity.
iii. It facilitates the organization to be very responsive to changing customer needs and environmental conditions.

The risks of an emergent strategy are as follows:

i. It can be highly risky since there are many risks involved in such a strategy since the result may not match the intended objectives.
ii. It may also interfere with other strategies due to the continuous changes and modifications required by this strategy.
iii. It has to be managed if it commits the organization to using resources.

c) Describe the source of Unilever's sustainable competitive advantage in its industry sector.
Competitive advantage is derived from the way in which firms organize and perform these discrete activities within the value chain.

To gain competitive advantage over its rivals, a firm must deliver value to its customers through performing these activities more efficiently than its competitors or by performing the activities in a unique way that creates greater differentiation.

Competitive advantage stems from two sources:

- *Firstly* in the ability of the organization to differentiate itself, in the eyes of the customer, from its competition (**Value advantage**) and
- *Secondly* by operating at a lower cost and hence at greater profit (**Cost advantage**).
  a) Many of the products are subject to constant innovation and improvement. This can be a source of value advantage and cost advantage.
  b) Unilever had charged 20 of its younger managers to spend 6 months on a special project designed to identify new opportunities in terms of products. This resulted in 13 new product groups which were classified as offering either superior growth (1), steady growth (2) or selective growth. This leads to sustainability for the company.
  c) Unilever announced that it would split its businesses into two separate companies: Foods and Home Products. Unilever then started a new round of acquisitions and divestments.

Unilever certainly seemed able to slim down its portfolio of brands, shed staff and shut down factories. This was meant to give a cost advantage.

d) The company had been working on plans for a restructuring, which it implemented. A new CEO was appointed who had previously worked for Nestle and Procter & Gamble and he expressed concern at the extent of the decentralization he found and said he wanted to explore how he might ensure the business was controlled effectively whilst capitalizing on the opportunities for synergy across brands. His desire was for fewer new products brought to market faster. He also wanted to promote sales growth, place less emphasis on financial targets and milestones and strengthen performance-related rewards for managers. The target was to be lower price but good value brands. These both create a cost advantage and value advantage which lead to sustainable competitive advantage.

d) Advise the newly appointed CEO in terms of the appropriate strategy to implement to ensure long-term survival of the company as a market leader.

Strategy is influenced by the market position of the business, for example as a leader, follower, challenge or niche.

The strategies for market leaders are as follows:

i. Expand the total market by seeking increased usage levels, new uses and users of the products. These aims correspond to market penetration and market development.
ii. Protect the current market share through continuous product innovation,
iii. Expand market share by enhancing the attractiveness of the product offering in almost any way including increased promotion, aggressive pricing and improved distribution.

e) If the contribution = K50, market value of debt = K50m, PBIT = K100m, market value of equity= K150m, market value of prior charge capital = K200m, calculate the financial and operating gearing ratios for this company. What do these two values tell us about this company?

Financial gearing = Market value of prior charge capital / Market value of equity + Market value of debt.

MVA = Market Value of Debt + Market Value of Equity – Book Value of Equity

Market Value of Debt = MVA – Market Value of Equity + Book Value of Equity

= K200m – K150m + K50m

= K100m

Financial gearing = K200m / K150m + K100m

= **1**

Contribution = Sales – Variable Cost of Sales

= K300m – K150m = K150m

Operating gearing = Contribution / Profit before interest and tax (PBIT)

= K150m / K100m = **1.5**

This is a highly geared business in that debt is a large part of the capital structure. The gearing ratio should not be more than 50% or the company may experience difficulty in servicing the debt and then become bankrupt. Hence this gearing ratio is manageable and non-threatening to the company in terms of survival.

SOLUTION TWO

a) The risks involved in this purchase include the following.

i) The amount of money required to buy an existing business will be high.

ii) Inevitably, relatively little will be known of the details of the business and its good and bad points before purchase.

iii) Many bad mistakes have been made even by major companies who have considerable investigating abilities.

iv) The staff who will be crucial to the continuing success of the business may not take kindly to the charge of ownership.

iv) This can be a dangerous undertaking because you may not know why the owner wants to sell the business.

b) The positive implications of Mr. Mate’s proposal of partnership business include:

i) Less formal and has fewer legal obligations. One of the main advantages of a partnership business is the lack of formality compared with managing a limited company.

ii) Easy to get started. The partners can agree to create the partnership verbally or in writing.

iii) Sharing the burden or risk. Compared to operating on your own as a sole trader, by working in a business partnership you can benefit from companionship and mutual support.

iv) Access to knowledge, skills, experience and contacts. Each partner will bring in their own knowledge, skills, experience and contacts to the business, potentially give it a better chance of success than either partner trading alone.

v) Better decision making. Compared with operating alone, in a partnership, the business benefits from the unique perspective brought by each partner.

vi) Privacy. Compared to a limited company, the affairs of partnership business can be kept confidential by the partners.

vii) Ownership and control are combined.

viii) The higher the number of partners in the business the higher the amount of working capital.

SOLUTION THREE

(a) The following are the functions of corporate strategy

1. Building and Managing a high–performing portfolio of business units (strengthening existing business positions, divesting businesses that no longer fit into management's plans).
2. Capturing the synergy among related business Units and turning it into a competitive advantage
3. Synergy leads to creation of opportunities and transfer of skills and Share of Experts or facilities
4. Establishing investment priorities and steering corporate resources into businesses, with the most attractive opportunities.
5. Reviewing/revising/unifying the major strategic approaches and moves proposed by SBU managers.

(b) Illustrations should centre on each of the following tests.

i) The Goodness of Fittest

A good strategy is well matched to the company's situation – both internal and external factors and its own capabilities and aspirations.

ii) The competitive Advantage test

A good strategy leads to sustainable competitive advantage. The bigger the competitive edge that a strategy helps builds the more powerful and effective it is.

iii) The performance Test

A good strategy boosts company performance. Two (2) kinds of performance improvements are the most telling, firstly in gains in profitability and secondly gains in the company's long-term business strength and competitive position.

SOLUTION FOUR

There are basically 5 types of power bases, which will influence the followers to accept your leadership.

i) Legitimate or Legal Power

This is the power based on one's position in the hierarchy of the organization. It is the leader's formal authority.

ii) Reward Power

This is the basis of leadership that is based on the ability of a supervisor to give out rewards valued by subordinates.

iii) Coercive Power

This is based on fear and punishment from the leader if the required behaviour is not expulsed by the follower. In other words, the followers will ensure that they follow the leader for doing contrary will attract punitive action from the leader.

iv) Referent Power

This is leadership power based on the follower's identification with the leader. Followers will follow the leader because there is something special that attracts the follower to the leader.

v) Expert Power

This arises out of a belief that the leader has some talent or special knowledge and that subordinates do not have.

Power ultimately comes from the subordinates' willingness to follow the direction of the leader by his ability to satisfy subordinates' needs. The ability to get the co-operation from subordinates strongly related to the perception that the manager has the power to make things happen.

SOLUTION FIVE

a) The human resource pitfalls that should be avoided by Mwiza and Chiwala should include:

i) Make sure that partners Mwiza and Chiwala are compatible with each other.
ii) Have a defined basis for reaching decisions and in particular to avoid the 50/50 split with no casting vote.
iii) Bad recruitment in the early days can be disastrous.
iv) Use other's expertise to recruit experts about whose skills they know little.
v) Be careful when employing members of their families and those close to their hearts.

b) Advice on the financial strategies that Mwiza and Chiwala need to be successful would include:
   i) Avoid too little finance
   ii) Avoid high overheads
   iii) Have financial control from the start,
   iv) Be careful to be over-dependent on one customer or supplier,
   v) Low profitability is dangerous,
   vi) High gearing is dangerous. So they should avoid over borrowing, and
   vii) Short–term borrowing should be avoided.

END OF SOLUTIONS

CHARTERED ACCOUNTANT ZAMBIA

ADVISORY LEVEL – PUBLIC PRACTICE ROUTE

CA 3.4: ADVANCED TAXATION

THURSDAY 25 JUNE 2020

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 (1) 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 phone**s are **NOT** allowed in the examination room.

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

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

8. Present legible and tidy work.

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

10. A Taxation table is provided from page 2 to page 6 of the question paper.

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

Taxation table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		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	35%
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**	**Tax per day**
	K	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 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 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				
0	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 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**	37,086	28,432	13,907	10,662

ignition internal combustion piston engine

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. **Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted

QUESTION ONE

You should assume that today's date is 1 December, 2019 and that the earnings ceiling for the purposes of NAPSA contributions is K275,904 per annum.

Lukena Simasiku, a Zambian resident individual, is employed as a Stock Controller at MegaStores plc a chain of supermarkets with over 200 outlets spread across the ten provinces of Zambia:

The company is considering restructuring Lukena's remuneration package effective 1 January 2020 and has provided you with the following information relating to Lukena's current package and the proposed new remuneration package. Lukena has been given a choice of eithermaintaining his current remuneration package or accepting the new proposed package.

Lukena's current Remuneration Package

Lukena is currently entitled toan annual basic salary of K192,000 and the company pays medical insurance premiums of K336 per month on his behalf.

He is accommodated in a company owned house which has a market value of K900,000 in the tax year 2020. Had the house been let out to Lukena on a commercial basis, he would have been required to pay gross monthly rentals K3,360for the house. The company pays for all the ancillary expenses in connection with the accommodation which amounts to K1,680 per month.

He is provided with a petrol driven personal to holder motor car which the company acquired in January 2019, ata cost of K270,000and has a cylinder capacity of 2,800cc. His private usage of the motor car is 20%. The company pays for all the motor car running expenses which amounts to K6,000 per month.

Since his duties require substantial travel across Zambia every month, he is required to be accommodated at specific hotels whenever he travels out of town for employment purposes. The company pays K9,000 per month on his behalf to the hotels, in relation to the expenditure he incurs on accommodation and meals at those hotels.

The company deducts employee's National Health Insurance Scheme Contributions (NHISCs) at the rate of 1% of his basic salary per month from his employment income and contributes employer's NHISCs of 1% of his basic salary on his behalf.

The company additionally deducts employee's NAPSA contributions of 5% of his relevant employment earnings per month from his employment income and pays employer's NAPSA contributions of 5% of his relevant employment earnings on his behalf.

The company further pays a skills development levy of 0.5% of his employment earnings per month.

Lukena's Proposed Remuneration Package

Effective 1 January 2020, the company is proposing to award Lukena a salary increment of 5% on his current basic salary. He will no longer be accommodated in a company owned house but he will now be required to provide his own accommodation. He is expected to pay gross accommodation rentals of K3,360 per month for the house he will start renting on 1 January 2020.

The company will pay him a housing allowance of 20% of his basic salary. He will additionally be entitled to a utility allowance of 10% of annual basic salary and a medical allowance of 2% of his annual basic salary.

The personal to holder motor car will be withdrawn and instead, he will use his own personal motor car (which has cylinder capacity of 2,600cc) that he bought two (2) years ago at the cost a of K270,000, both for employment and private purposes. His total mileage in his motor car is expected to be 25,000 kilometres per annum out of which 1,250 kilometres per annum will be travel between his home and work place, 20,000 kilometres, will be travel in the performance of stock takes at the various outlets of Mega Stores plc across Zambia and 3,750 kilometres per annum will be for private travel. The company will reimburse him in full at the end of each month, the motor car running expenses he will incur on the motor car which will amount to K6,000 per month.

Since his duties requires substantial travel across Zambia every month, he will incur expenditure of K9,000 per month on accommodation and meals, whenever he travels out of town every month for employment purposes. The company will pay him an allowance of K9,000 per month in lieu of this expenditure on accommodation and meals.

The company will deduct employee's National Health Insurance Contributions (NHISCs) at the rate of 1% of his basic salary per month and will pay employer's NHISCs at the rate of 1% of his basic salary on his behalf.

The company will additionally deduct employee's NAPSA contributions of 5% of his relevant employment earnings per month from his employment income and pay employer's NAPSA contributions of 5% of his relevant employment earnings on his behalf.

The company will further be required to pay a skills development levy of 0.5% of his employment earnings per month under this option.

Required

(a) Assuming that Lukena choses to maintain his current remuneration package:

(i) Compute the amount of his income tax payable for the tax year 2020. (3 marks)

(ii) Compute his net income for the tax year 2020,after statutory deductions and other relevant expenditure from his gross earnings under the current package. (4 marks)

(b) Assuming that Lukena decides to accept the proposed package:

(i) Compute his income tax payable the tax year 2020, under the new package. (9 marks)

(ii) Compute his net income for the tax year 2020 after deducting statutory deductions and other relevant expenditure from the gross income under the new package. (5 marks)

(c) Based on your computations in parts (a) and (b) above, advise Lukena as to which of the two (2) packages will be beneficial for him from a taxation point of view. (2 marks)

(d) Provide a computation showing the amount of tax savings arising for Maga stores plc and the net after tax cash flow position for the company under:

(i) The current remuneration package. (9 marks)

(ii) The proposed remuneration package. (6 marks)

(e) Based on your computations in part (d) above advise the directors of Megastores plc as to which of the two remuneration packages will be beneficial for the company from a taxation point of view. (2 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section. Attempt Any THREE (3) questions.

QUESTION TWO

QPR Mining Limited is a Zambian resident company engaged in open cast mining operations of copper in Zambia. QPR Mining is a subsidiary of a foreign multinational mining company. The group financial statements are prepared in United States Dollars. The company incurred a loss before taxation of K185,166,000 This figure was arrived at after dealing with the following items:

Note 1: Operating expenses

		K'000
Depreciation on non-current assets	196,916	
Construction of a school in the mining township		12,500
Upgrading of roads in mining township		21,360
Complying with health and safety regulations		256
Mineral Royalty Tax		19,800
Other allowable operating expenses		51,488
Total operating expenses	302,320	

Note 2: Investment income

This comprised the following:

	K'000
Rent from letting of property in Zambia (gross)	5,040
Fair value gains on investment property.	440
Fixed deposit interest (gross)	68
Realized foreign exchange gains of a revenue nature	184

Note 3: Additional information

(1) The company incurred a tax adjusted mining loss of US$4400,000 in the year ended 31 December 2019.

(2) Mining losses may be indexed using the following formula:

$$1+\frac{(R_2-R_1)}{R_1} \text{ x Mining loss brought forward}$$

(3) The following Zambian kwacha per US Dollar (K/US$) mid exchange rates have been provided by the Bank of Zambia and approved by the Commissioner General:

Date	Exchange rate ZK/US $
31 December 2019	13.50
31 December 2020	14.00

(4) There were no capital assets qualifying for capital allowances at 1 January 2020. During the year ended 31 December the company constructed a new copper smelter at a cost of K3,200,000 and new administration buildings at a cost of K2,500,000.

Required:

(a) Explain any five (5) tax incentives available to companies such as QPR engaged in mining operations. (5 marks)

(b) Advise the directors of QPR of the amount of the company income tax payable for the tax year 2020. (15 marks)

[Total: 20 Marks]

QUESTION THREE

You are employed by a firm of Chartered Accountants and your manager has presented you with the following information relating to Masiku.

Masiku who is a VAT registered trader has been running a retail business for many years as a sole trader. He has always prepared his financial statements for years ending on 31 December.

Due to a down turn of the economic environment, sales for Masiku's products have reduced drastically. He therefore, decided to cease trading on 30 April 2020 after preparing his last financial statements for the period from 1 January 2019 to 30 April 2020 reporting a tax adjusted profit before capital allowances of K787, 200.

The income tax values of Masiku's assets were as follows on 1 January 2019:

	Income tax Value	Original cost
	K	K
Office equipment	13,750	55,000
Office building	180,000	300,000
Motor van	65,000	130,000

All the assets were used wholly and exclusively for the purposes of the business. On 30 April 2020, Masiku sold all his business assets at the following market values:

	Disposal proceeds
	K
Office equipment	31,000
Office building	600,000
Motor van	53,000

On 1 July 2020, Masiku got employed by AB Limited, a Zambian resident company, at a gross annual salary of K280,000. For the tax year 2020, income tax deducted from the salary under the pay as you earn system amounted to K41, 742.

Other information

Masiku has held investments in companies and properties that are resident in a country known as Eastport. The currency of Eastport is the Eastport dollar (EP$). During the year ended 31 December 2020, Masiku received the following investment income from his investments in Eastport:

	EP$
Dividends	9,350
Rent	24,000
Fixed deposit interest	3,400

Dividends and fixed deposit interest are net of withholding tax deducted in Eastport at a rate of 15%. Withholding tax deducted from rent in Eastport was 20%.

There is no double taxation convention between Zambia and Eastport. When computing the Zambian income tax, credit is available against Zambian income Tax for any foreign tax paid. The relevant Bank of Zambia exchange rate for the tax year 2020 averaged K14.40 per EP$1. This average exchange rate is the rate for use when converting amounts from foreign currency to the Zambian Kwacha for tax purposes.

Required:

(a) Calculate the final taxable profits for the tax year 2019 and 2020, explaining the basis of assessment. (11 marks)

(b) Advise Masiku on the amount of income tax payable for the tax year 2020. (9 marks)

[Total: 20 Marks]

QUESTION FOUR

For the purposes of this question you should assume that today's date is 30 December 2019

You are the team leader of the taxation team in a firm of Chartered Accountants. You have been presented you with the following information relating to the following two clients of your firm:

HP Plc

HP Plc is a Zambian resident company engaged in manufacturing. The company manufactures Polly pipes which it sells to customers within Zambia. The raw materials used in the manufacture of Polly pipes are imported from a country known as Southland. The currency of Southland is the Southland dollar (SL$). The board of directors of HP Plc has approved the expansion programme to be undertaken by the company during the year 2020. The company will expand its operations into the manufacture of water tanks. The expansion will require specialized manufacturing equipment that will be imported from Southland at a cost of SL$400,000. The directors are considering two options of raising the additional finances to purchase the manufacturing equipment.

(1) Issue 6% loan notes with a nominal value of K6,000,000 at a premium of 4%. The issue costs amounting to K90,000 will be incurred.

(2) Issue 1,200,000 K1 equity shares at an issue price of K5.20 per share. Issue costs amounting to K240,000 will be incurred.

Due to the instability of the Zambian Kwacha (ZMW) against the Southland dollar (SL$), the directors of HP are considering using foreign currency hedging techniques to hedge any potential loss the company may suffer as a result of the transaction.

Daniel Kabulo

Daniel Kabulo is the Chief Executive Officer of HP Plc. His second contract with HP Plc expired on 20 December 2019 and his benefits will be paid to him by the company on 5 January 2020. He is considering investing all his benefits in profitable investment opportunities within Zambia. He has heard that a reasonable amount of return can be made by investing in collective investment schemes but does not know how such schemes operate. Daniel is further concerned about how his children will survive in the event of his ill health or death. He therefore, wishes to take up some personal financial protection product offered by insurance companies to protect his family from any adverse financial effect arising from his ill health or death

Required:

(a) Advise the directors of HP Plc in relation to the following matters:

(i) The taxation implications of raising additional finance by issuing loan notes to purchase the manufacturing equipment. (3 marks)

(ii) The taxation implication of raising additional finance by issuing equity shares to finance the purchase of the manufacturing equipment. (4 marks)

(iii) The taxation implications of hedging. (3 marks)

(b) Describe the nature of a collective investment scheme and advise Daniel Kabulo of the taxation implications for him of investing in such a scheme. (4 marks)

(c) Advise Daniel Kabuloof the nature of each of the following financial protection products and taxation implications associated with each product:

(i) Family income benefit (2 marks)
(ii) Permanent health insurance (2 marks)
(iii) Critical illness insurance (2 marks)

[Total: 20 Marks]

QUESTION FIVE

You are employed as a Tax Manager in a firm of Chartered Accountants. You have been presented with the following information relating to two clients of your firm:

Esson plc

Esson plc is a Zambian resident manufacturing company that is listed on the LuSE. The company has been your audit client for a year. The directors of Esson plc have now requested that in addition to external audit services your firm should this year start to providing the following taxation services:

(1) Assistance in performing tax calculations for the purpose of preparing the accounting entries to be made in the financial statements.
(2) Preparation of VAT returns and self-assessment returns

(3) Assistance in the resolution of a tax disputes against the ZRA which is before the Tax Appeals Tribunal. The company is appealing against an income tax assessment recently made by the ZRA on the company.

Pezo Chiyeni

Pezo Chiyeni commenced in business on 1 January 2019, running a chain of fashion boutiques. She has informed you that she recently received a letter from the Zambia Revenue Authority giving her notice of their intention to make an enquiry into her self- assessment income tax return and provisional income tax return for the tax year 2019. This letter also warned that penalties and interest may be payable.

Pezo registered her business for tax purposes with the ZRA immediately she commenced trading in January 2019. She had estimated the taxable profit for the tax year 2019 to be K800,000. She submitted the return of provisional income tax in respect of the tax year 2019 on 30 June 2019. She also paid the provisional income tax for both the first and second quarters of 2019 on 30 June 2019, whilst the third installment for provisional income tax relating to the third quarter was paid on 31 October 2019. The final installment of provisional income tax relating to the last quarter of 2019 was paid on 8 January 2020.

She has informed you that for the year ended 31 December 2019, her business generated a net profit as per accounts of K1,026,000 and that she calculated the actual amount of income tax for the tax year 2019based on this net profit figure. She also computed the balance of income tax payable for the tax year 2019, on this basis and paid this on 21 June 2020. She submitted the self-assessment income tax return in respect for the tax year 2019 on 21 June 2020.

She has provided you with the financial statements for the year ended 31 December 2019 and using these, you have established that her actual tax adjusted profit the tax year 2019 was K2,404,000.
You should assume that the Bank of Zambia discount rate is 9.75% per annum and that the tax regulations for the tax year 2020, applies throughout.

Required:

(a) Evaluate the ethical issues which will arise from the provision of each of the following services requested by Esson plc and advise on how your firm should deal with each issue:

(i) Assistance in performing tax calculations for the purpose of preparing the accounting entries to be made in the financial statements. (2 marks)

(ii) Preparation of VAT returns and self-assessment returns. (3 marks)

(iii) Assistance in the resolution of a tax disputes against the ZRA which is before the Tax Appeals Tribunal. (4 marks)

(b) Compute the amount of income tax underpaid by Pezo in respect of her taxable business profit the tax year 2019. (2 marks)

(c) Advise Pezo 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. (9marks)

[Total: 20 Marks]

END OF PAPER

SOLUTION ONE

(a) (i) COMPUTATION OF INCOME TAX PAYABLE UNDER CURRENT PACAKAGE

	K
Salary	192,000
Medical Insurance Premiums (K336 x12)	4,032
Ancillary accommodation expenses (K1,680 x 12)	20,160
Gross emoluments	216,192
Income Tax	
On first K74,400	9,960
On excess (K216,192 – K74,400) x 37.5%	53,172
	63,132

(ii) COMPUTATION OF NET INCOME UNDER CURRENT PACKAGE

	K
Gross emoluments (as already computed in (a) (i)) (K192,000 + K4,032 + K20,160)	216,192
Less	
Income tax	(63,132)
Employee's NAPSA contributions (K216,192 x 5%)	(10,810)
National Health Insurance contributions (K192,000 x 1%)	(1,920)
Net income	140,330

(b) (i) COMPUTATION OF INCOME TAX PAYABLE UNDER NEW PACAKAGE

	K
Salary (K192,000 x105%)	201,600
Housing allowance (K201,600 x 20%)	40,320
Utility allowance (K201,600 x 10%)	20,160
Medical allowance (K201,600 x 2%)	4,032
Accommodation and meals allowance (K9,000 x 12)	108,000
Reimbursement of Motor car expenses (K6,000 x12)	72,000
Gross emoluments	446,112
Less allowable deductions	
Motor car running expenses (K6,000 x 12) x 20,000/25,000	(57,600)
Capital allowances on motor car (K270,000 x 20%) x 20,000/25,000	(43,200)
	345,312
Income Tax	
On first K74,400	9,960
On excess (K345,312 – K74,400) x 37.5%	101,592
	111,552

(ii) COMPUTATION OF NET INCOME

	K
Gross emoluments (as already computed in (b) (ii)	446,112
Less	
Income tax	(111,552)
Employee's NAPSA contributions	
(K275,904 x 5%)	(13,795)
National health Insurance contributions	
(K201,600 x 1%)	(2,016)
Accommodation and meals cost (K9,000 x12)	(108,000)
Accommodation rentals (K3,360 x 12)	(40,320)
Motor car running expenses (K6,000 x12)	(72,000)
Net income	98,429

(c) The current package will be more beneficial for Lukena as it gives a higher net income by: K98,429 – K80,285 = K41,901

(d) (i) COMPUTATION OF TAX SAVINGS AND NET TAX POSITION UNDER CURRENT PACKAGE

Allowable deductions		K
Lukena's Gross emoluments		
(as already computed in part (a) (i))		216,192
Other cash allowable deductions		
Motor car expenses (K6,000 x12)		72,000
½ Accommodation & meals (K9,000 x 12)		108,000
Employer's NHISCs (1% x K192,000)		1,920
Employer's NAPSA (5% x K216,192)		10,810
Skills development levy (0.5% x K216,192)		1,081
Total cash outflows/ Cash allowable deductions		410,003
Non- cash allowable deductions		
Capital allowances on personal to holder car		
(K270,000 x 20%)		54,000
Total allowable deductions		464,003
Non-cash disallowed amounts		
Accommodation benefit		
(30% x K216,192)	664,858	
Personal to holder motor car benefit	30,000	
		(94,858)
Net allowable deductions		369,145
Company income tax saved (K369,145 x 35%)		129,201
Net Tax position of company		
Total cash outflow		410,003
Less Tax saved		(129,201)
Net post tax cash outflow position		280,802

(ii) COMPUTATION OF TAX SAVINGS AND NET TAX POSITION UNDER PROPSED PACKAGE

	K
Lukena's gross emoluments (as already computed in part (b) (ii))	446,112
Other cash allowable deductions	
Employer's NHISCs (1% x K201,600)	2,016
Employer's NAPSA (5% x K275,904)	13,795
Skills development levy (0.5% x K446,112)	2,231
Total cash allowable deductions	464,154
Company income tax saved (K464,154 x 35%)	(162,453)
Net post tax cash out flow position	301,701

(e) From Megastores plc's point of view the current remuneration package is more beneficial for the company from a taxation point of view because it results in a lower net cash outflow from the company when compared with the proposed new package.

If the proposed package were to be implemented, then the net cost for the company will increase from the current K280,802 to K301,701 which represents a net increase in costs of K20,899 (K301,701 – K280,802).

SOLUTION TWO

(a) The tax incentives available to mining companies are:

(1) Reduced standard rate of company income tax of 30%.
(2) 20% deduction of capital expenditure incurred for the purposes of mining, as well as capital expenditure incurred on the provision of services in a mining township.
(3) Dividends paid subjected to withholding tax at the rate of 0%. This eliminates the potential penalty that would arise for late payment of withholding tax.
(4) 10 year period carry forward of tax losses (five years for prospecting and exploration companies).
(5) Remission of duty on special mining vehicles and machinery specified as:
- Dump trucks-off high way
- Mine-locomotives
- Transmission or conveyor belt
- Conveyors

(6) Guaranteed input tax claim for ten years on pre-production expenditure for exploration companies in the mining sector.

(b) COMPUTATION OF TAXABLE BUSSINESS PROFIT FOR THE TAX YEAR 2019

	K	K
Loss before tax		(185,166,000)
Add		
Mineral royalty tax	19,800,000	
Depreciation	196,916,000	
Construction of school	12,500,000	
Upgrading roads	21,360,000	
		250,576,000
65,410,000		
Less		
Rental income	5,040,000	
Fixed deposit interest	68,000	
Fair value gains on investment property	440,000	
Capital allowances (W1)	7,462,000	
	(13,010,000)	
Tax adjusted mining profits before loss relief		52,400,000
Less loss relief (W3)		(26,200,000)
Taxable mining profit		26,200,000

QPR
COMPANY INCOMETAX COMPUTATION FOR THE TAX YEAR 2020

	K
Taxable mining profit	26,200,000
Fixed deposit interest	68,000
Taxable profit	26,268,000

Tax on mining profits (K26,200,000 x 30%)	7,860,000
Tax on Fixed deposit Interest (K68,000 X 35%)	23,800
7,883,800	
Less: Tax already paid:	
WHT on fixed deposit interest (K68,000 x 15%)	(10,200)
Tax payable	7,873,600

WORKINGS

(1) COMPUTATION OF CAPITAL ALLOWANCES

	K
Constructing of hospital (K12,500,000 x 20%)	2,500,000
Upgrading roads (K21,360,000 x 20%)	4,272,000
Copper Smelter (K3200,000 x 20%)	640,000
Central administration offices (K2500,000 x 2%)	50,000
7,462,000	

(2) LOSS RELIEF

Indexed loss brought forward (W3)	61,600,000
Loss Relief available (K52,400,000 x 50%)	(26,200,000)
Unrelieved loss C/F	35,400,000

(3) COMPUTATION OF INDEXED LOSS

Amount of mining loss b/f	
US$4,400,000 x K13.50=	K59,400,000
Indexed mining loss	
K59,400,000 x [1 + [((14.0 – 13.50)/13.50)]	K61,600,000

SOLUTION THREE

(a) Masiku ceased to trade on 30 April 2020 and prepared the last financial statements for a period of 16 months from 1 January 2019 to 30 April 2020. Therefore, the cessation rules will be applied in computing the taxable business profits for the last accounting period.

This period should be split into two notional accounting periods with the first period consisting of exactly twelve months and the last period consisting of four months.

First 12 months from 1 January 2019 to 31 December 2019
K787,200 x 12/16 = K590,400
Last 4 months from 1 January 2020 to 30 April 2020

K787,200 x 4/16 = K196,800
The basis of assessment is the current year basis i.e tax years 2019 and 2020.

Final taxable business profits for the tax years

	2019	2020
	K	K
Profits before capital allowances	590,400	196,800
Capital allowances (w1)	(52,250)	177,500
Taxable business profits	538,150	374,300

Workings

Capital allowances		Cost/ITV	Capital allowance
2019	K	K	
Office equipment			
ITV b/f	13,750		
W & T @25% x 55,000		(13,750)	13,750
ITV c/f	Nil		
Office building			
ITV b/f	180,000		
W & T @ 2% x300,000		(6,000)	6,000
ITV c/f	174,000		
Motor van			
ITV b/f	65,000		
W & T @25% x 130,000		(32,500)	32,500
ITV c/f	32,500	-	
Total capital allowance			52,250

2020		
Office equipment		
ITV b/f	Nil	
Disposal proceeds		(31,000)

Balancing charge			(31,000)
Office building			
ITV b/f	174,000		
Disposal proceeds (restricted to cost)	(300,000)		
Balancing charge			(126,000)
Motor van			
ITV b/f	32,500		
Disposal proceeds	(53,000)		
Balancing charge			(20,500)
Net balancing charge		(177,500)	

(b) Masiku

Income tax payable for the tax year 2020

		K	K
Business profits (a)		374,300	
Salary: K280,000 x 6/12			140,000
			514,300
Foreign income			
Dividends: EP$9,350 x 100/85 x K14.40/ EP$	158,400		
Interest: EP$3,400 x 100/85 x K14.40/ EP$	57,600		
			216,000
Taxable income			730,300

Computation	
First K74,400	9,960
Balance K655,900 x 37.5%	245,963
Income tax liability	255,923
Less:	
Double taxation relief:	
Dividends (working)	(23,760)
Interest (working)	(8,640)
PAYE	(41,742)
Income tax payable	181,781

Workings

Double taxation

1. Dividends

Foreign tax paid: K158,400 x 15% = K23,760

Zambian tax

$\frac{\text{Gross foreign income}}{\text{Total assessable income}}$ x Zambian tax charge

$\frac{K158{,}400}{K730{,}300}$ x K255,923

= K55,509

The double taxation relief is K23,760

2. Interest

Foreign tax paid: K57,600 x 15% = K8,640

Zambian tax

K57,600 x K255,923

K730,300

= K20,185

The double taxation relief is K8,640

SOLUTION FOUR

(a) HP PLC

(i) Issue of loan notes

The following are the taxation implications:

(1) Costs incurred in issuing loan notes will not be allowable when computing the taxable business profits because the proceeds of issue will be used to finance the purchase of a non-current asset. Therefore, the costs of K90,000 will not be allowable.
(2) The interest payable on the loan notes will not be allowed when computing the taxable business profits because the proceeds of the loan will be used to finance the purchase of a non-current asset.
(3) The company will be able to claim capital allowances on the cost of the manufacturing equipment at a rate of 50% per annum

(ii) Issue of equity shares

If the company issues equity shares, the following are the tax implications:

(1) Costs incurred in making the issue of equity share capital are not allowable when computing the taxable business profits. Therefore, the costs of K240,000 will not be allowable.
(2) Costs incurred in making distributions (dividends) to the shareholders are not allowable for tax purposes
(3) Dividends paid to the shareholders are not allowable
(4) The company will be able to claim capital allowances on the cost of the manufacturing equipment at a rate of 50% per annum.

(iii) Hedging

The following are the taxation implications of hedging:

(1) Hedging is treated as a separate source of income for tax purposes. Therefore, any profit arising from hedging is subjected to tax on the same basis as income from other sources. i.e. for the company any profit is taxed at a rate of 35%.
(2) If a loss is incurred from hedging, that loss will be carried forward for a period of five years and be offset against the future taxable profits from hedging.
(3) The taxable amount of profits are the actual gains credited to profit or loss, and the tax loss to be carried forward is the actual loss charged to profit or loss.

(b) Collective investment schemes

A Collective Investment Scheme is an arrangement that enables a number of investors to pool their assets and have these professionally managed by an independent professional investment manager (fund manager) or a management company. Investments may typically include deposits, bonds and equities, but depending on the type of scheme may go wider.

The total value of the pool of invested money is split into equal portions called participatory interests or units. An investor will need to buy a portion of the participatory interests or units for him to invest in the scheme.

The price of a unit is based on the value of the investments the scheme has invested in. The investor can be making regular payments e.g. monthly, quarterly towards the acquisition of these units. Once an investment is made, it is expected that at the end of the year, the investor will register growth on his investments through capital appreciation and income in the form of dividends and interest income.

The tax implications for participating investors such as Daniel is that the investors are liable to pay tax on the income received on distribution. Since the funds contributed into the fund are invested in various types of investments such as deposits, bonds, equities and so on, they generate income, for participating investors, which is generally subjected to withholding tax. The withholding tax is deducted at source at the applicable rates.

(c) Personal financial protection products

(i) Family income benefit

A family income benefit pays out the sum assured only if the life or lives assured die within the policy term with benefits being paid out as instilments of capital over the remaining term of the policy

The insurance premiums receive no tax relief when paid by an individual and, therefore the policy proceeds are not tax.

If the policies are taken up by the company to insure/ assure the lives of key employees, the insurance premiums are allowable deductions when computing the taxable business profits. Therefore, the policy proceeds are treated as trading receipts and are taxable.

(ii) Permanent health insurance

This policy provides income replacement payable in the event of the in ability to perform The taxation implications will be as follows:

(1) Each individual will not receive any tax relief the premiums paid they will be paying by an individual, i.e. the premium will not be allowable for tax purposes.
(2) The policy proceeds which the insurance company will pay on the occurrence of the assured event will be are exempt from income tax.

(iii) Critical illness insurance

This policy provides a lump sum benefit payable on the diagnosis of one from a list of life threatening conditions. I,e cancer, coronary artery bypass surgery, heart attack, kidney failure, major organ transplant, multiple sclerosis and stroke.

The insurance premiums receive no tax relief when paid by an individual and, therefore the policy proceeds are not tax.

If the policies are taken up by the company to insure/assure the lives of key employees, the insurance premiums are allowable deductions when computing the taxable business profits. Therefore, the policy proceeds are treated as trading receipts and are taxable.

SOLUTION FIVE

(a) (i) **Tax calculations for the purpose of preparing the accounting entries to be made in the**

This will give rise to a significant self-review threat given that your firm is the external auditor for Esson plc and you will be required to subsequently review the tax computations you firm would have made on behalf of the company.

Providing the above services may additionally entail your firm assuming management responsivity in relation to any computations made on behalf of the client.

Safeguard

The IFAC code of ethics states that except in emergency situations tax calculations for the purpose of preparing the accounting entries may not prepared for public interest entities.

Your firm cannot therefore accept to perform the this service given that you are the external auditor of Esson plc which is listed on the LUSE

(ii) **Preparation of self-assessment income tax returns and VAT returns**

This may give rise to a self-review threat because your firm may end up reviewing their own work, given that your firm is also is the external auditor of Esson plc.

Safeguards

- This threat can be managed by using a different team to provide the taxation work which is not involved in performing any external work for the client.

- Another safeguard is to ensure that management takes responsibility for any returns prepared on behalf of the company.

(iii) **Assistance in the resolution of tax disputes may be provided**

This may give rise to an advocacy threat where your firm promotes a particular position or opinion in relation with the tax issue to the point that subsequent objectivity is compromised when Safeguards

(1) The IFAC code of ethics requires the firm is evaluate the of the effect of matter and where the effect of the matter is material to the financial statements to be audited the firm is not then you will have to decline, given that you are the external auditor of the firm and you will be subsequently required to come and audit this issue

(2) Assuming the matter is not material and you accept to represent the company, you must s ensure that the client is aware that the member has an obligation not to mislead the Tax Appeals Tribunal in relation to this matter and that you will put in place measures to safeguard professional objectivity.

(3) Assuming you accept the assignment after judging the matter not to be material then you should use professionals who are not members of the audit team to perform the service,

(4) Your firm can additionally and obtaining advice on the service from an external tax professional.

(b) Computation of correct amount of income tax payable in the tax year 2019 the amount of income tax underpaid is:

(K2, 404,000 – 1,026,000) x 37.5% = K516,750

(c) Pezo is exposed to penalties and interest due to late payments of taxes. He 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 30 June 2019, when it should have been submitted on 31 March 2019. Penalties are chargeable if the return is filed after 10 April. It was therefore filed late by 2 months and 20 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. The amount of penalty will be: 1,000 x 3 = 3,000 penalty units (alternatively K300 x 3 = K900)

(3) The first installment of provisional income tax for the first quarter of 2019 was paid late. It was paid on 30 June 2019, when it should have been paid by 10 April 2019. It was therefore paid late by 2 months and 21 days.

(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 K70, 515 (W) x 3 = K3,526.

(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:
(9.75% + 2%) x K70, 515 x 3/12
= K2, 071

WORKINGS:
COMPUTATION OF PROVISIONAL INCOME TAX PAYABLE:

	K
Provisional Inocme	800,000
Provisional Income Tax	
On the first K74, 400	9,960
On excess K725,600 x 37.5%	272,100
	282,060

Provisional income tax payable per quarter is:
K282, 060/4 = K70,515

(6) Penalties and interest will be chargeable on the underpaid tax for the tax year 2019 of K516,750
(computed in part (b) above) running from 21 June 2020 to the date when the tax will be paid.

(7) Additional penalty: Where the amount of provisional income tax paid is less than the actual total income tax for the tax year by at least one third, then an additional penalty at the rate of 10% of the underpaid income tax will arise.

One third of the income tax for the tax year 2019 is:

= 1/3 x [K9,960 + 37.5% (2,404,000 – K74,400)]

= 1/3 x K883,560

= K294,520

Total provisional income tax paid of K282,060 was less than this and therefore the additional penalty will arise. The amount of the additional penalty will be:
= (K883,560 – K282,060) x 10%

= K60,150

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.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 23 JUNE 2020

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Formulae, present value, annuity, and normal distribution tables are attached at the end of the question paper.

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

SECTION A

This question is compulsory and must be attempted

QUESTION ONE

Huya & Uone (H&U) manufactures branded electrical equipment and electronic chips. H&U currently manufactures hundreds of products, although some are very similar in specification, with slight differences due to customer requirements. H&U does not sell its own products to individual domestic consumers. Sales teams therefore focus on high volume sales to large companies. These goods are made to the specification required by the large companies.

The company has a well-established cost and management accounting system. The cost accounting system records the actual manufacturing costs for all the products and also produces standard unit costs for the purposes of budgeting and budgetary control. The Finance Director is pleased with the management information system that is in place within the company, and is particularly proud of the budgetary control reporting system that provides monthly control reports to the board within one week following the end of the month.

The electrical and electronic goods market is increasingly competitive, with overseas companies entering the market. H&U's customers have responded to this by demanding lower prices and better quality products from H&U. As the electrical and electronic goods market is technologically innovative, there is also a requirement to continually develop new products or enhance existing ones. The profitability levels are fairly low at the moment, although H&U is operating at a profit. Management of H&U is not sure what competitors might do next, although it suspects that at least one of them might be in financial difficulty.

However, at a recent management meeting, the Sales Manager revealed her sales team figures for the year 2019 and is excited to announce that the team has exceeded sales volume targets. The sales manager's enthusiasm has not been shared by the Management Performance Analyst (MPA)who has written a report to the Chief Executive Officer (CEO) suggesting that there are fundamental performance problems in the company.

An extract of his report is given below:

Business performance
'In a period of increased competition and growing product ranges, we are failing to keep control of the profitability of our business. Although low prices are one factor in the buying decisions of customers, customers are much more concerned about the quality, reliability and functional features of the electronic chips that the company produces. Table 1 presents a summary of our performance for 2019, showing problems with our pricing and cost control. This has affected profitability.

Table 1: Budegted versus actual performance 2019

	Budget units	**Actual units**
Sales volume	81,000	90,000
	K'000	K'000
Sales revenue	12,150	12,150

Direct materials	(5,265)	(6,210)
Direct labour	(1,134)	(1,575)
Fixed overheads	(2,750)	(3,817)
Operating profit	3,001	548

The company should adopt activity based costing (ABC) immediately, in order to better understand our costs and to introduce an appropriate strategy to turn around our business performance. Specifically, we should ensure that we incorporate both product and customer costing into our ABC analysis to determine our profitable and unprofitable products and customers. I have done a further analysis of overheads as shown below.'

Budgeted production for electronic chip #123: 10,000 units
Direct materials per unit: K125
Direct labour: 0.5hrs @ K75 per hour
Batch size: 100 units per batch
Number of component orders: 75

H&U 's production activity, budgeted activity cost and cost drivers are as follows:

Cost Pool	Cost K	Cost Driver	No. of Drivers
Production set ups	160,000	Number of set ups	160
Product testing	96,000	Number of inspections	320
Component supply & storage	384,000	Number of components	1,440

Machines are re-set after each batch. Product tests are executed after every second batch.

The Sales Manager has seen the MPA's report and has angrily responded. 'We are in a period of increased competition and have successfully managed to grow our sales in difficult times. We even managed to fulfill some special orders with very short lead times. We should be celebrating these successes, not treating them as poor performance. We should expect some fall in profitability as our customers are able to shop around, so we have to make our products and our prices more attractive to them. The new costing system that you are proposing will just be a paper exercise for you to criticize the efforts of the sales and production teams. I will do everything I can to stop the introduction of this costing system.'

Required:

(a) Discuss why it will be important for H&U to monitor both non-financial and financial aspects of performance. (4 marks)

(b) Evaluate the compatibility of the current management accounting system in H&U and the information it provides with the objectives of management accounting. (5 marks)

(c) Analyse the data shown in Table 1, suggesting possible reasons why performance may not be as positive as that portrayed by the Sales Manager. (15 marks)

(d) Calculate the cost per electronic chip using activity based costing. (6 marks)

(e) Evaluate whether activity based costing may be beneficial to H&U, making reference to any benefits and limitations of activity based costing and any problems associated with its implementation. (10 marks)

[Total: 40 Marks]

SECTION B

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

<u>QUESTION TWO</u>

Asimbi Ltd manufactures and sells a range of consumer foods in Zambia. The company has expanded rapidly over the last few years, since it was formed. The company has a set of core products which it sells. Recently Asimbi Ltd's growth rate for some products slowed and the Chief Executive Officer (CEO) is under pressure from investors to introduce performance measures that will reinvigorate the share price for these products. However, during the Board meeting, the CEO highlighted that focusing purely on the share price might be detrimental in the long run. Therefore, it is high time we considered implementing a Balance Scorecard approach to measuring performance.

The following data about the Company's products for the most recent year is given below;

Product	Cash flow (K'000)	Prospects	Market share
A	1,257,000	Competitive and mature market	35%
B	(11,000)	Mature market	10%
C	54,000	Previous high growth rate slowed recently	9%
D	103,000	Market growing rapidly	25%

Other information from the suggestion box situated at the company's entrance is given below (A suggestion box is wooden box located at the entrance where customers can drop in their comments on Asimbi Ltd's products);

- "This is old fashion, open a website to upload pictures and sound clips, I wana shout"
- "you products are ok, need a lot of work on product B for me to ever buy it again"
- " does this company have a purpose of its existence, with limited products, some I can't even recommend anyone to buy"
- "I waited for over an hour to be served the wrong product…can't come back to this place"
- "open a call centre or hot line, people have no time to write on paper"

Asimbi Ltd opens the suggestion box monthly to review comments from clients for discussion in meetings.

Required:

(a) Using the BCG Matrix, analyse the company's product portfolio. (4 marks)

(b) Identify and explain a suitable performance measure for each of the products in the company's product portfolio. (6 marks)

(c) Discuss how the implementation of a Balance Scorecard approach in assessing performance could help management of Asimbi Ltd resolve the challenges currently being faced by the Company. (10 marks)

[Total: 20 Marks]

QUESTION THREE

Akuna Limited is a Company that provides consultancy services to the engineering sector. The company was established by four (4) engineers that went to one of the best engineering universities in the country. The company has been operational for over 5 years and has grown significantly, but the Directors maintain a lean structure of 9 staff. However, when the company wins a big tender extra staff is engaged for the period of the project. Akuna Limited's projects are normally less than Eight (8) months. Below is an extract of the company's financial data as of 30 June 2019;

	K'000
Revenue	7,100
Cost of sales	(2,400)
Administration costs	2,600
Operating profit	2,100

The company's capital employed is as follows:

Equity	5,440
15% Bank loan	1,800

Akuna Limited has just won a tender for a six (6) months project to 31 December 2019. The contract value is K3,500,000 and the projected total cost to complete the works is 51% of the contract value. Akuna Limited has K110,000 available funds to invest in the project.

Akuna Limited is therefore seeking financing for this project and a venture capitalist firm has agreed to invest in Akuna Limited's equity a total of K1,760,000. The venture capitalist firm will invest for 3 years and require a return on their investment of at least 15% per annum on a compound basis. Alternatively, the Company can obtain an additional loan of K1,760,000 for 3 years at 25% interest to finance the project. Akuna Limited pays tax on profits at 35%.

Required:

(a) Calculate the total equity required to meet the venture capitalist's return requirement. (4 marks)

(b) Calculate the ROE before and after undertaking the project and Recommend the best financing for the project. (12 marks)

(c) Discuss two disadvantages of using the ROE as a performance measure for Akuna Ltd. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Bwezani Ltd is considering an initial investment of K100,000 in order to open a new production line for a new product. The investment will be made over a two year period, with 50% immediately and the balance at the end of the year. The expected life of the production line is four years. Sales are estimated to be K100,000 during the first year and to increase by 10% per year until the fourth year. The variable costs of producing the product are 50% of sales and the additional fixed costs are K15,000 per year. A straight-line depreciation method is used to calculate tax depreciation over a four period. Bwezani Ltd pays tax of 40% in the year that profits arise and any tax credit can be offset against future tax payments. Bwezani Ltd expects to recover K10, 000 of its working capital, included in the initial investment, at the end of the fourth year.

Bwezani Ltd has a cost of capital of 10% that is used to evaluate projects of this type based on the Internal Rate of Return (IRR). The IRR has been criticized by the Board, and now, management wants to try using the Modified Internal Rate of Return (MIRR) and incorporate risk in the evaluation using certainty equivalents.

Required:

(a) Discuss the disadvantages of using the IRR in evaluating the investment in Project A. (4 marks)

(b) Calculate the MIRR and advise management of Bwezani Ltd whether to invest in the project. (10 marks)

(c) Discuss the suitability and acceptability of using certainty equivalents in incorporating risk when undertaking project appraisals. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Fish 'N' Chips operates a fast foods business in the central business centre of the capital city. It delivers food to business houses, government and domestic customers. It has grown successfully over the past twenty years, and now has a sophisticated management accounting system that measures and reports the costs of delivering different types and weights of packaged foods between any two locations, and the profitability of its services.

However, the board of directors is concerned about the lack of other information about the company's operations and performance. The directors believe that the success of the company has been built on a reputation for reliable service and strong brand recognition, although they have no firm evidence to support this opinion.

The directors are also aware that Fish 'N' Chips's main competitors have introduced cost-saving automated calling systems, whereby the entire process consists of recorded messages and voice recognition, so that customers can request food deliveries without having to speak to anyone. Fish 'N' Chips's directors are convinced that automated calls may provide short-term benefits through cost reduction, but that the quality of the service to customers is reduced.

The directors believe that Fish 'N' Chips's success is built on its high-quality personal service for callers. Fish 'N' Chips does not have an automated calling system; instead it operates a call centre which is staffed by full-time employees. Whenever customers have specific questions to ask or specific problems to handle, the call centre staff are able to use their knowledge to assist them and provide a better service.

The directors' views, however, are a matter of opinion, and there is some concern within the business that unless Fish 'N' Chips introduces automated calling systems, it may lose business to its competitors.

The management accountant of Fish 'N' Chips has suggested that the board would benefit from the provision of more qualitative information about its services and performance. The directors have opinions about reputation, service quality, reliability, experience and customer satisfaction, but they do not have any evidence on which to base their views or to make decisions about the company's operational systems.

Required:

(a) Discuss the qualitative information that may be of benefit to the directors of Fish 'N' Chips. (10 marks)

(b) Discuss the difficulties that would have to be addressed when introducing a reporting system for the board and the difficulties the company's management may face when providing information of a qualitative nature. (10 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

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

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Importance of non-financial measures – The quality and reliability of the equipment that H&U produces could both potentially be critical success factors for H&U because they are likely to be important in customers' buying decisions.

By performing well in these areas, H&U should be better placed to sustain its financial performance than if it performs badly in them. For example, if it provides its customers with high quality, reliable equipment, this should ensure a high level of customer retention, which should in turn help it maintain its revenues. In this way, there would seem to be a strong link between non-financial performance and financial performance.

Importance of financial measures – However, it is also important that H&U continues to monitor its financial performance, because there is no guarantee that favourable non-financial performance will necessarily translate into favourable financial performance. For example, although H&U's equipment may be very reliable, if it is significantly more expensive than competitors', customers may choose to buy the competitors' equipment instead.
Also, the directors have already highlighted the importance of reducing costs in order to improve profitability. This identifies the importance of monitoring financial performance, in order to assess how successfully H&U is reducing its costs and improving profitability.

Combination of measures – H&U's profit margins are known to be low, as a result of the intense competition in the market. This reinforces the need to monitor aspects of its financial performance (such as costs and margins). However, it is equally important to monitor whether sales and market share are increasing or decreasing in this competitive market, and how H&U is performing in relation to the other critical success factors which will affect customers buying decisions.

(b) **Focus on tactical information** – The cost and management accounting system of H&U appears to provide information about product costs, including standard costs, and also monthly variance analysis reports. This should help management to prepare budgets and then control performance at a tactical level by providing comparisons between actual and standard or budgeted costs.

Lack of strategic information – Management accounting should provide information to assist and support decision-making by management. Information is needed at a strategic as well as a tactical level. Much strategic information is forward-looking and long-term in nature, whereas budgetary control variance reports are historical and most budgets do not plan beyond the next financial year.
Strategic management accounting information should also include non-financial as well as financial information, such as information about customer needs and customer satisfaction, competitive advantage and product differentiation. It seems that H&U does not have a management accounting system that provides strategic information, and the current system is therefore incompatible with the purposes of management accounting.

Focus on cost – The current management accounting information system appears to focus exclusively on cost. Competition is strong and profit margins are low; therefore it is appropriate to consider costs and cost control. However, customer buying decisions are influenced by **quality** and **product design** considerations and it is therefore appropriate to provide management information about these aspects of performance as well as cost. A lack of information about these matters indicates a weakness in the information system.

Investment decisions – The management accountant of H&U is unwise to be satisfied with the current management accounting system. By failing to provide non-financial information and strategic information, it is not fulfilling the purpose of management accounting, to support well-considered decision-making.

(c) The sales manager is correct in that the sales volume has outperformed budgeted sales volume by 11·1% over budget. This is a positive sign in a situation where there is increased competition and more demanding customers.
However, profitability is much lower at 4·5% rather than the 24·7% budgeted, or the 27% expected if the budget was flexed to represent actual sales volume. This could have a serious impact on the future sustainability of the business. The flexed budget can be analysed to determine where performance has been worse than expected. Differences between expected and actual performance can then be investigated. The flexed budget and variances are as follows:

	Budget	**Actual**	**Flexed budget**	**Variance report**
Sales volume (units)	81,000	90,000	90,000	
	K'000	K'000	K'000	K'000
Sales revenue	12,150	12,150	13,500	1,350(A)
Direct materials	(5,265)	(6,210)	(5,850)	360(A)
Direct labour	(1,134)	(1,575)	(1,260)	315(A)
Fixed overheads	(2,750)	(3,817)	(2,750)	(1,067)
Operating Profit	3,001	548	3,640	

From the above, it can be seen that all calculated variances are adverse when considered against the flexed budget. Although the actual sales revenue is the same as budgeted, this is from a much higher sales volume. The average selling price per unit was budgeted at K150, but the average actual selling price per unit was K135, a decrease of 10%. It may be that this was reduced in order for the sales team to hit targets, especially if their commission is based on sales volume rather than revenue. Alternatively, it could be that the price was necessarily reduced in order to cope with increased competition.

Direct materials have shown an adverse materials variance of K0.36m. This may either be due to the price or quality of materials used, but further information would be required to determine which. It is possible that price may be an important factor, as the sales manager mentioned fulfilling orders with a short lead time. This may have meant that higher prices were paid if materials were sourced at short notice, or not using economic order techniques. Furthermore, it was stated that customers wanted 'more attractive' products, which may have led to more advanced component parts, thus increasing costs. In addition, the industry is a dynamic industry with rapidly developing technology; the cost of new technology may be higher than the standard costs budgeted for. This is one of the difficulties of using standard costing in an environment where products are frequently enhanced or new products developed.

Direct labour should have cost K1.26m but instead did cost K1.575m, hence an adverse variance of K0.315m. This may be due to either the rate paid, or the hours worked on products. If orders were satisfied at short notice, this may have required overtime, which could affect the labour rate variance causing it to be higher due to enhanced overtime payments. In addition, special and customer-specific orders may require longer than standard hours as they may not yet have benefitted from the learning curve effect associated with standard, repeat orders.

Fixed overheads show a K1.067m adverse variance, which is 39% higher than budgeted. This is clearly a major problem and suggests that either the standard absorption rate of overheads is incorrect, or that overheads have not been controlled throughout the year. The focus on meeting increased orders may have distracted management attention from overhead control, thus leading to inefficiencies related to these costs. Overheads include those indirect elements of cost which are not specifically attributed to a product, such as cleaning materials, supervisor salaries and factory rent and rates, heating and lighting. By treating them as fixed overheads, the suggestion is that they should not change with a variation in activity volumes. It is vital that the company analyses the overhead spend urgently, as this has had a major impact on profitability.

Overall, H&U should have made a budgeted profit of K3.64m on the actual sales, but instead made a profit of K0.548m, a difference of K3.092m.

One of the problems of using a standard costing system is that standard costs are based on historical information, and in a changing environment these are unlikely to remain accurate for long. It may be that the standards used in the budget are simply no longer realistic, and these need analysing before the blame is placed upon any particular department within the organisation. The suggestion of activity based costing could certainly assist with this in terms of understanding the overheads, although it will have no impact on the labour or material standards used; these would need separate analysis.

(d) Cost per electronic chip using activity based costing

		K per chip
Direct materials		125.00
Direct labour	0.5 x K75	37.50
Set up cost	10,000 chips/100 chips = 100 batches. [100 @ K1,000] /10,000chips	10.00
Production testing cost	100 batches/2 = 50 tests x K300 = K15,000/10,000	1.50
Supply & storage costs	75 x K266.67 = K20,000.25/10,000	2.00
	Cost per chip	**176.00**

Workings:

Activity	**Cost pool**	**Cost driver**	**Rate**
Set ups costs	K160,000	160 set ups	K1,000 per set up
Production testing cost	K96,000	320 tests	K300 per test
Supply & storage costs	K384,000	1,440 requisition	K266.67 per requisition

(e) Activity based costing attempts to discover what drives costs to be incurred. Cost pools are established which include all of the costs caused by one cost driver. These cost pools are then absorbed into products based on the driver activity related to each product. For example, H&U may recognise the cost driver 'machine set ups' which would occur every time the manufacturing line is set up to produce a different product or model. Following the initial recognition of costs, drivers and activities, overhead costs can then be allocated to products or customers accordingly.

Activity based costing was developed to improve the accuracy of costing in an environment where methods of production were becoming more automated and less labour intensive. The introduction of greater product ranges also demanded enhanced costing methods in order to both understand how costs were driven (and hence determine how to successfully reduce costs) and also to enhance product pricing in an increasingly competitive environment. For H&U, given the falling profitability and the increasing competition, it is important that the company determines how to reduce costs and become competitive on price without affecting profitability.

Although activity based costing should prove to be beneficial in the long term, the initial implementation of the method is a time-consuming and complex task which requires the identification of numerous activities and their cost drivers. In reality, these may number in their hundreds or even thousands. Given the volume of products in H&U's portfolio, this is likely to be an especially complex task. In addition, as new products and methods are introduced, the analysis of activities and drivers needs to be updated. The introduction of activity based costing may take up to a year and will require the participation of managers and staff in all departments. Given the growth of the company, it may be that departmental managers are feeling under pressure of enhanced activity volume and may not give sufficient thought to the identification of activities and their drivers, which would make the results irrelevant.

Additionally, some managers may be resistant to the idea of change. The pressure of work mentioned above may contribute to resistance. The impact of the change on their roles would also be a contributory factor. The sales manager, specifically, feels that performance is good and may see the introduction of new costing and pricing methods as something which will make it more difficult for him to hit targets. His participation is important as he will need to determine the cost drivers relevant to sales activities. This participation is essential to determine the profitability of customers, a key feature of activity based costing, and this itself may lead to resistance as he may see it as a route to losing some of his more 'lucrative' contracts.

The majority of H&U's customers is repeat business customers and, even if activity based costing were to be successfully introduced, they may not accept changes in pricing. For example, analysis might suggest that a product incurs greater costs than expected and so its price is increased as a result. The customer for this product may refuse to pay this price and so seek an alternative supplier for the product. This may, however, be beneficial to H&U's to focus on more profitable customers or products, providing market share does not fall substantially.

Despite the limitations, in a period of increasing overheads (H&U's overheads are 39% greater than budgeted) and falling profitability, the use of activity based costing to determine cost behaviour can lead to increased efficiency as cost drivers are recognised and a focus placed on reducing the main cost drivers. Therefore the implementation of this method could bring future cost advantages to H&U, and help to regain the previous levels of profitability.

SOLUTION TWO

Part a

A portfolio of products can be analysed using the Boston Group Consulting Matrix. This categorises the products into one of four different areas, based on:

1. Market share – does the product being sold have a low or high market share?
2. Market growth – are the numbers of potential customers in the market growing or not

Star High market growth High market share Cash neutral Hold	**Problem child** High market growth Low market share Cash absorbing Build
Cash cow Low market growth High market share Cash generating Harvest or milk	**Dog** Low market growth Low market share Cash neutral Divest

From the above, the products can be categorised according to the BCG as follows;
A is Cash Cow
B is Dog
C is Question mark or Problem Child
D is Star

Part b

Product	KPI	Reason
A	% Cash generated % Revenue generated	Cash required to invest in other products
B	% cash spent/used up No. of potential buyers	How quickly can this product be disposed off
C	% of funds invested % Market share growth	Level of investment in the product to drive growth
D	% Volume sales % Market growth rate	To support the level of growth and sustain profitability

Part c

Robert S. Kaplan and David P. Norton have developed a set of measures that they refer to as "a balanced scorecard." These measures give top managers a fast but comprehensive view of the organization's performance and include both process and results measures. Kaplan and Norton compare the balanced scorecard to the dials and indicators in an airplane cockpit. For the complex task of flying an airplane, pilots need detailed information about fuel, air speed, altitude, bearing, and other indicators that summarize the current and predicted environment. Reliance on one instrument can be fatal. Similarly, the complexity of managing an organization requires that managers be able to view performance in several areas simultaneously. A balanced scorecard or a balanced set of measures provides that valuable information.

Four Perspectives

Kaplan and Norton recommend that managers gather information from four important perspectives:

- The customer's perspective. Managers must know if their organization is satisfying customer needs. They must determine the answer to the question, how do customers see us?
- The internal business perspective. Managers need to focus on those critical internal operations that enable them to satisfy customer needs. They must answer the question, what must we excel at?
- The innovation and learning perspective. An organization's ability to innovate, improve, and learn ties directly to its value as an organization. Managers must answer the question, Can we continue to improve and create value for our services?
- The financial perspective. In the private sector, these measures have typically focused on profit and market share. For the public sector, financial measures could include the results oriented measures required by the Government Performance. Managers must answer the question, How do we look to our shareholders and other key stakeholders?

A balanced approach to employee performance appraisal is an effective way of getting a complete look at an employee's work performance, not just a partial view. Too often, employee performance plans with their elements and standards measure behaviors, actions, or processes without also measuring the results of employees' work. By measuring only behaviors or actions in employee performance plans, an organization might find that most of its employees are appraised as Outstanding when the organization as a whole has failed to meet its objectives. By using balanced measures at the organizational level, and by sharing the results with supervisors, teams, and employees, managers are providing the information needed to align employee performance plans with organizational goals. By balancing the measures used in employee performance plans, the performance picture becomes complete.

Some of the most significant benefits that part of the companies who have successfully implemented the BSC methodology agreed upon are listed as follows:

- Ensures an integrated strategic planning;
- Transforms strategy into action and desired behavior;
- Aligns Key Performance Indicators (KPIs) with strategy at all levels of an organization, not just strategic, but also at operational and individual level;
- Improves processes;
- Provides management with a comprehensive picture of business performance;
- Facilitates communication and understanding of the strategic goals at all levels of the company;
- If applied at all levels (not only organizational and operational, but also individual), it ensures an effective way of getting a complete understanding of an employee’s work performance;
- By using balanced measures at organizational level, and by efficiently sharing the results with superiors and employees, managers can provide the information needed to align employee performance plans with organizational goals;
- Makes service delivery as efficient and effective as possible, by providing a real call for action;
- Helps companies to focus on accomplishing their most important strategic objectives and priorities. For instance, with so many competing demands coming from citizens and community groups, local governments might inadvertently redirect attention from top priorities;
- Helps managers in identifying areas that need improvement and allocating resources properly.

The list does not stop here, as each company, depending on the industry it activates in, can identify many other specific benefits of implementing a Balanced Scorecard methodology.

However, in order to arrive at the benefits of a Balanced Scorecard approach, companies need to understand how to efficiently implement and use the tool (studying best practices, but also keeping in mind that they have to focus on what matters mostly for them), and to ensure that all employees have a clear picture of the whole performance system.

Another important aspect is to be aware that it is an ongoing process that needs analysis, initiative identification and successful implementation to keep the business competitive.

SOLUTION THREE

Part a

Equity capital invested by VC = 1,760,000
Return of 15% for 3 years = K1,760,000 x $(1.15)^3$ = K2,676,740
VC represents {1,760 / (1,760 + 5,440)} 24.4% of the equity, therefore total equity value for A plc in 3 years' time must be (K2,676,740 / 0.244) K10,950,302

Part b

Details	Before	VC Financing	Debt Financing
Operating profit (PBIT)	K2,100,000	K3,815,000	K3,815,000
Interest	(K270,000)	(K270,000)	(K710,000)
Profit before tax	K1,830,000	K3,545,000	K3,105,000
Tax@35%	(K640,500)	(K1,240,750)	(K1,086,750)
Profit after tax	K1,189,500	K2,304,250	K2,018,250
Equity	K5,440,000	K10,950,302	K5,440,000

ROE	21.9%	21%	37.1%

ROE is calculated as profit for the year divided by total equity. Before the project, the ROE is 21.9%, with financing the project using VC; the ROE is projected at 21%, and 37.1% using debt financing.

The purpose of ROE is to indicate how efficiently a company uses the capital it receives from its owners to generate an investment return to those shareholders. Because net income can be manipulated in many different ways, however, ROE is not a reliable indicator of efficiency when used on its own.

The company has two options when it wants to raise funds to improve profits. It can take on debt or it can take on new equity through VC. It is critical for a company to be able to employ this investment efficiently, regardless of source. The ROE only reflects the results of the company's equity investments, though. This means that the company could be highly-geared with a risky amount of debt and it will show an improving ROE if that debt as the case with A Limited. ROE must be looked at with other measures such as Return on Investment in order to present a more balanced snapshot of the company. 2 marks

Part c

The ROE calculation is based on profit rather than revenues, and profit is revenue less expenses. Revenues are straightforward and easily understood by most investors. However, expenses are subject to many manipulations through the company's accounting policies, both intentionally and unintentionally. For example, a company with significant amounts of capital assets will have a large depreciation expense, which lowers the ROE as compared with a company with fewer assets. When and how a company chooses to write down assets will also impact ROE, even though it has no impact on the company's overall financial well-being

By focus on ROE, management might not focus on cash flow which is a better indicator of company performance than profit. Profit is a notional amount that is subject to a number of accounting estimates further eroding its objectivity compared to cash.

The ROE is calculated by using financial information which could be manipulated easily. Further, this financial information is usually historical.

SOLUTION FOUR

Part a

1. The method assumes that the net cash inflows generated through the project life will be reinvested to earn the same return as the IRR, but this may not be possible in real life.
2. The method ignores the relative size of the investments
3. If the project has non-conventional cash flows – for example, cash outflow, inflow and then outflow – it may be possible to calculate two IRRs.
4. If an organisation is trying to decide between mutually exclusive projects. This is when an organisation has two or more projects to choose between, and they can only undertake one. Let's say that we have Project A and Project B. The cash flows for these projects have been discounted at various discount rates.
5. The method is easily confused with the Accounting Rate of Return (ARR) method of investment appraisal. In previous sittings, candidates have performed an ARR calculation rather than an IRR.

Part b

Details	**K'000**	**K'000**	**K'000**	**K'000**	**K'000**
	Year 0	Year 1	Year 2	Year 3	Year 4
Investment	(50)	(50)			

Sales		100	110	121	133.1
Variable costs		(50)	(55)	(60.5)	(66.55)
Fixed costs		(15)	(15)	(15)	(15)
Deprecation		(22.5)	(22.5	(22.5	(22.5
Taxable profit		(37.5)	17.5	23	29.05
Tax@40%		-	-	(1.2)	(11.62)
Add Dep		22.5	22.5	22.5	22.5
W/capital					10
Net cash flows	(50)	(15)	40	44.3	49.93

Total PV of investment (cash out flow) is K50,000 + (K15,000 x0 0.909) = K63,635
Terminal value; K40,000 X 1.1^2 = K48,400
K44,300 X 1.1 = K48,730
K49,930
Total (Terminal value) = (48,400 +48,730+49,930) = K147,060
K63,635(1 + MIRR)^4 = K147,060
MIRR = 23.3%

The MIRR is higher than the cost of capital, therefore the project is worth undertaking.

Part c

Alternative methods have been developed for incorporating project risk into the capital budgeting decision process. One is the certainty equivalent method, in which the expected cash flows are adjusted to reflect project risk: Risky cash flows are scaled down because the riskier the flows, the lower their certainty equivalent values.
The certainty equivalent (CE) method follows directly from the concept of utility theory. Under the CE approach, the decision maker must first evaluate a cash flow's risk and then specify how much money, to be received with certainty, will make him or her indifferent between the riskless and the risky cash flow.
The certainty equivalent method is simple and neat. Further, it can easily accommodate differential risk among cash flows. For example, if the Year 4 expected net cash flow of K100,000 included a very risky estimated salvage value, we could simply reduce the certainty equivalent, say, from K70,000 to K49,000 (based on a 70% weight), and recalculate the project's NPV. Unfortunately, there is no practical way to estimate certainty equivalents. Each individual would have his or her own estimate, and these could vary significantly. To further complicate matters, certainty equivalents should reflect shareholders' risk preferences rather than those of management. For these reasons, the certainty equivalent method is not used very often in corporate decision making.

SOLUTION FIVE

(a) The board of directors of Fish 'N' Chips believes that its competitive advantage is based on reputation, brand recognition, reliability, experience and personalised service by its call centre staff. This belief appears to have made the directors decide that Fish 'N' Chips should not copy its rivals and introduce an automated ordering system, even though this may be less expensive to operate.

Information for decision-making – The directors would probably benefit from information about these aspects of the company's service, because their views currently seem to be based on opinion rather than firm evidence. In this respect, it seems probable that the board is basing decisions about the company's future strategy on its views of Fish 'N' Chips's competitive advantage, rather than any firm evidence.

If the directors believe that these qualitative aspects of performance are the reason why Fish 'N' Chips is successful in the market, they will probably base the company's future strategy on preserving the factors that create this advantage. Therefore it would be valuable to obtain information about whether these qualitative aspects of performance really do create value for Fish 'N' Chips; for example, by establishing whether they affect customer's choice of which delivery service to use.

Competitive advantage – If qualitative aspects of performance are strategically significant, then it is also important that information about them is reported regularly so that the board can monitor any change in circumstances that might create a threat to competitive advantage.

The most significant qualitative aspects of performance that appear to be significant for Fish 'N' Chips may be those that have been identified by the board.

- **Brand recognition** – The board believe that Fish 'N' Chips has a good reputation for service and that it benefits from strong brand recognition. Information about the strength of the company's reputation and brand recognition by customers would help the company to develop its marketing strategies. For example an advertising campaign might promote the brand name and image.

- **Service reliability** – The board believes that the company's reputation is based largely on its service reliability. Reliability probably means on-time deliveries, or possibly speed of delivery. Information about on-time services and speed of services would help management to monitor this aspect of performance, and try to ensure that the service standard is maintained.

- **Customer service** – The board also believes that customers value the experience and personal service of its call centre operators. As a result, it has taken the important decision to retain a personal calls system for customer orders, when rival companies have chosen to cut costs and use automated voice recognition ordering systems. Information about the value of this service to customers would enable the board to confirm their view – or prove it wrong.

  - **Customer needs** – Information about the quality of the telephone ordering service and reliability of service are important only if they are significant to customers. Fish 'N' Chips does not seem to have obtained reliable information about customer needs and whether Fish 'N' Chips's services are meeting them sufficiently well. Information about how much extra customers would be willing to pay for additional features in the service would also be of value.

(b) One of the distinctions between qualitative and quantitative information is that it can be harder to measure qualitative information and qualitative aspects of performance. For quantifiable aspects of performance, it is possible to set specific targets for achievement; whereas often qualitative aspects targets can only be expressed in more general terms. When targets are not measurable and performance is not measured, it can be difficult to assess whether the targets are being achieved.

There is a risk that monitoring qualitative aspects of performance can become self-delusional.

Management may decide that actual performance is what they would like it to be, not necessarily what it actually is. Strength of reputation is one such qualitative aspect of performance. Others may be employee loyalty, team spirit and quality of strategic leadership.

Since qualitative information is not currently measured at Fish 'N' Chips, there are problems in gathering and analysing information, and in accessing and retrieving qualitative information that is held on file. The information provided by a reporting system may also be of limited value, because management may not know what to do about it.

Information must have a purpose, but qualitative information may not be sufficiently specific and its purpose may therefore be unclear.

It may be argued that qualitative information may be of value for strategic planning rather than performance management and control. Information about the strengths and weaknesses of the company, and about threats and opportunities in the industry and the business environment, may be largely qualitatively in nature, but this information is used to assess strategic options and make strategic choices.

SWOT analysis, however, is unlikely to be made part of a regular performance reporting system for management.

The importance of non-financial information is now widely recognised: much qualitative information is nonfinancial in nature, but many aspects of non-financial performance can be measured quantitatively.
If Fish 'N' Chips's board wants to obtain information of a qualitative nature, an appropriate approach may be to convert as many qualitative aspects of performance as possible into quantifiable aspects. Customer satisfaction, for example and aspects of service quality may be measured by means of regular customer surveys or market research surveys.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 26 JUNE 2020

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
Section A: One (1) Compulsory scenario question.
Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Resent 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

This question is compulsory and must be attempted.

QUESTION ONE

AVEN Plc is a listed company operating in the hospitality and leisure industry. The company has been operating profitably since its establishment. However, in the past four years the company acquired significant debt which has brought concern among the board members. The company has been failing to pay dividends because most of its profits have been going towards servicing interest payments on debt. AVEN Plc's Board of Directors met recently to discuss proposals to save the company from collapsing. The board resolved to undertake two proposals which it thought were the best for the business.

Proposals

The firstproposal involves selling all the hotel properties that AVEN Plc owns and leasing them back on a long-term rental agreement. AVENPlc would then focus solely on the provision of hotel services at these properties under its popular brand name. The proposal stated that the funds raised from the sale of the hotel properties would be used to pay off 80% of the outstanding long term debt and the remaining funds would be used towards financing partly the second proposal.Any shortfall on the second proposal will be funded from the available internal resources.

AVENPlc'sBoard of Directors is of the view that reducing the level of debt in the company will reduce the company's risk and therefore its cost of capital. If the proposal is undertaken and AVENPlc focuses exclusively on the provision of hotel services, it can be assumed that the current market value of equity will remain unchanged after implementing the proposal. On the other hand, two of the directors expressed concern on the validity of this assumption. They argue that the current market value of equity will change as a result of the business risk. It has been estimated that the hotel services business accounts for approximately 60% of the current value of AVEN Plc and the property company business accounts for the remaining 40%.

EXTRACT FROM THE MOST RECENT STATEMENT OF FINANCIAL POSITION FOR AVEN PLC

	K'm
Non-current assets (revalued recently)	43
Current assets	27
Total assets	**70**
Share capital (25ngwee per share par value)	3
Reserves	22
Non-current liabilities (5.2% redeemable bonds)	43
Current liabilities	2
Total capital and liabilities	**70**

The company use free cash flow to equity to measure the amount of funds available for reinvestment. AVENPlc'slatest free cash flow to equity of K2.5million was estimated after taking into account taxation, interest and reinvestment in assets to continue with the current level of business. It can be assumed that the annual reinvestment in assets required to continue with the current level of business is equivalent to the annual amount of depreciation. AVEN has consistently used 45% of its free cash flow to equity on new investments while distributing the remaining 55%. AVEN Plc uses the free cash flow to equity model as a basis to provide a reasonable estimate of its current market value.

The bonds are redeemable at parin three years and pay the coupon on an annual basis. Although thebonds are not traded; it is estimated that AVENPlc'scurrent debt credit rating is BBB but would improveto A+ if the non-current liabilities are reduced by 80%.

The second proposal involves a taxi service business mostly for AVEN Plc'shotel customers and other hotels. It is expected that this business will generate pre-tax cash inflows of K18.75million in the first two years and K3.75million in the subsequent two years. The taxi service business will require the company to buy immediately 49 luxury taxis at a cost of K500,000 each. It is expected that after four years, the business with need significant investment to continue. The minimum expected return by investors for this investment is 10%.

Other information

Risk free rate of return	4%
Market risk premium	6%
AVEN's Plc'sEquity beta	1.10
Estimated average asset beta for property companies*	0.4
AVEN's Plc'scorporate tax	20%
3-year credit spread A+ rated bonds	60 basis points
3-year credit spread BBB rated bonds	90 basis points

**There is no beta available for companies offering just hotel services, since most companies own their own buildings.*
**Assume tax is payable in the same year.*

Required:

As a financial consultant, advise the Board of directors for AVEN Plc by addressing the following:

(a) Evaluate thecost of equity and weighted average cost of capital beforeand after implementing the first proposal for AVEN Plc. State any assumptions made.
(23 marks)

(b) Evaluate the financial viability of the second proposal using the Modified Internal Rate of Return (MIRR). (9marks)

(c) Discuss the views of the two directors on the validity of the assumption that the market value of equity will remain unchangedafter the implementation of the first proposal. (8 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Musweu Ltd is an agro processing company that has been in existence for over 15 years. The directors have recently resolved to diversify the operations of the company and have tasked the managers to come up with a diversification plan.

The managers are currently considering an investment opportunity of K50 million in the freight and transport industry. K12 million would be financed from internal resources, K20 million by a rights issue and K18 million by long-term loans. The investment is expected to generate pre-tax net cash flows of K10 million per year, for a period of ten years. The residual value at the end of year ten is forecast to be K10 million after taxes. The company is able to access a subsidized loan of K8 million from a development fund set up by the government to support the transport sector. This loan will cost 2% below the company's normal cost of long-term debt finance, currently at 8%.

Musweu Ltd.'s equity beta is 0.80 and its financial gearing is 60% equity, 40% debt by market value. The average equity beta in the transport industry is 1.2, and average gearing is 1:1 by market value. The risk free rate is 5.5% per annum and the market return is 12% per annum. Issue costs are estimated to be 1.5% for the debt financing (not applicable to the subsidized loan), and 4.5% for equity financing. These costs are not tax allowable.

The corporate tax is 25%.

Required:

(a) Explain the difference between Adjusted Present Value (AVP) and Net Present Value (NPV) as methods of investment appraisal techniques and include the circumstances under which APV might be more appropriate for evaluating capital investment projects than NPV.
(5 marks)

(b) Evaluate the proposed investment in the freight and transport industry using the APV method.
(10 marks)

(c) Explain any two other methods of raising long-term finance apart from the ones used by Musweu Ltd.
(5 marks)

[Total: 20 Marks]

QUESTION THREE

AKL Plc is a listed company that has a deliberate strategy of takeovers and mergers. The management of AKL Plc regularly looks for companies to takeover. Over the years, AKL plc has grown into a conglomerate with many unrelated business units within its structure thereby reducing the overall risk of the company and enhancing shareholder value. However, some of the takeovers and mergers have failed in the recent past and AKL Plc has had to sell off these business units at a loss. During the year to 31 December 2019, AKL Plc has proposed a takeover bid for Musa Plc. Musa Plc is in the Information Technology Sector and this will be the first of its kind within the AKL Plc group of companies. The shareholders of Musa Plc are prepared to sell at the right price. The Board Chairperson of Musa Plc, commented during a media interview on the proposed takeover, at which he mentioned that the Board is quite sensitive on how this deal is approached and with a premium of at least 15%, we could accept the offer.

The relevant data has been collected regarding the proposed takeover:

	AKL Plc	**Musa Plc**
Number of equity shares in issue	20m	15m
Current share price	K2.5	K1.75

AKL plc has offered a share for share exchange of 1 AKL plc share for every 3 Musa Plc shares.
Synergies with a Net Present Value of K5 million have been identified.

Required:

(a) Calculate the total gains or losses to the shareholders of AKL Plc and Musa Plc of the proposed takeover. (7 marks)

(b) Advise the maximum offer price that the shareholders of AKL Plc should accept and the premium offered to the shareholders of Musa Plc. (3 marks)

(c) Discusses the causes of failure of mergers and acquisitions and how the proposed takeover with Musa Plc can be successful. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) ZTE (Z) Ltd is a multi-national telecommunication company. The company intends to import into Zambia ICT equipment from Sony Corporation of Japan in three months' time on 30 June. The invoice amount of ¥225 million will be paid in Japanese Yen. The company is exposed to foreign currency risk.

The following data is available today on the first day of April 2020:

Spot foreign exchange rate	JP¥110/US$

Yen currency futures contracts on the Chicago Mercantile Exchange (CME) are quoted as follows:

Contract size	¥12,500,000
Tick Size	$0.000001

Contact price in US$/JP¥	
March 2020	0.009009
June 2020	0.009119
September 2020	0.009210

Future contracts mature at the end of each month.

Required:

(i) Briefly explain how the company might set up its hedge to manage its foreign exchange risk using currency futures. (2 marks)

(ii) Evaluate the efficiency of a futures hedge in reducing the loss resulting from changes in exchange rates, given that the spot rate is 100 JP¥/US$ and the futures contract price is US$0.009667/JP¥ on 30 June. (8 marks)

(b) Due to a trade dispute, the holding company for ZTE (Z) Ltd was in 2019 placed on a trade embargo, depriving it of critical technology components required to manufacture its products. The American and Chinese governments have since entered into a trade agreement to resolve some of their trade imbalances.

(i) Describe four (4) ways governments may restrict international trade in order to protect their local industries. (4 marks)

(ii) Discuss three (3) possible consequences of removing trade barriers between countries. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Minsk Tractor Ltd was setup in 2018 as a green field project with funding from a private equity fund through a mixture of equity and convertible debt. The company owns a tractor and agricultural equipment plant, located in the Lusaka South Multi–Facility Economic Zone (LS-MFEZ). The plant currently assembles tractors and sells them to regional countries, but has plans to manufacture other agricultural implements. The company was fully operational in 2019 with an issued share capital of K500 Million with a par value of K62.50 per share. The company only produced one product type, the tractor in the year ended 31 December 2019 and sold 2,000 units.

Statement of profit or loss account for the year to 31 December 2019 was as follows:

	K' Million	K' Million
Sales		190
Variable expenses	70	
Fixed expenses	40	
		(110)
Earnings before interest and taxation		80
Less interest payable on 5 year 10% convertible debenture		(20)
Earnings before taxation		60
Less corporation tax		(21)
Profit after taxation		39
Dividend		(16)
Retained profit for the year		23

To achieve its plans to manufacture other agricultural implements, the company has decided to enhance the capacity of its production process. The additional production capacity is estimated to increase fixed costs by K15 million (including depreciation) but will reduce variable costs by K15, 000 per unit.

The additional production processes will be financed by the issue of 8 year K100 million convertible debentures at an interest rate of 12%. The principal amounts on the debentures are repayable at the end of their tenures.

Installation of new production processes will commence immediately, but will be completed towards the end of the current year, 2020. Sales for the year will therefore not change, and stocks are as expected to remain at the 2019 level.

Minsk Tractor Ltd.'s shares currently sell at a PE ratio of 15 and the current corporation tax rate is 35%. The company has a dividend payout ratio of 40%.

Required:

(a) Explain what is meant by mezzanine finance, and discuss two (2) of its merits and de-merits when used to finance a green field project such as the tractor assembly plant. (6 marks)

(b) Calculate and comment on the change in earnings per share (EPS) and share price (P) if the company enhances its production capacity immediately. Explain any assumptions which you make.
(10 marks)

(c) Instead of funding the expansion with the K100 million debentures, analyze the implications for the share price (P), if Minsk Tractor Ltd makes a rights issue at an issue price of K50.00 per share (ignore issue costs). (4 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))}\beta_e\right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad F_0 = S_0 x \frac{(1+i_c)}{(1+i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2)e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Before implementing proposal**
Cost of equity = 4% + (1.1 × 6%) = 10.6%
Cost of debt = 4% + 0.90 = 4.9%
Market value of debt (MVd)
(K5.2 × 1/1.049) + **(**K5.20 × 1/1.0492) + **(**K105.20 × 1/1.0493) = K100.82
Market Value of Debt = K43 million × 100.82/100 = K43.35million
Market value of equity (MVe)
As stated in the question the free cash flow to equity model provides a reasonable estimate of the market value of the company.
Assumption
The growth rate can be estimated using the rb model. It is assumed that the retained free cash flows to equity will be invested to generate a return at least equal to the shareholders' required rate of return.
r = 10.6% and b = 0.45
g= rb = 10.6% × 0.45 = 4.77%
MVe =FCF×g = 2.5m × 1.0477/ (0.106 – 0.0477) = K44.93million

k –g
e
WACC = 10.6% × 0.51 + 4.9% × 0.49 (1-0.2) = 7.33%
After implementing the proposal
The estimate of the asset beta for AVEN is:
Ba= 1.1 × 0.51/(0.51 + 0.49 × 0.8) = 0.62
Asset beta for hotel services
It has been assumed that AVEN's asset beta is a weighted average of the average property company beta and the hotel services beta.

Therefore:
0.62 = (Asset beta (hotel services) × 0.6) + (0.4 × 0.4)
0.46 = Asset beta (hotel services) × 0.6
Asset beta (hotel services) = 0.77
Equity beta for AVEN, hotel services only
MVe is unchanged as stated in the question.
MVe= K44.93million
kd = 4 + 0.6 = 4.6%
MVd = **(**K5.20 × 1/1.046) + **(**K5.20 × 1/1.0462) + **(**K105.20 × 1/1.0463) = K101.65
Total value = K8.6 million × 101.65/100 = K8.74million

Equity beta calculation
0.77 = Be × (44.93m/(44.93m + 8.74m × 0.8))
0.77 = Be× 0.84
Be= 0.92
Hotel services cost of equity and WACC
ke= 4% + 0.92 × 6% = 9.52%
WACC = 9.52% × (44.93m/(44.93m + 8.74m)) + 4.6% × 0.8 × (8.74m/(44.93m +8.74m)) = 8.6%

Comment

	Before proposal	*After proposal*
Cost of equity	10.6%	9.52%
WACC	7.33%	8.6%

The proposal will increase the asset beta of AVEN Plc because the hotel services industry has a **higher business risk** than a business that also owns hotels. However, the equity beta and the cost of equity are both lower because of the **reduction in the level of debt**. This is because the reduction in debt means that the financial risk of AVEN is lower. However, the WACC increases because this lower debt level means there is less cheap debt in the financing mix. As a result, the board of directors' assertion that the lower level of debt will reduce WACC is incorrect.

b)

Year	1	2	3	4
	K'm	K'm	K'm	K'm
Pre-tax cash flow	18.75	18.75	3.75	3.75
Tax@20%	(3.75)	(3.75)	(0.75)	(0.75)
Net cash inflow	15.00	15.00	3.00	3.00
Discount@10%	0.909	0.826	0.751	0.683
Present values	13.64	12.39	2.25	2.05

PV_R = Total PV for years 1 – 4 = K30,327,000

PV_I = Cost of investment = K24,500,000

$$\text{MIRR} = \sqrt[4]{\frac{30{,}327}{24{,}500}} \times (1 + 0.1) - 1 = 16\%$$

The MIRR is calculated on the basis of **investing the inflows** at the **cost of capital**. As the MIRR at 16%is 6% higher than the cost of capital then the project is forecast to generate a positive NPV and should be accepted subject to assessment of risk and non-financial factors.

c)

The assumption that the market value of equity will not change is unlikely to hold in reality. The change in the growth rate of free cash flows and sales revenue and the changes in the business and financial risks of the new business are all likely to have an effect. In estimating the asset beta of AVEN Plc for offering hotel services only there has been no consideration of the **change in business risk** as a result of renting rather than owning the hotels. A revised asset beta should be estimated to reflect the change in business risk. The market value of equity has been used to estimate the post-implementation equity beta and cost of equity of the business. However, the market value of equity is dependent on the cost of equity, which is itself dependent on the equity beta. Therefore, both the cost of equity and the market value of equity will **change** as a result of the implementation of this proposal

SOLUTION TWO

(a) Adjusted present value (APV) and Net Present Value (NPV) are both discounted cash techniques of evaluating or appraising capital investment projects. The major difference between the two is in the way project finance is incorporated in the appraisal process.

With NPV, finance is usually incorporated into the discount rate which is then applied to the PROJECT-ONLY cash flows (ie. excluding finance related cash flows). The discount rate used can be the cost of equity though the WACC is more likely.

APV on the other hand involves a two stage process which deals with project cash flows and the finance cash flows separately. Project cash flows are discounted at an ungeared cost of equity to calculate a base case NPV. Finance side effects are then discounted at an appropriate rate- normally the pre-tax risk free rate of return. APV is a more appropriate technique in the following circumstances;

- where the investment involves complex tax payments and tax allowances.
- Where financing is raised through a mixture of subsidized and non subsidized loans and or grants and where there are issue costs.
- Where the capital structure of the company significantly changes as a result a result of the investment (5 marks).

(b) Step 1: Base case NPV

Using the transport sector beta to estimate the discount rate for the base case NPV and ungearing the equity beta of the transport sector;

ßa = $[\frac{\text{Ve}}{(\text{Ve+Vd}(1-\text{t})}ße]$ = $[\frac{50}{(50+50(1-0.25)} x\ 1.2\ ] = 0.685$

using the capital asset pricing model: E(ri) = Rf+ βi(E(rm)- Rf)

Ke ungeared = 5.5% + (12% - 5.5%)0.685 = 9.95% approx. 10%

Annual after-tax cash flows = K10 million (1 – 0.25) = K7,5 million.

Discounting at 10% (annuity)
Present value of annual cash flows 7,500,000 x 6.145 = K46,087,500
Present value of residual value 10,000,000 x 0.386 = K 3,860,000

K49,947,500
Less initial investment K50,000, 000 Base case NPV
(K 52,500)

Step 2: financing side effects

Financing side effects relate to the tax shield on interest payments, the subsidized loan, and issue costs associated with external financing.

Tax relief

- K10 million at 8%. Interest payable is K800,000 per year and tax relief K800,000 × 0.25 = K200,000 per year.
- K8 million subsidized loan. Interest K480,000 per year, tax relief is K144,000 per year.
- Total annual tax relief is(200,000 +144,000) K344,000 per year. The present value of this tax relief discounted at the risk-free of 5.5% per year, is: K344, 000 × 7.541 = K2,594,104.

Subsidy:

- The company saves 2% per year on K8,000,000 amounting to K160,000. After tax = (K160,000 × 0.75) = K120,000.
- Present value =K120,000 × 7.541 = K904,920.

Issue costs

- Debt: K10 million × 1% = K100,000
- Equity K20 million × 4% = K800,000

K900,000

Step 3: APV = base case NPV +PV of financing side effects

Base case NPV	(K 52,500)
PV of tax relief	K2,594,104
PV of subsidy	K904,920
Issue costs	(K900,000)
APV	K2,546,524

Based upon the above calculations, the project appears to be financially viable. The benefits of the finance far outweigh the inherent problems with the proposed project if any.

(c) Other sources of long-term finance

-**Venture Capital** : risk capital which is normally provided in return for an equity stake in the business. This is normally attractive for high growth private companies that have a potential to offer higher returns. Venture capitalists usually invest for a specific period of time and seek to exit through various exit routes at an opportune time with sufficient returns.

- **Business Angels**: wealthy individuals who invest in start-up and growth business in return for an equity stake. These are individuals who are normally prepared to take high risks in the hope of yielding high returns.
- **Crowd funding** : a process where a company raises funds from a large number of people using crowd funding platforms such as websites. This source of funding is most suited for projects or ventures that have a large appeal to a wider range of people and have some public or societal benefits.
-**Hybrids etc. (**Any two of the above or any other alternatives).

SOLUTION THREE

Part a

Firstly estimate the share price after the merger for combined group = combined value / number of shares.
Combined value = (20m x K2.50) + (15m x K1.75m) + K5m = K81.25m
Number of shares after the merger in A plc = 20m + (1/3 x 15m = 5m) = 25m

Therefore estimated post-merger share price = K81.25m / 25m = K3.25
As Musa plc have a 1 for 3 offer terms, the share price is adjusted by this factor = K3.25 x 1/3 = K1.08 (this will make it comparable with their current share price)
Therefore loss for Musa plc shareholders = K1.08 - K1.75 = K0.67

Total loss to Musa plc shareholder = 0.67 x 15m shares = K10.05m

A plc shareholder gain = K3.25 – K2.5 = K0.75 per share x 20 = K15m gain

Part b

Combined value	K81.25m
Less value for AKL Plc	(K50m)
Maximum value for Musa	K31.25m

Share price implied by max value of Musa is K2.08 (K31.25/15)

Premium if this price is offered is 18.86% ((K2.08-K1.75)/K1.75 X 100)

Part c

A merger refers to a situation where two companies, due to several reasons, mutually agree and become a single company, while an acquisition is a situation when one company buys a majority or all the assets and shares of another company. If the company obtains more than 50% ownership of another company, then also it is considered as an acquisition. Therefore, Mergers and acquisitions require two companies to work in collaboration but the financial, strategic and overall impact of the events are different. Some of the reasons behind the failure of mergers and acquisition include;

1. Mislead value for investment – The investment on the assets may look good on papers, but practically they may not be the revenue generating areas after the closure of the deal.

2. Lack of clarity in the integration process – Post-merger, the disintegration of factors like key employees, processes, important projects, policies, etc. lead to failure in the execution process.

3. Mismatch in the culture – If the M&A deal fails to devise a strong strategy focused on the difference in the cultural aspects of two companies, a low productivity in employees of both the companies is observed.

4. Poor communication – If the purpose behind the deal is unclear or is not communicated to the employees, a lack of synergy in teams is marked and expectations from the deal are not met.

5. External factors – External factors such as economic collapse and other environmental factors affect the performance of the deal.

6. Negotiation errors – The company overpays the acquisition fees, which leads to financial losses and failures in future.

In order for to avoid failure in mergers and acquisitions (M&A) some of the following could be considered;

1. Recognize and adopt the mindset that any M&A effectively results in a new organization. Redevelop a start-up mindset and work ethic to ensure a complete and successful integration.
2. Communicate to each group of stakeholders the reasons behind the M&A and the value and associated costs it will bring to each group. Getting buy-in from everyone impacted is an important step toward optimizing benefits and minimizing costs, and leads to a more integrated outcome.
3. Integration ownership should be at the highest level. While it's smart to include all the key players, the president and/or CEO should drive the process and lead the group.
4. An integration plan must contemplate and include all facets of the respective businesses, operations, organizations and cultures; and should be measurable.
5. Assign individuals or teams (with a designated team leader) ownership of every item on the plan. The individual accountability that comes with ownership is critical to successfully executing an integration plan.
6. Develop tools to assess progress of the plan. It's the only way to ensure in an objective way whether necessary progress is being made.
7. Meet regularly and often to review and discuss progress and make tweaks or changes to the plan. Meetings with integration plan owners should occur weekly, and in some circumstances daily, and should focus on a review of measurable progress and a preview of next steps.
8. M&As are relationship-intensive; communication with all stakeholders, external and internal, should occur in some form or fashion at least once a month.
9. Bridging cultures into a common core and allowing a bit of each to survive is important. The best way to find commonalities to be embraced and differences respected is achieved through dedicated, purposeful time together both in and out of the office.
10. Get, and use, employee feedback. Use this as an additional information tool to assess integration progress and performance. You can never have too much information, and the thoughts and moods of employees are the pulse that every CEO and/or president should have his or her finger firmly on, particularly during times of great change and stress such as a M&A integration.

SOLUTION FOUR

4 (a)(i)

ZTE is importing equipment in three months' time, and therefore needs to hedge against the risk of the Yen appreciating against the US Dollar. It should therefore, buy Yen futures contracts with the intention of selling them at a higher price and realize a gain, if the Yen Strengthens. This will enable the company to off – set any loss on the currency spot market that will result when a stronger Yen is purchased in three months' time.

4 (a)(ii)

Three months: payment of ¥ 225 million
Now (1 April): buy 18 (225m/12.5m) June Yen futures at $0.009119/¥

Computation of contracts:

(i) Buy Yen futures – pay Yen at $0.009119/¥
(ii) Close contract (after 30 June 2020 – exposure date): June futures at $0.009667/¥
(iii) # of contracts = ¥225/¥12.5 = **18 contracts**
(iv) Tick value: $0.000001 x 12,500,000 = **$12.50**

Evaluation of futures hedge

Futures transaction:

Buy	$0.009119/¥	1 April
Sell	$0.009667/¥	30 June
Profit	$0.000548/0.000001 = **548 ticks**	

Profit = 548 ticks x $12.50 x 18 contracts = **$123,300**

Hedge Efficiency

Loss due to changes in exchange rate = ¥ 225 m/¥ 110 - ¥225m/¥100 = $2.04m - $2.25m = **$0.21m**

Hedge efficiency (%) = profit/loss *100 = $123,300/$ 210,000*100 = **59%**

Futures were only 59% efficient in reducing the loss due to changes in exchanges rates.

4 (b)(i)

Methods of protection

- Tariffs - import duties
- Import quotas – imposing quantities
- Exchange controls – restrictions to foreign currency
- Non – Tariff restrictions – ie administrative barriers

4 (b)(ii)

Consequences of removing trade barriers

- Certain local industries with comparative advantages will grow while others may contract
- Specialization may result leading to economies of scale, cost advantages and better quality
- Decline in local industries may lead to unemployment
- Dumping of cheap products from developed economies may result
- Development of infant industries may be slowed

SOLUTION FIVE

4 (a) Mezzanine finance or debt is a hybrid form of capital. The private equity or venture capitalist provides a mix of debt and equity. There is an option attached to the debt capital that in case of default of repayment, the debt will be converted into equity shares.

It is beneficial in that a small, high growth firm such as the tractor assembly plant can raise debt finance where the risk of default is high and there is also a low level of asset coverage for the loan. However, it can raise the financial risk of a start-up considerably, for instance by raising a loan of K100 million, Minsk Tractor Zambia Ltd would raise its market gearing from zero (given that there is already some outstanding debt) to more than 20% (debt to total capitalization). This increase in borrowing for a green field project may not be attractive to the commercial banks, and therefore requires specialized venture capital or private equity finance.

The advantage of issuing convertible debt is that it gives the lender the opportunity to participate in the success of the venture but with a reasonable level of interest payments assured. However, the disadvantage for the current equity investors is that the value of their investment will be reduced by the value of the debt if converted into equity. Although it can be expensive, mezzanine finance can provide the K100million required for the expansion project.

A major advantage to the issuer of debt that is convertible is that it normally carries a lower rate than similar bonds that are not convertible.

4 (b) Before the additional capacity

EPS	= PAT	= 39 million	= K 39 million	= K4.875
	No of Shares	500 million/62.50	8 million	

After the additional production capacity

	K' Million	K' Million	
Sales		190	
VC	40		[(70m/2,000 – 15,000) × 2,000]
FC	55	(95)	[40m + 15m]
EBIT		95	
Interest		(32)	[20m+ (12% * K100 m)]
Taxable profit		63	
Tax @ 35%		(22)	
PAT		41	
EPS = K 41m/8 m =		K 5.125	

1. A 5% change in expected EPS will be achieved if the expansion is undertaken.
2. No repayment of existing debt levels is assumed.
3. Assuming no change in PE ratio, the share price will rise by 5% from (15 × 4.875) = K73.12 to (15 × 5.125) = K76.88

Given the positive impact on the earnings and share price of the company, the project appears worth it. However, other criteria need to be taken into consideration when evaluating the project.

(c) Required funding = K100m			
The discounted rights price = K50.00	**Old Shares**		**New Shares**
Ignoring issue costs need to sell	8 million	K100m =	2 million

		K50.00	
Total number of shares after issue = (8,000,000 + 2,000,000) = 10 million			
Theoretical ex-rights share price:	**Before**		**After 1-for-4 rights**
4 shares @ K73.12 =	292.48		
<u>1 share@ 50</u>	<u>50.00</u>		<u>K342.48 =</u>
5	342.48		5
			68.50
On a forward-looking basis (including the benefits of the Expansion):			
Increase in PAT = K2 million /10 million shares = 0.2 n per share			
Valuing this at a PE ratio of 15, share price could increase by:			
(15 × 0.2 = 3 n			
Ex rights price (cum expansion) K68.50 + 0.10 = K5.97			**68.60**

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 26 JUNE 2020

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

The Zambian Government embarked on a computerization of all systems in different Ministries. This was done in phases starting with Cabinet Office and then Ministries. The accounting and record keeping were manually done resulting in a huge amount of paperwork. A pilot program was introduced three (3) years ago where Government Ministries were computerized and had stand-alone systems which were not integrated with any other systems.

The Government received a grant of $120 million from the American Government. The purpose of this grant was to enable the Zambian Government to acquire modern information technology equipment which would enable the integration of all Government information systems. The release of funds was in phases depending on the successful implementation of the previous phase. The funds will be kept in a separate bank account which will be controlled by the Budget Department of the Ministry of Finance.

On an annual basis, the Ministry of Finance was required to prepare project financial statements comprising the income and expenditure account and a statement of financial position which were required to be audited by independent auditors chosen by the American Government. Release of subsequent funding was dependent on the submission of audited financial statements with an unmodified audit opinion.

The expected implementation period of the computerization and integration of the IT project is five (5) years. Once the computerization project is over, all Government systems will be integrated and the control centre will be based at Cabinet Office. An IT Management Unit will be established whose main responsibilities will include maintenance of the systems and development of new applications. A small number of IT experts has been recruited and has begun setting up the IT Management Unit. While waiting for the full implementation of the new system, the team embarked on a project of linking the Government procurement systems to the accounting systems and the bank in order to enable online banking services to be used by the Ministries.

The Ministry of Finance will undertake the maintenance of the integrated computerized project and it will receive from each Ministry a contribution fee for the online banking services platform provided.

In planning for the audit, your Audit Manager has reminded you of the requirement of ISSAI 1315, which requires the Auditor to perform risk assessment procedures to provide a basis for identifying and assessing the risk of material misstatement. These risk assessment procedures should include appropriate analytic procedures.

Therefore, as part of your planning you are designing some analytic procedures to perform prior to the first visit to the Ministry to begin the on-site audit. Currently your focus is on the cost the integration of the procurement and accounting system as well as the online banking services.

Your audit objectives in this area include the following:

- To verify that all relevant costs of the implementation of computerization project have been included in the financial statements;

- To verify that the Ministry's costs of maintenance and online banking services are sustainable; and
- To verify that appropriate management control on has been exercised over the cost of providing the online banking services to the ministries.

You are also aware, that forming an audit opinion and preparing the Auditor's report is the culmination of the work done during a financial audit. ISSAI 1700, Forming an Opinion and Reporting on Financial Statements, contains a number of requirements that must be met before an unmodified opinion of financial statements may be provided.

Cabinet Office has requested your office to carry out audits of the Ministries that have migrated to online banking. The Secretary to the Cabinet is concerned that fraud could take place resulting in loss of huge sums of money because of the absence of manual records. You called a meeting with your staff where you briefed the staff on the request by the Secretary to the Treasury. John, one of the audit team members raised concern over the request by the Secretary to the Cabinet that audits of all the Ministries that have online banking should be carried out. He considers this request as interference in the work of the Office of the Auditor General (OAG) who should decide on the subject matters that should be audited. John suggested that if the request by the Secretary to the Cabinet will have to be considered, the matter should be included in the emphasis of matter paragraph of the audit report so that the public may be informed.

Required:

(a) Explain the objectives of the Auditor in conducting an audit of financial statements. (4 marks)

(b) Describe the three (3) different types of audits that can be conducted on the implementation of the computerization project. (6 marks)

(c) Explain why ISSAI 1320, materiality in planning and performing an audit, makes a distinction between planning and performance of materiality. (4 mark)

(d) Formulate and describe an appropriate analytic procedure to meet each of the audit objectives listed above, clearly explaining what further action you would take after undertaking the procedure. (6 marks)

(e) Describe four (4) risks that the newly computerized Ministries will face because of migrating from the manual systems. (4 marks)

(f) Identify and explain six (6) fraud risk factors that may exist in the Ministries and the intended computerization systems. (6 marks)

(g) Briefly describe the circumstances an Auditor is required to modify the opinion in the Auditor's report. (3 marks)

(h) Respond to the concern by John that the Secretary to the Cabinet is interfering with the work of the Office of the Auditor General (AOG). (3 marks)

(i) Comment on the assertion by John that the request by the Secretary to the Cabinet should be included in the emphasis of matter paragraph of the audit report. (4 marks)

[Total: 40 Marks]

SECTION B

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

<u>QUESTION TWO</u>

(a) You are the Audit Manager on the financial audit of a Government owned utility company. The utility company is in the business of generating and distributing electricity around the country through the national grid. Due to power surges on the supply lines in 2017, a number of companies in the industrial area had most of their production equipment damaged.

A number of industrial users sued the utility company and were claiming compensation for equipment damaged and also for loss of business. The case has been ongoing and the company relied on a disclaimer clause that the company shall not be liable for acts that are not of the company's making.

The Supreme Court ruled in favor of two litigants against the utility company. The company provided an amount in the financial statements that is half the amount determined by the court.

Required:

(i) Explain why the audit of accounting estimates is a risky area for public sector auditors. (2 marks)

(ii) Suggest four (4) audit procedures that should be conducted during the audit of provisions in the financial statements of the utility company. (6 marks)

(b) You are in charge of training in the Office of the Auditor General (AOG). During the year, the Office of the Auditor General (AOG) has employed twenty (20) new audit assistants who on completion of induction will be sent to the Regional Offices across the country.

You arranged a three (3) day training workshop for the newly recruited audit assistants and during the training, the trainees were divided into four groups of five each.

You gave the trainees a case study each that they were required to do and make a presentation to the whole team.

The following are the outcomes of the case study from each group:

Group One:
This group was tasked to discuss the importance and relevance of quality control in public sector auditing. They were required to illustrate their final conclusion using a suitable example.
The group concluded that quality control is very important in every organization. This is the case with companies that are in the manufacturing industry which should aim at getting things right the first time in line with the principle of Total Quality Management (TQM).

Group Two:
Group two was required to discuss the reporting requirements of the public sector auditor. The most recent Auditor General's report was released and sent to the President and Parliament at the same time.

There was an outcry from many stakeholders who argued that it was not in order for the report to be sent to Parliament and the President at the same time. The argument put forward was that the President is the appointing authority of the Auditor General (AG) and so he should have the right to receive the report first and make comments and require changes to be made as he deems fit. Only then should the report be circulated to other recipients and published in the public media.

The group concluded that the report should be released simultaneously to the President and Parliament.

Group Three:
The third group was required to discuss and outline differences, if any, between the Lima Declaration and the Mexico Declaration. These two declarations are important to the Supreme Audit Institution (SAI) of member countries of the International Organization of Supreme Audit Institutions (INTOSAI).

The group concluded that the two declarations are similar as they both deal with Supreme Audit Institutions (SAIs) and they aim at ensuring that these institutions fulfil their objective of assisting those charged with the responsibility of giving oversight on Government expenditure fulfil their responsibilities.

Group Four
Group four was required to discuss and report on the role of the Office of the Auditor General (AOG) and the Public Accounts Committee (PAC) of Parliament.

The team argued and concluded that there is no need for the reports of the Auditor General (AG) to be copied to Parliament because Members of Parliament (MPs) who sit in the Public Accounts Committee (PAC) are non-accountants and they add no value in reviewing of the reports of the Auditor General (AG).

Required:
Evaluate the conclusions of each of the four (4) groups and comment either on the appropriateness or lack of appropriateness of the conclusion. (12 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) At a consultative meeting of all stakeholders, it was agreed that reforms should be undertaken in the training of drivers and issuance of driving licenses by the Road Transport Agency (R.T.A).

The driving force behind the reform is the increase in the number of accidents and deaths arising from the road traffic accidents in Zambia over the last five (5) years. It is anticipated that as a result of the reforms, there will be a reduction of 20% and 50% respectively in the number of accidents and deaths caused by road traffic accidents.

The Agency acquired 150 vehicles that will be distributed to all provincial offices where driving examinations are conducted. Those intending to take road traffic tests will no longer be allowed to use private motor vehicles when taking practical driving tests.

The following reforms were agreed and implemented in 2018:

1. Only five (5) approved driving schools will be authorized to carry out driving lessons to people intending to obtain driving licenses.
2. No driving licenses will be given to individuals who do not attend driving lessons at the approved schools and pass the examination by the school.
3. Only people who have attained an age of 18 at their last birthday will be eligible to get driving licenses.
4. All those intending to obtain a driving license will be required to sit for a theory examination set by independent consultants and obtain a score of not less than 80%.
5. Practical road examinations shall be conducted along specified routes and shall be carried out by two examiners determined by the Officer in Charge on duty. The scoring by two examiners shall be done electronically and sent to the central computer system where the final score will be determined.

Required:

(i) Explain the importance of audit evidence in public sector auditing. (2 marks)

(ii) Describe the evidence that you expect to find in the working papers arising from the compliance and performance audits of the reforms in licensing of drivers. (6 marks)

You work for the Office of the Auditor General (OAG) and you have been assigned to lead a team of auditors to perform a financial audit of the Senior Club of the Zambia Police.

The Club was established over ten (10) years ago through a grant of K200 million from the Ministry of Home Affairs. The Club operates from a building originally owned by the Police Headquarters. Membership to the Club is limited to senior police officers who are required to contribute K500 annually as membership fee.

Chulu worked as Club Accountant for six (6) years and he rose to the position of Club Manager. In the last three (3) years, Chulu has been studying for his Chartered Accountant qualification which he completed one (1) year ago. Soon after qualifying, Chulu got a job with the Office of the Auditor General (OAG) as Principal Auditor.

Banda took over from Chulu as Club Manager and he reports to the Director of Sports at Police Headquarters.

During the course of the audit, you wanted to review the Club bank statements in order to verify the completeness of the club revenue. You were not availed the bank statements. The Club

Manager informed you that he cannot let you review the bank statements without the permission of the Director of Sports at Headquarters. Efforts to seek authorization of the Director of Sports failed as he was reportedly out of the office all the time.

The audit is nearing completion. Banda informed you that the senior police annual ball will be held at the Intercontinental Hotel in three (3) weeks. He gives you five (5) double tickets for the audit team members and their spouses. He has informed you that the tickets came from the Office of the Director of Sports and that the Director would be pleased to see you there together with other invited dignitaries.

Required:

(i) Identify and explain four (4) ethical matters in the audit of the financial statements of the senior police club and recommend action that should be taken in each case. (8 marks)

(ii) Explain the response that you will take in view of the refusal by the Club Manager to give you the Club bank statements for review. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

The Office of the Auditor General (AOG) is the Supreme Audit Institution (SAI) in Zambia and it is responsible for the provision of external audit and assurance services to the public sector organizations and institutions.

It is a Government department which reviews accountability reports prepared by the Executive arm of Government and produces audit reports to the Legislature.

The Office of the Auditor General (OAG) has the sole purpose of enhancing transparency and accountability in the collection and expenditure of public resources whilst maintaining a position of independence from any direction or control of a person or authority.

According to Article 249 of the Constitution of Zambia:

1. There should be an Auditor General (AG) appointed by the President on the recommendation of the State Audit Commission, and subject to ratification by the National Assembly.

2. The Auditor General (AG) shall:

- Audit the accounts of State organs, institutions and other spending agencies.
- Conduct different types of audits including financial, performance, compliance, forensic and other specialized audits.
- Ascertain as to whether public resources have been spent according to purpose and within the authority that governs it.
- Recommend to Law enforcement agencies on matters for which criminal prosecution may be required.

The Public Accounts Act of 2016 also states that the Auditor General (AG) shall report simultaneously to the President and Speaker of the National Assembly on accounts of entities that have been audited.

On the global level, the Office of the Auditor General (OAG) is a member of the International Organization of Supreme Institutions (INTOSAI). This organization exists to promote the exchange of ideas, knowledge and experience between its members, in the field of Government auditing. It has over the years come up with serious guidelines and professional standards for the conduct of public sector audits.

In the year 1998, the International Organization for Supreme Audit Institutions (INTOSAI) issued some guidelines through the Lima Declaration and one central issue in these guidelines focused attention on independence as a bedrock of effective public sector audits. Further, the Lima declaration highlights, among other things, the concept of audit staff who are, by nature of their job, required to have appropriate qualifications, moral integrity and other essential fundamental ethical values required to completely carry out their tasks.

Required:

(a) Explain the fundamental expectations of Zambian citizens on the work of the Auditor General (AG). (9 marks)

(b) Explain the role of the National Assembly in the public sector audit process. (3 marks)

(c) In the context of the Lima declaration, discuss the Independence of:

(i) Supreme Audit Institutions (SAI). (2 marks)
(ii) Members of Supreme Audit Institutions. (2 marks)

(d) Discuss the relationship between financial and compliance audits in the public sector. (2 marks)

(e) Explain the importance of transparency and accountability to a Supreme Audit Institution. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

You are working for the Supreme Audit Institution (SAI) as a Principal Auditor. The Audit Manager has assigned you to lead a team of four (4) auditors in the performance audit of the procurement system on drugs procurement of the Ministry of Health. Your audit plan includes an item on risk assessment after which you will review important documents such as policy documents and payment vouchers among others. A walk through test of the procurement system will be followed in order to obtain appropriate evidence going by the nature of the subject matter.

In the previous year's financial audit report of the procurement system at the Ministry of Health, had revealed waste of medicines and leakage of funds within the Ministry and irregularities.

These irregularities were about overpayments, good paid for but not supplied, purchases not taken on charge, circumventing of laid down rules and non-transparent purchasing procedures.

The audit found that the Ministry does not collect appropriate data to procure the right type and quantities of drugs to meet customer requirements. The Ministry in a number of cases did not supply drugs to public health units' needs according to their orders and could not fulfil its obligation to supply drugs to all public health units. Furthermore, it procured drugs without taking into regard buffer stock levels. As a consequence, it stocked drugs in excess of the one year's requirement while others are under stocked. As a result the Ministry also has huge stocks of expired drugs within their stores.

Required:

(a) Explain the objectives of undertaking performance auditing in the public sector. (6 marks)

(b) Explain the possible performance audit objective and propose the approach that could be undertaken in an audit of procurement of drugs in the Ministry. (5 marks)

(c) Explain how the principles of economy, efficiency and effectiveness can be used in carrying out a performance audit of procurement of drugs. (9 marks)

[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

a) **The objective of a Financial Audit**

In conducting an audit of financial statements, the overall objectives of the auditor are:

- To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework; and
- To report on the financial statements, and communicate as required by the ISSAIs, in accordance with the auditor's findings.
- Communicate to users, management, those charged with governance, or parties outside the entity, in relation to matters arising from the audit as required by the standard or by legislation.

b) **The different types of audits that can be conducted on the implementation of the computerization project**

The three main types of public-sector audit are defined as follows:

i) *Financial audit* focuses on determining whether an entity's financial information is presented in accordance with the applicable financial reporting and regulatory framework. This is accomplished by obtaining sufficient and appropriate audit evidence to enable the auditor to express an opinion as to whether the financial information is free from material misstatement due to fraud or error.

ii) *Performance audit* focuses on whether interventions, programs and institutions are performing in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement. Performance is examined against suitable criteria, and the causes of deviations from those criteria or other problems are analysed. The aim is to answer key audit questions and to provide recommendations for improvement.

iii) *Complianceaudit* focuses on whether a particular subject matter is in compliance with authorities identified as criteria. Compliance auditing is performed by assessing whether activities, financial transactions and information are, in all material respects, in compliance with the authorities which govern the audited entity. These authorities may include rules, laws and regulations, budgetary resolutions, policy, established codes, agreed terms or the general principles governing sound public-sector financial management and the conduct of public officials.

c) **Why ISSAI 1320, Materiality in Planning and Performing an Audit, makes a distinction between planning and performance materiality**
Performance materiality is defined as the 'amount or amounts set by the auditor at less than materiality for the financial statements as a whole to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole'.

This means that several misstatements, each below a materiality threshold, could add up to one that is above such a threshold. The auditor must thus plan such that they are likely, when performing the audit, to identity such multiple, smaller misstatements by setting 'performance materiality' somewhat lower. Performance materiality is the one that the auditor will use in the performance of the audit with a view to reduce the risk that uncorrected misstatements will exceed the materiality set for the financial statements.

d) **Analytical procedure to meet each of the audit objectives in the question**
The following are possible procedures, but other appropriate answers should receive credit:

i) A trend analysis of the total relevant costs of the implementation of computerization project processes with the cost in previous financial years. Any deviation from the trend may indicate errors in the allocation of costs and should be presented to management for them to provide explanations for the deviation. The persuasiveness of the explanations provided will help to determine the assessed risk to this objective and subsequent audit activity.

ii) Calculate the unit costs of the maintenance of integrated computerized project and compare with the fee paid for the delivery of the banking services. Trend analysis of maintenance costs and banking service fees for different ministries would help to further assess sustainability in this area. Where problems are apparent, management should be asked to provide details of their action plans to address the problems.

iii) Expenditure and income on the provision of the banking services should be profiled over the year and compared with the Ministry's budget for the online banking services. Significant variances from budget may indicate problems in planning or cost/revenue control. Where variances occur, management should be asked to provide details of their analysis of the causes, and the action taken to bring actuals back into line with the budget, or to reallocate resources to meet requirements.

e) **Risks arising from computerization:**

1. **System security risk:**
   This is a risk that can arise resulting in the loss of integrity of the information from the system arising due to lack of adequate controls over the system.
   There is a risk of systems failure which could result in loss of information or being unable to perform the required business or processes.

2. **Cyber-crime risk:**
   This is the risk of unauthorized access to the computer system which could result in loss of money or unauthorized access to organizational information. This is because the computer systems will be connected to the internet there is a high risk of unauthorized access to the systems.

3. **Ineffective controls:**
   There is need for controls systems to be put in place in a computer environment. This applies to both general controls as well as application controls. There is a risk that when computerizing the controls may either be inadequate or they may not be effective resulting in the loss of integrity of the resulting information.

4. **Systems development risks:**
   This is the risk that can arise during systems development whereby fraud can be committed by those developing the systems. This could arise in the case of poor controls and lack of segregation of duties during systems development.
   There is a risk that the system will not operate as expected if not well managed at the system development stage.

5. **Changeover risks:**
   There is a risk of fraud during changeover from manual systems to newly introduced computer systems. This is because manual data and information will have to be input into the new system and errors or fraud can occur at this stage.

f) **Fraud risk factors in computerized system:**

1. **The ministries Chief Accountants are responsible for initiating and authorization of payments.**

This is a fraud risk factor because of the absence of controls including the segregation of duties.

2. **Computerization before establishing IT Audit Dept. at the SAI:**
Part of the grant received from the American government is meant for capacity building within the Office of the Auditor General (OAG). In the interim before the department is fully operational there is a risk that fraud may be perpetuated and go unnoticed.

3. **Risk of hackers:**
The new systems connecting ministries amongst themselves as well as online banking uses communication systems using internet. There is a risk that hackersmay gain access to the system and commit fraud which can result in loss of funds by the ministries.

4. **Experts implementing the project:**
In the initial stages of implementing the project experts have been engaged to carry out the task. There is a risk that fraud can take place unnoticed because most of the controls are electronic and the experts may want of to commit fraud during these initial stages of systems development.
5. **Lack of parallel run:**
The conversion from manual to a computerized system without a period of parallel run can result in failures in the new system going undetected. This can result in incorrect accounting records as well as loss of funds from the ministries concerned.

6. **Risk of errors during the changeover from manual to computer systems:**
There is a risk that information and data may be incorrectly transferred from the manual system to the new computerized system. Fraud and error may occur at this stage of the changeover.

g) **The circumstances an auditor is required to modify the opinion in the auditor's report.**
The auditor should appropriately modify the opinion in the auditor's report when the auditor:
- o Concludes that, based on the audit evidence obtained, the financial statements as a whole are not free from material misstatement; or
- o Is unable to obtain sufficient appropriate audit evidence.
- o Determines that the auditee did not comply with responsibilities prescribed by the financial reporting framework to:
  - Achieve fair presentation of financial information when it is a fair presentation framework;
  - Fulfil all requirements of the financial reporting framework when it is a compliance framework.

h) **Alleged interference by the Secretary to the Treasurer:**
The observation made by one of the members of the audit team that the public sector auditor should decide on the subjects to audit is correct.

However, the request by the Secretary to the Cabinet that the audit team should perform an audit of all ministries that have migrated to online banking does not amount to interference. The request is coming in view of the risk that has been observed.

Interference could arise in a situation where the Secretary to the Cabinet or indeed any other government official stops the Office of the Auditor General from carrying out an audit it intended to carry out.

i) **Comments on the matters included in the Emphasis of matter paragraph:**
Guidance on the use of the Emphasis of matter paragraph by the public sector auditor is given by ISSAI 1706.

The guidance states that the EoM paragraph can be used by the auditors to bring a matter that is appropriately dealt with and contained in the financial statements to the attention of the users of the financial statements. The paragraph does not result in a modification of the opinion of the auditor.

In the case at hand, the matter of concern is not likely to be included in the financial statements and so does not qualify to be one that can be included in the Emphasis of matter paragraph. The public sector auditors may consider including the matter and making mention of it in the Other matter paragraph which is used for matters that need not be contained in the financial statements and are not contained in the financial statements.

SOLUTION TWO

a) i. **Why auditing accounting estimates is risky:**

By definition, an accounting estimate is an approximation of a monetary amount in the absence of a precise means of measurement such as a supplier invoice in a purchase.

The fact that there is no precise method of measuring suggest that there is subjectivity and judgment on the part of the person making the measurement.

For that reason accounting estimates are a risky area for the public sector auditor and the risk of material misstatement may be considered higher than for amounts that can be determined with certainty with a reliable basis of measurement.

ii. **Audit procedures for provisions:**

1. Obtain the list of provisions that make up the amount in the financial statements.
2. Cast the schedule and confirm that the total agrees with the amount in the ledger for provisions.
3. Establish from management the basis for making the provisions and ensure they meet the requirements of IAS 37.
4. Obtain written representations from management on the basis for the provisions.
5. Evaluate events after the period end and establish is help confirm the amount at the period end.
6. Examine the previous year provisions and compare with actual outcome to assess management's ability to make provisions.

b) **Evaluations of group recommendations:**

Group one

ISSAI 40 *Quality control for SAIs* gives guidance to the public sector auditor in the area of quality control.

It is important to note that the quality control that is referred to here is that relating to the Supreme Audit Institution. This is not related to quality control in the entity organization.

In the case study, the group was asked to discuss quality control in public sector auditing. The provisions of ISSAI 40 should have been considered in arriving at a conclusion.

The conclusion of the group is therefore incorrect. Quality control in accordance with the ISSAI considers the quality of the work performed by the public sector auditor and not the client organization.

Group two
The matters the group should have considered here include the simultaneous release of the report to the president and parliament as well as the ability of the president to require amendments to the report.

The Mexico Declaration considered the independence of the SAI and the fact that he should be free to determine what to include in the report and should not be subject to direction by anyone including the president.

If the president were to influence the Auditor General with regards what should and what should not be included in the audit reports then the Auditor General will not be objective and not able to fulfill his mandate.

The conclusion by the team is correct. The constitution of Zambia provides that the Auditor General reports to parliament and the president and so it is correct that the reports are released at the same time.

Group three
Both the Lima and the Mexico Declarations were issued by the International Organizations for Supreme Audit Institutions (INTOSAI)

Although there are some provisions that are contained in both declarations there is some difference in the objectives of these declarations as follows:

The **Lima Declaration** was issued with the objective of helping member countries effectively hold those responsible for the use of public resources accountable for their actions. The main aim of the provisions of the Lima Declaration is for member countries to set up effective Supreme Audit Institution which will perform this duty effectively. Member countries of the INTOSAI will compare the effectiveness of their Supreme Audit Institutions (SAIs) by comparing the extent to which they comply with the Lima Declaration.

Countries that wish to establish Supreme Audit Institution can refer to the provisions of the Lima Declaration if they wish to fulfil the objective of public sector auditing in an effective manner.

The **Mexico Declaration** on the other hand deals largely with the independence of the Supreme Audit Institution and that of the head of the Supreme Audit Institution. The provisions recognize that without independence the SAI and the head of the SAI will not be able to be

objective and so will fail to meet the indented objective of helping those charged with oversight perform their work effectively.
The group's conclusion is not entirely correct they should have highlighted the major differences between the two declarations.

Group four
The group was required to discuss the roles of the Office of the Auditor General (OAG) and the Public Accounts Committee (PAC) with regards accountability and transparency on the part of those charged with managing public funds.

The constitution specifies the duties of the Public Accounts Committee (PAC) and the Auditor General (AG).

Parliament confers the responsibility of carrying out audits of those responsible for the use of public resources to the Auditor General (AG).

The responsibility of oversight and holding those charged with the use of public funds accountable lies with a committee of parliament the Public Accounts Committee (PAC).
The Auditor General (AG)facilitates that the Public Accounts Committee (PAC) performs its task of oversight.

Clearly according to the constitution each of these has their role to play in holding those responsible for the public purse accountable for its use.

The conclusion by the team is therefore incorrect. The fact that the members of parliament are non-accountants does not invalidate the constitutional requirements of the role of the Public Accounts Committee (PAC).

SOLUTION THREE

a) i. **Importance of evidence in public sector auditing:**

Audit evidence is the basis for the opinion of the auditors. The public sector auditor is required to gather sufficient appropriate evidence which will form the basis of the opinion that will be reached.

ii. **Evidence expected to be found in the working papers of:**

A compliance audit:

- Evidence that all the provincial licensing offices have been allocated a vehicle that will be used in testing drivers. Evidence will be a record of the inspection carried out by the audit compliance audit team.
- Evidence that the compliance audit team observed that there are no private vehicles that are used in driver testing.
- Evidence on the identity of the five approved schools allowed to provide driving lessons.
- A sample of members of the public who obtained licenses and evidence of the age confirming that only eligible one get the licenses.
- Evidence of a sample of members of the public who obtained driving licenses having sat for the mandatory examination and obtained a minimum pass mark of 80%
- Evidence for a sample of road examinations conducted were done along the determined routes. This should be evidence by observation of tests being done by for example following a driver under test incognito.

A performance audit:

- Documentation to support the acquisition of the motor vehicles was at the best price. Tender documents in the case of tenders having been invited or copies of the quotations from different motor vehicle suppliers.
- Details of the annual number of road traffic accidents showing the trend in order to test for the achievement of the objective for the reforms in licensing drivers.
- Details of the number of fatalities arising from road traffic accidents to determine whether the reforms have achieved the intended goals.
- Details of the utilization of the vehicles acquired for testing drivers showing the average number of drivers tested per vehicle to ensure efficiency on the use of the resources.

b) i. **Ethical issues in the audit of the ZP Senior club:**

1. **Assignment of Chulu as team leader on club audit:**
   Chulu worked as the club manager for the senior police club before he joined the Office of the Auditor General (OAG). This means most of the systems that are being used could have been established at the time that he was club manager. This could lead to a self-review threat on the part of Chulu and he is most likely to lose objectivity in the performance of the audit.

   Safeguard:
   Chulu should not have been assigned to this audit. Someone who has not been associated with the club should have been assigned to this audit.

2. **Invitation to the annual ball:**
   The invitation to the annual ball by Banda creates a self-interest threat to the audit team. This can lead to the team losing objectivity in the carrying out of the audit. This is compounded by the fact that management's integrity is put into question because of the refusal to allow the audit team to have access to the bank statements.
   The motive to invite the audit team to the annual ball may be to influence them in the audit work.

   Safeguard:
   The audit team should decline the invitation to the annual ball.

3. **Possible intimidation of Chulu by senior Police Officers:**
   Chulu was the manager of the Police senior club. There is a risk that Chulu may feel intimidated to carry out an effective audit of the Police and that he may be intimidated by the senior police Officers who were recently his supervisors.

   Safeguard:
   A different person should be assigned to the audit of the senior police club.

4. **Long association with staff at the club and relationship with Banda:**
   Having previously worked as club manager for senior police club Chulu is familiar with the staff who work for the club due to long association. Further, Banda who is now club manager is Chulus close friend. These relationships are likely to influence Chulu in the performance of the audit.

   Safeguard:
   Someone else should be assigned to the audit of the police club. Alternatively the audit working papers should be reviewed by someone else who was not involved in the audit.

ii. **Audit response – refusal of inspection of bank statements:**
The public sector auditor is required to obtain sufficient appropriate audit evidence which is necessary to arrive at an appropriate opinion.

The auditor should consider carrying out alternative audit procedures in view of the refusal that they should access and review the bank statements.
Further, the auditors should reevaluate the integrity of management of the club and question the reliability of the other evidence that has been obtained and given by management.

If there is a committee supervising the running of the club, the auditor may consider bringing this matter to the attention of such a committee.

Finally, if the auditors cannot obtain the necessary evidence concerning the club revenue they will consider the materiality of the amounts involved and further consider the impact which lack of evidence will have on the audit opinion and report.

SOLUTION FOUR

(a) (i) Strengthening accountability, integrity and transparency of government and public sector institutions.

- Carrying out audits to ensure that government and public entities are held accountable for their stewardship.
- Enabling those responsible for public governance to fulfil their responsibilities by responding to audit findings and taking appropriate action.

(ii) Demonstrating ongoing relevance

- The Auditor general should be aware of the concerns of stakeholders by responding to the key issues affecting society.
- Being a credible source of independent and objective guidance to support beneficial change in government and public entities

(iii) Being a model organization

- The Auditor General should ensure the public is made aware of its mandate, responsibilities, mission and strategy
- Should have an appropriate organizational and management structure that supports good governance and sound project management

(b) The work of the National Assembly

- It confers responsibility on the executive and other public sector entities to manage the collection and expenditure of public resources through the National budget
- It confers responsibility on the office of the Auditor General to enhance transparency and accountability in the collection of revenues and in the use of public money and other resources by providing independent third-party assurance.

(c) Lima Declaration

- The independence of the Supreme Audit Institution-The Auditor General can only perform its functions objectively if it is independent of the audited entity and protected against outside influence.
- The independence of decision makers within the office of the auditor general should be protected. Procedures for their removal should be provided for in the republican constitution

(d) Financial versus Compliance audits

When performing financial audits, you seek to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud and error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework.

In compliance audits, you check compliance with the requirements of the financial reporting framework.

(e) **The importance of Transparency and Accountability for a SAI**

The SAI need to be transparent and accountable in the work they do because they are a foundation of credibility in all public institutions particularly when SAIs lead by example.

SOLUTION FIVE

(a) **The objective of performance audits in the public sector**

The main objective of performance auditing is constructively to promote economical, effective and efficient governance. It also contributes to accountability and transparency.

The following objectives are also relevant to performance audits:

- Performance auditing promotes accountability by assisting those charged with governance and oversight responsibilities to improve performance. It does this by examining whether decisions by the legislature or the executive are efficiently and effectively prepared and implemented, and whether the taxpayers or citizens have received value for money.
- Performance auditing focuses on areas in which it can add value for citizens and which have the greatest potential for improvement. It provides constructive incentives for the responsible parties to take appropriate action.
- Performance auditing promotes transparency by affording Parliament, taxpayers and other sources of finance, those targeted by government policies and the media an insight into the management and outcomes of different government activities.
- It contributes in a direct way to providing useful information to the citizen, while also serving as a basis for learning and improvements. In performance auditing, SAIs are free to decide, within their mandate, what, when and how to audit, and should not be restrained from publishing their findings.

(b) **The audit objective and approach that could be undertaken in an audit of procurement of drugs**

The objective of a performance audit should be related to the principles of economy, efficiency and/or effectiveness. The audit objective(s) must give sufficient information to the audited entity and other stakeholders about the focus of the audit. Well-defined audit objective(s) relate to a single audited entity or an identifiable group of government activities, systems, operations, programs, activities or organizations.

The audit objective would be to evaluate the procurement control system and other key success factors that improve efficiency in the procurement function.

The audit approach should be result-oriented, problem-oriented or system-oriented (or a combination of approaches), and the approach taken depends on the objectives of the audit.

- A results-oriented approach deals with questions such as: 'What results have been achieved, and have the requirements or objectives been met? Findings are usually presented in the form of a deviation from criteria, and recommendations are aimed at eliminating the deviation.
- A problem-oriented approach deals with questions such as: 'What is the problem?' 'What are the causes of the problem? To what extent can the government resolve the problem? The audit begins with recognition that there is a problem or deviation. The audit should set out to establish what the problem is, what its causes are, and what can be done about it.
- A system-oriented approach is concerned with the functioning of a system, such as a financial management system or a control system, and considers whether they are well managed and functioning efficiently and effectively, or whether improvements can be made.

The proposed approach in the audit of procurement system would be a combined approach, where aspects of problems, systems and results are considered.

The formulation of the audit problem is either derived from shortcomings in the outputs and outcomes procurement's systems and processes. The audit will then verify the problem and analyse its causes. Audit criteria can also be used to assess the performance of procurement system with regard to the issues covered in the audit, in order to develop findings and conclusions by comparing conditions with criteria. In this approach, the ideal approach is to verify the audit problem, analyse the main causes contributing to the problems, assess these causes based on criteria and identify realistic and practical recommendations to reduce or solve the problems identified in the question.

(c) **The principles of economy, efficiency and effectiveness can be used in carrying out a performance audit of procurement**

Economy means minimising the cost of resources used for an activity, having due regard to quality. Resources (inputs) should be available in due time, of appropriate quantity and quality, and at the best price. For the procurement system for medicines and drugs the main inputs are staff and funds. The economy perspective may deal with questions such as: Have the Ministry employed officers with an appropriate competence for the tasks of procurement that are assigned to them? Are expenditures kept within budget?

Efficiency means making good use of the available resources. Efficiency is related to economy in the use of resources. The main questions to be asked are: have the resources been put to optimal or satisfactory use? Or could similar results have been achieved just as well with fewer resources? The Efficiency of a procurement system of medicines and drugs can be measured by comparing the number of staff with the quantity and quality of the medicines and drugs procured.

Questions that may be used in the efficiency analysis of the medicine and drug procurement system are: How has the control processes of procurement improved over time? To what extent do procurement control processes address the main causes of identified problems and short coming in procurement of medicines and drugs?

Effectiveness is concerned with objectives and achievements. It is concerned with the questions: did our use of resources result in the achievement of the intended outcome? Or did our use of resources result in the achievement of the intended outputs? Resources may be used effectively to achieve the planned outputs, but this in itself may fail to achieve the intended outcomes. Good outcomes for the Ministry could be a reduction in the irregularities and an improvement in the procurement system of medicines and drugs.

END OF SOLUTIONS