CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY LEVEL

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 14 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
   Section B: One (1) compulsory scenario question.
   Plus Four (4) scenario questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

1.1 Which of the following should be included in the calculation of gross profit?

A. Carriage outwards
B. Depreciation of Administrative building
C. Salaries for the marketing staff
D. Sales returns

(2 marks)

1.2 A business cash book balance as at 30 June 2021 amounted to K14,210 (Debit). The bank statement received on the same date revealed a balance different from the cash book balance. On investigation, the following were discovered:

	K
Bank charges not included in the cash book	2,300
Unpresented cheques	20,000
Uncredited cheques	21,500
Standing orders not included in the cash book	5,100

How much is the correct bank balance to be included in the statement of financial position as at 30 June 2021?

A. K13,410
B. K5,810
C. K6,810
D. K8,310

(2 marks)

1.3 X Limited bought an asset on 1 July 2017 at a cost of K40,000. The asset was being depreciated at a rate of 20% per annum on the reducing balance basis. It is company policy to charge depreciation in proportion to time in the year of purchase and none in the year of disposal. X Limited has a 31 December year end. On 30 November 2021, the asset was sold for K18,200.

How much should be recognised in the statement of profit or loss as a profit or loss on disposal?

A. K232 Profit
B. K232 Loss
C. K1,816 Loss

D. K1,816 Profit (2 marks)

1.4 Mweemba's financial year ended on 31 May 2021. His electricity bills were even throughout the year ended 31 May 2021. He paid for electricity bills amounting to K5,000. The payment covered a period of four (4) months ended 30 June 2021.
What adjustment is required when preparing the financial statements for the year ended 31 May 2021?

A. An Accrual of K1,250
B. A Prepayment of K1,250
C. An Accrual of K2,500
D. A Prepayment of K2,500 (2 marks)

1.5 When preparing the financial statements for the year ended 31 December 2021, the closing inventories were understated by K2,450. What is the effect of this error on the profits for the year ended 31 December 2021?

A. The profit is overstated by K4,900
B. The profit is understated by K4,900
C. The profit is overstated by K2,450
D. The profit is understated by K2,450

(2 marks)

1.6 Which of the following statements about the trial balance is true?

A. A trial balance is prepared to facilitate the preparation of financial statements.
B. Income and Expenses are always presented on the debit side of the trial balance
C. Every credit balance represent capital
D. Trial balance is a book of prime entry.

(2 marks)

1.7 Which of the following formulae is used to calculate the inventory turnover ratio?

A. Average inventory divided by cost of sales multiplied by 365 days
B. Cost of sales divided by average inventory
C. Cost of sales divided by average inventory multiplied by 365 days
D. Cost of sales divided by opening inventory.

(2 marks)

1.8 A company had 2 million Ordinary shares of 50 ngwee each in issue on 1 April 2021. During the month of April 2021, the company made a bonus issue of 1 for 10 capitalising the share premium account.

What entries should be made in the financial statements to record this transaction?

A. Dr Cash K100,000 and Cr Share capital K100,000
B. Dr Share capital K100,000 and Cr Cash K100,000

C. Dr Share premium K100,000 and Cr Share capital K100,000
D. Dr share capital K100,000 and Cr Share premium K100,000

(2 marks)

1.9 D & A Limited manufactures a detergent paste. The goods are transferred from the production department to the sales department at a cost plus 15% factory profit. The inventories of the finished goods were K20,125 and K22,310 on 1 April 2020 and 31 March 2021 respectively. These inventories are stated at transfer price. The cost of goods produced during the year ended 31 March 2021 amounted to K560,000.

What amount of allowance for unrealized profit should be recognised in the statement of profit or loss for the year ended 31 March 2021?

A. K285
B. K2,910
C. K2,625
D. K328

(2 marks)

1.10 Which of the following are the users of Public Sector financial information:

(i) Shareholders
(ii) Customers
(iii) Tax payers
(iv) General Public

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

(2 marks)

[Total: 20 Marks]

SECTION B

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

<u>QUESTION TWO</u> – (COMPULSORY)

Lindaboni Limited deals in building materials, it is a family owned business based in Luapula Province. The Financial Accountant, produced the following trial balance as at 31 May 2021:

	Dr	Cr	
	K	K	
VAT recoverable	200		
Inventory at 1 June 2020	4,800		
Bank		600	
General reserve		800	
Carriage cost	2,160		
Returns	600	640	
Discounts	400	480	
Purchases	120,800		
Trade payables		4,360	
Trade receivables	7,200		
Land at cost	3,000		
Buildings	6,400		
Plant	11,200		
Accumulated depreciation:			
Buildings		960	
Plant		1,600	
8% loan note		6,400	
Insurance	400		
Wages	2,600		
Electricity	580		
Directors remuneration	700		
Audit fees	400		
Revenue		134,960	
7% preference shares of K1			2,400
Ordinary shares of K1			4,600
Share premium			2,600
Retained earnings			640
			400
Allowance for receivables at 1 June 2020			
	<u>161,440</u>	<u>161,440</u>	

Additional information:

1. The Directors, classified 7% preference shares as an equity instrument. Before the year end, Directors declared that preference dividends amounting to K168 for the year be paid. They also declared an interim ordinary dividends of K0.05 per share. Further, final ordinary dividends amounting to K666 were proposed for the year.

2. Freehold land is to be revalued upwards by K200.

3. Inventory at 31 May 2021 was valued at its cost of K3,800, while the net realisable value was K3,600.
4. K432 of carriage cost relates to carriage inwards.
5. K6,000 of the loans are redeemable by 30 June 2040 and K400 by 31 May 2022.
6. Insurance amounting to K80 has been prepaid.
7. Directors wish to transfer K1,200 to general reserve.
8. Depreciation on non-current assets is to be provided for as follows:
   a. Buildings – 10% per annum on cost
   b. Plant – 20% per annum on reducing balance basis.

9. Allowance for receivables is to be adjusted downward by K40.
10. Income tax provision for the year has been estimated at K320.

Required:

(a) Prepare Lindaboni Limited's statement of profit or loss and other comprehensive income for the year ended 31 May 2021. (10 marks)

(b) Prepare Lindaboni Limited's statement of financial position as at 31 May 2021. (10 marks)

[Total: 20 Marks]

QUESTION THREE

(a) The following is an extract of the cash book of JB Enterprises for the month of April 2021:

Cash book (bank column)

	K		K
Balance b/f	39,100	Cash payments	176,400
Cash receipts	199,050	Balance c/f	61,750
	238,150		238,150

The bank statement for the month of April 2021 was received on 2 May 2021 and showed a credit balance of K43,220.
On investigation the following were discovered:

1. Bank charges amounting to K5,140 had not been recorded in the cash book.
2. Standing orders amounting to K2,100 had not been recorded in the cash book.
3. Cheques amounting to K33,400 issued to suppliers had not yet been presented to the bank for payments.
4. The opening balance in the cash book was wrongly recorded as K39,100 instead of K31,900.
5. A cheque amounting to K2,765 issued to a supplier was wrongly recorded as a receipt in the cash book.
6. Cheques amounting to K22,460 were deposited on 29 April 2021 but credited by the bank on 4 May 2021.
7. Cheques from customers amounting to K4,300 were returned by the bank marked "refer to the drawer" but entry had been made in the cash book.
8. The bank wrongly debited JB Enterprises account in error with a cheque amounting to K5,200. The cheque was supposed to be debited to another client of the bank.

Required:

(i) Prepare the corrected cash book for the month of April 2021. (6 marks)

(ii) Prepare the bank reconciliation statement as on 30 April 2021 starting with balance as per bank statement. (3 marks)

(b) A business had allowance for doubtful debts amounting to K12,600 at 1 January 2021. Irrecoverable debts written off during the year ended 31 December 2021 amounted to K21,100.

As at 31 December 2021 the receivables balance amounted to K161,500. It was discovered that a customer owing an amount of K17,200 was bankrupt at 31 December 2021 and this debt is to be written off as irrecoverable. The allowance for doubtful debts should be adjusted to 10% of the outstanding receivables as at 31 December 2021.

Required:

Calculate the amount of receivables expense to be included in the statement of profit or loss for the year ended 31 December 2021 and the amount of receivables to be included in the statement of financial position. (6 marks)

(c) Explain any three (3) advantages and two (2) disadvantages of using cash basis of accounting by public sector organisations. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

A business primarily exists to make profit and one of the key roles of an Accountant is to prepare financial statements and to determine the profitability of a business. When two or more individuals come together to form a Partnership, it is advisable to have a correctly drafted Partnership Agreement carefully detailing the terms of the business relationship. A partnership agreement is a contract between partners in a partnership which sets out the terms and conditions of the relationship between the partners.

Required:

(a) State the objective of financial reporting? (2 marks)

(b) Identify six (6) users of financial statements and explain their information needs. (9 marks)

(c) Explain five (5) key issues that should be covered in a partnership agreement when setting up a partnership. (5 marks)

(d) State two (2) responsibility of directors towards the preparation of financial statements. (2 marks)

(e) Explain what is meant by 'faithful representation'. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

The IASB's Conceptual Framework for Financial Reporting was revised in 2018 and prescribes bases for measuring elements in financial statements. Initial measurement is done on the date of the transaction whereas subsequent measurement is done at the year end to determine the recoverability of assets and full obligations of liabilities.

Required:

(a) Explain each of the following bases, clearly stating when it is applied and giving an appropriate example of a transaction and its subsequent account balance at the year end:

(i) Historical cost (2 marks)
(ii) Fair Value (2 marks)
(iii) Value in Use/Fulfillment Value (2 marks)
(iv) Current Value (2 marks)

(b) BSA bought two vehicles three years ago at K 12,000 each. One vehicle was involved in an accident during the year and is due for replacement. The depreciation policy is write off the cost of the asset on a straight-line basis over a period of 5 years, with full depreciation in the year of purchase and none in the year of disposal. The scrap value of each vehicle is assumed to be K 2,000 at the end of the life of the asset. The vehicle that was damaged was sold to an employee for K 5,000.

Required:

(i) Define depreciation according to IAS 16 (2 marks)

(ii) Define impairment of an asset according to IAS 36, giving two factors that cause an asset to be impaired. (4 marks)

(iii) Calculate the carrying amount of the motor vehicle at the end of the third year, and the profit of loss on disposal of the vehicle that was sold. (6 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Mubita specializes in the manufacturing of a variety of grocery products. Mubita is about to carry out an inventory valuation at the year end and requires your guidance on the following matters that have arisen:

Required:

(i) What is the IAS 2 inventories' rule for valuing inventory? (2 marks)

(ii) List four (4) costs that would be included in the cost of inventory that Mubita manufactures. (2 marks)

(b) The objective of IAS 1 *presentation of financial statements*, is to prescribe the basis for presentation of general purpose financial statements, to ensure comparability both with the entity's financial statements of previous periods and with the financial statements of other entities. IAS 1 sets out overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for content. IAS1 suggests formats for the statement of financial position and statement of comprehensive income, but these are not rigid.

Required:

List three (3) items (information) which should be disclosed in a statement of financial position. (3 marks)

(c) Explain the following accounting concepts, giving an example of a transaction representing each of them in financial statements:

(i) Prudence (3 marks)

(ii) Going concern (3 marks)

(d) At 1 April 2020, Mubita had machinery with a cost of K5 million and was being depreciated at 20% per annum on reducing balance basis. The machine had been bought on 1 January 2014.

On 30 September 2020, Mubita traded in the machine for a new one. The trade in value placed on the old machine was K2.1 million and Mubita paid a supplier of the new machine by cheque amounting to K3.5 million.

Required:

Compute relevant amounts for inclusion in the financial statements for the year ended 31 March 2021. Note that this should include the accounting for new machine. (7 marks)

[Total: 20 Marks]

END OF PAPER

CA1.1 FINANCIAL ACCOUNTING

SUGGESTED SOLUTIONS

SECTION A

SOLUTION ONE

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

SECTION B

SOLUTION TWO

a) Lindaboni Plc. Statement of profit or loss and other comprehensive income for the year ended 31 May 2021

	'K'	'K'
Sales		134,960
Less returns inwards		(600)
Turnover		134,360
Less cost of sales:		
Opening inventory	4,800	
Purchases	120,800	
Less returns out	(640)	
Add carriage inwards	432	
Less closing inventory	(3,600)	(121,792)
Gross profit		12,568
Add discounts received		480
Total income		13,048
Less operating expenses:		
Discounts allowed	400	
Carriage outwards (2,160-432)	1,728	
Insurance (400-80)	320	
Electricity	580	
Wages	2,600	
Directors remuneration	700	
Audit fees	400	
Decrease in allowance for receivables	(40)	
Depreciation: Buildings (10% x 6,400)	640	
Plant (20% x 9,600)	1,920	
Loan interest accrued (8% x 6,400)	512	
Total expenses		(9,760)
Profit before tax		3,288
Less income tax		(320)
Profit for the year		2,968
Other comprehensive income		
Revaluation gain		200

Total comprehensive income	**3, 168**

Working

1. Allowance for receivables at start	400
Movement	(40)
Allowance for receivables at end	360

b) Lindaboni Plc's statement of financial position as at 31 May 2021

	Cost	accumulated Depreciation	carrying amount
Non current assets :	'K'	'K'	'K'
Land (3,000 +200)	3,200	--	3,200
Buildings	6,400	(1,600)	4,800
Plant	11,200	(3,520)	7,680
	20,800	5,120	15,680
Current assets:			
Inventory		3,600	
VAT recoverable		200	
Receivables (7,200-360)		6,840	
Insurance prepaid		80	10,720
Total assets			26,400
Equity and liabilities:			
Share capital			4,600
7% preference share capital			2,400
Share premium			2,600
General reserve (800 + 1,200)			2,000
Revaluation reserve			200
Retained earnings (640 + 2,968-1,200 -168-230)			2,010
Total equity			13,810

Non current liabilities:

8% loan note		6,000
Current liabilities		
Trade payables	4,360	
8% loan note	400	
Tax payable	320	
Dividends payable (168 +230)	398	
Loan interest payable	512	
Bank overdraft	600	
Total current liabilities		6,590
Total equity and liabilities		26,400

Proposed ordinary dividends should only be disclosed in the notes as per IAS 37.

SOLUTION THREE

(a) Bank reconciliations

(i) Corrected cash book

	K		K
Balance b/f	61,750	Bank charges	5,140
		Standing orders	2,100
		Opening balance overstated	
		(39,100 – 31,900)	7,200
		Cheque wrongly debited	
		(2,765 + 2,765)	5,530
		Dishonoured cheques	4,300
		Corrected balance c/f	37,480
	61,750		61,750

(ii) Bank reconciliation

	K
Balance as per bank statement	43,220
Add:	
Uncredited cheques	22,460
Bank error	5,200
	70,880
Less:	
Unpresented cheques	(33,400)
Balance as per corrected cash book	37,480

(b) Receivables expenses

	K
Irrecoverable debts written off	
(K21,100 + K17,200)	38,300
Allowance for doubtful debts	
(14,430 – 12,600)	1,830
Receivables expense	40,130

Receivables balance	K
Receivables	161,500
Less:	
Debts owed by the bankrupt customer	(17,200)
Adjusted receivables balance	144,300
Less:	
Allowance for receivables	
(K144,300 x 10%)	(14,430)
	129,870

(c) The following are the advantages and disadvantages of cash basis:

Advantages

1. Financial statements are easier to prepare and understand
2. activities must be carried out within the constraints of available funding
3. Only actual activities are recorded, therefore there is no subjectivity.

Disadvantages

1. Assets and liabilities other than cash are ignored
2. Financial statements are incomplete
3. The true worth of an organisation is not measured.

SOLUTION FOUR

(a) The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential equity investors, lenders and other creditors in making decisions relating to providing resources to the entity. The focus is therefore primarily on the capital markets.

(b) The people who might be interested in financial information about the company may be classified as follows:

- **Shareholders in the company.** They will be interested in the company's profitability and its ability to pay dividends. They will also be interested in the company's long term prospects.

- **Managers of the company.** These are people appointed by the company's owners to supervise the day-to-day activities of the company. They need information about the company's financial situation as it is currently and as it is expected to be in the future. This is to enable them manage the business efficiently and to take effective control and planning decisions.

- **Trade contacts**, including suppliers who provide goods to the company on credit and customers who purchase the goods or services provided by the company. Suppliers will want to know about the company's ability to pay its debts; customers need to know that the company is a secure source of supply and is in no danger of having to close down.

- **Providers of finance to the company**. These might include a bank which permits the company to operate an overdraft, or provides longer-term finance by granting a loan. The bank will want to ensure that the company is able to keep up with interest payments, and eventually repay the amounts advanced.

- **The tax authorities**, who will want to know about business profits in order to assess the tax payable by the company on its profits and any sales taxes.

- **Employees of the company**. These should have a right to information about the company's financial situation, because their future careers and the size of their wages and salaries depend on it.

(c) **Items that should be included in a partnership agreement include the following:**

- **Capital.**
  The partnership agreement should state how much each partner is putting into and leaving in the partnership.

- **Profit-sharing Ratio**
  The partnership agreement should include how any profits are to be split between the various partners.

- **Interest on Capital and Drawings**
  The agreement should disclose the interest rate that partners are entitled to, based on the amount of capital invested in the partnership, or the interest to be paid to the partnership based on drawings from the partnership. If no interest on capital or drawings is being paid/received, this should be included in the partnership agreement.

- **Partners Salaries**
  The agreement should state what, if any, and when salaries are to be paid to partners.

- **Goodwill**
  The partnership agreement should state whether the business will be valued and goodwill allowed to be brought into the partnership accounts or not.

- **Admittance/Amalgamation/Dissolution of Partnership**
  The partnership agreement should include details on these three aspects of the partnership.

(d) **Directors are responsible** for the preparation of the financial statements of the company. They are specifically responsible for:

- The preparation of the financial statements for the company in accordance with applicable financial reporting framework (e.g IFRSs)
- The internal controls necessary to enable the preparation of financial statements that are free from material misstatement, whether due to error or fraud.
- Prevention and detection of fraud.

(e) **Faithful representation**

- The information gives full details of its effect on the financial statements and is only recognized if its financial effects are certain.
- Financial reports represents economic phenomena in words and numbers. To be useful, financial information must not only represent only relevant phenomena but must faithfully represent the phenomena that it purports to represent.
- To be faithful, financial information must be complete, neutral and free from error. A complete report must include all information necessary for the user to understand, neutral is without bias and finally free from error means there should be no errors or omissions in the report.

SOLUTION FIVE

(a) The **Historical cost** is a basis of measurement requires that transactions and events be recorded at the original contract price, and subsequent measurement revises the same contract value. For example, a piece of machinery may be bought at K6,000 as the invoice amount. The amount becomes the initial measurement of the asset. One year later, this amount is historical and if revised by the depreciation of K1,200, the carrying amount of K4,800 would still be a historical cost.

Fair value is the amount at which an asset would be exchanged in its current state. If this were done at the year end, the machinery would perhaps be sold for K4,500, even though in the books of accounts it is reported at K4,800. The K4,500 is the fair value of the asset.

Value in use is the present value of future economic benefits that would be obtained from the continued use of the asset. Estimated future revenue on the assumption that the asset would be used to the end of its economic life are discounted to arrive at the present value of those future benefits to find the value in use. In the case of the machinery, the discounted amount may be K5,000 which would be different form historical cost and from fair value.

Current value refers to what the asset would be valued at depending on the purpose of measurement. Fair value, value in use and replacement cost are all forms of current value.

(b) (i) Depreciation is allocation of the cost of the asset over the useful economic life of the asset. The allocation or sharing is done regardless of whether the asset is being used or not, since the asset can reduce in value even due to technological obsolescence.

Impairment of an asset is the reduction in value of an asset other than that due to depreciation. Such reduction would be caused by factors that are usually out of the control of the business, such as an accident or loss in demand for the product that is manufactured using the asset in question.

(ii)Annual depreciation K24,000 – 4000/5yrs = K4000
Carrying amount at start of the year K24,000 – 8,000 (4000 x 2 yrs) = K16,000

Transfer to disposal account K16,000 -8,000 = K8,000. Depreciation of the remaining asset is K2,000 (half of K4,000). Therefore the carrying amount is K8,000 – K2,000 = K6,000

Loss on disposal is K8,000 – K5,000 = K3,000

SOLUTION SIX

(a) (i) 'IAS 2 inventories' states that inventory should be valued at the lower of cost and net realizable value.

(ii)

- Direct materials
- Direct labour
- Direct expenses
- Production overheads

(b)

Receivables at 31 March 2021	580,000	
Less irrecoverable debt expense	(44,000)	
Receivables net of irrecoverables	536,000	
Allowance for receivables at end	16,080	(3%x536,000)
Receivables at 31 march 2021	519,920	

Total receivables expense is therefore K42,060 (K44,000 irrecoverable debt written off) less decrease in allowance for receivables in the period of K1,940 (18,020 – K16,080). This will be expensed to the profit or loss for the year ended 31 March 2021.

Total receivables to be recognized in the statement of financial position is therefore K519,920 per above computation.

(c)

i. **Prudence concept**

It states that an entity must not overestimate its revenues, assets and profits and must not underestimate its liabilities, losses and expenses.

For example, if certain debts are doubtful of collection, the entity needs to recognize a receivable expense thereby avoiding understatement of expenses and overstatement of profit. Consequently, an entity would have avoided overstating its assets.
Another example is stating inventory at a lower of cost and net realizable value, and this happens when NRV is lower, and entity recognizes inventory at the lower NRV as maintaining it at cost overstates asset and leads entity to recognize amount not realizable. Reducing closing inventory will increase cost of sales in profit or loss statement and hence reduce profit.

ii. **Going concern concept**

The going concern concept of accounting implies that the business entity will continue its operations in the future and will not liquidate or be forced to discontinue operations due to any reason. It means the company has no evidence available that it will cease its operations in the foreseeable future.

For example, recognizing non current assets at carrying amount calculated based on economic useful life is a sign of a going concern in the foreseeable future, otherwise it would be recognized based on realizable (fair) value.

(d) The new asset would have been disposed of at a profit of K699,000 (Trade in value of K2.1 million – Carrying value of **K1.401 million** [K5 million-K3.599 million]). This will be credited to profit and loss for the year ended 31 March 2021.

The new asset would be recognized at carrying amount of **K5.040 million** (K5.6 million – depreciation of 20% x K5.6 million x 6/12).

The total depreciation charge to go to profit and loss will be K0.716 comprising depreciation of old and new machine as follows:
Depreciation charge of old machine = K0.156 million (20% x K1.557 million (W1) x6/12)
Depreciation charge of new machine = K0.56 million (20% x K5.6 million x 6/12)

WORKING

1. Movement on machinery from date of purchase to date of disposal

Cost at 1.1.2014	5,000
Accmtd dep'n to 31.3.2014 (20% x 5,000 x3/12)	(250)
Carrying amount at 31.3.2014	4,750
Dep'n expense to 31.3.2015 (20% x 4,750)	(950)
Carrying amount @ 31.3.2015	3,800
Dep'n expense to 31.3.2016 (20%x3800)	(760)
Carrying amount at31.3.2016	3,040
Depreciation expense to 31.3.2017 (20% x 3,040)	(608)
Carrying amount at 31.3.2017	2,432
Dep'n expense to 31.3.2018 (20% x 2,432)	(486)
Carrying amount at 31 3 2018	1,946
Dep'n expense to 31.3.2019(20% x 1,946)	(389)
Carrying amount at 31.3.2019	1,557
Dep'n expense to 30.9.2020 (20% x 1,557 x 6/12)	(156)
Carrying amount at 30.9.2020	1,401

2. Profit or loss on disposal

Profit or loss on disposal	K'000
Machinery carrying amount	1,401(K5.0 million – accumulated K3.599 million)
Machinery trade in value	2,100
Profit on disposal	699

3. Machinery account

	K'000		k'000
Balance b/f	5,000	disposal	5,000
TIV	2,100		
Bank	3,500	Bal c/d	5,600
	10,600		10,600
Bala c/d	5,600		

4. Accumulated depreciation account

	K'000		K'000
Disposal	3,599	Balance b/f	3,443
		Profit/loss(old)	156
		Profit/loss(new)	560
Bal c/d	560		
	4,159		4,159
		Bal b/d	560

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2: BUSINESS STATISTICS

WEDNESDAY 16 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
   Section B: One (1) compulsory scenario question.
   Plus Four (4) scenario questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

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

SECTION A – (COMPULSORY)

Attempt all the ten (10) multiple choice questions.

QUESTION ONE

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

1.1 Which one of the following describes what a Statistic is?

A. a sample characteristic
B. a population characteristic
C. a survey characteristic
D. a sampling unit

(2 marks)

1.2 X and Y are two events such that $P(X|Y) = 0.4,\ P(Y) = 0.25$ and $P(X) = 0.2$. Find $P(Y|X)$.

A. 0.50
B. 0.20
C. 0.80
D. None of the above

(2 marks)

1.3 In regression analysis, the range of coefficient of correlation is:

A. Between 0 and 1
B. Between -1 and 0
C. Between -1 and 1
D. Greater than 0

(2 marks)

1.4 A statistical analysis of performance of employees, over a period of five (5) years indicated that their mean, mode and median had equal values. Therefore this implies that the histogram formulated from data with these results was:

A. Non Symmetrical
B. Skewed left
C. Skewed right
D. Symmetrical

(2 marks)

1.5 Let A and B be two possible outcomes of an experiment and suppose $P(A) = 0.6$, $P(A \cup B) = 0.9$ and $P(B) = x$. For what value of x are A and B mutually exclusive?

A. 0.2
B. 0.3
C. 0.5
D. 0.6

(2 marks)

1.6 The mean of 10 items is 50 and standard deviation is 14. Find the sum of squares of all the items

A. 27453
B. 26543
C. 27814
D. 26960

(2 marks)

1.7 Regression analysis was applied to return rates of white stork colonies. Regression analysis was used to study the relationship between return rate (% of birds that return to the colony in a given year) and immigration rate (y% of new adults that join the colony per year). The following regression equation was obtained:

$$\hat{y} = 51.5 - 0.15x$$

Based on the above estimated regression equation, if the return rate were to decrease by 10% the rate of immigration to the colony would:

A. increase by 15%
B. increase by 1.5%
C. decrease by 0.15%
D. decrease by 1.5%

(2 marks)

1.8 A financial expert wants to assess the impact of malaria in a small community. He collects various household information using a questionnaire and classifies the collected data as discrete and continuous. Which of the following best describes data classified as discrete?

A. The average number of persons per household in a large community
B. length of time before the past collected salary or incentive for service offered as employee or private business income
C. Average annual income of bread winners in the house hold
D. The units of different food items available

(2 marks)

1.9 The meteorological department uses historical data to assess the impact of climate change on agriculture. They use time series analysis to predict the future climate. The following would be suitable time series for analysis except.

A. Regular variation
B. Trend
C. Seasonal variation
D. Cyclical variation

(2 marks)

1.10 Which one of the following describes what a parameter is?

A. a sample characteristic
B. a population characteristic
C. a survey characteristic
D. a sampling unit

(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) The President of the Zambia Institute of Chartered Accountants (ZiCA) proposed that all students must take a course in ethics as a requirement for graduation. Three hundred (300) faculty members and students from this institute were asked about their opinion on this issue. The following table, gives a two-way classification of the responses of these faculty members and students:

	Favor	Oppose	Neutral
Faculty	45	15	10
Student	90	110	30

Let F be the event that a faculty member is selected and N be the event that the person selected is neutral. Find the following probabilities:

(i) $P(F)$ (2 marks)
(ii) $P(F' \cap N)$ (2 marks)
(iii) $P(F' \cap N')$ (3 marks)
(iv) $P(F \cup N)$ (3 marks)

(b) BG's Electronics manufactures computer parts that are supplied to many computer companies. Despite the fact that two quality control inspectors at BG's Electronics check every part for defects before it is shipped to another company, a few defective parts do pass through these inspections undetected. Let y denote the number of defective computer parts in a shipment of 400. The following table gives the probability distribution of x.

y	0	1	2	3	4	5
$P(y)$	0.02	0.20	0.30	0.30	0.1	d

Required:

(i) Find the value of d. (3 marks)

(ii) Compute the mean and standard deviation of y. Give a brief interpretation of the values of the mean and standard deviation. (7 marks)

[Total: 20 Marks]

QUESTION THREE

(a) The yield a particular crop on a farm is thought to depend principally on the amount of rainfall in the growing season. The values of the yield Y, in tonnes per acre, and the rainfall X, in centimeters, for seven (7) successive years are given in the table below.

Rainfall (cm)	13.3	14.7	15.5	13.2	14.2	15.1	13.0
Yield (tons per acre)	7.25	9.2	9.42	6.27	8.21	9.71	6.86

Required:

(i) Calculate the linear correlation coefficient and interpret your result. (9 marks)

(ii) Calculate the coefficient of determination and interpret your result (2 marks)

(b) Suppose that a game is to be played with a single die assumed to be fair. In this game a player wins K50 if a 2 turns up, K30 if a 4 turns up, loses K40 if a 6 turns up, while the player neither wins nor loses if any other face turns up. What is the expected value of the game? (4 marks)

(c) Three (3) unbiased coins are tossed. What is the probability of getting at most two (2) heads? (5 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Average weekly hours of work of full time employees in non-manual occupations in 2021.

Hours	Men	Women
28 but under 30	6.0	11.3
30 but under 32	19.7	24.0
32 but under 34	59.8	59.0
34 but under 36	10.8	5.7
36 but under 38	5.8	2.5
38 but under 40	2.6	0.5
40 but under 42	4.9	0.7

Required:

(i) Compare the two (2) distributions by finding the median, lower quartile and upper quartile. (12 marks)

(ii) Comment using the median, lower quartile and upper quartile found in part (i) above, in the context of the given information. (3 marks)

(b) A jar contains four (4) red marbles, seven (7) green marbles and eleven (11) white marbles. If a marble is drawn from the jar at random, what is the probability that this marble is white? (5 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) State clearly which is the most appropriate measure of the central tendency for the following:

(i) The most important value when the data has several values that occur frequently and several comparatively very high values. (1 marks)

(ii) The measure used when one wants to focus on particular ordinal and discrete factors. (1 mark)

(iii) The measure used when one needs to be accurate and the numbers studied don't differ very much. (1 mark)

(b) A company has sales territories with approximately the same number of sales for people working in each territory. During one month, the sales in thousands of kwachas, achieved were as follows:

Area	1	2	3	4	5	6	7	8	9	10
Sales	170	150	160	170	160	320	130	140	160	140

Required:

Calculate the following:

(i) Arithmetic mean (2 marks)
(ii) Mode (2 marks)
(iii) Median (3 marks)
(iv) Lower quartile (3 marks)
(v) Upper quartile (2 marks)
(vi) Quartile deviation (2 marks)
(vii) Mean deviation (3 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Mulenga took two (2) tests. The probability of her passing both tests is 0.8. The probability of her passing the first test is 0.9. What is the probability of her passing the second test given she has passed the first test? (3 marks)

(b) A company finds that the sales of its products are affected by the time of year, which tends to obscure any trend. The following sales data are available, showing sales in successive periods of three (3) months.

Time	Sales		
	1	2	3
2014	85	125	70
2015	93	144	84
2016	95	152	86
2017	105	165	98

Required:

(i) Using the method of moving averages, estimate the trend in these data and calculate the 'seasonal ' effects.

(12 marks)

(ii) Use your trend found in part (i) to estimate the mean monthly increase in sales that the company has achieved over the period. (4 marks)

(iii) How much more would the company expect to sell in May – August than in September – December in a situation where there is no trend?

(1 mark)

[Total: 20 Marks]

END OF PAPER

CA 1.2 BUSINESS STATICS

SUGGESTED SOLUTIONS

SECTION A

SOLUTION ONE

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

SECTION B

SOLUTION TWO (COMPULSORY)

i. $P(F) = \frac{n(F)}{n(S)} = \frac{70}{300} = 0.23$

ii. $P(F' \cap N) = \frac{n(F' \cap N)}{n(S)} = \frac{30}{300} = 0.1$

iii. $P\left(F' \cap N'\right) = \frac{n\left(F' \cap N'\right)}{n(S)} = \frac{200}{300} = 0.67$

iv. $P(F \cup N) = P(F) + P(N) - P(F \cap N) = \frac{70}{300} + \frac{40}{300} - \frac{10}{300} = \frac{1}{3}$

(b) probability distribution

y	0	1	2	3	4	5
P(y)	0.02	0.20	0.30	0.30	0.1	d

(i)

$\mathbf{0.02 + 0.20 + 0.30 + 0.30 + 0.1 + \boldsymbol{d} = 1}$

$\boldsymbol{d} = \mathbf{0.08}$

(ii)

$$E(X) = \sum X \cdot P(X = x) = (0 \times 0.02) + (1 \times 0.2) + (2 \times 0.3) + (3 \times 0.3) + (4 \times 0.1) + (5 \times 0.08)$$
$$= 2.5$$

$$E(X^2) = \sum X^2 \cdot P(X = x)$$
$$= \sum (0^2 \times 0.02) + (1^2 \times 0.2) + (2^2 \times 0.3) + (3^2 \times 0.3) + (4^2 \times 0.1) + (5^2 \times 0.08)$$
$$= 7.7$$

Therefore, $(X) = E(X^2) - [E(X)]^2 = 7.7 - 2.5^2 = 1.45$.

$$Standard\ deviation = \sqrt{1.45} = 1.204$$

SOLUTION THREE

(a)

(i)

Rainfall (x)	Yield (tonnes per acre) (y)	xy	x^2	y^2
13.3	7.25	96.425	176.89	52.5625
14.7	9.2	135.24	216.09	84.64
15.5	9.42	146.01	240.25	88.7364
13.2	6.27	82.764	174.24	39.3129
14.2	8.21	116.582	201.64	67.4041
15.1	9.71	146.621	228.01	94.2841
13.0	6.86	89.18	169.00	47.0596
$\sum x = 99$	$\sum y = 56.92$	$\sum xy = 812.882$	$\sum x^2 = 1406.12$	$\sum y^2 = 473.996$

(i) $r = \frac{7(812.882)-(99)(56.92)}{\sqrt{[7(1406.12)-(99)^2][7(473.9996)-(56.92)^2]}} = \frac{55.094}{56.59101342} \approx 0.956$

There is a strong positive linear relationship between values of yield and rainfall.

(ii) $r^2 \approx (0.956377758)^2 = 0.914658416$

95% of the variation in the yield can be explained by the amount of rainfall.

(b)

Let X be the random variable standing for the amount won.

face	1	2	3	4	5	6
X	0	50	0	30	0	-40
$P(X)$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

$$E(x) = \sum xP(x) = 0\left(\frac{1}{6}\right) + 50\left(\frac{1}{6}\right) + 30\left(\frac{1}{6}\right) + 0\left(\frac{1}{6}\right) - 40\left(\frac{1}{6}\right) = \frac{40}{6} \approx K6.67$$

(c) Three unbiased coins are tossed. Let S be the sample space. Then
$S = \{(HHH), (HHT), (HTH), (HTT), (TTT), (TTH), (THH), (THT)\}$

Let A be the event of getting a t most two heads. Then
$A = \{ (HTH), (HTT), (TTT), (TTH), (THH), (THT)\}$
Therefore, $P(A) = \frac{n(A)}{n(S)} = \frac{7}{8}$

SOLUTION FOUR

(a)

Hours	Men (%) frequency	Cumulative frequency (F)	Women (%) frequency	Cumulative frequency (F)
28 and <30	5.0	5.0	10.2	10.2
30 and <32	18.6	23.6	23.9	34.1
32 and <34	56.7	80.3	58.9	93.0
34 and <36	9.7	90	4.6	97.6
36 and <38	4.7	94.7	1.4	99.0
38 and < 40	1.5	96.2	0.4	99.4
40 and < 42	3.8	100	0.6	100

(i)

Measures	Men	Women
Lower quartile	$32+\frac{(25-23.6)}{56.7}\times 2 = 32.049$	$32+\frac{(25-10.2)}{23.9}\times 2 = 33.238$
Median	$32+\frac{(50-23.6)}{56.7}\times 2 = 32.931$	$32+\frac{(50-34.1)}{58.9}\times 2 = 32.540$
Upper quartile	$32+\frac{(75-23.6)}{56.7}\times 2 = 33.813$	$32+\frac{(75-34.1)}{58.9}\times 2 = 33.389$

NOTE: Alternative methods can be used to get the above the solutions.

(ii) It is clear from the data calculated in part (i) above that each of the median, and upper quartile is slightly higher for men than for women. So on the average men work slightly longer hours than women in full time non manual employment. The lower quartile for women is slightly higher than for men.

The upper quartile in men is slightly higher than in women, so men spent more hours than women.

(b) We construct a table of frequencies that gives the marbles colour distribution as follows:

Colour	Frequency
Red (R)	4
Green (G)	7
White (W)	11

We use the empirical formula of the probability

$$P(W)=\frac{frequency\ for\ white\ colour}{Total\ frequencies\ in\ the\ above\ table}=\frac{11}{22}=\frac{1}{2}$$

SOLUTION FIVE

(a)

(i) The median is the most important value when the data has several values that occur frequently, and several comparatively very high values.

(ii) The mode is used when you want to focus on particular, ordinal and discrete factors

(iii) The mean is used when the sum of numbers is a quantity you need to be accurate and the numbers studied don't differ too much.

(b)

(iv) Arithmetic mean $\frac{\sum x}{n} = \frac{107+150+160+170+160+322+130+140+160+140}{10} = \frac{1700}{10} = 170$

(v) Mode $= 160$

(vi) Median is given by arranging the data in ascending order
130, 140, 140, 150, 160, 160, 160, 170, 170, 320.
Median $= \frac{160+160}{2} = 160$

(vii) Lower quartile
Position is given by $\frac{1}{4} \times (10) = 2.5 \approx 3^{rd}$ position

$$Q_1 = 140$$

(viii) Upper quartile
Position is given by $\frac{3}{4} \times (10) = 7.5 \approx 8^{th}$ position

$$Q_3 = 170$$

(ix) Quartile deviation $\frac{1}{2}(Q_3 - Q_1) = \frac{1}{2}(170 - 140) = 15$

(x) Mean deviation= $\frac{\sum|X-\bar{X}|}{n}$

$X - \bar{X}$	$\lvert X - \bar{X}\rvert$
$130 - 170 = 40$	40
$140 - 170 = 30$	30
$140 - 170 = 30$	30
$150 - 170 = 20$	20
$160 - 170 = 10$	10
$160 - 170 = 10$	10
$160 - 170 = 10$	10
$170 - 170 = 0$	0
$170 - 170 = 0$	0

$230 - 170 = 150$	150
$\sum \lvert X - \bar{X} \rvert$	300

Mean deviation $= \frac{300}{10} = 30$

Since mean is greater than median the distribution is skewed and the appropriate measures of location is the median and that of dispersion is the quartile deviation.

SOLUTION SIX

(a)

$$P(Second|first) = P\left(\frac{Second\ \cap first}{first}\right) = \frac{0.8}{0.9} \approx 0.8889$$

(b)

Time	Sales	3 moving Total (3MT)	Trend Values (3MA)	Seasonal variations
2014 1	85			
2	125	280	93.3	+31.7
3	70	288	96.0	-26.0
2015 1	93	307	102.3	-9.3
2	144	321	107	+37.0
3	84	323	107.7	-23.7
2016 1	95	331	110.3	-15.3
2	152	333	111.0	+41
3	86	339	113.0	-27
2017 1	101	352	117.3	-16.3
2	165	364	121.3	+43.7
3	98			

	I	II	III	Total variation
2014		31.7	-26.0	
2015	-9.3	37.0	-23.7	
2016	-15.3	41	-27	
2017	-16.3	43.7		
Total variation	-40.9	153.4	-76.7	
Average seasonal variation	-13.6	51.1	-25.6	11.9
Seasonal adjustment	-3.97	-3.97	-3.97	$\frac{11.9}{3} \approx 3.97$
Adjusted Seasonal variation	-17.57	47.13	-29.57	0.01

(i) The trend from period 2, 2004 to period 2, 2017, indicates an increase of $121.3 - 93.3 = 28$ over a 3 – year period. This gives an average monthly increase of $\frac{28}{36} = 0.777778 \approx 0.8$ per month

(ii) The difference between the seasonal effects of May – August and September – December is $47.13 - (-29.57) = 76.7$.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.3: BUSINESS ECONOMICS

TUESDAY 15 MARCH 2022

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 (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 Adam Smith stated in 'The Wealth of Nations' that a good tax system would have four (4) qualities also called canons of taxation. Which of the following canons states that a good tax should be based on people's ability to pay?

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

(2 marks)

1.2 Which of the following are characteristics of a capitalist economic system?

(i) Respect of private property rights
(ii) Government ownership of resources
(iii) Private ownership of resources
(iv) Market forces of demand and supply determine the prices of goods

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

(2 marks)

1.3 A surplus of a good will arise when the price of that good is ……………………………

A. Above equilibrium, with the result that the quantity demanded exceeds the quantity supplied
B. Above equilibrium, with the result that the quantity supplied exceeds the quantity demanded
C. Below equilibrium, with the results that the quantity demanded exceeds the quantity supplied
D. Below equilibrium, with the results that quantity supplied exceeds the quantity demanded (2 marks)

1.4 Compared to Perfect Competition, which of the following statements is true about Monopolistic Competition?

A. It provides greater product differentiation at the cost of some excess capacity
B. It offers less product differentiation but attains equal productive efficiency
C. It provides greater product differentiation and achieves greater productive efficiency
D. It offers less product differentiation and lower productive efficiency

(2 marks)

1.5 Fiscal policy in Zambia is implemented through changes in which of the following?

A. Interest rates
B. Money supply
C. Unemployment and inflation
D. Taxation and government spending

(2 marks)

1.6 The following data is taken from a hypothetical economy:

	K' billion
Personal consumption expenditure	4,500
Consumption of fixed capital	1,500
Gross private domestic investment	800
Government purchases	950
Exports	65
Imports	85

From the above data, what percentage of Gross National Product (GDP) in this economy represents personal consumption expenditure?

A. 67%
B. 70%
C. 72%
D. 75%

(2 marks)

1.7 Suppose a 2% increase in the price of Good X causes the quantity demanded of Good Y to increase by 6%. What is the relationship between Good X and Good Y?

A. Substitutes in consumption
B. Complements in consumption
C. Substitutes in production
D. Complements in production

(2 marks)

1.8 Which of the following correctly describes the three (3) main objectives of commercial banks?

A. Maturity transformation, Aggregation, Convenience
B. Liquidity, Safety, Profitability
C. Liquidity, Profitability, Responsibility
D. Bank overdraft, Current Account, Savings Account

(2 marks)

1.9 The following table gives data for two countries namely, X and Y with regard to production of two goods Copper and oil

Country	**Copper (tonnes)**	**Oil (barrels)**
X	1000	300
Y	500	75

Which of the following statements is NOT true?

A. Country X has an absolute advantage in the production of both copper and oil
B. Country X has a comparative advantage in the production of Copper
C. Country X has a comparative advantage in the production of oil
D. Trade between the two countries will not be mutually beneficial

(2 marks)

1.10 Which one of the following is the correct equation for calculating Average Total Cost (ATC)?

(i) ATC = TC/Q
(ii) ATC = ΔTC/ΔQ
(iii) ATC = AFC + AVC
(iv) ATC = TC/MC

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

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

QUESTION TWO – COMPULSORY

Economics and economists are often associated with demand and supply. In 1872 Thomas Carylyle described economics as the science "which finds the secrets of this Universe in supply and demand". Although, something of an exaggeration, demand and supply are indeed the most important and useful tools in the economist's toolbox. Demand and supply can be used to predict and analyze what would happen if something changes?

Required:

(a) The market mechanism is not perfect in the sense that we can experience situations of excess demand and excess supply in markets for goods and services. The market mechanism is very efficient, however, because it quickly eliminates those excesses. Describe by way of a diagram how these excesses are eliminated. (8 marks)

(b) *Public goods, externalities, economies of scale and merit goods* are factors that will prevent economic efficiency despite the presence of market forces which eliminate excess demand and excess supply. Explain how each of these factors prevents economic efficiency.

(i)	Public Goods	(3 marks)
(ii)	Economies of Scale	(3 marks)
(iii)	Merit goods	(3 marks)
(iv)	Externalities	(3 marks)

[Total: 20 Marks]

QUESTION THREE

A Market structure is defined as the particular environment of a firm, the characteristics of which influence the firm's pricing and output decisions. There are four theories of market structure, and these are, perfect competition, monopoly, monopolistic competition and oligopoly. While the supply of some goods (electricity) may be characterized by monopoly tendencies, other goods (such as bottled water) are characterized by a large number of suppliers on the market.

In the recent past, Zambia has seen a proliferation of bottled water companies. The industry has received stiff competition on the small bottles because even backyard manufacturers are busy making these small bottles and the streets of Zambia particularly, Lusaka are flooded with these mineral water, some of which may not even be certified with Zambia Bureau of Standards.

Required:

(a) Explain any three (3) differences between perfect competition and monopoly.
(6 marks)

(b) Outline any two (2) advantages and any two (2) disadvantages of monopoly.
(4 marks)

(c) Consider a firm manufacturing bottled water has the following long-run cost information.

Quantity of bottled water	Total Cost 0(ZMK)	Marginal Cost	Average cost
0	0		
1	30		
2	54		
3	74		
4	91		
5	107		
6	126		
7	149		
8	176		
9	207		
10	243		

Required:

(i) Calculate the marginal cost and average cost. (6 marks)

(ii) Explain what would happen if this firm is unable to make profits in the long-run.
(4 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

Since resources are scarce, employing them in one way means that they may not be used in another way or for some other use, hence the concept of opportunity cost. This is the cost that lies at the root of almost all economic decisions. The fundamental economic problem (scarce resources), which all economic systems try to address, borders on three key decisions; 1) what to produce; 2) for whom to produce and 3) how to produce. The free market economy and the command economy are the two (2) extreme economic systems that try to address these questions.

Required:

(a) Consider a simple economy producing two (2) goods: cars and milk. The following table gives several points on this economy's production possibility frontier.

Cars (1000's/year)	Milk (1000's of gallons/ year)
0	60
1	50
2	30
3	0

Required:

(i) Graph this economy's production possibility frontier.(Put cars on the X-axis and milk on the Y-axis) (4 marks)

(ii) Explain why is the production possibility frontier downward sloping? (2 marks)

(iii) Explain why is the production possibility frontier concave? (2 marks)

(iii) Suppose the economy is currently producing 2000 cars and 30,000 gallons of milk. What is the opportunity cost of producing additional 20,000 gallons of milk? (2 marks)

(b) Explain how a free market economy tries to address the three fundamental economic questions. (10 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

"The Kwacha has depreciated to hit the K21.00 per dollar psychological barrier for the first time ever in Zambia's history, owing to overwhelming high demand for the greenback on the local market, compounded with little supply. According to financial market players, the kwacha maintained a weak position, depreciating to breach and crash through an historic K21.00 per dollar mark, continuing its depreciating trend to now average K21.00 per dollar compared to an average of K20.00 per dollar just five (5) weeks ago" **(News Diggers Newspaper, 10 November, 2020)**

Required:

(a) Explain how a weak Kwacha affects (holding others things constant) the following actors in the Zambian economy.

(i) Zambian exporters of Copper (3 marks)
(ii) Zambian importers of second-hand Japanese cars (3 marks)
(iii) Zambian Government servicing foreign debt (Eurobonds) (4 marks)

(b) Explain any three (3) factors that influence the exchange rate, in general. (6 marks)

(c) Explain any two (2) measures that the Bank of Zambia can put in place to prevent excessive depreciation of the Kwacha against the dollar (4 marks)

[Total: 20 Marks]

QUESTION SIX

A Government budget describes what goods and services the Government will buy during the coming year. A budget is the spending and revenue plans of a government, what transfer payments it will make and how it will pay for them. Government expenditure depends upon policy, such as fiscal policy. Most of this expenditure is financed by taxes. When spending exceeds taxes, there is a budget deficit. When taxes exceed spending, there is a budget surplus. in the 2020 budget, the Government of Zambia increased the tax threshold for Pay As You Earn (PAYE) from K3,300 to K4,000. In the same budget, the Government increased customs duty on some agro products, such as, beef, pork and chicken processed products from 25% to 40%.

Required:

(a) Explain the main purpose of a government budget. (4 marks)

(b) Describe the implications of the following on any economy;

(i) Budget surplus (3 marks)
(ii) Budget deficit (3 marks)

(c) State any three (3) functions of taxation. (6 marks)

(d) List any two (2) advantages and any two (2) disadvantages of direct taxes. (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.3 BUSINESS ECONOMICS

SUGGESTED SOLUTIONS

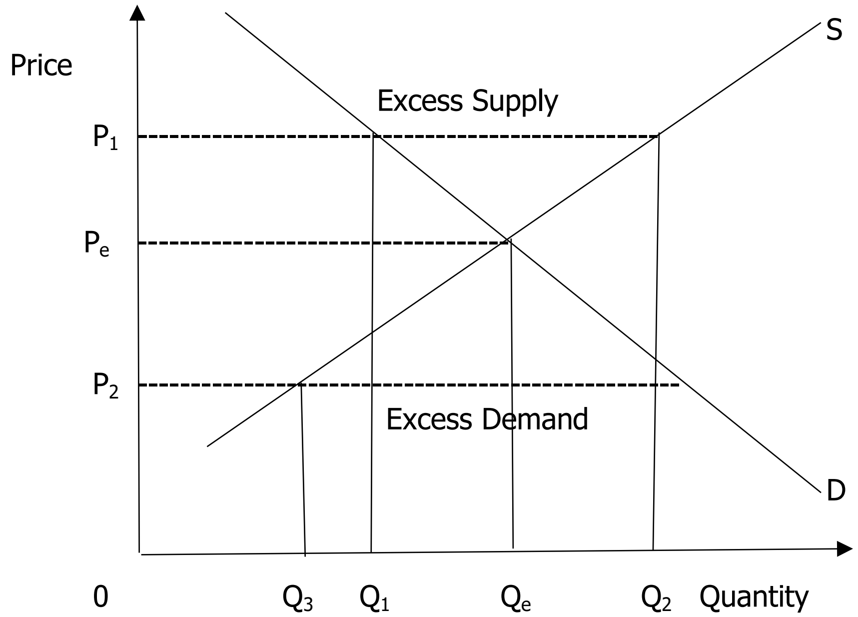
SOLUTION ONE

SECTION A: MULTIPLE CHOICE

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

SOLUTION TWO

a) Graphical representation:



- At P_e and Q_e, the market is in equilibrium.
- At P_1, the quantity demanded is Q_1 but suppliers are willing to supply Q_2 therefore there is excess supply which will force the price down to P_e.
- At P_2, the quantity demanded is Q_2 but suppliers are willing to supply Q_3, therefore there is excess demand which will push prices up to P_e.
- The above forces that exist within a market ensure that the price charged for a good is equal to where consumers are willing to buy, and suppliers are willing to sell. At the equilibrium price, all products within a given market can, and will, be sold, with no excess demand or supply for such goods and services.
- When excess supply exists, there are more goods within a market available for purchase than are actually demanded. In general, competitive forces will force down the price of the goods so that a greater quantity is demanded by consumers, usually with the effect of a lower price being offered.
- When excess demand exists, there are more goods demanded within a market than suppliers are willing to produce. In general, competitive forces will force up the price of the goods so that a greater quantity is supplied by producers, usually with the effect of a higher price being obtained.

b) Economic efficiency is prevented as follows:

i) **Public Goods:** The characteristics of public goods are that not every consumer contributes equally to their creation and they can be freely enjoyed by all individuals. In this respect, the costs to produce do not equal the total costs to society and the utility gained by each individual is different ('free rider' problem). As such the marginal equivalency conditions will not hold, and economic efficiency will prevail. Intervention is therefore required (usually by the government) to ensure that such resources are produced.

ii) **Economies of Scale:** Companies may reduce their costs per unit over time by increasing their output; via improved production methods or demanding decreased factor input prices (bulk discounts, etc.). This gives them a competitive advantage which if enforced will drive others out of business creating a monopoly situation. In this case, the monopolist's costs will be lower than under perfect competition and they can therefore charge a higher price and earn above normal profits, which will not be competed away. As this price is greater than the marginal costs, the marginal equivalency conditions will not hold, and economic efficiency will not prevail.

iii) **Merit goods:** Merit goods are considered to be worth providing to everyone irrespective of whether everyone can afford to pay for them, because their consumption is in the long term public interest. Since merit goods are divisible, only those who choose to pay for them will benefit and in doing so they will use up the supply of the good.

iv) **Externalities:** When individuals make decisions on consumption and production, they only consider their own private costs and the benefits of such decisions. However, some decisions can transfer costs on to others that are not directly involved ('negative externalities') e.g. pollution caused by production; or may confer benefits on to others that were not directly involved ('positive externalities'). Due to these indirect costs and benefits, the marginal equivalency conditions will not hold, therefore economic efficiency will not prevail.

SOLUTION THREE

a) Differences between perfect competition and monopoly

- Output and Price: Under perfect competition price is equal to marginal cost at the equilibrium output. While under monopoly, the price is greater than average cost.
- Equilibrium: Under perfect competition equilibrium is possible only when MR = MC and MC cuts the MR curve from below. But under simple monopoly, equilibrium can be realized whether marginal cost is rising, constant or falling.
- Entry: Under perfect competition, there exist no restrictions on the entry or exit of firms into the industry. Under simple monopoly, there are strong barriers on the entry and exit of firms.
- Discrimination: Under simple monopoly, a monopolist can charge different prices from the different groups of buyers. But, in the perfectly competitive market, it is absent by definition.
- Profits: The difference between price and marginal cost under monopoly results in super-normal profits to the monopolist. Under perfect competition, a firm in the long run enjoys only normal profits.
- Slope of Demand Curve: Under perfect competition, demand curve is perfectly elastic. It is due to the existence of large number of firms. Price of the product is determined by the industry and each firm has to accept that price. On the other hand, under monopoly, average revenue curve slopes downward. AR and MR curves are separate from each other. Price is determined by the monopolist.

b)

Advantages of Monopoly

- Monopoly avoids duplication and hence avoids wastage of resources. (We have to understand that duplicate and fake products are a real problem in many countries).
- A monopoly enjoys economies of scale as it is the only supplier of product or service in the market. The benefits can be passed on to the consumers.
- Due to the fact that monopolies make lots of profits, it can be used for research and development and to maintain their status as a monopoly.
- Monopolies may use price discrimination which benefits the economically weaker sections of the society.
- Monopolies can afford to invest in latest technology and machinery in order to be efficient and to avoid competition.
- Source of revenue for the government- the government gets revenue in form of taxation from monopoly firms.

Disadvantages of monopoly

- **Exploitation of consumers:** A monopoly market is best known for consumer exploitation. There are indeed no competing products, and as a result, the consumer gets a raw deal in terms of quantity, quality, and pricing. The firm may find it easy to produce inferior or substandard goods if it wishes because at the end of the day, they know very well that the items will be purchased as there are no competing products for the already available market.
- **Dissatisfied consumers:** Consumers get a raw deal from a monopoly market because quality will be compromised. Therefore it is not a wonder to see very dissatisfied consumers who often complain about the firm's products.
- **Higher prices:** No competition in the market means the absence of such things as price wars that may have benefited the consumer, and as a result of this monopoly, firms tend to charge higher prices on goods and services hence inconveniencing the buyer.

- **Price discrimination:** Monopoly firms are also sometimes known for practicing price discrimination, where they charge different prices on the same product for different consumers.
- **Inferior goods and services:** Competition is minimal or totally absent, and as such, the monopoly firm may willingly produce inferior goods and services because, after all, they know the goods will not fail to sell.

c)

i) Compute MC and AC

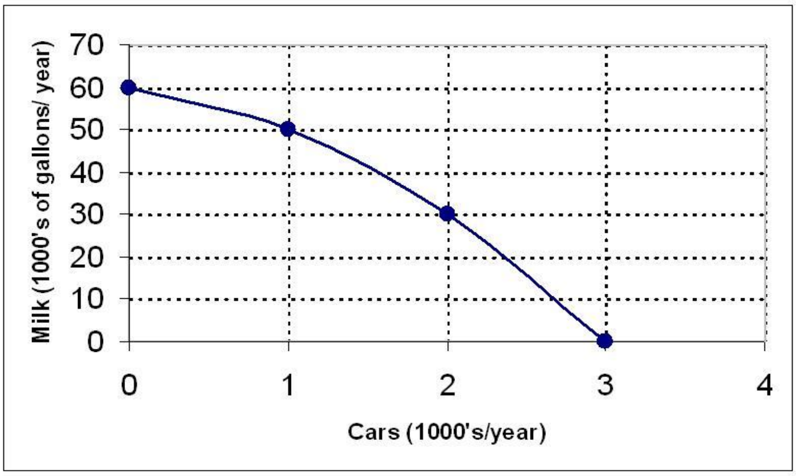
Quantity of bottled water	**Total Cost (K)**	**Marginal Cost**	**Average cost**
0	0	-	-
1	30	**30**	**30**
2	54	**24**	**27**
3	74	**20**	**24.7**
4	91	**17**	**22.8**
5	107	**16**	**21.4**
6	126	**19**	**21**
7	149	**23**	**21.3**
8	176	**27**	**22**
9	207	**31**	**23**
10	243	36	24.3

ii) Seeing that this could be a firm operating under assumptions of monopolistic competition, in the long-run, the firm will exit the industry because it is not making profits (normal profits).

SOLUTION FOUR

a)

i) Draw the PPF



ii) Down ward sloping

The negative slope of the PPF illustrates the fact that larger quantities of cars correspond to a smaller amount of milk, and vice versa. This happens because all the economy's resources are already in use, and therefore obtaining more cars would always require sacrificing some milk. In economic terms, the negative slope is due to the presence of opportunity cost.

iii) concave

The slope of a particular segment of the PPF shows how much good on the vertical axis (milk) has to be sacrificed in order to obtain an additional car (the good on the horizontal axis). The steeper the slope the larger the aforementioned sacrifice has to be. This happens as we move from left to right and therefore towards larger quantities of cars, which represents the principle of increasing costs discussed in class - as we produce more and more cars, each additional car costs us more in terms of milk we have to forgo.

iv) Opportunity cost

We can see from either the table or the graph that if 30,000+20,000=50,000 gallons of milk were produced, the economy could at the same time produce no more than 1000 cars. This represents a decrease by 1000 cars relative to the current production. (2000 - 1000 = 1000). The opportunity cost of additional 20,000 gallons of milk is 1,000 cars.

b) **Market economy**

A market (also called capitalist) economy is one in which answers to the three basic questions are the cumulative result of many individual decisions about what to buy and what to sell in the public marketplace.

What to produce?

Buyers express their preference for certain goods and services, thereby influencing what is produced. The producers/ sellers will produce goods based on the forces of demand. The price mechanism will determine where to allocate resources for maximum profit.

How to produce?

The means of production are privately owned by sellers, who try to produce goods and services as cheaply and efficiently as possible in order to make a profit.

For whom to produce?

The market economy produces for those that can afford the goods and services. Goods that don’t attract any payment (such as Public goods) may not be produced.

In its purest form a market economy should function without any government intervention. Market economies are founded on the idea that the good of the whole society depends upon freedom of choice, competition, and the right of every individual to pursue private wealth.

SOLUTION FIVE

a) A depreciating kwacha impacts some selected sectors of the economy as follows:

i) **For Exporters:** As a result of a depreciating kwacha, exports f copper would become relatively cheaper to foreign buyers, and so the demand for copper exports would rise, holding other things constant. The extent of the increase in export revenue would depend on several factors such as the price elasticity of demand for the copper in export markets, the extent to which the mining industry is able to respond to the export opportunities by either producing more copper, or switching from domestic to export markets, and it may also depend on the price elasticity of supply. With greater demand for their goods, producers should be able to achieve some increase in prices (according to the law of supply and demand), and the willingness of suppliers to produce more would then depend on the price elasticity of supply.

ii) **For Importers:** The cost of imports would rise as a result of **currency depreciation** because more domestic currency would be needed to obtain the foreign currency to pay for imported goods. The volume of imports would fall, although whether or not the total value of imports fell too would depend on the elasticity of demand for imports. (a) If demand for imports is inelastic, the volume of demand would fall by less than their cost goes up, so that the total value of imports would rise. (b) If demand for imports is elastic, the total value of imports would fall since the fall in volume would outweigh the increase in unit costs.

iii) **For Foreign Debt servicing by the government**: Since foreign debt servicing is transacted in United States Dollars to which the kwacha has depreciated against, the cost of debt servicing increases. Here is an example. If Zambia was servicing the debt to the tune of $42 million at an exchange rate of $/K =10, this would be equivalent to K420 million. Now, when the kwacha depreciates to $/K = 20, the kwacha amount required to service the same debt of $42 million now doubles to K840 million

b) The factors that determine the exchange rate in general include:

- **Total income and expenditure** (demand) in the domestic economy determines the demand for goods. This includes imported goods and demand for goods produced in the country which would otherwise be exported if demand for them did not exist in the home markets.
- **Output capacity and the level of employment** in the domestic economy might influence the balance of payments, because if the domestic economy has full employment already, it will be unable to increase its volume of production for exports.
- The **growth in the money supply** influences interest rates and domestic inflation. This is **monetarist** theory. The monetarist argument is that if a government restricts the growth of the money supply, it will be accompanied by high interest rates and consequently also a high exchange rate.
- A country's **economic prospects** can also affect its exchange rate. If the economic forecasts for the country are bullish, this might attract speculators' funds, thereby raising demand for the country's currency and increasing its exchange rate.

c) Government may intervene in the foreign exchange market to prevent excessive depreciation of the Kwacha against the United States Dollars using the following measures:

- The Bank of Zambia can supply the United States Dollars into the Zambian economy
- The Bank of Zambia can raise the Monetary Policy Rate (MPR).
- The Bank of Zambia can raise Statutory Reserve Ratio for commercial banks

- The Bank of Zambia can restricted commercial bank's access to the Bank of Zambia Overnight Lending Facility aimed at mopping out liquidity.
- The Bank of Zambia can raise the cost of funds for Overnight Lending Facility.

SOLUTION SIX

a) **The purpose of a budget**

- The government budget is an annual financial statement showing item wise estimates of expected revenue and anticipated expenditure during a fiscal year.
- At the beginning of every fiscal year, the government presents an estimate of its receipts and expenditure for the coming financial year.
- It plans its expenditure according to its objectives and then tries to raise the resources to meet the proposed expenditure.
- It is essential for any government to plan a budget as it allocates various resources across the nation to ensure progress and stability.

b) **Effects of Budget deficit and surplus**

Budget deficit

A government experiences a budget deficit when it spends more money than it takes in from taxes and other revenues. This gap between income and spending is subsequently closed by government borrowing, thereby, increasing the national debt. As the debt grows, it increases the deficit in two ways. First, the interest on the debt must be paid each year. This increases spending while not providing any benefits. Second, higher debt levels can make it more difficult to raise funds.

Budget surplus

A government experiences a budget surplus when spending is lower than income. A budget surplus allows for savings. A surplus allows a government to repay some of their existing national debt. A budget surplus also gives a government scope for meeting a future crisis e.g. a response to an external shock. The Government might use a budget surplus to cut taxes to stimulate the supply-side of the economy.

Functions of taxation

- To raise revenue for the government and to finance the provision of public and merit goods.
- To manage aggregate demand by adjusting taxes.
- To provide a stabilizing effect on national income by reducing the effect of the multiplier.
- To redistribute income and wealth
- To protect industries from foreign competition

Advantages of direct Tax

- Equitable
- Economical
- Certain

Disadvantages

- Inconvenient
- Evadable
- Arbitrary
- disincentive

END OF SOLUTION

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 18 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
   Section B: One (1) compulsory scenario question.
   Plus Four (4) scenario questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

<u>QUESTION ONE</u>

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

1.1 Law can be defined as:

A. Rules based on criminal laws

B. A theory to keep wrongdoers in prison

C. Rules which regulate the conduct of people

D. Restrictions which leaders create in times of emergency

(2 marks)

1.2 A company once registered becomes a separate legal entity. In which case was this principles established?

A. Macaura v Northern Assurance Limited

B. Salomon v Salomon

C. Rayfield v Hands

D. Carlill v Carbolic Smoke Ball & Co

(2 marks)

1.3 Some differences between law and morality are………..

A. Morals are about beliefs which society upholds and not easily changed, whilst the law is fixed and can only be changed by Parliament.

B. Law evolves over many years, whilst morality originates from customary laws

C. Morality can be ignored whilst the law cannot.

D. Law has to be interpreted by the courts, whilst morality is based on known norms.

(2 marks)

1.4 Which of the following sentences best describes the differences between the law of contract and the law of tort?

A. Law of tort deals with purely economic issues, while law of contract deals with commercial transactions.

B. Law of tort does not compensate for any financial loss while law of contract does.

C. Both law of contract and tort can compensate for financial loss, but law of tort can only compensate for financial loss linked to some form of harm, loss or injury suffered.

D. Law of contract compensates for bodily injury while law of tort only deals with purely financial losses.

(2 marks)

1.5 Civil and criminal law have different characteristics, which are:

A. Civil law is concerned with acts committed between legal persons while criminal law is concerned with wrongful acts committed against the state

B. Civil law includes divorce, property rights, contractual obligations, whilst criminal law includes incest, murder, gender based violence and theft

C. Remedies for civil law include restitution and damages but criminal law remedies are imprisonment, and rehabilitation.

D. Civil law is just aimed at enrichment.

(2 marks)

1.6 The five (5) major sources of law include Acts of Parliament and judicial decisions, among others. In terms of judicial decisions the doctrine of '*stare decisis*' means:

A. A combination of binding and persuasive precedent

B. Judges making good decisions

C. Using previous decisions to decide present cases

D. Standing by a previous decision

(2 marks)

1.7 Which of the following statements is correct?

A. Dissolution of a company is the same as lifting of the veil of incorporation

B. Dissolution of a company means bringing the life of a company to an end, while lifting of the veil of incorporation is a temporary suspension of the company's business.

C. Dissolution of a company and lifting of the veil of incorporation both bring the life of a company to an end.

D. Lifting the veil of incorporation brings the life of a company to an end while dissolution does not.

(2 marks)

1.8 Statutes can be interpreted in a variety of ways in particular, the **golden rule.**

A. states that if the literal rule produces an absurdity, then the court should look for another meaning of the words to avoid that absurd result

B. aims at finding out the mischief and defect in a statute and to implement a remedy for the same

C. explains what the law is rather than explaining what the law means

D. makes a decision as to what they felt Parliament meant to achieve

(2 marks)

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

A. A private limited company

B. A limited liability partnership

C. A general partnership

D. A public limited company

(2 marks)

1.10 A partnership may be defined as………………..

A. A business run by three people

B. A business owned and run by two or more people with the view of making a profit

C. A business owned and run by one person

D. A company run by two or more people

(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)

Kamukusu and Maiwase are timber experts based in Solwezi. They formed a partnership called Muti Trees and Timber specializing in planting trees and harvesting timber. The partnership employed twenty (20) forest and timber technicians. Last week, it entered into a contract with Zambezi Hydropower Company for the supply of 100 poles to be delivered next week.

Required:

(a) One of the new employees was offloading plants from a truck and it fell off leading to the injury of a passerby. Explain to him as to whether he would be personally liable for the passerby's injury. (6 marks)

(b) Explain as to at what point would the property in 100 poles sold to Central Hydro Power Company pass to the buyer? (6 marks)

(c) Maiwase has been suggesting that that they dissolve the partnership, but Kamukusu has been refusing. She now wants to petition the court for the dissolution of the partnership. Explain four (4) grounds Maiwase may advance to the court for their partnership to be dissolved. (8 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

Chushi is an entrepreneur in the business of buying and selling different products. He has been doing with business with Mwansa for some time. Mwansa has a furniture making company and makes exotic furniture. Chushi found a very beautiful set of furniture displayed at Mwansa's showroom and writes Mwansa requesting for the price of the same. Chushi was informed that the furniture was going for a good price of K15,000. Chushi is quite interested in the furniture though he does not have the purchase price. He writes to Mwansa informing him that he would buy the furniture for cash at a good price of K10,000. Mwansa has written to Chushi informing him that he is happy to sale the furniture to him at the price contained in the initial correspondence sent to Chushi. On receipt of the correspondence from Mwansa, Chushi proceeds to make a bank transfer of K10,000 and writes Mwansa that the purchase price as agreed has been sent and that he would be awaiting delivery of the furniture soon. Three (3) days have passed after the deposit was made but no delivery of the furniture was made to Chushi's shop. Chushi writes Mwansa reminding him that he has been waiting for the furniture which was paid for some days back. Mwansa writes and informs Chushi that deliveries are only made upon completion of the full purchase price for the purchased goods. Chushi is surprised with the situation as he believes that he had made payment as had been agreed upon by the two. Chushi has already promised, received cash after describing the furniture to a client of his who loved it and was paying K15,000 for the same. He is now under pressure with the situation.

Required:

Chushi has come to you for legal advice in this matter. Advise him on the situation at hand.

[Total: 20 Marks]

QUESTION FOUR

Two local companies on the Copper-belt have since stumbled upon an opportunity to be able to mine emeralds and have since obtained an exploration license for the aforementioned mining activity. The two (2) Companies would however like to get into some form of a Partnership in order to achieve this goal.

The two (2) Companies also realize the need for human capital in order to be able to undertake the said project and have since put out an advertisement in the weekly Newspaper calling for qualified persons, both professional, semi-skilled and skilled worker to apply for employment under the Company *(under both contract for services and contracts of services)* and have since been cautioned against negligence amongst its Employees as the project is a multi-million dollar project.

The Chief Executive Officers of both Companies have heard that you are a *self-proclaimed* expert in matters of this sort, they have since approached you for advice.

Required:

(a) Explain to the two (2) CEOs the Seven (7) rights of a Partner under a Partnership Deed. (7 marks)

(b) List Three (3) Statutory duties of a Partner for the two (2) *CEOs.* (3 marks)

(c) Discuss for the benefit of the two (2) CEOs the difference between a contract of service and a contract for services. (5 marks)

(d) Explain to the CEOs the concept of Professional Negligence (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Mwape, Mubita and Mutinta formed a University they called 'The University of Commercial Science' in 2010. The three (3) are also directors of the said University. The University has grown exponentially posting huge profits since inception and is now a listed company on the Lusaka Stock Exchange. Last year it signed a contract for the supply of ZICA, ACCA and CIMA text books with iBrand Publishers Ltd, a company based in Zimbabwe. The University also appointed iBrand Publishers as their sole agent for the purpose of recruiting students in Zimbabwe and facilitating their travel to Zambia for school. iBarand has not delivered any books despite having been paid in full over nine (9) months ago. At its recent sitting, the university's management meeting ended abruptly after Mubita started accusing Mutinta and Mwape of money laundering over their slow action on iBrand Ltd.

Required:

(a) Mwape has come to you for help. He wants to sue iBrand Publishers Ltd for specific performance and damages, and has come to you for help in this regard. Explain the two terms to him. (8 marks)

(b) Explain how the agency relationship of recruiting students between The University and iBrand can be terminated by operation of law and by 'end of a time period'. (6 marks)

(c) Mutinta and Mwape are shocked of Mubita's accusations and they need your urgent help. Explain to them the three phases of money laundering. (6 marks)

[Total: 20 Marks]

QUESTION SIX

Statutory interpretation is the process by which judges bring out the meanings of the words used in statutes. The main rules of interpretation being the Literal Rule, Golden Rule, and Mischief Rule. There are instances where a precedent may be termed to be a bad precedent. Several reasons can be advanced for such an occurrence.

Required:

(a) State some of the reason that may lead to a precedent being a bad precedent. (8 marks)

(b) Discuss the main types of companies recognised in Zambia. (10 marks)

(c) Describe an agency relationship. (2 marks)

[Total: 20 Marks]

END OF PAPER

CA1.4 – COMMERCIAL AND CORPORATE LAW

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) The question is on *Vicarious Liability*. Vicarious Liability is where an employer is held liable for the damage caused to another by his employee while the employee was carrying out his work (or while he was in the course of employment). Coming to the matter at hand, the employee injured the passerby whilst on duty, thus will not be liable, but the employer. The employee was in the course of employment when he hit the passerby. The cases applicable here are *Britt v Galmoye and Nevill (1928);Rayner v Mitchell (1877)*; *Century Insurance Company v Northern Ireland Road Transport Board (1942)*. The employer would only be vicariously liable if the wrong was committed in the course of his employment, which is this case was during the loading of poles for the employer.

(b) This question is on *Unascertained Goods*. Unascertained goods (future goods) are those goods which are not identified and agreed o when the contract is made. At the time of buying the goods, it is impossible to identify which specific goods of the whole/bulk would be yours once they are ascertained/set aside. In a sale for unascertained goods, the property passes to the buyer only when the goods have been ascertained. Section 18 rule 5 of the Sale of Goods Act provides that once the unascertained goods sold by description are ascertained by the seller with the assent of the buyer or buyer with the assent of seller, the property in the goods then passes to the buyer. They are ascertained to the buyer once they are separated from the bulk and earmarked for a particular buyer, without separating the goods from the bulk, the property in the goods does not pass – ***Healy v Howlett & Sons (1917)*.**

Thus the property (ownership) in the 100 poles will only pass to the buyer when they have been separated from the bulk and allotted to Central Hydro Power Company.

(c) Muti Trees Partnership can be dissolved by the court on the following grounds as per Section 35 of the Partnership Act of 1890:

- *Mental incapacity*:- That is when one of the partners has mental incapacity, a petition can be made to the court to have the partnership dissolved.
- *Physical incapacity:-* This ground can be used to petition the court to dissolve the partnership when one of the partners a permanent physical incapacity.
- *Conduct prejudicial to the business:-* This is a petition for dissolution by the court when one of the partners' conducts is prejudicial to the partnership e.g. misappropriation of the partnership money, proved behaviour that affects the reputation of the business, etc.
- *Willful or persistent breach of the agreement:-* Where one partner willfully disregards the provisions of the partnership deed, the affected partners can petition the court to have it dissolved.
- *Where the business is running at a loss:-* The losses must be permanent, at least for a foreseeable future and partners must be unable to reach a decision to dissolve the partnership, in that regard, the court can dissolve it.

- *Just and equitable to do so:-* This is ground that the court may be petitioned to dissolve the partnership in the interest of justice, e.g. where the partners can no longer agree, they have reached a deadlock, can no longer carry the purpose for which the partnership was formed.

SOLUTION THREE

The case of Chushi and Mwansa is a contractual matter. The issue borders on what the elements of a valid contract are. For a contract to be valid, there are mainly three elements that ought to be present. There has to be an offer, there has to be an acceptance and, there has to be consideration.

Offer – this is the first stage in the formation of a valid contract. The offer always comes from the seller called the offeror to the buyer called the offeree. The seller will therefore be giving up something of value to a person interested in buying what is being offered. The offeror will offer the product to the offeree with terms and conditions which if accepted by the offeree, will form the basis of the agreement between the two parties. *Carlill v Carbolic Smoke ball Co*. 1893

Acceptance – this is an expression of interest by the offeree to agree unequivocally to the terms of the offer as made by the offeror. For a contract to be said to have been made, it is imperative that the acceptance is actually a reflection of the terms and conditions of the offer made by the offeror. If the purported acceptance suggests to alter what the terms and conditions of the offer were, then there is no acceptance but a counter offer to the offer of the offeror and in such cases, there cannot be a contract. In *Hyde v Wrench* the court held that the counter offer made by had the effect of rejecting the original offer hence there was no contract.

Consideration – this finally seals the contract. A contract is an agreement of quid-pro-quo meaning something for something. Each party to a contract must give up something to symbolize an intention to create a legal relationship. Where therefore an offeror has made an offer to the offeree, it is imperative that for the contract to be made, the offeree must give up something in return for that which the offeror has offered to give up. Consideration is therefore the passage from the offeree of something of value in exchange for that which the offeror has given to the offeree. There cannot be a contract unless consideration has passed. In *Tweddle v Atkinson* 1861, the claimant failed because he had not provided any consideration for the promise to pay.

Consideration arises in this case in that for consideration to be of effect, there the two elements above must be properly present. They were not in the scenario given above.

Arising from the facts in Chushi's case and the cited precedents, it would be advised that there was no contract as there was no acceptance but a counter offer.

SOLUTION FOUR

(i) Each and every Partner of a Partnership, one it has been agreed enjoys the following rights under the business:

1. A Partner is entitled to introduce a new Partner once all of the other Partners have consented to the said introduction.
2. The right to be indemnified in respect of payments made and personal liability incurred in his/her conduct of the business.
3. The right to share equally in the capital and profits of the Partnership business.
4. Each and every Partner is entitled to the interest on capital once the profits of the business have been ascertained.
5. Every Partner has the right to take part in Management of the Partnership business.
6. A Partner has the right to receive remuneration once it has been agreed.
7. Partners that contribute to the Firm beyond the agreed upon contributions in the form of advances have the right to receive interest on such excess.

(ii) Partners of a Partnership business have the following three statutory duties:

1. Duty to be accountable for private profits.
2. Duty to render true accounts and full information.
3. Duty to be accountable for profits from a competing business

(iii) The law of employment recognizes two classes of contracts, the first being a contract of service, and the other being a contract of services. A contract of services is one that exists between a Master and a Servant, in which the latter provides a service to the former in exchange for an agreed upon wage and/or salary. The Master will usually supervise and dictate how and when the work should be done by the Servant. A contract for services involves a self-employed person who undertakes work as an Independent Contractor. Under this kind of a contract, there is no Master Servant relationship and the Independent Contract will carry out the work as and when he pleases, of course with due regard to datelines to be met.

The difference between a contract of service and that for services appears to be the contract that is exercised by the person doing the work.

(iv) The law of negligence was developed in order to protect Third Parties from the careless act of those who owe such Third Parties a duty of care and happen to breach that duty, which in turn causes damage recognizable at law. The negligence above referred to is captured in the general sense, the law however recognizes that there is sometimes loss that is suffered as a result of, say; negligent misstatements made by professionals such as Accountants, Barristers, Solicitors and/or Attorneys, which misstatements cause financial loss. The basis upon which the concept of professional negligence is premised on is such that; where one is possessed of a ***special*** skill and undertakes to provide such a skill, usually at a fee, and Third Parties rely on his skill, judgment and/or ability for purposes of decision making, a duty of care will arise.

The skilled service provider will then have to ensure that he employs a degree of care as would be expected by any other skilled person in his sphere.

SOLUTION FIVE

(a) The two remedies he wants to sue for are Specific performance and Damages. He must be informed that since the university is a company, it is the company to sue and not himself as a shareholder/director. He has to sue in the name of the company.

- Damages – He can sue for monetary compensation for the loss suffered due to non-delivery of the books on time. Damages simply means financial compensation awarded to the injured party by the court against the wrong doer. There are different types of damages: Liquidated damages (these are damages agreed upon by the parties), Unliquidated damages (not agreed upon by the parties, but courts will order for them to compensate the injured party for the loss suffered), Nominal damages (small amounts awarded where there is no real damage suffered by the plaintiff

- Specific Performance – This is an order by the court that the party in breach carries out his contractual obligations. The order, like all other remedies are at the discretion of the court. Thus The University can sue can sue for specific performance, i.e. having iBrand perform their part of the contract by supplying The University with the ordered books.

(b) The agency relationship between iBrand and The University can be terminated by *operation of law* and *end of time period* as follows:

Operation of law:- This is the termination of an agency relationship where the performance of the contract becomes illegal, death or liquidation of either party, etc which make the performance of the contract illegal.

End of a time period:-This is the termination of an agency relationship due to the end of the duration or time period for which it was fixed to run. Thus once the time fixed for the agency relationship elapses or task for which it was formed is achieved, the agency is terminated.

(c) *Money laundering* is a financial crime whose purpose is to conceal the origins of the proceeds of criminal activity. The three phases of money laundering are as follows:

(i) *Placement*:- This is the initial disposal of the proceeds of the illegal activity into apparently legitimate business activity or property e.g. banking small amounts in different banks to avoid suspicion.

(ii) *Layering*:- This is the process of transferring of monies from business to business or place to place to conceal the original source e.g. under or overvaluing the invoices to disguise the movement of money.

(iii) *Integration*:- This is the last phase where, having layered the money, it now has the appearance of legitimate funds e.g. using the money to buy a house and later sell it.

SOLUTION SIX

(a) There are several reasons that can be responsible for a precedent being bad. One of the reasons is when a judge arrives at a decision '*per incuriam*' meaning he did not take into account an essential point of law; in certain cases a judge may misdirect himself in law; or the judge's decision can be declared too wide and the *ratio decidendi* may be declared too obscure.

(b) The following are the main types of companies in Zambia:

(i) Public Company which by nature is limited by shares meaning it raise its capital by listing its shares on the stock exchange.

(ii) Private company limited by shares which raises its capital through selling its shares tzo private individuals or companies and the liability of its members is limited to the extent of the balance owing on their shares.

(iii) Private limited by guarantee where the company does not necessarily sell shares and the liability of its members is determined by the amount they guarantee at inception indication how much they will contribute in the event that the company goes into liquidation.

(iv) Private unlimited company which has no amount specifies as to how much each member will contribute in the event of winding up.

(c) An agency relationship is a relationship where a principal, appoints a middleman known as an agent who concludes commercial business transactions on behalf of the principal. The acts of the agent are deemed as if they are the acts of the principal.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 15 MARCH 2022

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

QUESTION ONE

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

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Each question is allocated two (2) marks.

1.1 Objectives must be SMART…… What is the meaning of the acronyms SMART?

A. Smooth, Management, Attainable, Resource, Technology
B. Specific, Management, Accurate, Resource, Technology
C. Specific, Measurable, Achievable, Relevant and Time-bound
D. Specific, Measurable, Attainable, Reasonable and Time-bound

(2 marks)

1.2 …………………………………is not part of the recruitment process

A. Checking the back ground information on the applicant
B. Asking the employee to rewrite a national examination.
C. Selecting the candidates based on Gender and Age.
D. Induction process.

(2 marks)

1.3 ……………………………………is the form of a management which is more concerned with people than organization results

A. Team Management
B. Impoverished Management
C. Country Club Management
D. Produce or Perish management.

(2 marks)

1.4 Which of the following can help to reduce labor turnover?

A. Less working hours
B. Good Labor unions
C. Good Leadership skills
D. High profits in the company

(2 marks)

1.5 Which of the following clearly defines an internal stakeholder?

A. A person who has common shares in the company
B. A person who has the same business
C. The Government
D. Banks and other financial systems

(2 marks)

1.6 Which one of the following is not one of the functions of communication:

A. Controlling
B. Commanding
C. Planning
D. Coordinating

(2 marks)

1.7 ……………………..is an organization culture which deals with a formal structure with well-established rules and procedures

A. Power culture
B. Role culture
C. Person culture
D. Task culture

(2 marks)

1.8 Which one of the following marketing mix is concerned with Radio adverts?

A. People
B. Products
C. Promotion
D. Price

(2 marks)

1.9 Which statement best explains Batch processing.

A. Every product is batched to identification
B. Automated processing of multiple transactions as a single group.
C. Automated processing of new products in batches
D. Every product is specified with serial numbers

(2 marks)

1.10 Effective delegation should lead to optimum use of human resources and improved organization performance. Which of the following is/are NOT benefits of delegation?

A. Best use of managerial time
B. A means of training and development of staff
C. Cost of paying the person being delegated
D. Limited time of senior managers

(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)

Covid-19 has turned around many businesses, the client profile has dropped and sales records are not impressive. During the first quarter of 2018 the Big-Kah international company penetrated Sub-Sahara market and management made substantial investments. However, the company has lost its international market share and the new Managing believes that the organization must change its business strategy in order to survive, prosper and regain its market share. Mr. Pumulo the Projects Manager believes he has to transform and change the working culture and he is convinced that good team Leadership is important in organizations that have team culture. Therefore, he suggested to all his colleagues that during this period, every employee should be involved in the coming up with new ideas for the company to survive.

Required:

(a) Explain five (5) characteristics of good leadership (10 marks)

(b) Change may not just happen but could be triggered by a number of factors. As a management student, what are the three (3) internal change agents (6 marks)

(c) Explain what is meant by the term organizational culture. (4 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) Henry Mintzberg (1989), a writer on management and organization, has suggested that there are five 'building blocks' in an organization, and the way that organization operates depends on which of these elements is dominant. He further described managerial roles by arguing that management is a disjointed, non-systematic activity.

Required:

(i) What is an organization? (1 mark)

(ii) Explain the three (3) types of interpersonal roles of a manager identified by Mintzberg (9 marks)

(b) Explain the motivational theory according to Abraham Maslow (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Max Weber was a social scientist who had an interest in organization. His contention was that the rational organization performed tasks with maximum coordination and efficiency, this will be an organization built around a highly orderly system with a rigid structure of authority that worked according to defined set of procedures, rules and regulations. He further stated that structures in an organization can be centralized or decentralized.

Required:

(a) Draw a generic organizational structure. (8 marks)

(b) Explain the meaning of the following words in terms of management

(i) Centralized organization structure

(ii) Decentralized organization structure

(iii) Matrix functional structure

(12 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Tatwikuta Ltd. is a medium-sized food retail outlet in a town. Using PEST or PESTLE analysis, discuss four (4) of the main influences from the external environment on Tatwikuta Ltd.

(16 marks)

(b) List four (4) advantages of the Limited Company as compared to the Sole Trader.

(4 marks)

[Total: 20 Marks]

QUESTION SIX

Mr. Right the Manager at a certain company is so uncomfortable about the informal organizations within the company and has threatened or fired all those involved in such groupings.

Required:

(a) What is the informal organization? (2 marks)

(b) Remind Mr. Right about the five (5) benefits of the informal organization to him as Manager. (10 marks)

(c) What are the five (5) mechanisms embraced by informal organization? (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5 – MANAGEMENT THEORY AND PRACTICE

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SECTION B
SOLUTION TWO (compulsory question)

(a) Explain five (5) characteristics of good leadership

- 1. Honesty and Integrity.
- 2. Confidence.
- 3. Inspire Others.
- 4. Commitment and Passion.
- 5. Good Communicator.

(b) Change may not just happen but could be triggered by a number of factors. As a management student, what are the three (3) internal change agents

- Management structure
- Business structure
- Leadership structure
-

(c) Explain what is meant by the term organizational culture.

Organizational culture, is defined as the shared **beliefs, assumptions, values, norms, artifacts, symbols, actions, and language patterns by all members of an organization.**

SOLUTION THREE

(a)

(i) What is an organization

An Organization is an entity – such as a company, an institution, or an association comprising one or more people and having a particular purpose.

(ii) Explain the three types of interpersonal roles of a manager identified by Mintzberg

- *Figurehead* – includes symbolic duties which are legal or social in nature.
- *Leader* – includes all aspects of being a good leader. This involves building a team, coaching the members, motivating them, and developing strong relationships.
- *Liaison* – includes developing and maintaining a network outside the office for information and assistance.

(b) Explain the motivational theory according to Abraham Maslow

i. *Physiological Needs.* These include needs for satisfaction of hunger and thirst, need for sleep, sensory pleasures, activities, material behaviour and sex desire.

ii. *Safety Needs.* These include safety and security, freedom from pain or threat of physical attack, protection from danger or deprivation and the need for predictability and orderliness.

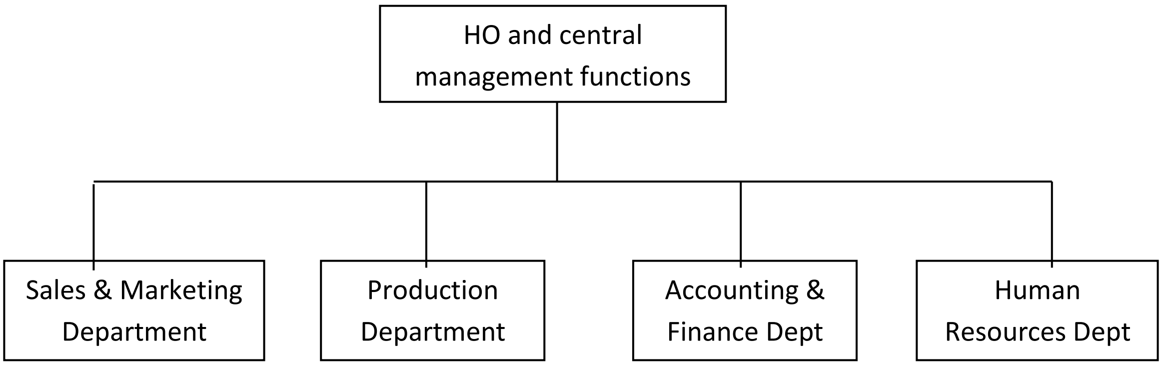
iii. *Love or Social Needs.* These include needs for affection, sense of belonging, social activities, friendship, and giving and receiving of love.

iv. *Esteem or Ego Needs.* These include self-respect and esteem of others. Self-respect involves the desire for confidence, strength, independence and freedom and achievement.

v. *Self-Actualisation Needs.* This is the development and realisation of one's full potential. Maslow regards this as what humans can be, they must be, becoming everything that one is capable of becoming.

SOLUTION FOUR

a. Draw a generic organizational structure.



b. Explain the meaning of the following words in terms of management

i. Centralized organization structure

-Organization structure were all control is centrally done by at one place eg. Head office

ii. Decentralized organization structure

- Organization structure were authority and powers to control is delegated to other sectors/places

ii. Matrix functional structure

- Organization structure created mostly focused on project execution by bring different people from deferent sections for a specific project

SOLUTION FIVE

(a) Tatwikuta Ltd. is a medium-sized food retail outlet in a town. Using PEST or PESTLE analysis, discuss four of the main influences from the external environment on Tatwikuta Ltd.

- *Political factors-* A change in the political setup may affect the company eg an unexpected political crisis.
- *Economical factors -* economic changes such as economic depression or low product demand and consumer income.
- *Social and Culture factors -* a change in public attitudes and opinions might persuade an organization to alter its strategy
- *Technological factors* - Companies need to adapt to new technologies to continue to succeed in their business.
- *Ecological factors* – climatically and weather conditions may change and force the company to reconsider the location or product diversifications.
- *Legal factors* – Major changes in the land laws can force the company to alter the operations. E.g. labor or employment laws

(b) List down four (4) advantages of the Limited Company as compared to the Sole Trader.

- Can have access to borrow from the Bank without much problems
- Can keep existing even when the owner has died
- Can raise funds through the stock market
- It has its own liabilities

SOLUTION SIX

(a) An informal organization exists side by side with the formal one but it is loosely structured, flexible and spontaneous. What is an informal organization?

(b) The following are the benefits of informal organizations to the manager: Employ commitment by meeting their social needs

i. Knowledge sharing through informal networks
ii. Speed of the network makes it more efficient than the formal
iii. Responsiveness- the direct information-richness and flexibility may be particularly helpful in conditions of rapid environmental change
iv. Cooperation the strengthening of interpersonal networks con facilitates team work and coordination across organization boundaries

(c) The following are the mechanisms embraced by informal organization:

i. Social relationships and groupings
ii. The grapevine bush telegraph communication or informal communication. Behavioral norms and ways of, doing things both social and work related
iii. Power influence and structures, irrespective of organizational authority: informal leaders are those trusted and looked for advice
iv. Interpersonal relationships
v. Free skills sharing among employees

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 16 MARCH 2022

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.

Each of the following sub-questions has only one correct answer. Write the letter of the correct answer you have chosen in your answer booklet.

QUESTION ONE

1.1 What is the other name for the computer's main memory?

A. Memory output storage
B. Memory input storage
C. Internal storage
D. A working area

(2 marks)

1.2 Which of the following is a task of the operating system?

A. Multitasking
B. Batch processing
C. Opening and closing of files
D. Backing storage

(2 marks)

1.3 Which of the following is a type of information systems?

A. Functional based system
B. Computer based information system
C. Operational system
D. Accounting Information System

(2 marks)

1.4 Which of the following key combinations achieves Copy and Paste function in application programs?

A. Ctrl – L and Ctrl – T
B. Ctrl – C and Ctrl - V
C. Ctrl – D and Ctrl – V
D. Ctrl – F and Ctrl – E

(2 marks)

1.5 What is an attribute in the context of a relational database?

A. A column of a table
B. A key field of a table
C. A relational table
D. A row of a table

(2 marks)

1.6 Which of the following mode of communication is ideal when informing member of staff about a job promotion?

A. Memo
B. letter
C. Notice
D. Report

(2 marks)

1.7 State the type of communication involved when Mr. Banda informs a colleague about their un confirmed promotions

A. Horizontal communication
B. upward communication
C. Informal communication
D. Formal Communication

(2 marks)

1.8 Which of the following is a suitable salutation to someone you don't know when writing letters

A. Dear Jane
B. Dear Colleague
C. Dear sir
D. Dear Dr, Banda

(2 marks)

1.9 Which of the following heading is **NOT** likely to be included on a curriculum vita for someone who has never worked before

A. Personal detail
B. Skills profile
C. professional qualifications
D. Experience

(2 marks)

1.10 Which of the following is likely to maximize the chance of successful communication in any given situation?

A. Information over load
B. Using simple language
C. Using different formats
D. Using different languages

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

<u>QUESTION TWO – COMPULSORY</u>

SCENARIO

Information Technology has seen that in the online world, private information can be accessed by criminals. Some of the legislation passed in recent years does protect the users against invasion of privacy. However, some of the laws observed contain far too many exceptions and exclusions to the point that their efficacy suffers. In addition, the government continues to utilize state-of-the art techniques for the purpose of accessing information for the sake of "national security" justified currently under the Computer Security Act. New bills and legislation continue to attempt to find a resolution to these problems, but new guidelines, policies and procedures need to be established and laws need to be enforced to their full extent if citizens are to enjoy their right to privacy as guaranteed under the constitution.

If security products are not safe from every attack and if current laws may not always be efficient in addressing the problem correctly, is there anything a user might be able to do?

A good starting point might be establishment and implementation of a good computer security policy.

Required:

(a) Explain any six (6) items a good computer security policy may contain? (12 marks)

(b) As you compare system before purchasing, adopt the assumption that you are going to get what you pay for. There's a saying to the effect that "a computer is only as good as its weakest component"

State any four (4) points you should keep in mind as you shop around for your computer system. (4 marks)

(c) Knowing your way around word processing software is a crucial foundation for all kinds of documents that computer users use.

Explain the word processing skills below?

(i) Cell shading (2 marks)
(ii) Footnotes (2 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Most successful organisations rely on technology for almost every aspect of their business. Although there are many types of technology available, going digital doesn't have to intimidate business owners.

Required:

Explain the following types of business technologies below.

(i) Software and Productivity tools (2 marks)
(ii) Networking of computers (2 marks)
(iii) Transaction Processing System. (2 marks)
(iv) Inventory Control System (2 marks)
(v) Customer Relationship Management System (2 marks)

(b) The data contained in AIS is all of the financial information pertinent to the organisation's business practices. Any business data that impacts the company's finances should go into AIS. The type of data included in an AIS depends on the nature of the business, but has common data types that are usually entered in the system.

Required:

Identify any eight (8) types of data that could be included in an AIS of an organisation? (8 marks)

(c) State any two (2) advantages of videoconferencing (2 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Organisations employ computer systems to carry out a series of operations on data. The process includes activities like data entry, processing and storage. Business data is repeatedly processed and usually give large volumes of output. There are different methods and types of data processing.

Required:

Explain the two (2) methods of data processing presented below:

(i) Manual Data Processing (3 marks)

(ii) Electronic Data Processing (3 marks)

(b) Define the term CD-ROM and state any three (3) advantages over floppy storage medium (5 marks)

(c) The separation of duties in internal controls of a business organisational structure provides checks and balances for every level of an organisation, whether it's a big corporation or small business. An effective system of internal controls incorporates separation of duties of accounting functions and other areas that deal with sensitive or valuable data. Duties that are properly separated segregate the record keeping, calculation, authorisation and review process of every business function. A functioning system of internal controls helps prevent fraud and collusion among an entity's employees.

Required:

Explain what the Accounts Officer will be required to do with the following duties:

(i) Calculation (3 marks)

(ii) Authorisation (3 marks)

(iii) Review (3 marks)

[Total: 20 Marks]

QUESTION FIVE

SCENARIO

You work at a higher learning institution in the Accounts Department. Your institution will have a virtual graduation ceremony. You expect 6,000 students to participate in the virtual graduation ceremony and finally be conferred with their qualifications and receive their certificates after the graduation ceremony. However, you have discovered that some students still have outstanding balances of tuition fees from various fields of study. The following figures provide information regarding the unpaid amounts of tuition fees.

Course	**Amount owed**
Diploma in accounting	1,400
Zambian Taxation	1,085
Chartered accountant	2,000
Public sector Management	1,300
Managerial Economics	215

Required:

(a) Using the information in the table above, visually present it in form of a pie chart. (6 marks)

(b) Interpret the information that is presented from the pie chart. (2 marks)

(c) Briefly explain the purposes of using each of the following methods of presenting data:

(i) Gantt chart (4 marks)

(ii) Bar charts (4 marks)

(ii) Line graphs (4 marks)

[Total: 20 Marks]

QUESTION SIX

Effective communication is a process by which ideas, thoughts, knowledge and information are shared in such a way that the purpose or intent is achieved in the best possible way. It is nothing but the presentation of views by the sender in a way better interpreted by the recipient, in plain words. In order for information to be useful, it needs to apply the 7Cs.

Required:

(a) Briefly explain the 7Cs of effective communication. (14 marks)

(b) State any six (6) barriers to effective communication. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA1.6 – BUSINESS COMMUNICATION

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a) A good policy can include:

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

b)

- Look for a system that can easily be upgraded with new components as your needs change
- Be prepared to accept trade-off among desired components
- Find a shop that has been in business for a good period of time and that has established a track record with respect to reliability and service
- You need to be sure that you are dealing with a reputable company
- Carefully read each seller's return policy and agreement's terms and conditions
- Compare service and warranty agreements
- Don't delay in setting up the system once its purchased. Make sure everything is received that was bargained for and that the system functions properly
- RAM size, processing speed, storage capacity, resolution of the screen

c) Word processing skills

- **Cell shading –** shading specific rows/columns to draw attention to headings

- **Footnotes –** allows an author to make a note about an idea in the text

SOLUTION THREE

a)

- **Software and Productivity tools** - this is a category of application programs that help users produce things that help users produce things such as documents, database, graphs, worksheets or spreadsheet and presentations that are intended for business use
- **Networking of computers –** computers are often linked to form a network, can allow people in the organisation to share documents or information, communicating using e-mail and also allow people in the organisation to share resources like printers or storage device.
- **Transaction Processing System –** this is a type of information system that collects, stores, modifies and retrieves the data transactions of an enterprise
- **Inventory Control System –** these systems keep track of every item in the inventory, ensuring you don't run out of stock or order too much. When new inventory arrives, the system is updated to reflect the additions and when it is sold and is deducted from the totals
- **Customer Relationship Management System –** tracks a customer throughout his experience and interaction with organisation. The CRMS helps build the relationship with a customer by assembling all the information the organisation collects from the customer in one place for use, review and proactive response

b) **Types of data that could be included in a AIS of an organisation**

- Sales orders
- Customer billing statements
- Sales analysis reports
- Purchase requisitions
- Vendor invoices
- Cheque registers
- Inventory data
- General ledger

- Payroll information
- Timekeeping
- Tax information

c) **Advantages of videoconferencing**

- Saves costs as participants do not need to travel for meeting
- It saves time as participates do not have to take time off
- Participants can see each other as they discuss issues

SOLUTION FOUR

a)

i) **Manual Data Processing**

- Data is processed manually without using any machine or tool to get the result.
- All calculations and logical operations are performed manually on data and data is transferred manually from one pace to another.
- This method is very slow/time-consuming and high probability of errors
- Its labour intensive

ii) **Electronic Data Processing**

- Modern method to process data through a computer
- It's the fastest, highly reliable and accurate
- Manpower required is reduced
- Large amounts of data are processed with high accuracy

b) CD-ROM stands for Compact Disk – Read Only Memory, which is a storage device used with computers. A CD is the same size as a music CD which is inserted into the CD_ROM drive on a computer and the contents of the CD can be used using Windows Explorer or a similar file management program. Many CD_ROMS also contain programs which will run automatically when the CD is placed in the drive.

The advantages of a CD over floppy disk as a storage medium include:

i) Larger storage capacity. A CD can hold up to 700MB of data compared to 1.44MB on a standard floppy disk
ii) A CD tends to be more robust than a floppy disk. The surface can be cleaned with a non-abrasive cleaner; attempting to clean a floppy disk will normally destroy the data on it.
iii) Data storage on CD tends to be more reliable than floppy disk, with fewer read errors occurring

c) Explaining what the accounts officer will be required to do with the following duties

i) **Calculations**

- Designates an accounts officer to calculate current payroll
- It involves maintaining time records and hourly rates
- It involves maintaining paid leave such as vacation sick and holiday, payroll taxes, retirement contributions, health insurance
- Preparation of quarterly and annual payroll tax return

ii) **Authorization**

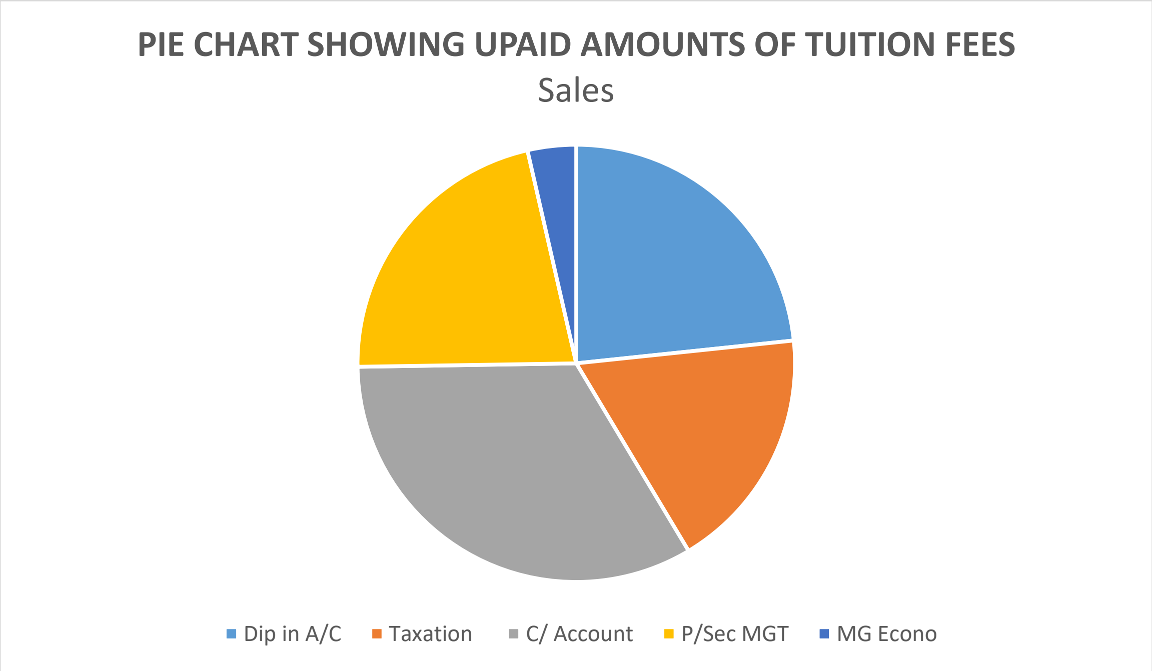
- A supervisor with authority to process the payroll
- Authorized signer for checks in the payroll account
- Has authority to electronically transmit payroll and applicable taxes via electronic fund transfer
- The supervisor shouldn't have access to bank routing and accounting numbers to prevent him/her from improperly accessing bank accounts

iii) **Review**

- Reviewing transactions for validity and reasonableness and comparing transactions to supporting documentation for employees
- The reviewer adds to the systems of checks and balances by reviewing payroll tax returns and recalculating a current-or-prior-period payroll
- Chances of frauds declines when an employee knows his work is being examined by an independent reviewer.

SOLUTION FIVE

i) This question was obtained from chapter 4 of the syllabus it tests candidate's ability to demonstrate an understanding of statistical data interpret and apply it in any given situation in order to communication effectively.



Course	Percentage portion	Degrees angles
Diploma in accounting	23 %	84
Zambian Taxation	18%	65.1
Chartered Accountant	33%	120
Public sector Management	22%	78
Managerial Economics	4%	12.9

SOLUTION FIVE

ii)

From the pie chart, it is clear that most students who pursued chartered Accountant have a high percentage rate of the outstanding balance giving a 33%. Most students doing Managerial Economics are likely to graduate apart from a small percentage of 4% who still have not paid up the outstanding balances. Other students in other fields of study such as Taxation, Diploma in Accounting and Public Sector management who still owe the institution are likely to collect the certificates when they finally clear their outstanding balances

SOLUTION FIVE

iii)

Gantt chart

- Used to focus progress on a project and predict the time of completion
- Used to report the pace at which progress of a given project moves in relation to time.

Bar charts

- Are useful for comparing of items
- They can also be used to show components of the total magnitude

Line graphs

- Used to show the relationship between two variables
- They are also used for demonstrating treads such as an increase of an item.

SOLUTION SIX (a)

We will look at each of the 7 Cs of Communication in this essay.

1. Clear

Be clear about your purpose or message while writing or speaking to others.

2. Conciseness

You stick to the point when you're succinct with your interactions and keep it short.

3. Concrete

The audience has a good understanding of what you're telling them when the message is concrete. Information (but not too many!) and vivid facts are visible, and there is a laser-like emphasis. It's solid your message.

4. Correct

It serves your audience when your communication is right. And right communication is also communication that is error-free.

5. Consideration

Effective communication must take the audience into consideration: educational background, age, sex e.t.c.

6. Completeness

The audience has everything they need to be updated in a full message and, if necessary, take action.

7. Courteous

Pleasant, open, and truthful is courteous contact. No secret insults or passive-aggressive sounds are present. You have the point of view of your reader in mind, and you are empathetic to their needs.

SOLUTION SIX (b)

- Inappropriate language
- Status
- Emotion
- Wrong medium
- Not wanting to transmit and not wanting to receive
- Information overload and under load
- Noise

END OF SOLUTIONS

CHARTERED ACCOUNTANTS EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED IN DIPLOMA IN ACCOUNTANCY

CA 2.1: FINANCIAL REPORTING

MONDAY 14 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

The following are the draft statements of financial position of Pemba Plc and Samfya Plc as at 30 September 2021:

	Pemba	Samfya
Assets	**K'000**	**K'000**
Non-current assets:		
Property, plant and equipment	1,960,500	546,000
Development project	0	20,000
Investments	457,000	0
	2,417,500	566,000
Current assets:		
Inventories	165,000	92,000
Trade receivables	99,000	76,000
Cash and cash equivalents	17,000	16,000
	281,000	184,000
Total assets	**2,698,500**	**750,000**
Equity and liabilities		
Equity		
Share capital (K1 shares)	1,360,000	160,000
Retained earnings	570,000	360,000
Other components of equity	102,000	0
Total equity	2,032,000	520,000
Non-current liabilities:		
Long-term borrowings	300,000	85,000
Deferred tax	256,500	54,000
Total non-current liabilities	556,500	139,000
Current liabilities:		
Trade and other payables	70,000	59,000
Short-term borrowings	40,000	32,000
Total current liabilities	110,000	91,000

Total equity and liabilities	**2,698,500**	**750,000**

The following information is relevant in the preparation of group financial statements.

1) On 1 April 2021, Pemba Plc acquired 120 million shares in Samfya Plc, paying K450 million in exchange for these shares. The individual interim financial statements of Samfya Plc showed a balance of K340 million on its retained earnings on 1 April 2021.

2) Pemba Plc incurred K1 million directly attributable (due diligence) costs on acquisition of Samfya Plc. This amount was included in the carrying amount of the investment in Samfya Plc in Pemba's Plc own statement of financial position.

3) The directors of Pemba Plc carried out a fair value exercise to measure the identifiable assets and liabilities of Samfya Plc at 1 April 2021. The following matters emerged:
   - Plant and equipment having a carrying amount of K400 million had an estimated fair value of K440 million. The estimated remaining useful life of this plant and equipment at 1 April 2021 was four (4) years.
   - An in-process development project of Samfya Plc's had a carrying amount of K8 million And a fair value of K18 million. During the six-month period from 1 April 2021 to 30 September 2021, Samfya Plc incurred further development costs of K12 million relating to this project. These costs were correctly capitalised in accordance with the requirements of IAS 38 – *Intangible Assets*. No amortisation of the capitalised costs of this project was required prior to 30 September 2021.

4) The fair value adjustments, in (3) above, have not been reflected in the individual financial statements of Samfya Plc. In the consolidated financial statements, the fair value adjustments will be regarded as temporary differences for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%.

5) There had been no issue of shares by Samfya Plc since the date of acquisition and neither Pemba nor Samfya Plc paid dividends for the year ended 30 September 2021.

6) Since 1 April 2021, Pemba Plc had supplied a product to Samfya Plc. Pemba Plc applies a mark-up of 25% to its cost of supplying this product. Sales of the product by Pemba Plc to Samfya Plc in the period from 1 April 2021 to 30 September 2021 totalled K30 million. One-third of the products which Pemba Plc had supplied to Samfya Plc since 1 April 2021 were still unsold by Samfya Plc at 30 September 2021. Any adjustment necessary in the consolidated financial statements as a result of these sales will be regarded as a temporary difference for purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%. No amounts were owing to Pemba Plc by Samfya Plc in respect of these sales at 30 September 2021.

7) On 1 April 2021, the directors of Pemba Plc measured the non-controlling interest in Samfya Plc at its fair value on that date. On 1 April 2021, the fair value of an equity share in Pemba Plc and Samfya Plc was K4 and K3·80 respectively.

8) Prior to 1 October 2020, Pemba Plc had no long-term borrowings. On 1 October 2020, Pemba Plc borrowed K300 million to finance its future expansion plans. Terms of these borrowings were five (5) years and the annual rate of interest payable on the borrowings was 6%, payable in arrears. Pemba Plc charged the interest paid on 30 September 2021 as a finance cost in its financial statements for the year ended 30 September 2021.
The borrowings are repayable in cash at the end of the five-year (5) term or convertible into equity shares on that date at the option of the lender. If the borrowings had not contained a conversion option, the lender would have required an annual return of 8%, rather than 6%. Discount factors which may be relevant are as follows:

Discount factor	**Present value of K1 payable at the end of year 5**	**Cumulative present value payable at the end of years 1–5 inclusive**
6%	K74.70 ngwee	K4.21
8%	K68.10 ngwee	K3.99

9) Unless specifically told otherwise, you may ignore the deferred tax implications of any adjustments you make.

10) The other investments are included in Pemba Plc's statement of financial position above at their fair value on 30 September 2021.

11) Incomes and expenses should be deemed to accrue evenly throughout the year.

Required:

(a) Prepare the consolidated statements of financial position for Pemba Plc at 30 September 2021. (30 marks)

(b) Explain 'control' as commonly used in IFRS 10 *consolidated financial statements* and briefly outline how it is determined. (4 marks)

(c) Describe four (4) circumstances in which a parent entity may not be required to present consolidated financial statements under International Financial Reporting Standards. (4 marks)

(d) Explain why consolidated financial statements are useful to the users of financial statements (as opposed to just the parent company's separate (entity) financial statements). (2 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

Kolala Co. is a company in the textile manufacturing industry based on the Copperbelt province of Zambia. You work as Finance Manager for Kolala Co. Directors of the company decided to close down one of the company's divisions due to some difficulties experienced recently with sales going down tremendously.

Below is a trial balance of Kolala Co., as at 31 March 2021.

	K'000	K'000
Land at valuation at 1 April 2020 **(note i)**	200,000	
Buildings at valuation at 1 April 2020 **(note i)**	450,000	
Plant and machinery at cost	110,000	
Accumulated depreciation of plant & machinery		39,600
Investment property	160,000	
Revenue **(notes iii and v)**		876,000
Cost of sales **(notes i and v)**	254,000	
Distribution costs **(note v)**	157,400	
Administrative expenses **(note v)**	214,950	
Current tax at 1 April 2020 **(note iv)**		27,000
Deferred tax at 1 April 2020 **(note iv)**		49,000
Inventories at 31 March 2021	38,000	
Trade receivables **(note ii)**	120,700	
Trade payables		132,050
Bank		40,000
6% loan note **(note viii)**		160,000
K1 ordinary share capital 31 March 2021		220,000
Interest paid	9,600	
Share premium at 31 March 2021		90,000
Revaluation reserve at 1 April 2020		56,000
Retained earnings **(note ii)**	20,000	
Investment income **(note vi)**		45,000
	1,734,650	**1,734,650**

The following information is relevant:

i) Kolala Co. has a policy of revaluating its land and buildings each year-end. The balances in the above trial balance are as a result of the revaluation exercise at 31 March 2020. At this date, the buildings' economic useful life had not changed which was 40 years at the date of acquisition on 1 April, 2010. Consequently, on 31 March 2021, land and buildings were revalued to K235 million and K415 million respectively. Kolala Co. does not make an annual transfer to retained earnings of excess depreciation and there is no deferred tax effect on revaluation surplus.

Of the revaluation surplus of K56 million in the trial balance, K30 million relates to buildings and K26 million relates to land.

Plant and machinery is depreciated at 20% per annum on the reducing balance basis. All depreciation of items of property, plant and equipment is charged to cost of sales.

ii) Early in April 2021, just before the financial statements were approved, Kolala Co.'s directors discovered a material fraud in which K40 million worth of trade receivables as shown in the trial balance at 31 March 2021 had in fact been paid but cash allegedly stolen by the company's credit control team. K10 million of the stolen cash from receivables relates to the year ending 31 March 2020 and K30 million relates to the year ending 31 March 2021.

iii) Revenue includes K18 million for cash sales made through Kolala Co.'s division during the year on behalf of Amaka Ltd. Kolala Co. acting as an agent is entitled to commission of 10% of the sales value of the goods. At 31 March 2021, Kolala had remitted the difference of K16.2 million to Amaka Co. (included in cost of sales).

iv) The estimated provision for income tax on the profit for the year ended 31 march 2021 is K34.75 million. During the year, the company's taxable temporary differences increased by K120 million. The deferred tax relating to the increase in temporary taxable differences should be taken to profit and loss. The applicable income tax rate is 20%.

v) On 1 January 2021, Kolala Co. closed the Malala Co. division whose results from 1 April 2020 to date of closure, as included in the above trial balance were:

	K'000
Revenue	57,000
Cost of sales	44,000
Distribution costs	17,000
Administrative expenses	10,500
Loss on disposal of divisional Assets	2,070

In February 2021, the directors of Kolala Co. re-organized the continuing business at a cost of K2.7 million which has not yet been accounted for. All re-organization costs had been paid by 31 March 2021.

vi) Kolala Co. uses fair value model for its Investment Property and the fair value at 31 March 2021 was estimated to be K147 million.

vii) Kolala Co.'s directors declared dividends totaling K7.4 million before the year end which were not paid by the year end.

viii) The 6% loan note was issued on 1 April 2020 and will be redeemed at a premium in 2023. It has an effective interest of 8%.

Required:

(a) Prepare, for Kolala Co., a statement of profit or loss and other comprehensive income for the year ended 31 March 2021 with strict adherence to requirements of *IAS 1 Presentation of financial statements.* (12 marks)

(b) Prepare, for Kolala Co., a statement of financial position as at 31 March 2021.
(8 marks)

[Total: 20 Marks]

QUESTION THREE

Bango is preparing to publish its financial statements for the year ending 31 December 2020 and has asked you to advise on the accounting treatment of transactions below:

(a) In the year ending 31 December 2020, Bango made a profit after tax of K45 million (K40 million in year ending 2019). At 1 January 2020, Bango had in issue 20 million equity shares. On 1 April 2020, Bango made a fully subscribed for rights issue of two new shares for every five existing shares held at a price of K3 each. The market price of equity shares of Bango immediately before the issue was K3.50.

Further, Bango had in issue a K15 million, 6% convertible loan note convertible in two years' time to equity shares on the basis of twenty shares for every K100 of the loan note at the option of the loan note holder. Loan interest is tax deductible and Bango's tax rate is 30%.

Required:

Explain and calculate both basic and diluted Earnings Per Share for Bango, for the year ended 31 December 2020 including comparative basic Earnings Per Share for the year ended 31 December 2019. (8 marks)

(b) Bango's inventory at 31 December 2020 includes inventory with a cost of K180,000 for which Bango received an offer for its sale K110,000 on 15 January 2021. Bango will incur selling costs of K10,000. The sale is highly probable.

The financial statements of Bango are to be approved for issue on 31 March 2021.

Required:

Explain and ascertain the amount at which the inventory should be valued at 31 December 2020 in accordance with *IAS 2 inventories* and *IAS 10 Events after the reporting period.*
(4 marks)

(c) At 31 December 2020, Bango had a cash generating unit comprising the following assets:

	K'000
Land	3,500
Goodwill	1,000
Buildings	4,600
Plant and machinery	3,300
Inventory	900
Receivables	980
Total	14,280

The building was rammed into by a truck and was unfit for use. However, some fittings had been assessed to have a recoverable amount of K500,000. The recoverable amount of the cash generating unit had been estimated at K7,600.

Required:

Explain and compute the amount at which Bango's assets in the cash generating unit will be recognized after the impairment review at 31 December 2020. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

You are a financial consultant for Kaka Ltd, a company involved in the distribution of sports equipment and accessories to its outlets throughout Zambia. Kaka Ltd is about to prepare its financial statements for the year ended 31 March 2021 and are seeking your advice on the required accounting treatment of the following situations:

Situation 1

Kaka Ltd made tax losses of K0.85 million for the year ended 31 March 2021. Kaka Ltd had taxable profits of K0.5 million for the year ended 31 March 2020 and taxable profits of K0.25 million for the year ended 31 March 2019. In Kaka Ltd's jurisdiction, tax losses could be carried back one year to offset against taxable profits of previous years. Additionally, Kaka Ltd. revalued its buildings with a carrying amount of K8.6 million to K9.5 million on 31 March 2021. Kaka Ltd had other taxable temporary differences amounting to K2.5 million requiring deferred tax provision at 31 March 2021. There was no deferred tax balance at 1 April 2020 but a credit current tax balance of K0.36 million. Kaka Ltd's income tax rate for the year is 30%.

Required:

Explain the accounting treatment of the above for the year ended 31 March 2021, in accordance with the requirements of *IAS 12 Income taxes*. (7 marks)

Situation 2

Kaka Ltd plans to expand its distribution network by opening more outlets in selected towns on the Copperbelt, Lusaka and Muchinga provinces. As this plan require more financing for infrastructure development, Kaka Ltd issued 8% K8 million loan notes on 1 April 2020 that are redeemable at a large premium in four (4) years' time. The loan notes were issued at a discount of 10% and Kaka Ltd incurred issue costs of K0.4 million on issue date. The loan notes have an effective interest rate of 12%.

The contractual terms of the financial liability give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal outstanding.

Required:

Explain and illustrate how the loan notes will be accounted for in the financial statements of Kaka Ltd for the year ended 31 March 2021 in accordance with the requirements of *IFRS 9 financial instruments*. (6 marks)

Situation 3

In addition to its distributary role, Kaka Ltd operates a small factory which makes basketball and volleyball nets. On 1 January 2018, Kaka Ltd purchased a machine for use in its factory for K6 million when its useful economic life of 10 years and machine was being depreciated on straight line method;

time apportioned both in the years of acquisition and disposal. The machine was revalued to K3.9 million at 30 September 2020 with no change to the useful economic life.

Required:

Explain and illustrate how the machine would be measured and accounted for in the financial statements for the year ended 31 March 2021 in accordance with the requirements of *IAS 16 Property, Plant and Equipment*.

(7 marks)
[Total: 20 Marks]

QUESTION FIVE

Kasongo Ltd. owns a large number of non-current assets and is undertaking a review of asset values as the directors believe that holding their assets at historic cost is increasingly becoming irrelevant. Kasongo Ltd has recently embarked on a program to hold assets at fair value.

(a) Explain the accounting treatment of revaluation surplus or loss when revaluation takes place for the first time or subsequently. (8 marks)

(b) Kasongo Ltd had two (2) properties with the following details:

	Property A	***Property B***
Cost	K300,000,000	K500,000,000
Date of purchase	1 April 2010	1 April 2010
Useful life at acquisition	60 years	50 years
Revalued at 31 December 2020 to:	K320,000,000	K300,000,000

Required:

Explain the accounting treatment of the two properties for the year to 31 December 2020 in accordance with the requirements of IAS 16 *Property, Plant and Equipment,* if Kasongo Ltd had revaluation surplus balance of K20,000 on 31 December 2020 relating to property A. (6 marks)

(c) Explain the three (3) conditions that must be met for borrowing costs incurred in connection with borrowing of funds for construction of a qualifying asset to be capitalized. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA2.1 FINANCIAL REPORTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Consolidated statement of financial position of Pemba at 30 September 2021**
(Note: All figures below in K'000)

	K'000
Assets	
Non-current assets:	
Property, plant and equipment (1, 960,500 + 546,000 + 35,000 (W1))	2,541,500
Goodwill (W2)	62,000
Other investments (457,000 - 450, 000 -1, 000)	6,000
Intangible assets (20,000 + 10,000 (W1))	30,000
	2,639,500
Current assets:	
Inventories (165,000 + 92,000 – (30,000 x 1/3 x 25/125%)	255,000
Trade receivables (99,000 + 76,000)	175,000
Cash and cash equivalents (17,000 + 16,000)	33,000
	463,000
Total assets	**3,102,500**
Equity and liabilities	
Equity attributable to equity holders of the parent	
Share capital (K1 shares)	1, 360,000
Retained earnings (W4)	575,310
Other components of equity (W8)	125, 880
	2,061,190
Non-controlling interest (W3)	156,000
Total equity	2,217,190
Non-current liabilities:	
Long-term borrowings (W10)	365,210
Deferred tax (W11)	319,100
Total non-current liabilities	684,310
Current liabilities:	
Trade and other payables (70,000 + 59,000)	129,000
Short-term borrowings (40,000 + 32,000)	72,000
Total current liabilities	201,000

Total equity and liabilities	**3,102,500**

WORKINGS – ALL FIGURES ARE IN K'000 UNLESS OTHERWISE STATED.

Working 1 – Net assets table for Samfya

	1 April 2021 K'000	30 September 2021 K'000
Share capital	160,000	160,000
Retained earnings:		
Per financial statements of Samfya	340,000	360,000
Fair value adjustments:		
Plant and equipment	40,000	35,000
Development project	10,000	10,000
Deferred tax on fair value adjustments:		
Date of acquisition (20% x (40,000 + 10,000))	(10,000)	
Year end (20% x (35,000 + 10,000))		(9,000)
Net assets for the consolidation	540,000	556,000

Increase in net assets post-acquisition (556,000 – 540,000)	16,000

Working 2 – Goodwill on acquisition of Samfya

	K'000
Cost of investment:	
Cash paid	450,000
Non-controlling interest at acquisition (25% of 160 million shares x K3·80)	152,000
Net assets at date of acquisition (W1)	(540,000)
	62,000

Working 3 – Non-controlling interest in Samfya

	K'000
At date of acquisition (W2)	152,000
25% of post-acquisition increase in net assets of 16,000 (W1)	4,000
	156,000

Working 4 – Retained earnings

	K'000
Pemba – per draft SOFP	570,000
Adjustment for unrealised profit on unsold inventory (2,000 less 20% (deferred tax))	(1,600)
Adjustment for finance cost of loan (W6)	(4,090)
Due diligence costs	(1, 000)
Samfya – 75% x 16,000 (W1)	12,000

	575,310

Working 5 – Equity component of long-term loan

	K'000
Total proceeds of compound instrument	300,000
Debt component:	
– Interest stream – 300,000 x 6% x K3·99	(71,820)
– Principal repayment – 300,000 x K0·681	(204,300)
So equity component equals	23,880

Working 6 – Adjustment for finance cost of loan

	K'000
Actual finance cost – 8% (300,000 – 23,880 (W5))	22,090
Incorrectly charged by Pemba (300,000 x 6%)	(18,000)
So adjustment equals	4,090

Working 7 – Due diligence costs

K1 million should be expensed to Cost of sales as per revised IFRS 3, business combinations

Working 8 – Other components of equity

	K'000
Pemba – per draft financial statements	102,000
Equity element of convertible loan (W5)	23,880
	125,880

Working 9 – income and expenses accrued evenly.

In this case no need to time apportion because the retained earnings figure on the date of acquisition was provided, unless we had retained earnings at the start of the year.

Working 10 – Long-term borrowings

	K'000
Opening loan element (300,000 – 23,880 (W5))	276,120
Finance cost less interest paid (W6)	4,090
So closing loan element for Pemba equals	280,210

Long-term borrowings of Samfya	85,000
So consolidated long-term borrowings equals	365,210

Working 11 – Deferred tax

	K'000
Pemba + Samfya – per draft SOFP (256,500 + 54,000)	310,500
On closing fair value adjustments in Samfya (W1)	9,000
On unrealised profits in inventory (2,000 x 20%)	(400)
	319,100

(b) **Control**

According to IFRS 10 consolidated financial statements, 'control is the power to govern the financial and operating policies of an entity so as to obtain benefit from its activities'. Control is presumed to exist where the investor owns more than half of the voting power of the other entity.

Other circumstances set out by IFRS 10 that signify existence of control (even if there is less than half of the equity share ownership) include:-

i) Where the investor has power to govern the financial and operating policies of the investee under a statute or agreement.
ii) Where the investor has power to appoint or remove the majority of the board of directors or equivalent governing board of the investee company.
iii) Where the investor has power to cast the majority of votes at meetings of the board of directors or equivalent body.
iv) Where the investor has power over more than half the voting rights by virtue of an agreement with other investors.

(c) **Exemptions**

IFRS 10 Consolidated financial Statements outlines the following exemptions when the parent entity need not present consolidated financial statements:

(i) The parent itself is a wholly owned subsidiary or a partially owned subsidiary and its owners have been informed about it and do not object to the parent not preparing the consolidated financial statements.
(ii) The parent's debt or equity instruments are not traded in a public market.
(iii) The financial statements of the parent are not filed with any regulatory organisation for the purpose of issuing debt or equity instruments on any stock exchange.
(iv) The ultimate or immediate parent of the entity produces publicly available financial statements that comply with IFRSs.

(d) **Usefulness of consolidated financial statements.**

The main reason for preparing consolidated accounts is that groups operate as a single economic unit and it is possible to understand the affairs of the parent company without taking into account the financial position and performance of all companies it controls.

The Directors of the parent company should be held fully accountable for all the money they have invested on the shareholders behalf.

The parent company's individual financial statements only show the original cost of the investment and dividends received from any subsidiaries, not a full picture. This hides the true value and nature of the investment in the subsidiary, and could be used to manipulate the reported results of the parent.

In addition, goodwill can only be quantified and reported if consolidated accounts are prepared and fair value of assets controlled by the group is only taken into account through consolidation and thereafter non-controlling interest is taken into account

Further, without consolidation, assets and liabilities of the subsidiary are camouflaged. Hence, consolidation reveals the underlying performance and profitability of the group as a whole.

SOLUTION TWO

a) Kolala Co. statement of profit or loss and other comprehensive income for the year ended 31 March 2021

	K'000
Continuing operations:	
Revenue (876,000 – 57,000W5 – 16,200W3)	802,800
Cost of sales (W2)	(222,880)
Gross profit	579,920
Investment income	45,000
Administrative expenses (W2)	(235,080)
Distribution costs (W2)	(140,400)
Loss on fair value of investment property (W6)	(13,000)
Operating profit	236,440
Finance cost (W8)	(12,800)
Profit before tax	223,640
Income tax (W7)	(31,750)
Profit for the year from continuing operations	191,890
Discontinued operations:	
Loss from discontinued operation	(16,570)
Total profit for the year	175,320
Other comprehensive income:	
Revaluation gain (W1)	15,000
Total comprehensive income	190,320

b) Kolala Co.'s statement of financial position as at 31 March 2021.

Non-current assets

	K'000
Property, Plant and Equipment (W1)	706,320
Investment properties	147,000
Total non current assets	853,320
Current assets	
Inventories	38,000
Receivables (120,700 – K40,000 W4)	80,700
Total current assets	118,700
Total assets	**972,020**
Equity and liabilities	
Equity share capital K1 each	220,000
Share premium	90,000
Revaluation reserve (56,000+35,000-20,000W1)	71,000
Retained earnings (W9)	137,920
Total equity	518,920

Non-current liabilities

6% loan note (W8)	163,200
Deferred taxation (W7)	73,000
Total non-current liabilities	236,200

Current liabilities

Trade payables	132,050
Bank overdraft (40,000 + 2,700)	42,700
Current tax payable	34,750
Declared dividends	7,400
Total current liabilities	216,900
Total equity	**972,020**

WORKINGS

1. **Property, Plant and Equipment**

	Land	**Buildings**	**Plant & Machinery**
	K'000	**K'000**	**K'000**
Valuations/cost @ 1/3/2020	200,000	450,000	110,000
Less actd dep'n @ 1/3/2020	Nil	Nil	(39,600)
Carrying amt b/f @ 1/3/2020	200,000	450,000	70,400
Dep'n charge for the year:			
Plant (20% x 70,400)	Nil	Nil	(14,080)
Buildings (450,000/30 yrs)	Nil	(15,000)	Nil
Carrying amnt at 31/3/2021	200,000	435,000	56,320
Revaluation gain/loss	35,000	(20,000)	Nil
Revalued at 31/3/2021	235,000	415,000	56,320

Total to PPE = K706,320 (K235,000+K415,000+K56,320)

Double entries:

Dr Land	35,000	
Cr revaluation reserve		35,000
Dr Revaluation reserve	20,000	
Cr Buildings		20,000

2. **Expenses:**

	Cost of sales expenses	Administrative expenses	Distribution
	K'000	**K'000**	**K'000**
Per trial balance	254,000	214,950	157,400
Depreciation expense:			
Plant (W1)	14,080		
Buildings (W1)	15,000		

Agency sales (W3)	(16,200)		
Re-organization cost		2,700	
Discontinued operation	(44,000)	(12,570)	(17,000)
Current year fraud		30,000	
Total expenses	222,880	235,080	140,400

3. Agency sales

Kolala needs to recognize commission only as part of their income and not the entire sales on behalf of the principal.

Commission = 10% x K18 million = K1.8

Amount to reverse = K18 million – K1.8 million = K16.2 million

4. Material fraud

The effect of this revelation is that receivables currently are overstated by K40 million and previous year profit is overstated by K10 million while current year profit is overstated by K30 million. The following double entries are required to correct the error:

Dr retained earnings b/f (prior period error)	K10 million	
Dr current year profit and loss	K30 million	
Cr receivables		K40,000 million

5. Discontinued operation

	K'000
Revenue	57,000
Cost of sales	(44,000)
Gross profit	13,000
Administrative expenses	(12,570) [10,500 + 2,070]
Distribution costs	(17,000)
Operating loss	(16,570)

6. Investment property

Fair value @ 31 March 2020	160,000
Fair value loss	(13,000)
Fair value @ 31 March 2021	147,000

7. Income taxes

Current tax:	K'000
Provision c/f	34,750
Less overprovision b/f	(27,000)
Charge to p/l	7,750
Deferred tax:	
Provision c/f (bal figure)	73,000
Less provision c/f	(49,000)
Charge to p/l increase	24,000

Total charge to P/L = K31,750 (K24,000 + K7,750)

8. 6% loan note

Balance b/f	***effective interest*** @8%	***nominal interest*** @6%	***balance c/f***
K'000	**K'000**	**K'000**	**K'000**
160,000	12,800	(9,600)	163,200

9. Retained earnings	**K'000**
Retained earnings b/f at 1/4/2020 (loss)	(20,000)
Adjustment for prior period error	(10,000)
Profit for the year (answer (a))	175,320
Dividends declared	(7,400)
Retained earnings c/f (profit)	137,920

SOLUTION THREE

a) Basic EPS is a measure of the amount earned by a company attributable to ordinary shareholders. Basic EPS is calculated by dividing the net profit or loss after tax by the weighted average number of ordinary shares outstanding during the period.

In the case of Bango, the basic EPS has to be calculated after taking into account a fully subscribed for rights issue. This calls for the need to calculate weighted average number of shares; which requires computation of Theoretical Ex Rights Price (TERP) as follows:

Before new issue proportion	5	x	K3.5	=	K17.5
New issue proportion	2	x	K3.0	=	K6.0
	7				K23.5

Therefore TERP = K3.36 (K23.5/7)

EPS for year ended 31.12.19 = K40,000,000/20,000,000 shares = K2 per share.

Restated EPS for year ending 31 December 2019:

= EPS x TERP/Fair Value of a share just before the rights issue

= K2 x K3.36/K3.50
= K1.92 per share

EPS for year ended 31.12 2020:
Weighted average number of shares is:

Before righte issue :20,000,000 x 3/12 x 3.5/3.36 =	5,208,333
After rights issue: 20,000,000 +[20,000,000/5 x2 x9/12)=	21,000,000
Total weighted average number of shares	26,208,333

Therefore, EPS for current year is 45,000,000/26,208,333
=K1.72

Earnings before convertible loan are K45,000,000
Weighted shares before convertible loan are 26,208,333
Earnings arising from conversion K15,000,000 x 6% x 70% = 630,000
Total earnings for Diluted earnings per share 45,630,000 (45,000,000 +630,000)
Shares from conversion K15,000,000/K100 x 20 shares = 3,000,000 shares
Total shares on conversion K29,208,333 (26,208,333+3,000,000)

Therefore, Diluted EPS = 45, 630,000/29,208,333
= K1.56 per share.

b) IAS 2 inventories require that inventory should be valued at the lower of cost and net realizable value (or fair value less costs to sell). IAS 10, events after the reporting period requires any adjusting event whose evidence of an existing condition comes into being before the financial statements are approved to be adjusted for in the financial statements.

Therefore, Bango's sales value of some of its inventory fell to lower than the cost before financial statements were approved for issue, and is a listed example of an adjusting event by the standard hence requires adjustment. Given that the inventory's cost is K180,000; it should be recognized at its lower NRV of **K100,000 (K110,000 – K10,000).** The inventory would have been written down by **K80,000 (K180,000-K100,000).** Consequently, profit for the year to be reduced via retained earnings figure by K80,000.

c) IAS 36 impairment of assets requires the treatment of impaired CGU to be as follows:

First allocating loss to asset specifically impaired, followed by goodwill and balance to the remaining assets on prorate basis. In making the impairment allocation, current assets are to be excluded from allocation as IAS 36 states that their carrying amounts are usually equal to their recoverable amounts hence not subject to impairment.

The CGU of Bango was impaired as the recoverable amount was lower than the carrying amounts by K6,680 (impairment loss).

The loss would be allocated as follows:

	Carrying amount	impairment loss	recoverable amount
Building	4,600	4,100	500
Goodwill	1,000	1,000	0
Land	3,500	813	2,687
Plant and machinery	3,300	767	2,533
Inventory	900	0	900
Receivables	980	0	980
	14,280	6,680	7,600

SOLUTION FOUR

Situation 1

IAS 12 income taxes allow tax losses to be carried back and be offset against previous taxable profits or carried forward to be offset against future taxable profits provided it is probable the entity will make profit. In the case of Kaka Ltd, it made profit of K0.5 million in the year ending 31 March 2020 and profit of K0.25 million in the year ending 31 March 2019. The loss of K0.85 incurred in the year ending 2021 can only be carried back one year, according to the rules in Kaka Ltd.'s jurisdiction, hence they qualify to reduce the taxable profit for the year ending 31 March 2020 from K0.5 million toK0.00 million creating a tax refund to Kaka Ltd of K0.15 million (30% x K0.5 million). Furthermore, as there was an opening credit balance of K0.36 million on current tax account on 1 April 2020, this increases amount to be credited to profit and loss for year ending 31 March 2021 to **K0.51 million (K0.36 million + K0.15 million). In the statement of financial position as at 31 March 2021, a tax asset of K0.15 million** will be recognized as expected refund on previous year charge.

Meanwhile, balance of the loss not set-off remains K0.35 million (K0.85 million – K0.50 million).

From the perspective of deferred tax, the total temporary difference is:

	i)	On revaluation surplus	=	900 (9,500-8,600)
	ii)	On other	=	2,500
Total temporary difference			=	3,400

Applying tax rate on the two leads to the following deferred tax figures:

Revaluation surplus	270 (to revaluation reserve)
Other	750 (to profit/loss)

Based on above working, the K0.27 million will reduce revaluation reserve to a balance of K0.63 million (K0.9 million – K0.27 million), whereas the K0.75 goes as a charge, to profit or loss with total of K1.02 going as deferred tax liability in statement of financial position as at 31 March 2021. Overall, a net amount to profit and loss will be a charge of K0.24 million (K0.75 million – K0.51).

Statement of profit or loss K'000

Income tax charge	240	

Statement of financial position

Current assets		
Tax refund	150	
Revaluation reserve		630
Non current liabilities		
Deferred tax		1,020

Situation 2

As the purpose of the loan notes is to make payments of principal plus interest and hold instrument upto maturity, the loan notes are classified and accounted for as a financial liability at amortized cost. This means, initially, the liability is measured at fair value less any discount on issue, less any transaction costs as follows:

	K'000
Fair value of consideration at 1 April 2020	8,000
Less discount on issue (10% x 8,000)	(800)
Less issue costs	(400)
Net proceeds	6,800
Add effective interest @12% x 6,800)	816
Less nominal interest @ 8% x 8,000)	(640)
Balance c/f	6,976

Therefore, at 31 March 2021, finance costs of K0.816 million will be charged to profit or loss and a financial liability of K 6.976 million will be recognized in statement of financial position.

Situation 3

According to IAS 16, the machine will be depreciated at K0.6 per annum from date of purchase oN 1 January 2018 to date of revaluation of 30 September 2020. Total depreciation of K1.65m would have been charged on date of revaluation leaving carrying value of K4.35 (K6m – K1.65). On the same date, the asset was revalued to K3.9 million giving rise to revaluation loss of K0.45 million to be expensed in profit or loss as the revaluation that took place was a first time revaluation.

On revaluation date, 2.75 years of the 10 years life of asset had expired, leaving 7.25 years. As there was no change to the life of the asset upon revaluing, the revalued amount will be subject to depreciation using the remaining life of 7.25 year giving depreciation expense of K0.538 million per annum of which only 6 months depreciation will be charged between revaluation date and reporting date of 31 March 2021 of K0.269 m (K0.538 x 6/12). Therefore, the carrying value of the machine at reporting date 31 March 2021 will be K3.631 million (K3.9m-K0.269m).

Working

Cost at purchase date 1.1.2018	6,000
Depreciation to 31 December 2018(10%x6000)	(600)
Carrying amount at 31 December 2018	5.400
Depreciation to 31 December 2019	(600)
Carrying amount at 31 December 2019	4,800
Depreciation to 31 March 2020 (600 x 3/12)	(150)
Dep'n from 31/3/20-30/9/20(600x9/12)	(300)
Carrying amount at 30 September 2020	4,350
Revaluation loss	(450)
Revalued amount	3,900

Depreciation from 30 September 2020 to 31 March 2021 = K3,900/ 7.25 years x 6/12 = K269.
Therefore, carrying amount at 31 March 2021 will be K3,631 (K3,900 – K269).

SOLUTION FIVE

a) If property, plant and equipment (PPE) is being revalued upwards for the first time, the revaluation surplus increases the PPE value in the statement of financial position as well as the revaluation surplus under equity. Depending on the policy for writing-off the surplus, if annual, then excess depreciation is written off the surplus to retained earnings systematically.

If PPE is being revalued for the first time and leads to revaluation loss, the loss is expensed to profit and loss and used to reduce PPE value in the statement of financial position.

If PPE is being revalued and leads to a revaluation surplus that follow the previous revaluation loss, it will have to reverse the previous loss to the extent of the amount expensed in profit or loss. Any balance on revaluation surplus account after off-setting against previous loss will be accounted for in a normal way of accounting for revaluation surplus, which is taken to surplus account and increase PPE with it.

If PPE is being revalued in subsequent year and leads to revaluation loss, following previous revaluation surplus, to the extent of balance of surplus on the account, the loss reverses that balance. Any amount that cannot be off-set against surplus balance will be written off to the profit and loss.

Note that offsetting of surplus against loss and vice versa is only possible with same asset.

	PTY A	**PTY B**
	K'000	K'000
b) Cost at 1 April 2010	300,000	500,000
Less depreciation @ 31 March 2020	(50,000)	(100,000)
Carrying amount at 31 March 2020	250,000	400,000
Dep'n to 31 Dec 2020	(2,500)	(50,000)
Carrying amount @ 31 Dec 2020	247,500	350,000
Revaluation surplus/loss	72,500	(50,000)
Revalued @ 31 Dec 2020	320,000	300,000

On 31 December 2020, a surplus balance of K20 million would not be used to offset AGAINST the revaluation loss of property B as it relates to property A and offsetting can only be for the same asset.

The following summary entries will be made in the financial statements:

Statement of profit or loss extract for the year ended 31 December 2020

	K'000
Depreciation expense:	
Property A	5,000
Property B	10,000
Revaluation loss (PB)	50,000

Other comprehensive income:	
Revaluation surplus	(72,500)

Statement of financial position extract as at 31 December 2020

Non-current assets	
Property, Plant and Equipment	620,000
Equity	
Revaluation reserve (20,000 + 72,500)	92,500

c) The following are the three conditions to be met for borrowing costs in connection with borrowing of funds to finance construction of qualifying asset:
   i) Interest costs are being incurred.
   ii) Construction works are being carried out
   iii) Expenditure of the borrowed funds is taking place on the construction project.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 15 MARCH 2022

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)

Nkumbu Ltd produces and sells product Munkoyo. The company operates a marginal costing system and its performance uses variance analysis. The Management Accountant presented the following data for the just ended quarter:

	Budget	Actual
Production/ Sales volume (Litres)	20,000	19,000
	K'000	K'000
Revenue (K65 per litre)	1,300	1,197
Material (5·2 kg at K4 per kg)	(416)	(418)
Labour (2 hours at K8 per hour)	(320)	(400)
Variable overheads (2 hours at K4 per hour)	(160)	(200)
Fixed overheads	(110)	(110)
Profit	**294**	**69**

Required:

(a) Prepare a budgetary control statement. (10 marks)

There was no opening and closing inventory in the last quarter. The Management Accountant is not involved in setting the original budget and believes that the adverse results are due to the following circumstances which were beyond his control:

1. A decision by Nkumbu Ltd's board to increase wages meant that the actual labour rate per hour was 25% higher than budgeted. This decision was made in response to a request by the production department to enable it to meet a large, one-off customer order in the last quarter.
2. Due to the closure of a key supplier, Nkumbu Ltd agreed to a contract with an alternative supplier to pay 6% more per kg than the budgeted price for material. The actual cost per kg of material was K4.40.
3. Difficult economic conditions meant that market demand for product Munkoyo was lower by 10%.

At present Nkumbu Ltd does not operate a system of planning and operational variances and the Management Accountant believes it should do so. The Chief Executive Officer sees no reason to have a budgeting system in the company. She feels that budgeting systems are outdated and therefore claims 'flexibility' in planning.

Required:

(b) Calculate the following variances

(i) Material price planning (4 marks)
(ii) Labour rate operational (4 marks)
(iii) Market share operating variance. (4 marks)

(c) Explain why Nkumbu Ltd should operate a system of planning and operational variances. (8 marks)

(d) Explain why the preparation of functional budgets must precede the preparation of the cash budget. (4 marks)

(e) Explain why employee participation in functional budget preparation is essential to the success of the budgeting process. (6 marks)

[Total 40 Marks]

SECTION B

There are four (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

There are two (2) production cost centres (Assembly and machining) and one service cost centre (Maintenance) in a factory. Overheads are absorbed in each production cost centre on the basis of machine hours.

The following budgeted information is available for a period:

1. Overhead costs allocated and apportioned:
   Assembly department K131,600
   Machining department K171,000
   Maintenance department K56,000
2. Service cost centre overheads are re-apportioned to the production cost centres as follows:

   Assembly department 40%
   Machining department 60%
3. Machine hours in Assembly department are 11,000.
4. Overhead absorption rate in Machining department is K33 per machine hour.

The following actual information is available for the same period:

(i) Overhead costs incurred in Assembly department (including the re-apportionment of Maintenance department costs) totalled K151,680.

(ii) Machine hours worked:
Assembly department 10,680
Machining department 6,450

(iii) Overheads were over-absorbed by K7,100 in Machining department.

Required:

(a) Define the term 'cost unit'. (2 marks)

(b) Suggest a suitable cost unit for each of the following:

(i) a manufacturer of canned food products; and (1 marks)
(ii) a house builder. (1 marks)

(c) Calculate for Assembly department:

(i) budgeted production overhead absorption rate; and (2 marks)
(ii) over or under absorption of overhead. (2marks)

(d) Calculate for Machining department :

(i) budgeted machine hours; and (2 marks)
(ii) actual overhead incurred. (2 marks)

(e) Describe the four types of responsibility centre. (8 marks)

[Total 20 Marks]

QUESTION THREE

LusTabo Enterprise is a food processing partnership in Lusaka. It smokes chickens for customers, mainly the general public, generating sales revenue of K591,250 per annum. All of the partnership's smoking machines are hired rather than owned outright.

The current rate of rejects (i.e. smokies of unacceptable quality) is 10%.
LusTabo Enterprise is now considering replacing the machines with more technically advanced ones, which would eliminate rejects altogether. The company's standard costs for one smoked chicken are as follows:

	K
Dressed chicken	60.00
Direct labour	9.00
Variable overheads	18.00
Cost per smoked chicken	87.00
Cost of rejects	8.70
Variable cost per chicken sold (good smokies)	95.70

Currently, the company sells 5,375 smoked chickens per annum. The company's fixed overheads are K958 per month.

If the new machines were hired to replace the old machines, machine rental costs would increase by K137 per month. However, the new machines would reduce variable overheads by 30%. The enterprise has also intentions to agree with the largest supplier of chickens to reduce the cost of a chicken by 10%.

Required:

(a) Calculate the current annual break-even point for good smokies. (3 marks)

(b) Calculate the annual break-even sales revenue if the new machines are hired. (5 marks)

(c) Calculate the annual level of good quality smoked chickens that would have to be demanded and sold for LusTabo to become indifferent about using the old or the new machines. Explain the basis of your calculation. (6 marks)

(d) Outline three (3) advantages and three (3) disadvantages of using marginal costing, as compared to absorption costing. (6 marks)

[Total 20 Marks]

QUESTION FOUR

Mukwala Ltd is a pharmaceuticals company engaged in the production and sale of medical drugs. During the past financial year demand for all three of their products, Paracetamol, Amantadine and Simethicone increased significantly. The company is currently preparing its budget for the forthcoming period and has just received information from their Indian material supplier, that the amount of material ingredient available next year will be 30% less than was available in the current year.

The following information in relation to all three products is provided:

Product	Paracetamol	Amantadine	Simethicone
Selling Price per unit	K600	K750	K540
Variable Costs per unit:			
Direct material ingredient	K300	K240	K180
Direct labour	K120	K180	K120
Variable overheads	K30	K60	K60
Fixed overheads	K30	K30	K30
Profit per unit	K120	K240	K150

Notes:

1. The amount of material that was available in the current year was 120,000 kgs and the price per kilo gram was K30. The price of the material will not increase in the forthcoming year.

2. Fixed overheads are absorbed into products on a unit basis. Total fixed overheads are estimated at K366,000 for the forthcoming year.

3. Demand for each of the products is forecast as follows for the forthcoming year:
   Paracetamol 950 tablets
   Amantadine 6,500 tablets
   Simethicone 4,750 tablets

4. The Marketing Manager of Mukwala Ltd has suggested that the company should concentrate on producing and selling Amantadine as these have the highest profit per unit.

Required:

(a) Comment on the suggestion by the Marketing Manager of Mukwala Ltd. (3 marks)

(b) Calculate the optimum production plan and the profit for Mukwala Ltd. (12 marks)

(c) Calculate the maximum amount that Mukwala Ltd would be willing to pay to purchase 6,000 extra kilo grams of material (2 marks)

(d) Discuss the following statement: "*fixed costs are never relevant for decision making scenarios* (3 marks)

[Total: 20 Marks]

QUESTION FIVE

At recent management meeting, the new Permanent Secretary was heard saying that there no need to have a Management Accounting system in the government Ministry because it is not mandatory. He also mentioned that performance analysis is challenge and lack of it may be viewed as lack of accountability.

Required:

(a) Explain the objectives of Management Accounting (10 marks)

(b) Explain the problems with performance measurement in the public sector

(10 marks)

[Total 20 Marks]

END OF PAPER

CA2.2 MANAGEMENT ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Budgetary control statement**

	Budget	Actual	Variance
Volume	19,000	19,000	-
	K'000	K'000	K'000
Revenue	1,235	1,197	38(A)
Material	(395.2)	(418)	22.8(A)
Labour	(304)	(400)	96(A)
Variable overheads	(152)	(200)	48(A)
Fixed overheads	(110)	(110)	0
Profits	273.8	69	204.8(A)

(b) **variances**

(i) Materials price planning variance

Original standard price per kg	K4.00
Revised standard price per kg (K4x106%)	K 4.24
Difference (K per kg)	K0.24
Actual quantity of material used (kg)	X 95,000
Variance	K 22,800 (A)

*Actual quantity of materials used = actual material costs/actual price per kg = K418,000/K4.40 per kg = 95,000 kg

(ii) Labour rate operational variance
Revised standard rate per hour K8.00
There is no revision made to the standard rate, as the increase was requested by the production department to meet a large, one-off customer order.

Actual rate per hour = 1.25 x K8 =K10.00
Difference K2.00 adverse
Number of hours worked = 40,000 hrs.
Variance K80,000 (A)

*Actual hours worked = actual labour cost/actual rate per hour = K400,000/K10 = 40,000 hrs.

(iii) The market share variance compares the revised sales volume to the actual sales volume:
Revised sales budget (20,000 units x 90%) 18,000 units
Actual sales 19,000 units
Difference (variance in units) 2,000 favourable
Valued at the standard contribution per unit K * 20.20
Variance = K40,400 (F)
*Standard contribution = K65 – (5.2 x K4) – (2 x K8) – (2 x K4) = K20.20

(c) The standard is set as part of the budgeting process which occurs before the period to which it relates. This means that the difference between standard and actual may arise partly due to an unrealistic budget and not solely due to operational factors. The budget may need to be revised to enable actual performance to be compared with a standard that reflects these changed conditions.

There must be a good reason for deciding that the original standard cost is unrealistic. Deciding in retrospect that expected costs should be different from the standard should not be an arbitrary decision, aimed perhaps at shifting the blame for bad results due to poor operational management or poor cost estimation.

A good reason for a change in the standard might be:

- a change in one of the main materials used to make a product or provide a service
- an unexpected increase in the price of materials due to a rapid increase in world market prices (e.g. the price of oil or other commodities)
- a change in working methods and procedures that alters the expected direct labour time for a product or service
- an unexpected change in the rate of pay to the workforce.

These types of situations do not occur frequently. The need to report planning and operational variances should therefore be an occasional, rather than a regular, event.
If the budget is revised on a regular basis, the reasons for this should be investigated. It may be due to management attempting to shift the blame for poor results or due to a poor planning process.

(d) There is a distinct hierarchy to budget setting in a production environment whereby the sales and finished goods inventory budget combine to form the pivotal production budget. Once the production budget is determined then the functional budgets such as labour, purchases, overhead and non-factory budgets can be determined. It is only when the functional budgets are prepared that the organisation will be in a position to consider the cash-flow ramifications of their plans along with the other master budgets.

(e)

Participation in the budget setting process by the members of staff who can on a daily basis impact on the delivery of the budget is essential for a number of reasons including:

- They can help determine the realism levels of the budget/s being set;
- They can understand the components of the budget better;
- They feel motivated to achieve budget targets as they have been involved in the budget setting process.

SOLUTION TWO

(a) A cost unit is 'a unit of product or service in relation to which costs are ascertained' (CIMA Official Terminology).

(b) Cost units:
(i) a manufacturer of canned food products – a can/thousand cans
(ii) a house builder – building job or a single contract

(c) Assembly department:
(i) Budgeted production overhead absorption rate:

Allocated and apportioned	K131,600	
Re-apportionment of maintenance department	K22,400	(K56,000 x 0·4)
	K154,000	
÷ budgeted machine hours	11,000	
Budgeted production overhead absorption rate	K14 per machine hour	

(ii) Under absorption of production overhead:

Actual production overhead incurred	K151,680	
Production overhead absorbed	K149,520	(10,680 mc. hrs x K14/ mc. hr)
Under absorption	K2,160	

(d) Machining department:
(i) Budgeted machine hours:

Allocated and apportioned	K171,000	
Re-apportionment of maintenance department	K33,600	(K56,000 x 0·6)
	K204,600	
÷ Production overhead absorption rate	K33 per machine hour	
Budgeted machine hours	6,200 machine hours	

(ii) Actual overhead incurred:

Production overhead absorbed	K212,850 (6,450 mc. hrs x K33/ mc. hr)
less over absorption	K7,100
Actual overhead incurred	K205,750

(e) **Responsibility Centres**

(i) **Cost centre**

This is an area of the business for which costs can be ascertained. This may be an entire factory or a smaller area such as a single machine. The manager responsible for a cost centre has authority regarding the costs incurred by his/her area of responsibility and should be held responsible for controlling the costs.

(ii) **Revenue Centre**

This **is** an area of the business for which revenues can be ascertained. The revenue centre manager will be responsible for revenue.

(iii) **Profit Centre**

This is an area of the business for which both revenues and costs can be ascertained and therefore a profit or loss for a period can be determined. Often profit centres are larger areas of the business such as an entire division or geographical sales area. The manager of the profit centre has authority over both costs and income and is responsible for the profit and thereby variances for both costs and revenues.

(iv) **Investment Centre**

This is similar to a profit centre, the difference being that the manager of an investment centre is responsible not only for the profit that is earned by the area of the business but also the net assets of the area of the business. Investment centres will often be entire divisions. The manager of an investment centre not only has authority over the costs and income of the centre but also over its assets and liabilities. A measure called 'return on capital employed' is calculated to determine how well the manager of an investment centre is performing.

SOLUTION THREE

(a) Current break-even point
Fixed overheads = K958 x 12 months = K11,496.
Sales price = K591,250/5,375 = K110 per smoked chicken.
Contribution per smoked chicken = K110 – K95.70 = K14.30 per smoked chicken.
Break-even point:
Fixed costs/Contribution per smoked chicken = K11,496 /K14.30 = **804 smoked chickens**.

(b) New break-even sales revenue

	K
Dressed chicken (60 x 90%)	54.00
Direct labour	9.00
Variable overheads (18 x 70%)	12.60
Variable cost per chicken sold (good smokies)	75.60

Contribution per smoked chicken = K110 – K75.60 = **K34.40** per smoked chicken.

Fixed overheads would increase by K1,644 (12 x K137)

Therefore, the new break-even point sales revenue is:

Fixed costs/Contribution per smoked chicken = [(K11,496 + K1,644) /K34.40] x K110 = **K42,017.44.**

(c) Output level at which the company would be indifferent.

The company would be indifferent about hiring the new machines where the total cost (fixed costs and variable costs) for production using the old machines is the same as total cost for production using the new machines. This can be calculated as follows:

Increase in fixed costs/decrease in variable costs

K137x 12/20.1 = **81.79 smoked chickens**

LusTabo would be indifferent between which method was used if the number of good smoked chickens and sold was **81.79 smoked chickens.**

(d) Marginal costing
Advantages
- It concentrates on controllable aspects of business by separating costs into their fixed and variable elements.
- Inventory valuations are not distorted with present year's fixed costs.
- By its nature, it gives the most relevant costs to assist a decision-maker. Marginal costs are usually differential, incremental costs that are important for pricing decisions, or make or buy decisions or decisions involving a limiting factor.
- No adjustments need to be made for under/over absorption of overheads since these simply do not arise when using marginal costing techniques.
- It is simple to understand.

- It shows the relationship between cost, price and volume.

Note: Only three advantages were required.

Disadvantages

- It totally ignores fixed costs to products as if they are not important to production, which they are.
- Inventory valued using marginal costing is not an acceptable method for financial reporting purposes.
- It fails to recognise that, in the long run, most fixed costs become variable.
- Not all costs can be simply categorised as fixed or variable, since some costs have a fixed and variable element.
- In the long run, when making pricing decisions, fixed costs cannot be ignored since all costs must be covered if the business is to survive.

Note: Only three disadvantages were required.

SOLUTION FOUR

(a) Short term decisions should be based on the principle of relevant costs. A relevant cost is a "future, incremental cash-flow". The marketing manager suggests that a short term decision, limiting factor, should be based on profit.

Profit is based on the accruals principle which includes non-cash items and if the company follows this proposal they will not maximise contribution.

(b) Optimum production plan and profit

Product	Paracetamol	Amantadine	Simethicone
	K	K	K
Selling price per unit	600	750	540
Less variable costs			
Direct material	300	240	180
Direct labour	120	180	120
Variable overheads	30	60	60
Contribution per unit	150	270	180
Kilo grams of material per unit	10	8	6
Contribution per kilo gram	15	33.75	30
Ranking	3	1	2

Optimum production plan:

Product	Kilo grams Per unit	Demand (units)	Kilo grams Required	Kilo grams Available
				84,000
Amantadine	8	6,500	52,000	32,000
Simethicone	6	4,750	28,500	3,500
Paracetamol	10	350	3,500	-

Profit Statement:

Product	Contribution /unit	Demand	Total contribution
	K	Units	K
Paracetamol	150	350	52,500
Amantadine	270	6,500	1,755,000
Simethicone	180	4,750	855,000
			2,662,500
Less Fixed costs			366,000
Profit			2,296,500

(c)
6,000 extra kilo grams would be used to produce Paracetamol. The contribution per kilo grams of material used in the Paracetamol is K15.Therefore the maximum amount that Mukwala Ltd would be willing to pay for the 6,000 extra kilo grams is = K90,000[6,000 x K15] .

(d) Short term decisions are made using relevant costing principles. A relevant cost is a future, incremental cash-flow.
For short term decision making, existing fixed overheads are ignored but incremental cash fixed overheads that relates to the decision must be taken into account.

SOLUTION FIVE

(a) **Objectives of management accounting**

The fundamental objective of management accounting is to enable the management to maximize profits or minimize losses. The evolution of management accounting has given a new approach to the function of accounting. The main objectives of management accounting are as follows:

1. **Planning and Policy Formulation**
   Planning involves forecasting on the basis of available information, setting goals; framing polices determining the alternative courses of action and deciding on the programme of activities.
   Management accounting can help greatly in this direction. It facilitates the preparation of statements in the light of past results and gives estimation for the future.
2. **Interpretation process**
   Management accounting is to present financial information to the management. Financial information is technical in nature. Therefore, it must be presented in such a way that it is easily understood. It presents accounting information with the help of statistical devices like charts, diagrams, graphs, etc.
3. **Assists in Decision-Making Process**
   With the help of various modern techniques management accounting makes decision-making process more scientific. Data relating to cost, price, profit and savings for each of the available alternatives are collected and analyzed and thus it provides a base for taking sound decisions.
4. **Controlling**
   Management accounting is a useful tool for managerial control. Management accounting tools like standard costing and budgetary control are helpful in controlling performance. Cost control is effected through the use of standard costing and departmental control is made possible through the use of budgets. Performance of each and every individual operation is controlled with the help of management accounting.
5. **Reporting**
   Management accounting keeps the management fully informed about the latest position of the concern through reporting. It helps management to take proper and quick decisions. The performances of various departments are regularly reported to the top management.
6. **Facilitates Organizing**
   Since management accounting stresses more on responsibility centers with a view to controlling costs and responsibilities, it also facilitates decentralization to a greater extent. Thus, it is helpful in setting up effective and efficient organization framework.
7. **Facilitates Coordination of Operations**
   Management accounting provides tools for overall control and coordination of business operations. Budgets are important means of coordination.

(b) **The problems with performance measurement .**

1) **Multiple objectives**
   The public sector tend to have multiple objectives, so that even if they can all be clearly identified it is impossible to say which is the overriding objective.

2) **Measuring outputs**
   Outputs can seldom be measured in a way that is generally agreed to be meaningful. (For example, are good exam results alone an adequate measure of the quality of teaching?)

Data collection can be problematic. For example, unreported crimes are not included in data used to measure the performance of a police force.

3) **Lack of profit measure**
If an organisation is not expected to make a profit, or if it has no sales, indicators such as ROI and RI are meaningless.

4) **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.

5) **Financial constraints**
Although every organisation operates under financial constraints, these are more pronounced in not 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.

6) **Political, social and legal considerations**

(i) Unlike commercial organisations, public sector organisations are subject to strong political influences. Local authorities, for example, have to carry out central government's policies as well as their own (possibly conflicting) policies.

(ii) The public may have higher expectations of public sector organisations than commercial organisations. A decision to close a local hospital in an effort to save costs, for example, is likely to be less acceptable to the public than the closure of a factory for the same reason.

(iii) The performance indicators of public sector organisations are subject to far more onerous legal requirements than those of private sector organisations.

(iv) While profit-seeking organisations are unlikely in the long term to continue services making a negative contribution, not for profit organisations may be required to offer a range of services, even if some are uneconomical.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 17 MARCH 2022

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

You are the Audit Manager in Banda & Associates Chartered Accountants and planning for the audit of the financial statements of Chavuma Chemicals Plc. a manufacturer of agricultural chemicals for the year ended 31 December 2020. Your firm has been auditor of Chavuma Chemicals Plc. for the past fifteen (15) years and Chanda has been Engagement Partner throughout this period. It is the first time that you and the rest of the audit team have been assigned to this audit. Chanda is a close friend of the Chief Executive Officer of Chavuma Chemicals Plc. and they are both part sponsors of the local social football team.

Chavuma Chemicals Plc. imports the bulk of its raw materials used in manufacturing of its products. The company sells the bulk of its products to Agro dealers who are given thirty (30) days to pay for the purchases. The accounts receivables have been increasing over the last three (3) years with 30% of the receivables outstanding for periods beyond two (2) months. Most of the Agro dealers have failed to settle their dues due to non-payment by government for the supply of chemicals to farmers under a support scheme.

The chemical industry is regulated by the Zambia Environmental Management Agency (ZEMA) and there are stiff penalties for non-compliance with the regulations.

The production plant at Chavuma Chemicals Plc. is old and the company obtained a loan of K45 million to purchase new modern equipment which produces less toxic fumes into the environment. It is clear that the carrying amount of the equipment is less than the recoverable amount and so an impairment exercise was carried out in the current year. During the year a court case in which Chavuma Chemicals Plc. was sued by one of its employee who suffered serious burns arising from lack of protective equipment commenced. The case is still in court and the company made a provision of K10 million in the financial statements. The employee refused to accept an out of court settlement of this amount and is claiming K50 million.

The Finance Director of Chavuma Chemicals Plc. resigned his position three (3) months before the period end and he was key in the preparation of the financial statements. The company is in the process of filling the vacancy and the Financial Accountant is assisting in the preparation of the final accounts for the first time.

During the planning stage of the audit of Chavuma Chemicals Plc. you establish that the company has poor risk management systems and the internal controls are poor in all the business cycles. The following information was gathered about the purchasing and inventory systems during the risk assessment stage performed in accordance with ISA 315 (Revised) *Identifying and assessing the risks of material misstatement through understanding the entity and its environment.* It is your wish that you should use a combined approach on this audit by carrying out tests of control and substantive tests.

The company has a Stores Department which is responsible for the custody and issue of stores items to user departments. The Stores Department has un-numbered inventory cards for each inventory item. The Stores Officer numbers the cards when used and he decides the numbering to use. On a regular monthly basis the stores officer counts all the items in stock and compares with the inventory per stock card. At the end of the year an inventory count involving staff from stores, finance and human resources carry out an inventory count supervised by the stores officer. All discrepancies are recorded and the Management Accountant does the inventory valuation.

When stock levels reach the reorder level, the Stores Officer makes a verbal order from any supplier on the list of approved suppliers. On receipt of goods from the supplier the stores officer passes the invoice to accounts who prepare the payment documentation. The only evidence of receipt of goods is that evidence by the Stores Officer signing for checking and receipt of inventory on the payment voucher prepared by accounts. The valuation of closing work in progress is done by a Specialist Engineer who worked for Chavuma Chemicals and has since formed his own company. Chavuma Chemicals Plcengages him annually for determination of work in progress.

Required:

(a) Identify and explain six (6) audit risks in Chavuma Chemicals Plc. and for each risk explain the audit response. (12 marks)

(b) Identify and explain four (4) ethical issues in the audit of the financial statements of Chavuma Chemicals Plc. and explain the response that should be made. (8 marks)

(c) (i) Distinguish between tests of control and substantive tests in the audit of financial statements. (3 marks)

(ii) Recommend a suitable audit approach to be followed in view of the poor internal control systems in Chavuma Chemicals Plc. (2 marks)

(d) Identify and explain five (5) internal control weaknesses in the purchases system of Chavuma Chemicals Plc. and suggest suitable improvements. (15 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

(a) You are the Audit Senior in the audit of the financial statements of Gardenia Ltd for the year ended 31 December 2020.

Your assessment of risk during the planning stage of the audit concluded that the risk of fraud was high. During the audit you learnt that there were three (3) instances of fraud two (2) involving staff and one (1) involving a member of management. There were many instances when you obtained oral evidence from Senior Management regarding accounting estimates.

In order for you to form an appropriate audit opinion, you are required to obtain sufficient appropriate audit evidence. You are aware of the need to obtain written representations from management in certain circumstances and that will form part of the evidence on which the opinion will be based.

There are three (3) areas in which you may require written representations from management as follows:

1. Confirmation of management's responsibilities.
2. Representations required by specific auditing standards and
3. Representations to support other audit evidence.

During the audit of the financial statements of Gardenia Ltd, you obtained the necessary written representations from management to support audit evidence as required. Soon after the audit report had been signed, you observed you did not obtain written representations from management regarding the going concern assumption. You requested for the representations and the Finance Director gave representations which were filed in the audit working papers.

Required:

(i) Explain giving examples, the written representations that should be obtained under each of the three (3) headings above during the audit of Gardenia Ltd. (6 marks)

(ii) Comment on the reliability of the written representations obtained from the Finance Director. (2 marks)

(b) The draft financial report of Magoye Plc. contains the financial statements, the Report of Directors, a summary of key performance indicators for the past five (5) years and the Chairman's statement.

The following were extracted from the draft audit report prepared by the Senior Audit Assistant after the audit of Magoye Plc.

The draft audit report prepared by the Senior Audit Assistant does not contain an '*Other information'* paragraph despite the fact that the financial report contains *other information.*

Emphasis of matter:

We draw the attention of the users of the financial statements that the financial statements of Magoye Plc. for the previous year were audited by different auditors.

Other matters:

We make reference to note 3 of the financial statements and refer to the legal case that is still active in court at the period end.

The estimate of the likely outcome of the case made by management is reasonable and in this regard a provision has been made in the financial statements.

Required:

(i) Explain the use of the emphasis of matter and other matter paragraphs in the audit report in accordance with relevant auditing standards. (2 marks)

(ii) Evaluate the use of the emphasis of matter and other matter paragraphs in the extracts from the draft audit report of Magoye Plc. (4 marks)

(iii) Explain the audit risk with regards to other information contained in the financial report of Magoye Plc. (2 marks)

(iv) Explain four (4) matters that should be included in the *other information* paragraph of the auditor's report of Magoye Plc. (4 marks)

[Total: 20 Marks]

QUESTION THREE

(a) The audit fee is a contentious issue for most companies who feel that they do not get value for money for the services paid for.

One way that companies try to reduce the audit fee is by enhancing the role of internal audit. The external auditors may rely on the work of internal audit or they may seek direct assistance of the internal auditors thereby save on time spent on the audit and ultimately the cost of the audit.

Required:

(i) Explain the meaning of seeking direct assistance of internal audit by the statutory auditor. (2 marks)

(ii) Explain four (4) situations where statutory auditors are prohibited from the direct use of internal audit according to ISA 610(Revised) *Using the work of internal auditors.* (6 marks)

(b) You were assigned to the audit of the financial statements of Manzi Ltd for the year ended 31 December 2019.

During the pre-audit meeting held with the Engagement Partner, emphasis was made to the audit team to maintain professional skepticism throughout the audit. Audit team members were reminded that they should document any weaknesses in internal controls observed during the course of the audit.

The Management of Manzi Ltd informed the Audit Manager that the company expects the audit report to include all internal control weaknesses that are in the company. Management claims that it is only in this way that there will be improvements in future on the quality of the financial statements. Management of Manzi Ltd is concerned that the auditors do not give an absolute assurance which suggests that they are not sure of the quality of the work that they perform.

Management of Manzi Ltd was not pleased with the former auditors who did not detect a fraud that happened during the period that they were auditors and yet issued an unmodified opinion.

Required:

(i) Explain the meaning of expectations gap in the audit of the financial statements of Manzi Ltd. (4 marks)

(ii) Explain the objective of a letter of weakness issued by the auditor. (2 marks)

(iii) Describe the information that will be included in the letter of weakness under the main headings. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Your firm has been auditor of Kangaroo Plc. for five (5) years. During this period your firm has had a good relationship with the management of Kangaroo Plc. However, a recent change in senior management has impacted negatively on the relationship.

You are the Engagement Partner on the audit of the financial statements of Kangaroo Plc. for the year ended 31 December 2020. The audit is in the final stages and there has arisen a serious disagreement with management over the accounting for development costs. Management insists on capitalizing development costs which do not meet the requirement for capitalizing.

You have obtained sufficient appropriate evidence that the development cost should instead be written off against revenue in the current year. You have indicated to management that unless they amend the financial statements, you will issue an adverse audit opinion in the year. However, Management have indicated that they may have no option but to replace you with another firm of auditors.

At a meeting with the Partner responsible for client management, it was resolved that the firm should not continue auditing the financial statements of Kangaroo Plc. and that the firm should resign from the engagement immediately.

You have been requested to start the process of resignation and ensure that the correct resignation process is followed.

Required:

(i) Explain the procedure that should be followed by your firm in resigning from the audit of Kangaroo Plc. (4 marks)

(ii) Explain two (2) rights of your firm after resignation as auditor of Kangaroo Plc. (2 marks)

(b) Your firm of chartered accountants is auditor of Mweru Ltd and you are the Audit Senior in charge of the audit for the year ended 31 December 2020.

Mweru Ltd is a manufacturing company involved in the manufacture of a range of goods. The company imports the bulk of its raw materials and has a warehouse for storage of raw materials. In the past, the company relied on the perpetual inventory system in use to determine the value of inventory at the period end. This was done because production is twenty four (24) hours and the company did not wish to disrupt production through conducting a physical inventory count which can only be done in two (2) days.

Mweru Ltd has been an audit client of your firm for three (3) years. Work that has been done on the perpetual inventory records suggests that record keeping is poor and only less than 10% of the inventory lines are counted each year.
You expressed concern with regards to the accuracy of the inventory figures in the financial statements. It is common for customers to pay for inventory and collect it later. There is concern on the valuation of inventory in view of the fact that there is evidence of damaged goods being carried into stock and the basis of determining allowance for obsolete inventory is not satisfactory. You have requested for a physical inventory count at the period end to which Management has agreed and they prepared inventory count instructions which you requested.

Required:

(i) Explain the impact on the financial statements of Mweru Ltd of a material misstatement of the closing inventory figure. (2 marks)

(ii) Explain the audit procedures that should be performed to test the assertion of cut-off of inventory. (3 marks)

(iii) Explain five (5) duties, during the count, of the audit team members that will witness the inventory count. (5 marks)

(iv) State four (4) matters arising from attending the inventory count that should be contained in the working papers. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Your firm of Chartered Accountants has been nominated auditor of Mabuya Ltd for the next three (3) years.

You are responsible for client acceptance and your assessment shows that there are no ethical or other issues preventing your firm from accepting nomination. The firm has replied to Mabuya Ltd accepting the nomination.

You are required to draft the engagement letter for the signature of the Managing Partner of your firm.

Required:

(i) State six (6) matters that should be included in the engagement letter. (6 marks)

(ii) Explain two (2) factors that may necessitate the revision of the engagement letter in future. (2 marks)

(b) You are one of the Audit Assistants assigned to the audit of the financial statements of Mpongwe Plc. for the year ended 30 September 2020.You attended a pre-audit meeting of the audit team members which was called by the Audit Manager.

The Audit Manager emphasized the following matters:

1. The importance of the assumption that Mpongwe Plc. is a going concern which will form the basis for the preparation of historical cost financial statements.
2. The need for observing professional skepticism throughout the audit so that audit team members should identify and document any indicators of Mpongwe Plc. having going concern problems.
3. The need to perform audit procedures on the going concern assumption in accordance with applicable standards.

Mpongwe Plc's Management carried out an assessment of the ability of the company as a going concern. Management based their conclusion on the cash flow projections that were prepared and the performance of the company according to the management accounts at the time of making the assessment.

During the discussions with the Finance Director of Mpongwe Plc., he indicated that although Management is of the view that the company is a going concern, there is a material uncertainty which casts doubt on the ability of the company to continue as a going concern. This is because of the fact that the company suppliers have withdrawn credit facilities and they are demanding cash upfront before supplying. The company has been negotiating with its bankers for a long term loan but this has failed due to failure in the past to service the existing loan. The current ratio for the year under audit is 0.5:1 and this is likely to deteriorate.

The problem that led the company into liquidity problems which made the company fail to declare dividends for four (4) years now is the lack of raw materials because the foreign supplier has not been able to meet the requirements. This together with old production equipment has adversely affected production and resulted in key workers leaving the company and labor disputes arising from delayed payments of salaries.

Despite the above, the company is confident that these problems will be overcome because the parent company is committed to injecting additional capital.

He stated that the company considers the basis of preparing the financial statements on a going concern basis is appropriate and that full disclosures concerning the material uncertainty have been made in notes to the draft financial statements.

Required:

(i) Identify and explain two (2) examples each of financial and operational events or conditions that may cast doubt on the going concern ability of Mpongwe Plc. (4 marks)

(ii) Explain four (4) audit procedures that should be performed on the going concern assumption according to ISA 570 *Going concern*. (6 marks)

(iii) Explain the impact on the audit report and opinion of the material uncertainty on the going concern assumption of Mpongwe Plc. (2 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.3 AUDITING PRINCIPLES AND PRACTICE

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Audit risks in Chavuma Chemicals Plc.:**
The following are the audit risks in the audit of the financial statements of Chavuma Chemicals Plc.:

1. **Compliance with listing rules:**
The fact that Chavuma Chemicals Plc. is a listed company on the Lusaka Securities exchange (LuSE) means that the company is required to follow the listing rules. There is a risk that this may not be the case and the company can be exposed to the penalties that go with non-compliance with the listing requirements.

   Non-compliance with listing rules may have implications on the ability of the company as a going concern and this may result in the company being de listed.

   Audit response: (Confirmation)
   The audit team members should be alert during the audit for any indications of non-compliance with listing rules. The audit team could also obtain written representations from management confirming that the company was compliant with the listing rules during the period under review.

2. **Non collectable accounts receivables:**
The increase in the receivables who are owing for periods above the allowable credit days poses a risk that some of the receivables may not be collectable. This may result in the misstatement of the receivables balance at the period end. This is compounded by the fact that the Agro dealers have not been paid by government and it is possible that some of them may go into liquidation without paying the money due to Chavuma Chemicals Plc.

   Audit response:
   A circularization (confirmation) of the receivables should be made and also obtaining of written representations from management on their view with regards the collectability of the outstanding amounts and the appropriateness of any allowance made for doubtful debts. A review of payments made after the period end will also aid in confirming amounts owing at the period end.

3. **Highly regulated industry:**
Chavuma Chemicals Plc. is a company in an industry that is highly regulated by environmental laws and regulations and labour laws affecting employment. There is a risk that the company will be non-compliant with the laws and regulations that govern it. This could result in penalties and also the risk that provisions may be misstated in the financial statements.

Audit response:
Gain an understanding of the laws and regulations that the company is subject to and specifically those laws and regulations that have an impact on the figures in the financial statements.

During the course of the audit, the audit team members to remain alert for any indications of non-compliance with laws and regulations. There will be need to obtain written representations from management that the company has complied with relevant laws and regulations.

4. **Impairment review of the equipment:**
The impairment exercise carried out during the year involves estimations including the determination of the recoverable amount and the net realizable value. There is a risk of management biases in determining accounting estimates which could result in the misstatement of figures in the financial statements.

Audit response:
Will need to confirm that all the assets in the class have been tested for impairment in accordance with IAS 36. There will be need to evaluate the assumptions made by management with regards the accounting estimates used in the impairment review.

5. **Legal case by employee:**
There is a disagreement between the employee and the management regarding the damages being sought for injury suffered by the employee. There is a risk that the provision made by management of K10 million could be misstated. This could result in the financial statements being materially misstated.

Audit response:
Discuss with the legal advisors of the company on the basis of arriving at the provision of K10 million. Possibly obtain independent view from external legal experts on the likely outcome of the case based on facts available. After the year end remain alert for any evidence regarding the provision such as if the case is concluded before the date of the auditor's report. If the there are other estimates that management made in the past compare these with the outcome to examine the reliability of accounting estimates made by management.

6. **Resignation of Finance Director**
The resignation of the Finance Director with no replacement may result in a high rate of errors in the financial statements prepared by the Financial Accountant who will prepare financial statements for the first time.

Audit response:
Remain alert throughout the audit for any errors that may be in the financial statements. There will be need to follow a substantive audit approach rather than a combined approach of relying on internal controls in addition with a limited amount of substantive tests. Closer supervision of the audit staff will be necessary.

7. **Poor internal controls:**
   The fact that the internal controls are assessed as being poor in Chavuma Chemicals Plc. poses a risk that the risk of material misstatements is high and that material misstatements may not be detected by the audit team.

   Audit response:
   There will be need to emphasize to the audit team the need to remain alert and apply professional skepticism through the audit. Reliance will not be placed on the internal controls but rather rely more on substantive audit procedures.

(b) **Ethical issues in the audit of Chavuma Chemicals Plc.:**

The following are the ethical issues in the audit of Chavuma Chemicals Plc.:

1. **Chanda as Engagement partner:**
   Chanda has been the Engagement Partner of Chavuma Chemicals Plc. from the time of inception of the company fifteen (15) years ago. This results in a familiarity threat in that Chanda is too familiar with the staff of Chavuma Plc. who are involved in the preparation of the financial statements and so is likely to have lost his independence and objectivity.

   Audit response:
   The firm should consider assigning someone else as Audit Engagement Partner for the audit of the financial statements of Chavuma Chemicals Plc. Guidance states that key staff of the audit team should be rotated and should not be on one audit for a period exceeding seven (7) years.

2. **First time on this audit for the rest of the audit team:**
   Except for Chanda who has been on this audit before, the rest of the audit team members will be on this audit for the first time. This means that there is no prior knowledge that they have and this may give rise to increased detection risk in that the team members may lack the skills and competences to undertake the audit of the financial statements of Chavuma Chemicals Plc.

   Audit response:
   There is need to emphasize the need for the audit team members to observe professional skepticism throughout the performance of the audit. Further, closer supervision of the staff will be necessary and possibly the use of an independent quality control reviewer to review the audit working papers for this audit.

3. **Valuation of work in progress:**
   The valuation of work in progress by the Engineer who recently worked for Chavuma Chemicals Plc. raises question on the Engineer's independence and objectivity. Having been involved with the valuation when he worked for Chavuma Chemicals Plc., it is unlikely that he will be objective and there will be an element of self-review.

Audit response:
There will be need to engage an independent valuer, an auditor expert, who will be more objective compared to the one who previously worked for Chavuma Chemicals Plc.

4. **Chanda the engagement partner on this audit is a close friend of the Chief Executive Officer of Chavuma Chemicals Plc.** There is a conflict of interest in that they both sponsor the local social football team. Further, the friendship gives rise to a self-interest and familiarity threat on the part of Chanda. He is not likely to maintain his objectivity because of this relationship.

   Audit response:
   Chanda should cease to be Engagement Partner on the audit of the financial statements of Chavuma Chemicals Plc.

(c) (i) **Distinction between tests of control and substantive tests:**
Tests of controls are procedures that are performed by the statutory auditor with a view to determine whether the controls are operating effectively throughout the period under review.

Depending on the results of the tests of control, the auditor will decide on the approach that will be followed in the audit. Either a substantive procedures will be followed or a combined approach. If the auditor concludes that the controls were operating well, he will place reliance on their effectiveness by examining less transactions and balances because of placing reliance on the controls.

Substantive tests on the other hand are tests of detail and analytical procedures performed by the auditor with a view to detect material misstatements in the figures contained in the financial statements.

(ii) **Recommendation of approach to use:**
Going by the fact that the Finance Director resigned before concluding the preparation of the financial statements of Chavuma Chemicals Plc., and the conclusion at the planning stage of the audit that the internal control systems in Chavuma Chemicals Plc. are poor, a substantive approach is recommended.

The use of a combined approach would only be acceptable if the results of the tests of control suggest that the internal controls were operating effectively throughout the period under review.

(d) **Internal control weaknesses in the purchases system of Chavuma Chemicals Plc.:**

1. **Un-numbered stock cards in use:**
   The use of un-numbered stock cards by stores is a weakness in that it will be easy to perpetuate fraud. This could be done by destroying cards on which fraud has occurred and

replacing the cards with a card with falsified information. The numbering by the stores officer does not reduce the risk of fraud through falsifying information on the stock cards.

Recommended improvement:
Stock cards should be made accountable documents by having them pre-numbered so that they need to be accounted for. Cards that may be cancelled or not used should be retained and accounted for.

2. **Responsibilities of the Stores Officer:**
   There is no segregation of duties in the stores department. The Stores Officer is performing all duties relating to stock items from receipt, recording, storage, issuing and the conduct of inventory counts and updating the stock records. This can result in fraud going undetected for prolonged periods of time.

   Recommended improvement:
   There should be segregation of duties so that no one person performs function from receipt of items to custody and record keeping. The Stores Officer should delegate some of his current duties to some of the staff in the Stores Department.

3. **Supervision of annual inventory count by the Stores Officer:**
   The conduct of the annual inventory count by staff from staff stores, finance and human resources is appropriate. This is because it includes staff who are not involved in the handling of stores items.

   The fact that the Stores Officer supervises the inventory count is inappropriate in that he is the custodian of the inventory being counted and may conceal any wrong doings in stores.

   Recommended improvement:
   The supervision of the inventory count should be given to someone independent from among those from other functions.

4. **Verbal order from suppliers:**
   The making of orders verbally by the Stores Officer is not appropriate. This could lead to wrong goods being supplied and result in disputes with the suppliers. Further, there should be authorizations of orders made which may not be the case when verbal orders are made.

   Recommended improvement:
   Orders should be made on the basis of written pre-numbered orders which should be authorized by the appropriate person. In this case, authorization should be made by someone other than the Stores Officer.

5. **Evidence of receipt of stock items:**
   The evidence of receipt of inventory items by signing on the payment voucher is not good enough. Receipt of inventory item should be confirmed at the time of receipt of goods and not when payment is being made which is later. There is need for documentation at the time of receipt which will form the basis of updating the stock cards.

Recommended improvement:

The raising of a Goods Received Note (GRN) should be introduced so that all receipts of inventory items are confirmed by raising this after checking for quality and other details to ensure goods ordered are the one received. For control purposes, the Goods Received Notes (GRNs) should be accountable documents.

SOLUTION TWO

(a) (i) **Written representations under each of the following:**

1. **Confirmation of management's responsibilities:**
   The written representations obtained by the auditors under this heading are meant for management to acknowledge its responsibilities for the preparation of financial statements in accordance with the applicable financial reporting framework.

   Management should also give written representations that it is responsible for putting in place suitable internal controls in the company meant to prevent and detect fraud and error.

   The reason why the auditor obtains these representations is to avoid misunderstanding with regards to the responsibilities of the management and that of the auditors.

2. **Representations required by specific standards:**
   ISA 580 *Written representations* guides that in addition to obtaining written representations in line with the standard there are specific written representations required by individual auditing standards.

   In this case, the information in the question refers to the risk of fraud in the company. ISA 240 *The auditor's responsibilities relating to fraud in an audit of financial statements* guides that the auditor should obtain written representations from management as follows:
   - That management have disclosed to the auditors any fraud that has taken place or is suspected.

3. **Representations to support other audit evidence:**
   Auditors obtain written representations as necessary during the audit mainly meant to support other audit evidence obtained. For example, auditors obtain oral evidence during the audit and they may wish to have this supported by written evidence. This is achieved by obtaining written representations from management.

(ii) **Reliability of written representations obtained after the date of the report:**

Written representations obtained by the auditor are part of the evidence that is used to arrive at an appropriate audit opinion. It is expected that the representations will be obtained before the audit report is signed.

In this case the written representations from the Finance Director were obtained after the audit report had been issued and signed. This brings into question the reliability of such representations because they would not have been considered when arriving at an audit opinion.

(b) (i) **The use of emphasis of matter and other matter paragraphs:**

ISA 706 *Emphasis of matter paragraphs and other matter paragraphs in the independent auditor's report* gives guidance.

The ***emphasis of matter paragraph*** is introduced by the auditor in the auditor's report when the auditor has a matter that has been adequately disclosed and accounted for in the financial statements and it is of such importance that the auditor wishes to make mention and emphasize in the report.

On the other hand, the ***other matter paragraph*** is meant for the auditor to mention a matter that need not be in the financial statements but he feels it is of such importance that he feels should be brought to the attention of the users of the financial statements.

(ii) **Evaluation of the EoM and Other matters paragraphs in the draft audit report:**

As explained in (b) (i) above, the emphasis of matter paragraph is used to draw user's attention to matters in the financial statements and that have been adequately dealt with by management. The draft audit report contained a matter that is not contained in the financial statements in the Emphasis of matter paragraph which is not appropriate.

The matter in the *other matter paragraph* is the one that should have been included in the Emphasis of matter paragraph because it related to a matter appropriately dealt with by management and contained in the financial statements.

The matter of the previous year financial statements having been audited by different auditors should be contained in the *other matter paragraph*.

(iii) **The audit risk – other information:**

The risks that exists with other information contained in the financial report of Magoye Plc. include:

- The risk that the company may not include an *Other information* section in its audit report which is a requirement for listed companies.
- There may be a misstatement arising from inconsistencies between the other information and the evidence gathered during the audit.

(iv) **Matters that are included in Other Information paragraph:**

1. A statement that management is responsible for the *other information* contained in the financial statements. Responsibilities of management and the auditors with regards to *other information* contained in the financial statements.
2. An identification of the other information namely the Report of directors, the summary of KPIs and the Chairman's report.
3. The fact that these are not separate opinions on the matters referred to in this paragraph.
4. The responsibilities of the auditor of reading the other information and requiring any inconsistences with the financial statements to be corrected.

5. Where there is other information, that the auditor has nothing to report on or a description of any uncorrected material misstatement where this exists.

SOLUTION THREE

(a) (i) **Seeking direct assistance of internal audit:**

Seeking direct assistance of the internal audit department occurs where the statutory auditor requests the internal audit department to perform some tasks which will form part of the evidence gathers upon which an audit opinion will be reached. The internal auditors will be assigned work and supervised by the statutory auditor.

The auditor is responsible for the audit opinion even where he used internal audit to perform some procedures.

(ii) **Situations where direct assistance prohibited:**

1. Where the work that is to be performed by the internal audit department involves a significant amount of judgment. For examples, the risk assessment procedures required to be carried out at the planning stage of an audit requires a significant amount of judgment and should not be assigned to internal audit staff.

2. Any work that the statutory auditor wishes to carry out in the client company in which the internal auditors were involved.

3. Carrying out an assessment of the internal audit department with a view to either rely on its work or seek direct assistance from internal audit.

4. Areas where significant risks have been identified during risk assessment should not be given to internal audit to carry out.

(b) (i) **The meaning of expectation gap:**

This is the difference between the perceptions of the public regarding the responsibilities of the statutory auditor.

This can be explained considering the information in the scenario. Management is suggesting that the auditors should be responsible for the putting in place internal controls in the company and also they are expected to detect any fraud that may have occurred.

The suggestions by management are contrary to the legal responsibilities of the auditors which is to obtain sufficient appropriate evidence on the financial statements and form an opinion. Management is responsible for setting up suitable controls in the company and for the prevention and detection fraud.

The expectation that the auditors should give an absolute assurance is evidence of the expectation gap. This is because the auditors can only give a reasonable assurance.

The difference in the responsibilities of the auditors as explained by management and the statutory responsibility of the auditor is the expectation gap.

(ii) **Objective of a letter of weakness:**

The objective of a letter of weakness given by the statutory auditor is to communicate the weaknesses in internal controls that the auditor came across during the audit to management.

The aim of the auditor is to explain the weaknesses in internal control that they came across together with the implications of the weaknesses and recommendations to remedy those weaknesses.

(iii) **Information to be included in letter of weakness:**

1. **INTRODUCTION**
   This is a paragraph in which the auditor explains the purpose of the letters and the fact that the weaknesses contained therein are not the only ones but those that the auditor came across during the audit.

2. **FOR EACH WEAKNESS:**
   Brief details of the weakness:
   This paragraph is used to make a brief explanation of the weakness identified by the auditor.

   Brief details of the impact of the weakness to the company:
   In this paragraph, the auditor explains the implication to the company of weakness explained in the above paragraph.

   Recommendations by the auditor:
   This paragraph contains the recommendations by the auditor to remedy the weakness identified.

   Response from management:
   In this paragraph, the auditor will state the response by management to the weakness identified.

SOLUTION FOUR

(a) (i) **Resignation procedures:**

1. The firm should deposit a written notice of resignation with a statement of circumstances that have caused the firm to resign as auditor of Kangaroo Plc. This is a requirement since the client company is a listed company.
2. The firm should send a statement of circumstances to the regulatory authority and anyone who is entitled to receive a copy of the financial statements.
3. The firm may wish to call on the directors to call for an extraordinary general meeting whose purpose is to discuss the circumstances of the resignation.
4. The firm may require that prior to the extraordinary meeting management circulates a statement of circumstances to all those entitled to receive notice of the meeting.

(ii) **Rights of the firm after resignation:**

1. The firm has a right to receive notice of any general meeting at which the firm's term of office would have expired.
2. In the event that the vacancy caused by the firm's resignation would require to be filled, the firm has a right to receive notice of such a meeting to fill up the vacancy.
3. The firm has a right to speak at any of the above meetings on matters that concern them as auditors.

(b) (i) **Risk of misstating of closing inventory figure:**

A misstatement on the closing inventory value of Mweru Ltd has an immediate impact on the profit reported. This is because the closing inventory value is used in calculating the cost of sales.

If inventory figure is overstated, this means that the cost of sales will be reduced to the extent of the overstatement and this will result in an overstatement of the reported profit.

If on the other hand closing inventory is understated, the impact will be an overstatement of the cost of sales resulting in an understatement of the reported profit.

(ii) **Audit procedures for cut-off of inventory:**

1. During attendance of inventory count, the auditors should obtain details of the last Goods Received Notes, Credit Notes and sales invoices raised during the year and also the first document numbers issued in the subsequent accounting period.
2. After the inventory count the auditor will confirm by inspection that the documents recorded during the inventory count have been processed and accounted for in the correct accounting period. The closing documents should be processed in the year under review while the opening ones should be recorded and accounted for in the subsequent accounting period.

(iii) **Duties of audit team members attending inventory count:**

1. The audit team members will read the inventory count instructions in order to assess their adequacy.
2. The audit team members will observe the manner in which the count is being conducted and ensure it is in accordance with the instructions.
3. The team will observe how the count teams treat damaged goods so that they are separately kept.
4. The team will carry out test counts in order to ensure that procedures and controls put in place are working.
5. The team will wish to confirm that any goods belonging to third parties are not included in the inventory.
6. The team will need to conclude as to whether the count can be relied upon as a basis for valuing inventory.

(iv) **Matters that will be included in the working papers:**

1. A copy of the inventory count instructions prepared by Management and comments on their adequacy.
2. Details of the observations of the team members and the conclusions on the conduct of the inventory count.
3. Details of test counts performed and the results of the test counts in comparison with the counts on the final count sheets.
4. Details of any instances observed where procedures were not followed or the count was not satisfactorily done and how this was resolved.
5. Overall conclusion on the conduct of the count.
6. Details of the results of the inventory count and how any difference with the book inventory values was resolved.

SOLUTION FIVE

(a) (i) **Matters included in the engagement letter:**

1. The responsibility of the management of preparing the financial statements.
2. The auditor's responsibility to obtain sufficient appropriate audit evidence to enable the auditor form an opinion.
3. The objective and scope of the audit of the financial statements.
4. Clear identification of the applicable financial reporting framework for the preparation of the financial statements.
5. The expected form and content of the report that will be issued after the audit.
6. Agreement of management to provide the auditor with the draft financial statements and other information on time.
7. The fees and the basis of determining the audit fee.
8. Any involvement of internal audit if client has internal audit department.
9. Arrangements regarding planning and performance of the audit.

(ii) **Factors that may necessitate a revision of the engagement letter:**

1. When there is a misunderstanding between the management and the auditor regarding the nature and scope of the audit.
2. A restriction on the scope of the audit whether imposed by management or any other circumstances.
3. A change in the management of the client entity management.
4. A change in the size of the client company may necessitate a revision of the engagement letter.

(b) (i) **Indications of going concern problems:**

1. **Financial indicators:**

Withdrawal of credit facilities:
The withdrawal of credit facilities from Mpongwe Plc. by its suppliers is a sign of loss of confidence as a result of the liquidity problems that the company is facing. If the company fails to pay upfront for essential materials required for production, the company may cease operations.

Adverse current ratio:
Adverse financial ratios, that is, a current ratio of less than 1:1 in the current year is a financial indicator of going concern ability of Mpongwe Plc. This explains why suppliers have withdrawn credit facilities and less investors will wish to buy shares in Mpongwe Plc.

Failure to obtain additional financing:
Mpongwe Plc. requires additional financing to continue its operations. The fact that the company is failing to secure a loan is a financial indicator that there is material uncertainty that the company will continue as a going concern.

Failure to declare dividends in the last four (4) years:
The failure by Mpongwe Plc. to pay dividends in the last four years with no prospects that it will manage to do so in the near future in an indication on the going concern ability of the company. Shareholders expect dividends from companies in which they make investments and so do potential shareholders. The company is unlikely to attract more capital for failing to pay dividends.

2. **Operating indicators:**
   Failure to secure essential raw materials:
   Mpongwe Plc. is facing difficulties in securing essential raw materials resulting in the company operating at below capacity. This is an operational challenge which can impact on the ability of the company continuing as a going concern.

   Breakdown of equipment:
   The constant break down of equipment has an adverse effect on the ability of the company continuing as a going concern. This is worsening the production capacity of the company which is also affected by the short supply of essential materials from abroad.

(ii) **Audit procedures on going concern assumption:**

1. Confirm that the Management of Mpongwe Plc. has made an assessment of the ability of the company continuing as a going concern for a period of not less than twelve months from the date of the assessment.
2. Inquire from Management the basis of concluding that Mpongwe Plc. is a going concern and evaluate reasonableness of the assumptions.
3. Inquire from Management on its knowledge of events or conditions beyond the period of assessment that may cast doubt on the ability of Mpongwe Plc. continuing as a going concern.
4. Obtain written representations from Management that they believe that Mpongwe Plc. is a going concern and the basis for that belief.

(iii) **Impact on the audit report when there is material uncertainty regarding going concern assumption:**

There is material uncertainty with regards to the going concern ability of Mpongwe Plc. The impact on the auditor's opinion depends on the appropriateness of the basis of the preparation of the financial statements and the disclosure of the material uncertainty in the financial statements.

In this case Management concluded that the basis of preparing the financial statements on a historical basis is appropriate and that full disclosure has been made in the financial statements. If the auditor concludes and agrees that the basis of preparing financial statements is appropriate, an unmodified opinion will be issued.

END OF SOLUTIONS

CA-ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 17 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: ONE (1) Compulsory Question.
   Section B: Four (4) Optional Questions. Attempt any THREE (3) questions

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

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

5. **Cell phones** are **NOT** allowed in the examination room.

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

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

8. Present legible and tidy work.

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

10. A Taxation table is provided from page 2 to page 6 of the question paper.

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

Taxation table for paper CA2.4– Taxation (MARCH 2022 Examinations)

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	5.5% of norm value
From US$4,500 to less than US$6,000	6.5% of norm value
From US$6,000 to less than US$7,500	7.5% of norm value
From US$7,500 to less than US$9,000	8.5% of norm value
From US$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing **(Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax 4%

Presumptive Tax for Transporters

Seating capacity	**Tax per annum**	**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 2 years but below 5 years		Aged 5 years and over	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 years but below 5 years		Aged 5 years and over	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not	18,049	23,463	13,357	17,598

exceeding 3000 cc				
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463
SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	Aged 2 years but below 5 years		**Aged 5 years and over**	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	30,697	13,302	24,119	10,452
Panel Vans				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1.	**Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	30%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Cylinder capacity of 1500 cc and less	20%
	Cylinder Capacity of more than 1500 cc	30%
2.	**Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**	
	Customs Duty	
	Percentage of Value for Duty Purposes	15%
	Minimum specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
3.	**Buses/coaches for the transport of more than ten persons**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Seating Capacity of 16 persons and less	25%
	Seating Capacity of 16 persons and more	0%
4.	**Trucks/lorries with gross weight exceeding 20 tonnes**	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and MUST be attempted.

QUESTION ONE

Samuel Phiri has been employed as a sales representative at TelZed plc for many years. In the tax year 2021 Samuel was entitled to an annual salary of K168,000, an annual housing allowance of 20% of his basic salary and an annual medical allowance of 10% of his basic salary. The company additionally paid the incidental expenses relating to his living accommodation amounting to K1,500 per month.

Samuel received two (2) bonuses during the year. The first bonus amounting to K4,000 was a Christmas bonus which all employees of TelZed plc were entitled to receive in the month of December 2020. However, the company only paid Phiri his Christmas bonus of K4,000 on 31 January 2021 as the company was facing some liquidity problems. The second bonus which was paid on 28 February 2021 amounting to K5,300, was a sales bonus paid in respect of him having achieved his sales target for the month of January 2021.

Throughout his employment in the tax year 2021, he was provided with a Toyota Fortuner motor car, having a cylinder capacity of 3,000cc on a personal to holder basis, which the company acquired at a cost of K360,000. He had private use of 40% of the motor car. He was entitled to free meals from the staff canteen which cost the company K1,200 per month. On 1 May 2021, he was given a labour day award comprising cash amounting K3,000 and a laptop valued at K4,000.

On 31 May 2021, Phiri was retrenched from his position. On his retrenchment the company paid him accrued leave pay of K7,200, a repatriation allowance of K28,000, severance pay of K280,000 and salary in lieu of notice of K42,000.

During his employment, payments made from his gross emoluments included employee's NAPSA contributions of K5,550, National Health Insurance Scheme contributions of 1% of his basic salary per month, trade union subscriptions of K300 per month, donations to approved public benefit organizations of K3,000 and school fees for his children of K18,000. Pay As You Earn of K89,410 was deducted from his emoluments in the tax year 2021.

Using his terminal benefits and some savings, Phiri commenced in business and set up a small manufacturing enterprise on 1 July 2021. He prepared the first accounts for the business on 31 December 2021, and will prepare accounts annually thereafter.

The statement of profit or loss extract for the period to 31 December 2021, was as shown below:

SAMUEL PHIRI
STATEMENT OF PROFIT OR LOSS FOR THE PERIOD ENDED 31 DECEMBER 2021

	Note	K	K
Gross Profit			1,656,700
Add: Other income			
Discount received		4,500	
Fixed deposit interest (actual amount received)	(1)	4,000	
Dividends (actual amount received)	(1)	17,000	
Copyright royalties (actual amount received)	(1)	30,600	
			56,100
			1,712,800
Less expenses:			
Preliminary business expenses	(2)	270,000	
Gifts and entertainment	(3)	44,700	
Staff salaries and wages	(4)	914,000	
Miscellaneous expenses	(5)	107,900	
			(1,336,600)
Profit for the year			376,200

Additional information:

Note 1: Investment income

The investment income shown in the statement of profit or loss above represents the actual amount of cash received by Samuel Phiri in each case. Withholding tax was deducted at source and paid on the relevant due dates.

Note 2: Preliminary Business Expenses

These were incurred by Phiri in June 2021, before commencement of trading and comprise the following items:

	K
Advertising & marketing expenses	26,500
Business stationery	19,000
Business registration fees with PACRA	16,000
Council Trading licence	14,500
Purchase of computers	30,000
Insurance for business premises	144,000
Motor vehicle repairs	20,000
	270,000

The motor vehicle repairs were incurred on a second-hand Isuzu Double cab van which Samuel acquired at the cost of K150,000 on 16 May 2021 for both business and private use. These repairs were necessary in order to put the van into a usable state and were completed on 28 May 2021, when he paid for them. Phiri brought the vehicle into use on 1 July 2021 and it has been agreed with the Commissioner General that his business use of the vehicle is 60%.

Note 3: Gifts and entertainment

These included expenditure of K8,500 incurred on Christmas presents for employees, expenditure of K13,200 incurred on Christmas gifts for customers bearing the business logo (valued at K150 each), expenditure of K14,600 incurred on entertaining business associates, and the cost of free trade samples to promote the business products amounting to K8,400.

Note 4: Staff salaries and wages

These include employees' salaries of K660,000, staff loans written off amounting to K12,000, Phiri's nominal salary K144,000, and Phiri's son's salary of K56,000. Phiri's son, works full time in the business as an electrician, other electricians performing similar work in the business were paid K42,000 during the same period.

Note 5: Miscellaneous expenses

Miscellaneous expenses comprised the following:

	K
Office expenses	32,600
Depreciation	45,000
Fees for trade debt collection	16,800
Discount allowed	2,500
Donation to National Amateur Sports Athletic club	8,000
Staff canteen expenses	3,000
	107,900

Note 6 – Goods for own use

Samuel withdrew some goods from the business, for personal use. The goods had a cost of K22,500. He makes a margin of 25% on all sales of these types of goods. The cost of the drawn goods was reimbursed.

Note 7 – Private telephone

Samuel uses his private telephone to make business telephone calls. The total cost of the private telephone expenses for the period to 31 December 2021 was K9,000 and 30% of this related to business telephone calls. The cost of the private telephone expenses has not included in the statement of profit or loss expenses shown above.

Note 8: Buildings

Samuel purchased a new building on 1 July 2021, at a total cost of K1,700,000, which was brought into use immediately. This comprised land with a cost of K400,000, a staff canteen, with a cost of K156,000, a showroom with a cost of K120,000, a factory with a cost of K664,000 and general offices with a cost of K360,000.

Note 9: Implements, Plant & Machinery

In July 2021, he acquired the following implements plant and machinery for exclusive use in the business:

	K
General plant	90,000
Manufacturing equipment	240,000
Delivery Truck	180,000

Required:

(a) In relation to basis rules for business and basis periods, explain the reasons why the profits made by Samuel Phiri in the first period of trading will be assessed in the tax year 2021. (4 marks)

(b) Calculate capital allowances claimable in the tax year 2021 on:

(i) Buildings (7 marks)

(ii) Implements, plant and machinery (6 marks)

(c) Compute Samuel Phiri's taxable business profits for the tax year 2021. (10 marks)

(d) Compute the final income tax payable by Samuel Phiri for the tax year 2021. (13 marks)

[Total: 40 Marks]

SECTION B

Attempt Any THREE (3) questions in section.

QUESTION TWO

Namununga Farms Plc is engaged in farming operations and has been in business for many years, preparing accounts annually to 31 December. The company listed its shares on the Lusaka Securities Exchange, three (3) years ago, when it issued 40% of the shares to indigenous Zambians. Since then, 40% of the shares have continued being held by indigenous Zambians who will continue owning this percentage holding of the shares for the foreseeable future.

In January 2021, the company estimated its provisional taxable farming income for the tax year 2021 to be K21,600,000. However, in February 2021, the company revised the provisional taxable farming income to only K17,500,000 due the poor rainfall pattern experienced during that farming season. The company paid the provisional income tax in respect of the tax year 2021 on the relevant due dates. The actual tax adjusted farming profit before capital allowances from farming operations for the tax year 2021 was K20,391,000.

At 1 January 2021, the only assets held by the company qualifying for capital allowances was a Toyota Fortuner motor car which had an income tax value of K176,000 with an original cost of K220,000. The Toyota Fortuner was sold during the year for disposal proceeds of K230,000 on 10 October 2021. The car was used on a personal to holder basis by the Farm Manager whose private use of the car was 40%.

During the year ended 31 December 2020, the company incurred the following expenditure:

	K
New irrigation equipment	550,000
Expenditure on citrus fruit plantation	350,000
Construction of dwelling houses for farm workers (costing K90,000 each)	540,000

Other income

The company generated the following investment income from Zambian sources during the tax year 2021:

	K
Dividends from Aspire plc a company listed on the LuSE	20,400
Dividends from Inspire Ltd, a private limited company	21,250
Interest from Government of Zambia bonds	170,000
Income from letting of property in Zambia	255,000

The above amounts of investment income represent the actual amounts received by the company. Withholding tax was deducted at source and paid on the relevant due dates.

Required:

(a) Calculate the amount of provisional company income tax paid by Namununga Farms Plc in respect of the tax year 2021 and clearly state the due dates when the tax was paid, and the amount paid on each due date. (5 marks)

(b) Calculate the final taxable profits for Namununga Farms Plc for the tax year 2021. (5 marks)

(c) Compute the final amount of company income tax payable by Namununga Farms Plc for the tax year 2021. (5 marks)

(d) Assuming that the final company income payable for the tax year 2021, you have computed in part (c) above, was paid on 21 October 2022 and the self-assessment return for the tax year 2021 was also submitted on this date, Calculate the amount of:

(i) Penalties arising on the late submission of the self-assessment income tax return. (2 marks)

(ii) Penalties and interest arising the late payment of the final company income tax payable assuming that the Bank of Zambia discount rate is 8.00% per annum. (3 marks)

[Total: 20 Marks]

QUESTION THREE

GTS Limited is a Zambian resident company engaged in manufacturing. The company is registered for Value Added Tax (VAT) and it manufactures both standard-rated and exempt supplies. During the month of May 2021, the company had the following transactions:

(1) The company made the following sales:

	K
Standard-rated sales	1,056,000
Exempt sales	244,000
Total sales	1,300,000

It has been determined that 40% of the standard-rated sales were made to customers who are not registered for Value Added Tax.

(2) The purchases comprised of the following:

	K
Standard-rated purchases	480,000
Exempt purchases	120,000
Total purchases	600,000

It has been determined that 20% of the standard-rated purchases were made from suppliers who are not registered for Value Added Tax (VAT).

(3) The standard rated general operating expenses, which are all VAT inclusive, comprised of the following:

	K
Motor vehicles repairs	32,000
Entertaining customers	13,920
Entertaining suppliers	18,792
Telephone bills	5,904
General overheads	118,738
Total	189,354

These expenses were incurred in making both taxable and exempt supplies in the same proportion as sales.

(4) The company bought the following assets during the month:

	K
Delivery light truck	127,600
Motor car	92,916

The cost of the assets are all inclusive of VAT. All the assets are used in making both taxable and exempt supplies in the proportion of sales.

Unless stated otherwise all of the above figures are exclusive of VAT.

Required:

(a) Explain how the basic tax point is determined and the importance of the tax point for VAT purposes. (3 marks)

(b) Explain the circumstances under which the basic tax point can be changed. (2 marks)

(c) Explain any three (3) advantages and two (2) disadvantages of voluntary VAT registration. (5 marks)

(d) Calculate the amount of VAT payable by GTS Limited for the month of May 2021. You should indicate zero (0) on each item where VAT is not payable or recoverable. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Rashid Ahmed Patel was born in a foreign Asian country in 1995. On 1 April 2021, Rashid relocated to Zambia to join his Zambian parents of Asian origins who run successful businesses in Zambia. Rashid has investments in ordinary shares in a company that is resident in the foreign Asian country, and also holds a fixed deposit account, with a bank in the same foreign country. Rashid additionally, owns commercial property in the Asian country that has been let out to tenants in that country.

In December 2021, dividends amounting to US$3,600 and fixed deposit interest of US$800 were credited to his Zambian bank account in respect of the above investments. Additionally, rental income of U$14,400 was also credited to his Zambian bank account in respect of the commercial property let out in the foreign country. The US$ per Zambian kwacha rate at that time was K22/US$. The dividends were net of withholding tax at the rate of 40% deducted in the Asian country, whilst the fixed deposit interest and the rental income were net of withholding tax at the rate of 20% deducted in the same foreign country. There is no double taxation convention between Zambian and the foreign Asian country, Any double taxation relief is given by means of unilateral relief.

On his arrival in Zambia, Rashid immediately bought some shares in a Zambian company listed on the Lusaka Securities Exchange and also opened a savings account with a Zambian bank. In December 2021, he received dividends of K8,500 from the Zambian company and interest of K3,500 from the Zambian savings account. These were the actual amounts received in each case. Rashid did not earn any other income in the tax year 2021.

Rashid's father Mr. Ashraf Patel is a successful businesses man who migrated to Zambia in 2010, together with his wife. Mr and Mrs Patel have since obtained Zambian citizenship. During the year ended 31 December 2021, Mr. Ashraf Patel imported the following motor vehicles:

Toyota Camry Sedan

A brand new 2,360 cc Toyota Sedan car from a motor car dealer in Japan, which was manufactured in the year 2020. The list price of the car was $12,000. He paid freight charges up to the port of Dar-es-Salam amounting to $3,500. Clearing and forwarding agency fees at the port of Dar es Salam were $2,000. Incidental costs incurred to transport the vehicle from Nakonde to Lusaka amounted to $800. Motor vehicle registration fees in Lusaka amounted to $300, whilst road tax was K250.

Toyota Noah Station Wagon

A second-hand Toyota Noah Station Wagon, from Japan at a cost of $3,600. He paid insurance charges of $600 and transportation costs of $1,600. Both the insurance charges and the transportation costs covered the vehicle up to the Nakonde border post. The car had a cylinder capacity of 1,990cc and was manufactured in January 2006. Incidental costs incurred to transport the vehicle from Nakonde to Lusaka amounted to $300 where he incurred clearing charges with Interpol amounting to K950, motor vehicle registration fees of K3,000 and Road Tax of K350.

Additional information

An exchange rate of K22.00 per US$1, should be used where applicable.

Required:

(a) Explain the reasons why Rashid will be regarded as being resident and ordinary resident in Zambian in the tax year 2021. (2 marks)

(b) Compute the amount of income tax payable by Rashid for the tax year 2021. (8 marks)

(c) Calculate the Customs Value (Value for Duty Purposes) of the following vehicles and the total import taxes paid by Mr Ashraf Patel on the importation of each vehicle:

(i) Toyota Camry Sedan (5 marks)

(ii) Toyota Noah Station Wagon (5 marks)

[Total: 20 Marks]

QUESTION FIVE

You are employed in the Tax department of a firm of Chartered Accountants. Your firm is preparing a training workshop for newly recruited trainee accountants. The Tax Manager has asked you to develop notes including enough details on the following topics which will be used in a training workshop for newly recruited trainee accountants which your firm will be conducting soon.

(1) Professional ethics for tax practitioners

(2) Ethical threats

(3) Consequences of tax evasion

(4) The responsibilities of the ZRA

Required:

Prepare notes to be used in the workshop explaining:

(a) How the principles of Integrity, Objectivity and Confidentiality apply in the provision of tax services. (6 marks)

(b) Any three (3) threats to compliance with the fundamental principles outlined in the IESBA Code of Ethics. (6 marks)

(c) Three (3) consequences of tax evasion (3 marks)

(d) The main responsibilities of the Zambia Revenue Authority (ZRA). (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.4 TAXATION

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) The reasons why Samuel's taxable profits for the first period of trading will be assessed in the tax year 2021 as follows:

(1) Commencement rules will be used to determine the basis of assessment for the period ended 31 December 2021, because this is Phiri's first period of trading.

(2) The basis of assessment for the first period of trading depends on whether that period is more than twelve months long or whether the period is exactly twelve months long or less from the commencement of trading. In the case of Phiri, the first period of trading is less than 12 months being 6 months long and therefore the normal rules (i.e. the current basis of assessment or the preceding year basis of assessment) will be used to determine the basis of assessment for this period.

(3) The current year basis of assessment applies to business preparing accounts to a date falling between 1 April and 31 December inclusive and therefore will clearly apply in Phiri's case given that his first accounts were prepared on 31 December 2021.

(4) The current year basis of assessment means that profits made in a particular accounting period are assessed in the tax year in which that accounting period ends. Since Phiri's first period ends on 31 December 2021, it therefore follows that profits made in this period will be assessed in the tax year 2021.

(b) (i) COMPUTATION OF CAPITAL ALLOWANCES ON BUILDINGS

Qualifying cost for IBA purposes

	K
Total cost	1,700,000
Less cost of land	(400,000)
	1,300,000
10% of K3,500,000	130,000

The total cost of the non-qualifying part, comprising the showroom and the general offices of K480,000 (K120,000 + K360,000) exceeds K130,000 and therefore will not be classified as Industrial buildings but will be classified as commercial buildings.

COMPUTATION OF ALLOWANCES ON BUILDINGS

	K
Staff Canteen	
Wear and tear allowance	
K156,000 x5%	7,800
Initial allowance	
K156,000 x 10%	15,600
Investment allowance	
K156,000 x 10%	15,600
Factory	
Wear and tear allowance	
(K664,000 x 5%)	33,200
Initial allowance	
K664,000 x 10%	66,400
Investment allowance	
K664,000 x 10%	66,400
Showroom	
Wear and tear allowance	
K120,000 x 2%	2,400
General offices	
Wear and tear allowance	7,200
(K360,000 x 2%)	
	214,600

(ii) COMPUTATION OF CAPITAL ALLOWANCES ON BUILDINGS

	K
Computers	
Wear & tear allowance	
(K30,000 x 25%)	7,500
Isuzu Double cab van	
Wear and tear allowance	
(K150,000 +K20,000 = K170,000 x 20%) x 60%	20,400
General Plant	
Wear and tear allowance	
(K90,000 x 25%)	22,500
Manufacturing equipment	
Wear and tear allowance	
K240,000 x 50%	120,000
Delivery Truck	
Wear & tear allowance	
(K180,000 x 25%)	45,000
	215,400

(c) COMPUTATION OF TAXABLE BUSINESS PROFIT

	K	K
Profit before tax		376,200
Add		
Computers	30,000	
Motor vehicle repairs	20,000	
Christmas gifts for customers	13,200	
Entertaining business associates	14,600	
Staff loans written off	12,000	
Phiri's nominal salary	144,000	
Phiri's son's excessive salary (K56,000 – K42,000)	14,000	
Depreciation	45,000	
Staff canteen expenses	3,000	
Goods for own use (25/75 x K22,500)	7,500	
		303,300
		679,500
Less		
Fixed deposit interest	4,000	
Dividends	17,000	
Copyright royalties	30,600	
Use of private telephone		
(K9,000 x 30%)	2,700	
Capital allowances on buildings	214,600	
Capital allowances on IPMs	215,400	
		(484,300)
		195,200

(d) SAMUEL PHIRI
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K
Business profits		195,200
Employment income		
Salary (K168,000 x 5/12)	70,000	
Housing allowance (K168,000 x 20%) x 5/12	14,000	
Medical allowance (K168,000 x 10%) x 5/12	7,000	
Accommodation expenses (K1,500 x 5)	7,500	
Sales bonus	5,300	
Leave pay	7,200	
	111,000	
Less allowable deductions		
Donations to Approved Public Benefit Organisation	(3,000)	
Taxable emoluments		108,000
Investment income		
Copyright royalties (K30,600 x 100/85)		36,000
Taxable income		339,200
Income Tax		
On first K48,000 x 0%		0

On next K9,600 x 25%	2,400
On next K25,200 x 30%	7,560
On excess (K339,200 – K82,800) x 37.5%	96,150
	106,110
Less tax already paid	
PAYE	(89,410)
WHT on Copyright Royalties (K36,000 x15%)	(5,400)
Final income tax payable	11,300

SOLUTION TWO

(a) COMPUTATION OF PROVISIONAL INCOME TAX PAID

	K
Revised Estimated taxable farming income	17,500,000
Provisional income tax	
(10% - 5% = 5% x K17,500,000)	875,000
Provisional income tax paid per quarter	
(K875,000/4)	218,750

This would have been as follows during the tax year 2021

Instalment	**Quarter ended**	**Due Date**	**Amount Paid K**
1st	31 March 2021	10 April 2021	218,750
2nd	30 June 2021	10 July 2021	218,750
3rd	30 September 2021	10 October 2021	218,750
4th	31 December 2021	10 January 2022	218,750
		Total	**875,000**

(b) COMPUTATION OF FINAL TAXABLE PROFITS

	K	K	K
Taxable profit before capital allowances			20,391,000
Less capital allowances:			
Toyota Fortuner			
ITV b/f	176,000		
Proceeds (restricted to cost)	(220,000)		
Balancing charge		(44,000)	
Irrigation equipment			
Wear and tear allowance			
(K550,000 x100%)		550,000	
Citrus fruit plantation			
Development allowance			
K350,000 x 10%		35,000	
Dwelling houses			
Wear & tear allowance			
(K20,000 x 6) x 100%		120,000	
Total allowances			(661,000)
			19,730,000

(c) NAMUNUNGA FARMS PLC
COMPANY INCOME TAX COMPUTATION FOR THE TAX YAER 2021

	K
Non farming income	
Government bond interest	
(K170,000 x 100/85)	200,000
Farming profits	19,730,000
Total taxable profits	19,930,000
Company income tax on non- farming profits	
(K200,000 x 35%)	70,000
Company income tax on farming profits	
(K19,730,000 x 5%)	986,500
	1,056,500
Less Tax already paid:	
Provisional income tax	(875,000)
WHT on Treasury bill interest (K200,000 x 15%)	(30,000)
Final Company income tax payable	151,500

(d) (i) Penalties arising on the submission of the self-assessment return on 22 October 2022.

The self-assessment return income tax would have been submitted late by 4 months as it should have been submitted on 21 June 2022 but was submitted on 21 October 2022.

Given that Namununga plc is a company, the penalty will be 2000 penalty units (K600) per month or part thereof. The amount of the penalty will be:

2000 penalty units x 4 = 8000 penalty units or K600 x = K2,400

(ii) Penalties and interest arising on late payment of the balance of the income tax payable.

The balance of income tax relating to the tax year 2021 would have been paid late by 4 months as it should have been paid on 21 June 2022 but was paid on 21 October 2022.

(1) A penalty of 5% per month of the overdue tax will be chargeable and this will amount to:
5% x K151,500 x 4 = K30,300

(2) Additionally, interest at the BOZ discount rate of plus 2% will arise. The applicable rate of interest will therefore be 8% + 2% = 10% per annum. The amount of interest payable will be:

10% x K151,500 x 4/12 = K5,050

SOLUTION THREE

(a) A tax point is the time when a supply is deemed to have taken place. The basic tax point is the time when goods are made available or services rendered to the customer. Tax point is important because:

(i) It is used to determine the period in which VAT should be accounted for

(ii) It is used to determine the VAT scheme or rate to use

(b) The following are the circumstances under which the basic tax point can be changed:

(i) If the tax invoice is issued before the goods are made available or services rendered to the customer, the tax point is the time when the invoice is issued.

(ii) If the tax invoice is issued within fourteen (14) days from the date the goods were made available to the customer.

(c) The following are the advantages and disadvantages of voluntary registration:

Advantages

(i) The trader is able to claim the input VAT incurred on purchases and expenses for as long as it is recoverable

(ii) The trader will be able to compete favorably with other business as the expenses in the income statement will be exclusive of VAT

(iii) The impression of a substantial business will be given since it is believed that only businesses with annual turnover of K800,000 and above register for VAT.

Disadvantages

(i) The trader will be charged penalties for failure to comply with the VAT obligations

(ii) The trader will have an increase in administration costs as a result of registering for VAT.

(iii) The trader’s customers who are not registered for VAT will have an increased purchase cost as the prices will now be inclusive of VAT.

(d) GTS

VAT payable for the month of July 2021

	K	K
Output VAT		
Exempt sales		0
Standard-rated sales (K1,056,000 x 16%)		168,960
		168,960
Input VAT		
Standard-rated purchases		
(K480,000 x 16% x 80%)	61,440	
Exempt purchases	0	
Motor vehicles repairs		
(K32,000 x 4/29 x 1,056/1,300)	3,585	
Entertaining customers	0	
Entertaining suppliers	0	
Telephone bills	0	
General overheads		
(K118,738 x 4/29 x 1,056/1,300)	13,304	
Motor car	0	
Delivery light truck		
(K127,600 x 4/29 x 1,056/1,300)	14,297	
		(92,626)
VAT payable		76,334

SOLUTION FOUR

(a) An individual is resident in Zambia in any tax year if the individual physically present in Zambia for a period of at least 183 days.

For the tax year 2021, Rashid will be regarded as being resident in Zambia and ordinary resident in Zambia because he was physically present in Zambia for at least 183 days, having stayed in Zambia for 275 days from 1 April 2021 to 31 December 2021.

(b) RASHID

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K
Income from foreign sources		
Dividends (US$3,600 x 100/60) x K22		132,000
Fixed deposit interest (US$800x 100/80) x K22		22,000
		154,000
Income Tax		
On first K48,000 x 0%		0
On next K9,600 x 25%		2,400
On next K25,200 x 30%		7,560
On excess (K154,000 – K82,800) x 37.5%		26,700
Zambian income tax charge		36,660
Less Double Taxation Relief on:		
- Foreign dividends (W1)	31,423	
- Foreign fixed deposit interest (W2)	4,400	
Income tax payable		(35,823)
		837

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:

K132,000 x 40% = K52,800; and

(ii) The Zambian Tax Charge attributed to the dividends computed as:

$$\left(\frac{\text{K132,000}}{\text{K154,000}}\right) \text{x K36,660}$$

= K31,423

DTR will therefore be K31,423 being the lower amount.

(2) Double taxation relief on the fixed deposit interest from foreign sources:

This will be the lower of:

(i) The foreign tax paid on the debenture interest:

K22,000 x 20% = K4,400; and

(ii) The Zambian Tax Charge computed as:

$$\left(\frac{\text{K}22{,}000}{\text{K}154{,}000}\right) \text{x K}36{,}660$$

= K5,347

DTR will therefore be K4,400 being the lower amount.

(c) (i) COMPUTATION OF THE VDP ON TOYOTA CAMRY SEDAN

Purchase cost	$12,000
Freight	$3,500
Clearing and forwarding costs	$2,000
	$17,500
Exchange rate	x K22.00
VDP	385,000

COMPUTATION OF IMPORT TAXES

	K	K
VDP for Customs purposes	385,000	
Customs duty @30%	115,500	115,500
	500,500	
Excise duty @ 30%	150,150	150,150
Value for import VAT purposes	650,650	
Import VAT @16%	104,104	104,104
	754,754	
Surtax charge		369,754

(ii) COMPUTATION OF THE VDP ON TOYOTA NOAH

Purchase cost	$3,600
Insurance	$600
Transportation costs	$1,600
	$5,800
Exchange rate	x K22.00
VDP	127,600

COMPUTATION OF IMPORT TAXES

	K	K
VDP for Customs purposes	127,600	
Specific Customs duty	9,024	9,024
	136,624	
Specific Excise duty	11,731	11,731
Value for import VAT purposes	148,355	
Import VAT @16%	23,737	23,737
	172,092	
Surtax charge		2,000
		46,492

SOLUTION FIVE

(a) Code of Ethics

Integrity

The principle of integrity imposes an obligation on the practitioner to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.

This means that a member providing tax services shall ensure that their own personal tax obligations and those of any associated entities for which the member is responsible are properly discharged.

It also means that a member providing taxation services must not knowingly be associated with reports, returns communications or other information where the member believes that the information:

1. Contains a materially false or misleading statements or calculations
2. Contains statements or information furnished recklessly.

Objectivity

The principle of objectivity states that a member shall not allow bias, conflict of interest or undue influence of others to override professional or business judgements.

In situations where a member is required to act as an advocate for a client when representing or assisting them before tribunals or courts of law, the member shall ensure that the client is aware that the member has an obligation not to mislead the court or tribunal and to safeguard their professional objectivity.

Confidentiality

The principle of confidentiality states that a member shall respect the confidentiality of information acquired as a result of professional relationships.

They should therefore not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties.

A member who acquires confidential information during the course of performing professional tax services for a client shall not use or disclose any such information without proper and specific authority, unless there is a legal or professional right or duty to disclose such information.

(b) The following are the threats:

1. Self-review threat

   This threat may occur when a member has to review work that they have previously done. It may be very difficult for a member to re-evaluate their own previous judgements objectively.

2. Advocacy threat
   This threat may occur when a member is asked to promote or represent their client in some way. In this case a member would likely be biased in favour of their client and therefore his objectivity may be compromised.

3. Self-interest threat
   This threat may occur when a member has financial or other interests in the client which may inappropriately influence their professional judgement.

4. Familiarity threat
   This threat may occur when because of a long or close relationship with a client or employer, a member becomes too sympathetic to their interests or too accepting of their work.

5. Intimidation threat
   This threat occurs when a member is deterred from acting objectively because of actual or perceived pressures, including attempts to exercise undue influence over the member.

(c) The following are the consequences of tax evasion

(1) Loss of revenue for government: the Government sustains enormous revenue losses that directly affect its debt level and jeopardise its capacity to provide services and fund programmes that meet the needs of our ever-changing society.
(2) Some people have to pay for others: people who comply with the law shoulder heavier tax burden than they should because they must compensate for others who participate in the underground economy.
(3) Tax compliant businesses face unfair competition: businesses that fulfil their tax obligations face unfair competition from those that do not.

(d) The following are the responsibility of ZRA:

(1) Properly assess and collect taxes and duties at the right time without causing undue burden to the public.
(2) Encourage the public to present themselves and pay tax voluntarily
(3) Ensure that all monies collected are properly accounted for and banked in a timely manner
(4) Properly enforce all relevant statutory provisions
(5) Give advice to ministers on aspects of tax policy
(6) Facilitate international trade

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 18 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

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

   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted

QUESTION ONE – (COMPULSORY)

SPV Ltd achieved a turnover of K16 million during the year ended 31 December 2020 and expects turnover to grow by 8.4% next year. Cost of Sales in 2020 amounted to K10.88 million and indirect expenses were K1.44 million.

The statement of financial position for SPV Ltd as at 31 December 2020 is as follows:

	K'000	**K'000**
Non-current assets		22,000
Current assets		
Inventory	2,400	
Trade receivables	2,200	
		4,600
Total assets		26,600
	K'000	**K'000**
Equity finance		
Ordinary shares	5,000	
Reserves	7,500	
		12,500
Long-term bank loan		10,000
		22,500
Current liabilities		
Trade payables	1,900	
Overdraft	2,200	
		4,100
Total liabilities		26,600

The long-term bank loan has a fixed annual interest rate of 8% per year. SPV Ltd pays taxation at an annual rate of 30% per year. The following accounting ratios have been forecast for 2021:

Gross profit margin:	30%
Operating profit margin	20%
Dividend payout ratio:	50%
Inventory turnover period:	110 days
Trade receivables period:	65 days
Trade payables period:	75 days

Overdraft interest in the next year is forecast to be K140, 000. No change is expected in the lever of non-current assets and depreciation should be ignored.

Required:

(a) Outline four (4) limitations of ratios in analyzing financial statements. (4 marks)

(b) Prepare the following forecast financial statements for SPV Ltd using the information provided: an income statement for 2021; and a statement of financial position at the end of 2021. (10 marks)

(c) Analyse the trends in the accounting ratios for the two (2) financial years and discuss the financial performance of SPV Ltd in relation to working capital management. (8 marks)

(d) Evaluate changes in the company's policy for financing working capital over the two (2) years. (8 marks)

(e) Explain how the capital asset pricing model can be used to calculate a project-specific discount rate and the limitations of using it in investment appraisal.

(10 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

The Directors of HY Supermarkets are considering closing one of the retail outlet store located in the city outskirt. There has been a reduction in the sales from the outlet in recent years, and the Directors are not optimistic about the long-term prospects due to high unemployment levels. The store is leased, and there are still four (4) years of the lease remaining. The Directors are uncertain as to whether the store should be closed immediately or at the end of the period of the lease. Another business has offered to sublease the premises from HY Supermarkets at a rental of K0.095 million a year for the remainder of the lease period. The machinery and equipment at the store cost K1.55 million, and have a net book value of K0.45 million. In the event of immediate closure, the machinery and equipment could be sold for K0.3 million. The working capital at the store is K0.5 million, and could be liquidated for that amount immediately, if required. Alternatively, the working capital can be liquidated in full at the end of the lease period. Immediate closure would result in redundancy payments to employees of K0.2 million. If the store continues in operation until the end of the lease period, the following operating profits (losses) are expected:

Year	1	2	3	4
	K'000	K'000	K'000	K'000
Operating profit (loss)	200	(30)	45	35

The above figures include a charge of K0.8 million a year for a depreciation of machinery and equipment. The residual value of machinery and equipment at the end of the lease period is estimated at K0.035 million. Redundancy payments are expected to be K0.19 million at the end of the lease period if the store continues in operation. The company's minimum expected rate of return by the shareholders is 10%. Corporate annual tax is payable at the rate of 30%.

Required:

(a) Evaluate the option of allowing the store to continue operating until the end of the lease period, rather than closing immediately. State the reason of each figure included in the evaluation. (16 marks)

(b) Explain other factors the Directors might take into account before making a final decision on the timing of the store closure. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Kings Co is a listed company which is seen as a potential target for acquisition by financial analysts. The recent bid was rejected because the offer was far below the desire of the company. Hence the value of Kings Co has been a matter of public debate in recent weeks and the following financial information is available:

Statement of financial position information for the year ended 31 December 2021

	Km	Km
Non-current assets		138
Current assets		
Inventory	57	
Trade receivables	6.8	12.5
Total assets		150.5
Equity finance		
Ordinary shares	30	
Reserves	70.8	100.8
Non-current liabilities		
7% bonds		39
Current liabilities		10.7
Total liabilities		150.5

Non-current assets are depreciated using the straight-line method. The annual depreciation cost is K2 million and is projected to remain constant over the years. The shares of Kings Co have a nominal (par) value of 50 ngwee per share and a market value of K6.5 per share. The cost of equity of the company is 13.5% per year. The business sector of Kings Co has an average price/earnings ratio of 15 times. The 7% bonds are redeemable at nominal (par) value of K1000 per bond in seven (7) years' time and the before-tax cost of debt of Kings Co is 10% per year. The annual tax rate is 30%. The expected net realizable values of the non-current assets and the inventory are K129 million and K6 million, respectively. In the event of liquidation, only 85% of the trade receivables are expected to be collectible. The current liabilities does not include overdraft. The growth rates of profit after tax and dividends given below for the past four (4) years are expected to remain constant.

Year	*1*	*2*	*3*	*4 (current)*
Profit before interest & tax (K'm)	12.5	13.9	14.7	15.1
Total dividends (K'm)	7.5	7.9	8.4	9.01

Required:

Calculate the value of Kings Co. using the following valuation methods:

(a) Discounted cash flow model *(ignore taxation)* (9 marks)

(b) Net asset value (liquidation basis) (2 marks)

(c) Price/earnings ratio method (5 marks)

(d) Dividend growth model (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Lusaka Tiles Corporation (LTC) is a manufacturing company that wishes to evaluate an investment in machinery for making porcelain floor tiles. The machinery would enable the company to meet increasing demand for existing products and the investment is not expected to lead to any change in the company's existing level of business risk.

The machinery will cost K2.0 million, payable at the start of the first year of operation, and is not expected to have any scrap value. Annual before-tax net cash flows of K680,000 per year would be generated by the investment in each of the five (5) years of its expected operating life. These net cash inflows are before taking account of expected inflation of 3% per year. Initial investment of K240,000 in working capital would also be required, followed by an incremental investment in line with inflation to maintain the purchasing power of working capital.

LTC has in issue five million shares with a market value of K3.81 per share. The equity beta of the company is 1.2. The yield on short term Government debt is 4.5% per year and the equity risk premium is approximately 5% per year.

The debt finance of LTC consists of bonds with a total book value of K2 million. These bonds pay annual interest before tax of 7%. The par value and market value of each bond is K100.

LTC pays taxation one (1) year in arrears at an annual rate of 25%. Capital allowance (tax-allowable depreciation) on machinery are on a straight-line basis over the life of the asset.

Required:

(a) Calculate the after-tax weighted average cost of capital LTC. (6 marks)

(b) Prepare a forecast of the annual after-tax cash flows of the investments in nominal terms, and determine the present value of the investment and advise whether it is worthwhile investment. (8 marks)

(c) Discuss three (3) methods LTC can use to improve its cash flow position. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

Ubuntu Ltd is a locally based beverage manufacturing company in Lusaka. The company is considering the introduction of a new soft drink "the switty". "The switty" will be a sweetened carbonated drink. It will be locally manufactured from one of its factories in light industrial area.

In light of the present competitive environment in the beverage industry in Zambia the Managing Director is reluctant to introduce the soft drink. He recently called for a senior strategic management meeting where a number of issues were discussed such as the ability of Ubuntu Ltd to absorb possible losses in the initial stages of the project. Other issues discussed include the possibility of exporting the product to some neighbouring countries especially those in the SADCC region. The possibility of expansion through Foreign Direct Investment (FDI) was also considered. Internal strengths and weaknesses of the company were considered. However the external opportunities and threats were overlooked.

The Managing Director (MD) proposed an aggressive marketing campaign of "the switty" on both print and electronic media. 'This should enable us make "the switty" become a house hold name in a period of three (3) to six (6) months' time'. He said. However, the MD was skeptical about the project as he believes most people in Zambia are health conscious and therefore are avoiding carbonated drinks. He believes that other factors external to Ubuntu Ltd should be considered. However, the Finance Manager recommended an investment appraisal of the project to be carried out by an external consultant.

A month later the consultant produced a report which gave a go ahead to management to produce "the switty". The report shows a positive net present value arising from the estimated cash flows of the project. The report also shows that the project should pay back within a year. This has cheered some of the senior managers.

Required:

Advise the Management of Ubuntu Ltd of the external factors and opportunities and threats that it must also take into consideration before undertaking the project in the spite of the positive financial appraisal report. (20 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_oD}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \text{ x spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))}\beta_e\right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad F_0 = S_0 x \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 2.5: FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Limitations of ratio analysis in financial statements include:

- Availability of comparatives - Non availability of comparable company ratios against which to benchmark
- Use of historical information - Ratios use historical/out of date accounting information, which may be of limited use
- Not definitive - Ratios are merely a guide, and not definitive ie vary industry by industry
- Need for careful interpretation - The require careful interpretation as apparently good ratios might be a result of poor performance in another area
- Manipulation - Ratios might be distorted by choice of accounting policy

(b) (i) Forecast Income Statement

Details	K'000
Turnover (16·00m x 1·084)	17,344
Cost of sales (17·344m – 5·203m)	(12,141)
Gross profit (17·344m x 30%)	5,203
Indirect expenses (5·203m – 3·469m)	(1,734)
Net profit (17·344m x 20%)	3,469
Interest expense ((10m x 0·08) + 0·140m)	(940)
Profit before tax	2,529
Tax (2·529m x 0·3)	(759)
Profit after tax	1,770
Dividends (1·770m x 50%)	(885)
Retained profit	885

2(b)(ii) Forecast Statement of Financial Position:

	K'000	K'000
Non-current assets		22,000
Current assets		
Inventory	3,660	
Trade receivables	3,090	
		6,750
Total assets		28,750
Equity finance:		
Ordinary shares	5,000	
Reserves	8,390	

		13,390
Bank loan		10,000
		23,390
Current liabilities		
Trade payables	2,490	
Overdraft	2,870	
		5,360
Total liabilities		28,750

Workings	**K'000**
Inventory (12·141m x (110/365)	3,660
Trade receivables (17·344m x (65/365))	3,090
Trade payables (12·141m x (75/365))	2,490
Reserves (7·5m + 0·885m)	8,390
Overdraft (28·75m – 23·39m – 2·49) (balancing figure)	2,870

2(c) Working capital management

The financial analysis shows a deterioration in key working capital ratios.

- The inventory turnover period is expected to increase from 81 days to 110 days,
-The trade receivables period is expected to increase from 50 days to 65 days and
- The trade payables period is expected to increase from 64 days to 75 days.

SPV Ltd is forecasting a worsening in its working capital position. The current and forecast values could be compared to sector values in order to confirm whether they are realistic.

Because current assets are expected to increase by more than current liabilities, the current ratio and the quick ratio are both expected to increase in the next year, the current ratio from 1·12 times to 1·26 times and the quick ratio from 0·54 times to 0·58 times. Again, comparison with sector average values for these ratios would be useful in making an assessment of the working capital management of SPV ltd.

The balance between trade payables and overdraft finance is approximately the same in both years (trade payables are 46% of current liabilities in the current statement of financial position and 47% of current liabilities in the forecast statement of financial position), although reliance on short-term finance is expected to fall slightly in the next year.

The deteriorating working capital position may be linked to an expected deterioration in the overall financial performance of SPV Lt. For example, the forecast gross profit margin (30%) and net profit margin (20%) are both less than the current values of these ratios (32% and 23% respectively), and despite the increase in turnover, return on capital employed (ROCE) is expected to fall from 16·35% to 14·83%.

Extracts from current income statement:	
	K'000
Turnover	16,000
Cost of sales	(10,880)
Gross profit	5,120
Indirect expenses	(1,440)
Net profit	3,680

Gross profit margin (100 x 5·12/16·00)	32%	30%
Net profit margin (100 x 3·68/16·00)	23%	20%
ROCE (100X3.68/22.5)	16.35%	14.83%
(100X3.469/23.39)		
Inventory Period (365x2.4/10.88)	81 days	110 days
Receivables Period (365x2.2/16.00)	50 days	65 days
Payables Period (365x1.9/10.88)	64 days	75 days
Current Ratio (4.6/4.1)	1.12 times	1.26 times
(6.75/5.36)		
Quick ratio (2.2/4.1)	0.54 times	0.58 times
(3.09/5.36)		

2 (d)

Working capital financing policies can be classified into conservative, moderate (or matching) and aggressive, depending on the extent to which fluctuating current assets and permanent current assets are financed by short-term sources of finance. Permanent current assets are the core level of investment in current assets needed to support a given level of business activity or turnover, while fluctuating current assets are the changes in the levels of current assets arising from the unpredictable nature of some aspects of business activity.

A conservative working capital financing policy uses long-term funds to finance non-current assets and permanent current assets, as well as a proportion of fluctuating current assets. This policy is less risky and less profitable than an aggressive working capital financing policy, which uses short-term funds to finance fluctuating current assets and a proportion of permanent current assets as well. Between these two extremes lies the moderate (or matching) policy, which uses long-term funds to finance long-term assets (non-current assets and permanent current assets) and short-term funds to finance short-term assets (fluctuating current assets).

The current statement of financial position shows that SPV Ltd uses trade payables and an overdraft as sources of short-term finance. In terms of the balance between short- and long-term finance, 89% of current assets (100 x 4·1/4·6) are financed from short-term sources and only 11% are financed from long-term sources. Since a high proportion of current assets are permanent in nature, this appears to be a very aggressive working capital financing policy which carries significant risk. If the overdraft were called in, for example, SPV Ltd might have to turn to more expensive short-term financing.

The forecast statement of financial position shows a lower reliance on short-term finance, since 79% of current assets (100 x 5·36/6·75) are financed from short-term sources and 21% are financed from long-term sources. This decreased reliance on an aggressive financing policy is sensible, although with a forecast interest coverage ratio of only 3·7 times (3·469/0·94), SPV Ltd has little scope for taking on more long-term debt. An increase in equity funding to decrease reliance on short-term finance could be considered.

e) The capital asset pricing model (CAPM) can be used to calculate a project-specific discount rate in circumstances where the business risk of an investment project is different from the business risk of the existing operations of the investing company. In these circumstances, it is not appropriate to use the weighted average cost of capital as the discount rate in investment appraisal.

The first step in using the CAPM to calculate a project-specific discount rate is to find a proxy company (or companies) that undertake operations whose business risk is similar to that of the proposed investment. The equity beta of the proxy company will represent both the business risk and the financial risk of the proxy company. The effect of the financial risk of the proxy company must be removed to give a proxy beta representing the business risk alone of the proposed investment. This beta is called an asset beta and the calculation that removes the effect of the financial risk of the proxy company is called 'ungearing'.

The asset beta representing the business risk of a proposed investment must be adjusted to reflect the financial risk of the investing company, a process called 'regearing'. This process produces an equity beta that can be placed in the CAPM in order to calculate a required rate of return 'a cost of equity'. This can be used as the project-specific discount rate for the proposed investment if it is financed entirely by equity. If debt finance forms part of the financing for the proposed investment, a project-specific weighted average cost of capital can be calculated.

The limitations of using the CAPM in investment appraisal are both practical and theoretical in nature. From a practical point of view, there are difficulties associated with finding the information needed. This applies not only to the equity risk premium and the risk-free rate of return, but also to locating appropriate proxy companies with business operations similar to the proposed investment project. Most companies have a range of business operations they undertake and so their equity betas do not reflect only the desired level and type of business risk.

From a theoretical point of view, the assumptions underlying the CAPM can be criticised as unrealistic in the real world. For example, the CAPM assumes a perfect capital market, when in reality capital markets are only semi-strong form efficient at best. The CAPM assumes that all investors have diversified portfolios, so that rewards are only required for accepting systematic risk, when in fact this may not be true. There is no practical replacement for the CAPM at the present time, however.

SOLUTION TWO

a)

Year	0	1	2	3	4
	K'm	K'm	K'm	K'm	K'm
Operating profits	-	0.2	(0.03)	0.045	0.035
Add back depreciation	-	0.8	0.8	0.8	0.8
Cash flow	-	1	0.77	0.845	0.835
Tax@30%		(0.30)	(0.23)	(0.25)	(0.25)
Sale machinery & equipment	(0.30)	-	-	-	0.035
Redundancy costs	0.2	-	-	-	(0.19)
Sublease	-	(0.095)	(0.095)	(0.095)	(0.095)
Working capital	(0.50)	-	-	-	0.50
Net Cash flow	(0.60)	0.61	0.44	0.50	0.83
Discount@10%	1.000	0.909	0.826	0.751	0.683
Present value	(0.60)	0.55	0.37	0.37	0.57
NPV	**1.26**				

Based on financial ground (positive NPV)the store should continue operating until the end of the lease period.

b) Reasons for inclusion:
   i) Each year's operating cash flows are calculated by adding back the depreciation charge for the year to the operating profit for the year. In the case of the operating loss, the depreciation charge is deducted. This because depreciation is a non-cash flow item.
   ii) In the event of closure, machinery could be sold immediately. Thus an opportunity cost of K0.3million is incurred if operations continue.
   iii) By continuing operations, there will be a saving in immediate redundancy costs of K0.2million. However, redundancy costs of K0.19million will be paid in four years' time.
   iv) By continuing operations, the opportunity to sublease the factory will be foregone.
   v) Immediate closure would mean that working capital could be liquidated. By continuing operations this opportunity is foregone. However, working capital can be liquidated in four years' time.

Other factors that may influence the decision include:

i) The overall strategy of the business. The business may need to set the decision within a broader context. It may be necessary to manufacture the products made at the factory because they are an integral part of the business's product range. The business may wish to avoid redundancies in an area of high unemployment for as long as possible.
ii) Flexibility. A decision to close the factory is probably irreversible. If the factory continues, however, there may be a chance that the prospects for the factory will brighten in the future.
iii) Creditworthiness of sub-lessee. The business should investigate the creditworthiness of the sub-lessee. Failure to receive the expected sublease payments would make the closure option far less attractive.
iv) Accuracy of forecasts. The forecasts made by the business should be examined carefully. Inaccuracies in the forecasts or any underlying assumptions may change the expected outcomes.

SOLUTION THREE

(a) (i) **Discounted cash flow**

	K'm
Profit before interest and tax	15.1
Add back depreciation	2
Cash flow	17.1

$P_o = \frac{17.1(1.065)}{0.13 - 0.065)}$

= K280.18million

Historic growth rate = [(15.1m/12.5m)1/3 – 1] x 100 = 6.5%

Cost of debt = 10% x 0.7 = 7%

MV of debt:

Period	Cash flow	Discount@7%	PV
1-7	Interest (1000 x0.7) =70	5.389	377.23
7	redemption 1000	0.623	623
			1000.23

MV of debt = 1000.23/1000 x K39m = K39m

Market of equity
Number of ordinary shares of company = K30m/0.5 = 60 million shares
Ordinary share price = K6.5 per share
Market capitalisation = 60m x 6.5 = K390 million
Total value = K390m + K39m =K429m
Weighting = Debt (39/429) = 0.09
Equity (390/429) = 0.91
WACC = 13.5% x (0.91) + 7 %(0.09)
= 13%

(ii) Net asset value (liquidation basis)
Current net asset value (NAV) = K138m + K12.5m – K39m – K10.7m = K100.8 million
Decrease in value of non-current assets on liquidation = K138m – K129m = K9 million
Increase in value of inventory on liquidation = K6m – 5.7m = K0.3 million
Decrease in value of trade receivables = K6.8m x 0.15 = K1.02 million
NAV (liquidation basis) = K100.8m – K9m + K0.3m – K1.02m = K91.08 million

(iii) Price/earnings ratio value

	K'm
Forecast profit before interest and tax (15.1 x 1.065)	16.1
Interest (K39m x 10%)	(3.9)
	12.2
Tax @30%	(3.66)
Profit after tax	8.54

Industry average price/earnings ratio of King Co. business sector = 15 times
Price/earnings ratio value of King Co. = 15 x K8.54m = K128.1 million

(iv) Dividend growth model value (using historic dividend growth rate)

Historic dividend growth rate = [(9.01m/7.5m)1/3 – 1] x 100% = 6·3%

Value of King Co = (9.01m x 1.063)/ (0·135 – 0·063) = K133 million

SOLUTION FOUR

(a)

Calculation of weighted average cost of capital:

Cost of equity = 4.5 + (1.2 x 5) = <u>10.5%</u>

The company's bonds are trading at par and therefore the before-tax cost of debt is the same as the interest rate on the bonds, which is 7%.
After-tax cost of debt = 7 x (1 – 0.25) = <u>5.25%</u>

Market value of equity = 5m x 3.81 = K19.05 million
Market value of debt is equal to its par value of K2 million
Sum of market values of equity and debt = 19.05 + 2 = K21.05 million
WACC = (10.5 x 19.05/21.05) + (5.25 x 2/21.05) = <u>10.0%</u>

(b)

Year	0	1	2	3	4	5	6
	K000	K000	K000	K000	K000	K000	K000
Cash in flows		700.4	721.4	743·1	765·3	788·3	
Tax on cash inflows			(175.1)	(180·4)	(185·8)	(191·4)	(197·1)
		700.4	546.3	562.7	579.5	596.9	(197,1)
CA tax benefits		-	100.0	100.0	100.0	100.0	100.0
After-tax cash flows		700.4	646.3	662.7	679.5	696.9	(97.1)
Initial investment	(2000)						
Working capital	(240)	(7·2)	(7·4)	(7·6)	(7·9)	270.1	-
Net cashflows	(2,240)	693.20	638.90	655.10	671.60	967.00	(97.10)
Discount factors@10%	1·000	0·909	0·826	0·751	0·683	0·621	0·564
Present values	(2,240)	630.1	527.7314	491.9801	458.7028	600.507	(54.8)

The NPV = K414,000

The investment is financially acceptable, since the net present value is positive. The investment might become financially unacceptable, however, if the assumptions underlying the forecast financial data were revised. For example, the sales forecast appears to assume constant annual demand, which is unlikely in reality.

Workings

Capital allowance tax benefits

Annual capital allowance (straight-line basis) = K2·0m/5 = K400,000 Annual tax benefit = K400,000 x 0·25 = K100,000 per year

	0	1	2	3	4	5
Working capital (K000)	240	247·2	254·6	262·2	270·1	
Incremental investment K000)		(7·2)	(7·4)	(7·6)	(7·9)	270·1

c.) i) Postponing capital expenditure

ii) Sale of surplus assets

iii) Seeking longer credit terms (better) from suppliers.

SOLUTION FIVE

Ubuntu Ltd should carry out a PESTEL analysis to consider factors external to the company that are likely affect the success of the project.

1) POLITICAL FACTORS

   Governments are external factors that impose requirements on Ubuntu Ltd. The political stability in Zambia at the moment is an opportunity that the company can take advantage of. However the company may face some threats from some politically unstable countries in the region if it were to set up subsidiaries abroad. Government's policy e.g. increased taxes, against carbonated drinks is another threat that it should consider as this can affect the revenues earned by Ubuntu in these countries. Ubuntu can consider making a variant such as one with an element of pure juice perhaps 50% pure juice to counter this threat. The cooperation currently being enjoyed among the member states in the SADCC region is an opportunity that the company can take advantage of if it invests abroad.

2) ECONOMIC FACTORS
   This should consider the economic stability of the country. Issues such as the stable inflation rate currently being experienced in Zambia are one of the opportunities that the company can utilize to increase its market share locally. The growth rate of the Zambian economy including that of the other countries can be either a threat (if slow) or an opportunity (if fast) to the company.

3) SOCIAL/CULTURAL FACTORS
   The increased consciousness of healthy eating habits globally is a threat to Ubuntu as carbonated drinks such as "the switty" contains high sugar levels which are believed to have a negative effect on someone's health. In addition the issues of quality can also be considered as certain economies in the region may be more sensitive to quality of products than others. However given the high levels of poverty generally in sub Saharan Africa, the issues of quality may not be as threatening to companies as it is in developed economies. Most poor people buy what they can afford irrespective of quality. However the company can use this as an opportunity to improve the quality of the soft drink in order to capture different classes of people rather than targeting the low class only.

4) TECHNOLOGICAL FACTORS
   The company should consider investing research and development in order to improve its performance in the beverage industry. This is because there is moderate level of investment in R&D in this sector. Ubuntu can take this as an opportunity to better its performance through new technologies so as to become more competitive.

5) ENVIRONMENTAL FACTORS
   Here issues such as environmental friendliness of the product should be considered. Ubuntu should look at issues of recycling the bottles in order to win customer support. Improving on its waste disposal is another opportunity for the company. This can be seen as an opportunity to Ubuntu. Issues of climate change are another factor which can pose a threat. Consumers will general drink more soft drinks in hot weather than in cold weather in order to quench their thirst.

6) LEGAL FACTORS

   Legal requirements must be adhered to in every industry. The food and beverage industry is not an exception. "The switty" should pass the quality standards set by the particular country in order to protect consumers. The common standards include eliminating genetically modified foods from the market.(GMO'S).Ubuntu can take this as an opportunity by ensuring that the soft drink is free of GMO'S in order to satisfy the regulations and make its product more competitive than others.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.6: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 16 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory question.
   Section B: There are four (4) questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This is compulsory and must be attempted.

<u>QUESTION ONE</u> – (COMPULSORY)

Mungule and Company is one large company that has started operating in the Mungule area manufacturing a variety of consumer goods for the local and global markets. The company was the brainchild of two entrepreneurs, Mwila Chitundu and Joseph Muti, who invested an initial amount of K5 million of their own resources before obtaining a loan of K3 million from the Development Bank of the Copperbelt at an interest rate of 20% per annum. They also used lease finance by leasing their major manufacturing and distribution equipment from a Lease Financing bank at a cost of K1 million per annum. The company is thus highly leveraged and has a capital structure that is a mixed portfolio. The company also outsources its human resource function by using HR agents to recruit the best talent around but with an emphasis on the hiring of local Zambians at the expense of foreign labour. The founders are co-CEOs but they mainly utilize a traditional functional organization structure so as to be able to maintain stability and predictability in the face of a turbulent economy and climate. But they have deliberately modified this organizational to a lean one with only 3 levels of top management, middle management and workers at the bottom so that they obtain all the advantages of an organic management style.

But it is on the supply side of their supply chain that has given the company a lot of challenges in terms of predictability, reliability and capability so as to maintain a high level of customer service to their end customers. The company maintains a supplier base of 100 suppliers, most of whom were foreign who thus presented a serious coordination challenge for the company. This was because the company also relied heavily on outsourcing most of the value-adding activities so that it received inputs that required only minimal work before they were sent to the market as finished products. But due to the distances involved and the associated risks, the company has not been very willing to implement a JIT system. Hence its current reliance on semi-automated warehouses to reduce the inventory handling costs and increase the throughput, both of which are essential for attaining high inventory turnover and customer responsiveness rates.

To be competitive they have adopted flexible manufacturing in their production operations. They use automated warehouses for their inbound logistics while automated order processing is used for the outbound logistics. Their marketing and sales staff utilize telemarketing and remote computer terminals for the sales people. The company heavily depends upon remote servicing of the equipment coupled with computer scheduling and routing of repair trucks to keep them in service most of the time. This is essential to ensure high availability of the equipment and minimized downtimes which are very costly.

In order to minimize stock outs, they utilize online procurement of the necessary spare parts while their technology development revolves around computer-aided design (CAD) and electronic market research. The CAD is especially essential in the face of high technology changes so as to enable the company to keep up with the latest developments that ensures the meeting of customer needs and maintenance of competitive advantage over its industry competitors. The electronic market research is important as a complement to the CAD since it provides fast customer feedback which should be taken into account in the product development process.

To effectively manage the human resources, they utilize automated personnel scheduling to avoid human errors that can create serious human resource shortfalls. The firm infrastructure cuts across all the activities of the company to provide the context of the work environment and as such it provides the necessary planning models. This is because all the planning that is done is based upon the infrastructure that is available so as to ensure the timely fulfillment of customer orders.All the above gives them a healthy margin of 45% while the industry average is 25%.

Suppose the following figures apply to this company: Shareholders = 200; ordinary shareholders = 150; number of ordinary shares issued = 100; gross profit = K2,500,000; profits attributable to ordinary shareholders = K1,000,000; dividend per share = K200.

Required:

(a) Draw a fully labeled value chain based on the information given above and describe its parts. (9 marks)

(b) Explain the source of the competitiveness for this organization. (2 marks)

(c) Describe how Information Systems (IS) can support this company's generic business (competitive) strategies. (3 marks)

(d) Suppose this company uses an E-market value chain, draw this value chain and state its features. How does this value chain compare with the traditional value chain? (12 marks)

(e) Calculate the earnings per share and the dividend cover for this company. What do the answers tell us about this company? (14 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) question in this section.

Answer Any Three (3) from the following Questions.

QUESTION TWO

When Bunga Milling was set up in Kitwe ten (10) years ago, a Board of Directors was put in place so that all the key stakeholders got a fair treatment from the company in addition to them knowing what the company was doing all the time. But for this to happen, the board was not to be interfered with so that it made decisions that ensured the sustainability of the firm and its good name. It had also to ensure that the company conducted its affairs above board in line with what it was supposed to do. The moral fiber of the company had to be maintained at all costs and hence the management's actions had to be questioned at all times.

Required:

(a) Describe any seven (7) of the corporate governance principles that are mentioned in the passage above. (7 marks)

(b) Suppose this company wanted institutional investors to invest in its operations, what would be the merits and disadvantages of such investments? (4 marks)

(b) How can institutional shareholders save their investments in this organization if it started performing badly in terms of making losses and losing market share? Explain fully. (5 marks)

(d) Distinguish between corporate governance and corporate social responsibility and their similarities. (4 marks)

[Total: 20 Marks]

QUESTION THREE

You have just have elevated to a position of Senior Manager - Strategic Awareness reporting to the Managing Director (MD) of your company. The Main term of reference is to ensure that you advise management and the board on all aspects of strategy as regards company performance in the operating environment so that it remains competitive.

Required:

(a) You have been requested by the MD to prepare a paper on steps that are to be taken in strategic analysis process of your company. State and Comment on what would be involved in each. (14 marks)

(b) Describe the three (3) tests that can be used to evaluate the merits of one strategy over another and to gauge how good a strategy is. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

The "One World" alliance brings together more than 10 of the worlds' biggest airlines, including American Airlines, Cathay Pacific, British Airways, and Qantas. The Alliance allows them to offer an integrated service, including code-sharing and common use of passage terminals.

Required

(a) Explain five (5) reasons why a firm enters into a strategic alliance (10 marks)

(b) Discuss five (5) benefits of joint ventures (10 marks)

[Total: 20 Marks]

QUESTION FIVE

At this critical juncture in the evolution of Internet technology, dot-com (start-up Internet) companies and established companies face different strategic imperatives. Dot-coms must develop real strategies that create economic value. They must recognize that current ways of competing are destructive and futile and benefit neither themselves nor, in the end, customers. Established companies, in turn, must stop deploying the Internet on a stand-alone basis and instead use it to enhance the distinctiveness of their strategies. One CEO stated as follows: "I spend more time thinking about the future and the challenges and how to avoid making mistakes, how to keep growing and how to conquer new markets and succeed in places where we haven't".

Required

(a) Describe how the Internet is changing businesses and how they conduct their operations. (10 marks)

(b) Explain how the new companies can assess how they are using their resources. (3 marks)

(c) Procurement is one area which can significantly benefit from the use of the Internet. Describe the benefits and drawbacks of Internet-based procurement. (7 marks)

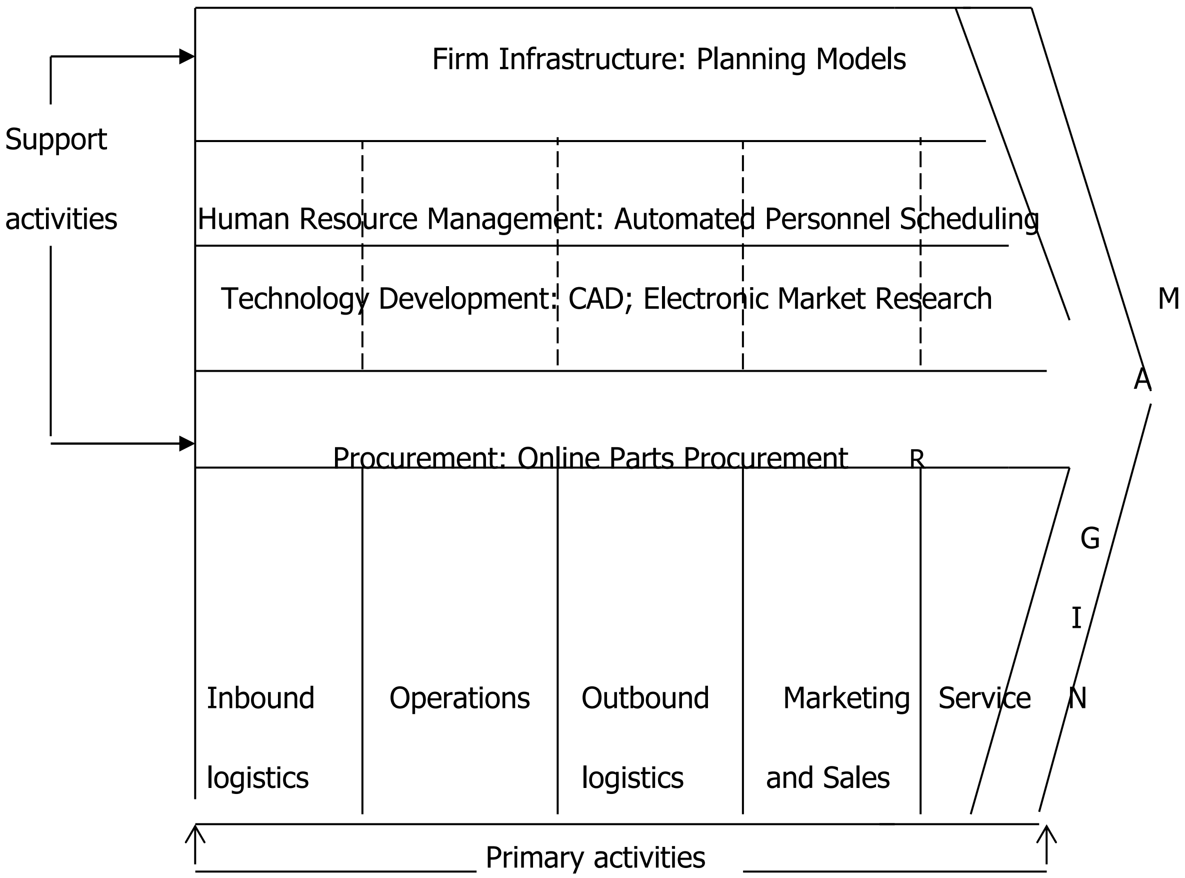
[Total: 20 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

SOLUTION ONE

a. **Draw a fully labeled value chain based on the information given above.**



Parts of the value chain:

Value chain activities can be categorized into two types:

Primary activities include inbound logistics, operations, outbound logistics, marketing and sales, and service.

Support activities include infrastructure, human resource management, technology development and procurement.

These support activities are integrating functions that cut across the various primary activities within the firm.

b. **Explain the source of the competitiveness for this organization.**

- Competitive advantage cannot be understood by looking at a firm as a whole.
- It stems from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its products.
- Each of these activities can contribute to a firm's relative cost position and create a basis for differentiation.
- The value chain disaggregates a firm into its strategically relevant activities in order to understand the behavior of costs and the existing and potential sources of differentiation.
- A firm gains competitive advantage by performing these strategically important activities more cheaply or better than its competitors.
- 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.

c. **Describe how Information Systems (IS) can support this company's generic business (competitive) strategies.**

IT enhances competitive advantage in two major ways:

- By reducing costs (cost leadership)
- By making it easier to differentiate products (differentiation).

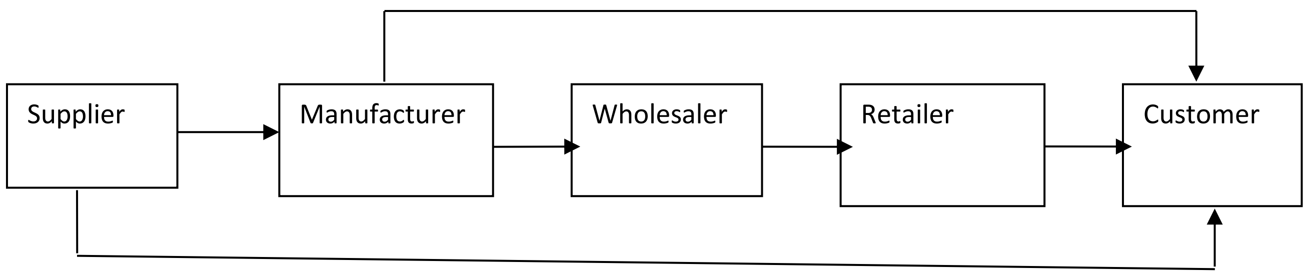
IS through IT can support each of the generic business strategies as follows:

Business Strategy	**How IS can support the strategy**
Cost leadership	By facilitating reductions in cost levels, for example by reducing the number of administration or support staff required. By allowing better resource, for example by providing accurate stock information allowing lower 'buffer' inventories to be held. By using IS to support JIT and advanced manufacturing systems.
Differentiation	By suggesting differentiation, perhaps in the product itself or in the way it is marketed. For example, moving away from paper-based products to electronic.

Focus	By enabling a more customized or specialized product/service to be produced. By facilitating the collection of sales and customer information that identifies targetable market segments.

d. **Suppose this company uses an E-market value chain, draw this value chain and state its features. Describe how this value chain compares with the traditional value chain and give the features of the later.**

An E-market Value Chain



Features of an E-market Value Chain (Pull System)

- Demand drives production and replenishment.
- Centralization of demand information and of replenishment decision-making.
- Reduced product obsolescence.
- Expanded ability to meet changing demand patterns.
- Lower inventories and higher service levels.
- Reduced bull whip effect.

Comparisons

- An E-market value chain is driven by e-commerce while the traditional value chain is driven by schedules based upon historical sales patterns.
- An E-market value chain is a customer-driven pull model where production and distribution are demand driven while a traditional value chain is sales forecast driven.
- An E-market value chain emphasizes delivering value to customers while the traditional value chain emphasizes meeting production and distribution targets.
- In an E-market value chain customers are actively involved in product and service specification development while customer feedback is not taken into account in the traditional value chain

Features of a Traditional Value Chain (Push System)

- Forecasts of sales drive production and replenishment.
- Forecasts are long-term.
- Inventory pushed to the next channel level usually with the help of trade
- promotions.
- Inability to meet changing demand patterns (rigidity).

e. **Calculate the earnings per share, dividend payout ratio and the dividend cover for this company. What do the answers tell us about this company?**

Shareholders = 200; ordinary shareholders = 150; ordinary shares issued = 100; gross profit = K2,500,000; profits attributable to ordinary shareholders = K1,000,000; dividend per share = K200.

Earnings per share (EPS) = Profits attributable to ordinary shareholders / Number of ordinary shares issued.

= K1,000,000 / 100 = K 10,000

Dividend Cover = EPS / Dividend per share

= K 10,000 / K 200 = 50

Dividend Payout Ratio = Dividend per Share / EPS

= K 200 / K 10,000 = 0.02

= 1 : 0.02

Implications:

High earnings per share.

Dividend cover is high enough hence it is attractive.

Dividend payout ratio is too low.

The company is not attractive as the payout ratio is too low.

SOLUTION TWO

a. **Describe the corporate governance principles that are mentioned in the passage above.**

- **Fairness:** Directors' deliberations and the systems and values that underlie the company must be balanced by taking into account everyone who has a legitimate interest in the company and respecting their rights and values.

- **Transparency:** Open and clear disclosure of relevant information to shareholders and other stakeholders, as well as not concealing information when it may affect their decisions. It means open discussions and a default position of information provision rather than concealment.

- **Independence:** This is the avoidance of being unduly influenced by vested interests and free from any constraints that would prevent a correct course of action being taken. It is an ability to stand apart from inappropriate influences and be free of managerial capture, to be able to make the correct and uncontaminated decision on a given issue.

- **Probity:** Relates to not only telling the truth (being honest) but also not misleading shareholders and other stakeholders (acting with integrity and transparency). Also relates to independence.

- **Responsibility:** means management accepting the credit or blame for governance decisions. It implies clear definition of the roles and responsibilities of senior management.

- **Accountability:** Refers to whether an organization (and its directors) is answerable in some way for the consequences of its actions. This is because investors have demanded greater assurance that directors are acting in their interests.

- **Reputation:** This is determined by how others view a person, organization or profession. It includes a reputation for competence, supplying good quality goods and services in a timely fashion, and also being managed in an orderly way.

- **Judgement:** This means the board making decisions that enhance the long-term prosperity of the organization. This means that board members must acquire a broad enough knowledge of the business and its environment to be able to provide meaningful direction to it.

- **Integrity:** This means straightforward dealing and completeness. Can be taken as meaning someone of high moral character, who sticks to strict moral or ethical principles no matter the pressure to do otherwise. Straightforwardness, fair dealing and honesty in relationships with the different people and constituencies whom you meet.

- **Skepticism:** This is needed to effectively challenge management decisions in one's role of scrutiny. An open and enquiring mind must always be employed.

- **Sustainability:** for an organization to prosper on the long-term, it must follow a strategy that is sustainable. Thus, sustainability issues are integral to a successful corporate vision and strategy.

b**.** Suppose this company wanted institutional investors to invest in its operations, what would be the merits and disadvantages of such investments?

Benefits of institutional investments.

- Institutional investors have large amounts of money to invest.
- Such investments are covered by fewer protective regulations on the ground that they are knowledgeable and able to protect themselves.
- They also manage funds invested by individuals, pooling them.
- They also provide the roles of agents employed on behalf of the investors.

Disadvantages of institutional investment:

- Excessive market influence which can lead to prices being influenced.
- Playing safe as many institutions tend to avoid shares which are seen as speculative, as a result the shares of such companies tend to be relatively expensive.
- Short-term speculation in that they tend to seek short-term speculative gains or simply sell their shares and invest elsewhere if they feel that there are management shortcomings.
- Lack of power of investors since they cannot directly influence policy of the companies in which their funds invest since they do not hold shares themselves and cannot hold the company accountable at general meetings.

c. When can institutional shareholders save their investments in this organization if it started performing badly in terms of making losses and losing market share? Explain fully.

In extreme circumstances the institutional shareholders may intervene more actively, for

example by calling a company meeting in an attempt to unseat a poorly performing board.

The following are a number of reasons why institutional investors might intervene:

- Fundamental concerns about the strategy being pursued in terms of products, markets and investments.
- Poor operational performance particularly if one or more key segments has persistently underperformed.
- Management being dominated by a small group of executive directors with the non-executive directors failing to hold management to account.
- Major failures in internal controls particularly in sensitive areas such as health and safety, pollution and quality.
- Failure to comply with laws and regulations or governance codes.
- Excessive levels of directors' remuneration.
- Poor attitudes towards corporate social responsibility.

d. Distinguish between corporate governance and corporate social responsibility, indicating their similarities.

- Corporate governance is a set of relationships between a company's directors, its shareholders and other stakeholders. It also provides the structure through which the objectives of the company are set and the means of achieving those objectives and monitoring performance are determined.
- Corporate social responsibility (CSR) is concerned with a company's obligation to all stakeholders to act in a sustainable way, particularly in the economic, social and environmental dimensions. It is an organization's obligation to maximize positive stakeholder benefits while minimizing the negative effects of its actions.

Similarities:

- Both are concerned with increasing the benefits to the company from the activities carried out.
- Both are concerned with the welfare of the stakeholders of the company.

SOLUTION THREE

(a) **Strategic analysis has the following steps;**

Step 1. Mission and Vision statement determination

Mission denotes values, the business's rationale for existence; Vision refers to where the organisation intends to be In the near future.

Step 2. Goals

Interpret the mission to different stakeholders of what to be achieved

Step 3. Objectives

Quantifiable embodiments of the mission in terms of achievement measures like profits, time scale, deadlines, etc.

Step 4. Environmental analysis identifies opportunities and threats/challenges using pest analysis and Porter's five factor model.

Step 5. Position audit or company situation analyses in which you identify company strengths and weaknesses. You also outline company's current resources, products, customers, systems, structure, results, efficiency, effectiveness, etc.

Step 6. Corporate Appraisal in which you carry out an appraisal between the company and environment appraisal or relationship using the SWOT analysis charts.

Step 7. Gap analyses in which you evaluate each strategy on the basis of suitability, acceptability and feasibility using both risk and stakeholder analysis and financial measures.

(b) **Three (3) tests that can be used to evaluate the merits of one strategy over another and to gauge how good a strategy is are:**

(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 gains in profitability and gains in the company's long-term business strength and competitive position

SOLUTION FOUR

(a) Explain five (5) reasons why a firm enter into a strategic alliance

- To share developmental costs and risks of particular technology
- To overcome the legal restrictions on takeovers
- To enter into new global markets
- Sharing of technology and expertise with partners
- To exploit synergies between their different businesses

(b) Discuss Five (5) benefits of joint ventures

i- Joint ventures permit coverage of large number of countries
ii- Can reduce the risk of government intervention
iii- Can provide learning exercises and gain other competences
iv- Can proved an opportunity to build or buy production assets abroad
v- Can provide close control over operations

SOLUTION FIVE

a) **Describe how the Internet is changing businesses and how they conduct their operations.**

- New distribution channels, revolutionizing sales and brand management.
- The continued shift of power towards the consumer, e.g. ability to compare prices.
- Growing competition locally, nationally, internationally and globally by removing some of the barriers to entry to an industry.
- An acceleration in the pace of business and linked to this an increased automation of business transactions and workflows.
- The transformation of companies into extended enterprises involving virtual teams of business, customer and supplier working in collaborative partnerships.
- Reduced importance of location due to the availability of internet connections making the physical location where people work less important.
- A re-evaluation of how companies, their partners and competitors add value not only to themselves but in the wider environmental and social setting.
- Recognition of knowledge as a strategic asset.

b) **Explain how the new companies can assess how they are using their resources.**

- Identify the value activities and assign costs and added value and identify the critical activities.
- Identify the cost or value drivers.
- Identify the linkages between the value activities.

c) **Procurement is one area which can significantly benefit from the use of the Internet. Describe the benefits and drawbacks of Internet-based procurement.**

Benefits

- Cost reduction.
- Reduced inventory levels.
- Control of parts inventories is more effective.
- Wider choice of supplier globally.

Drawbacks

- Control. If anyone can order goods from anywhere then there is a major risk that unauthorized purchases will be made. There is also an increased likelihood that purchases will be made from suppliers who cannot deliver the required quality or cannot deliver at all.

- Organizational risk. In moving to an e-procurement tool, an adopting company will make a substantial investment but for many reasons the implementation may never be done.
- Data security. Putting a company's spending online means dealing with the security issues that come with any internet-related deployment.
- Management loses spending control. There is a perceived risk that moving to e-procurement will put spending decisions in the wrong hands internally and management will lose decision-making control over who spends how much on what.
- Supply chain problems. Moving to e-sourcing speeds up the sourcing process dramatically but the increased efficiency and speed can also destabilize the rest of the supply chain if it is not able to step up its performance to meet the increased speed in the purchasing link of the chain.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 14 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

   Section A: One (1) compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. Present Value and Annuity tables are attached at the end of this paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

The following draft financial statements relate to Lusaka, Ndola and Mansa all public limited companies.

Statements of financial position as at 31 March 2022 are as follows:

Assets:	**Lusaka**	**Ndola**	**Mansa**
Non-current assets	**Kmillion**	**Kmillion**	**Kmillion**
Property plant and equipment	720.0	550.0	650.0
Investment properties	300.0	200.0	100.0
Investments in subsidiaries:			
Ndola Ltd	625.0		
Mansa Ltd	155.0	635.0	
Financial assets	160.0	10.5	70.5
	1,960.0	1,395.5	820.5
Current assets	447.5	340.5	75.0
Total assets	**2,407.5**	**1,736.0**	**895.5**
Equity and liabilities:			
Equity			
Share capital	875.0	605.0	400.0
Retained earnings	620.0	465.0	175.0
Other components of equity	62.5	40.0	47.5
Total equity	1,557.5	1,110.0	622.5
Liabilities			
Non-current liabilities	492.5	382.5	75.0
Current liabilities	357.5	243.5	198.0
Total liabilities	850.0	626.0	273.0
Total equity and liabilities	**2,407.5**	**1,736.0**	**895.5**

Additional information:

(i) On 1 April 2020, Lusaka Ltd acquired 14% of the equity interest of Mansa Ltd for a cash consideration of K130 million and Ndola Ltd acquired 70% of the equity interest of Mansa Ltd for a cash consideration of K635 million. At 1 April 2020, the identifiable net assets of Mansa Ltd had a fair value of K495 million, retained earnings were K95 million and other components of equity were K26 million.

(ii) On 1 April 2021, Lusaka Ltd acquired 60% of the equity interests of Ndola Ltd, a public limited liability company. The cost of investment comprised cash of K625 million. On 1 April 2021, the fair value of the identifiable net assets acquired was K975 million and retained earnings of Ndola Ltd were K325 million and other component of equity were K27.5 million. The excess in fair value is due to non-depreciable land. It is the group's policy to measure the non-controlling interest at acquisition at its proportionate share of the fair value of the subsidiary's net assets.

At 1 April 2021, the identifiable net assets of Mansa Ltd had a fair value of K575 million, retained earnings were K120 million and other components of equity were K35 million. The excess in fair value is due to non-depreciable land. The fair value of the 14% holding of Lusaka Ltd in Mansa Ltd, which was classified as fair value through profit or loss, was K140 million at 31 March 2021 and K155 million at 31 March 2022. However, the fair value of Ndola Ltd's interest in Mansa Ltd had not changed since acquisition.

(iii) Goodwill of Ndola Ltd and Mansa Ltd were tested for impairment at 31 March 2022 and found that there was no impairment relating to Mansa Ltd. However, the goodwill of Ndola Ltd was fully impaired by the reporting date.

(iv) On 1 April 2020, Lusaka Ltd acquired office accommodation at a cost of K45 million with a 30-year estimated useful life. During the year, the property market in the area slumped and the fair value of accommodation fell to K37.5 million at 31 March 2021 and this was reflected in the financial statements. However, the market unexpectedly recovered quickly due to the announcement of major government investment in the area's transport infrastructure.

On 31 March 2022, the valuer advised Lusaka Ltd that the offices should now be valued at K52.5 million. Lusaka Ltd has charged depreciation for the year but has not taken account of the upward valuation of the offices. Lusaka Ltd uses the revaluation model and records any valuation change when advised to do so.

(v) Lusaka Ltd announced two major restructuring plans during the year. The first plan was to reduce its capacity by the closure of some of its smaller factories, which had already been identified. This would lead to the redundancy of 500 employees, who had been individually selected and communicated to. The costs of this plan were K4.5 million in redundancy costs, K2.5 million in retraining costs and K2.5 million in lease equipment termination costs. The second plan is to re-organize the finance and information technology department over a one-year period but it does not commence until two years' time. The plan will result in 20% of finance staff losing their jobs during the restructuring. The costs of this plan are K5 million in redundancy costs, K3 million in retraining costs and K3.5 million in equipment lease termination costs. There are no entries made in the financial statements for the above plans.

(vi) The following information relates to the group pension plan of Lusaka Ltd:

	1 April 2021	**31 March 2022**
	Kmillion	**Kmillion**
Fair value of plan assets	14	14.5
Actuarial value of defined benefit obligation	15	17.5

(vii) Contributions for the period received by the fund were K1 million and the employee benefits paid in the year amounted to K1.5 million. The discount rate to be used in any calculation is 5%. The current service cost for the period based on actuarial calculations is K0.5 million. The above figures had not been taken into account for the year ended 31 March 2022 except for the contributions paid which were entered in cash and the defined benefit obligation.

Required:
Prepare Lusaka Ltd group consolidated statement of financial position of as at 31 March 2022.

[Total: 40 Marks]

SECTION B
Answer ANY Three (3) questions in this section.

QUESTION TWO

(a) Zambeef PLC, a parent company had 6 million, K1 fully paid ordinary shares outstanding on 1 January 2020. On 1 April 2020 the company made a consolidation of existing shares in issue (i.e. a reverse share split) at nominal value, on a 2 for 3 basis, due to financial distress. There was no special dividend, share repurchase or other outflow of resources.

Having completed the consolidation of shares, a new share issue for 600,000 shares was made through an offer for sale at the market price of K1.55 per share. The allotment was made on 1 September 2020 and the proceeds were due on 1 October 2020. The company's (summarised) statement of profit or loss for the year ended 31 December 2020 as published, showed:

	K'000
Revenue	25,740
Cost of sales and operating expenses	(26,060)
Loss before interest and tax	(320)
Finance costs	(68)
Taxation	(60)
Loss for the year	**(448)**
Profit/(loss) attributable to:	
Owners of the parent	(478)
Non-controlling interests	30
	(448)

The company also had in issue, K500, 000 5% cumulative redeemable preferences shares throughout the year ended 31 December 2020.

Required:

In accordance with *IAS 33: Earnings per Share* calculate the basic earnings per share figure for the year ended 31 December 2020. (6 marks)

(b) You are the Chief Financial Officer of Zamcontractor, a family owned company involved in road construction. Your Managing Director, who is not an accountant, has recently attended a virtual seminar at which key global standards on non-current assets were discussed. He remembers being told that: IAS 16 *Property, Plant and Equipment* deals with accounting for tangible non-current assets. However, when accounting for tangible non-current assets, it is important to consider the requirements of IAS 36 *Impairment of Assets* and IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

Required:

Explain briefly why it is important to consider the requirements of IAS 36 and IAS 37, in addition to those of IAS 16, when accounting for tangible non-current assets. (4 marks)

(c) FRS 13, Fair Value Measurement defines fair value, establishes a framework for measuring fair value and requires significant disclosures relating to fair value measurement. The guidance in IFRS 13 does not apply to transactions dealt with by certain standards. Therefore, IFRS 13 applies to fair value measurements where fair value is permitted by other standards as a measurement basis. It replaces the inconsistent guidance found in various IFRSs with a single source of guidance on measurement of fair value.

Required:

(i) Discuss the main principles of fair value measurement as set out in IFRS 13. (5 marks)

(ii) Describe the three-level hierarchy for fair value measurements used in IFRS 13. (5 marks)

[Total: 20 Marks]

QUESTION THREE

(a) After reviewing their published financial statements, Directors of Kopala Ltd, a mining company are of the view that their financial statements have limited environmental information and do not address a broad range of users' needs.

Despite the difficulties in recognising and measuring the financial effects of environmental matters in financial statements, Kopala Ltd discloses the following environmental information in its financial statements:

- Release of minerals and other naturally occurring impurities including heavy metals;
- Loss of natural fishing and recreational places and ;
- Soil erosion and sedimentation, noise and dust.

Required:

(i) Explain two (2) factors which motivate companies to disclose social and environmental information in their financial statements. (2 marks)

(ii) Identify three (3) specific difficulties in recognising and measuring the financial effects of environmental matters. (3 marks)

(b) In March 2018 the IASB issued a comprehensive set of concepts for financial reporting, the revised *Conceptual Framework for Financial Reporting*. The current form of the conceptual framework provides a revised and complete version of the framework.

Required:

Explain primary reasons why the IASB believed it was *necessary to revise* its Conceptual framework and state what has changed in this revised document. (5 marks)

(c) You are the financial controller of Chipata Plc, a listed entity which prepares consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). The Managing Director, who is not an accountant, has recently attended an international virtual business seminar at which financial reporting issues were discussed. Following the seminar, she reviewed the financial statements for the year ended 31 March 2021. Based on this review she is concerned that certain Standards permit entities to choose between different measurement bases and presentation methods. She believes that these choices hinder shareholders from comparing the entity's performance to other entities on a like-for-like basis.

Required:

Discuss the potential impact of the main accounting choices permitted by IAS 16 *Property, Plant and Equipment* and IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* on investors' analysis of financial statements. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) ***IFRS 15: Revenue from Contracts with Customers*** specifies how and when an entity applying IFRS will recognise revenue as well as requiring such entities to provide users of financial statements with more informative and relevant disclosures. The standard provides a single, principles-based five-step model to be applied to all contracts with customers. Zamtour Ltd, a hotel based in Livingstone had the following transactions during the year:

(i) On 31 March 2021, Zamtour Ltd signed a contract to supply 50,000 units of food packs at an agreed price of K100 per unit. On the same day, 30,000 units were delivered, with the remainder delivered on 1 June 2021. It was agreed that the customer would have extended credit terms of 12 months from the date of delivery. Zamtour Ltd's cost of capital is 10%. (3 marks)

(ii) During the year ended 31 March 2021, Zamtour Ltd received payment in advance for the supply of 2,000 hotel room-nights to customers at K1, 000 per room per night. Only 400 of these had been occupied by 31 March 2021. Customers are entitled to occupying the remaining 1000 room-nights within the next six months. The amounts paid by the customers are non-refundable unless the company fails to provide the agreed accommodation. (3 marks)

Required:

In each of the scenarios above, calculate the amount of revenue to be recognised in the financial statements of Zamtour Ltd for year ended 31 March 2021, and explain the appropriate accounting treatment in accordance with IFRS 15, referring to the workings you prepared.

(b) Zamtech is a listed company which manufactures personal computers (PCs). It is preparing its financial statements for the year ended 31 May 2021 and would like to seek advice on the following accounting issue:

During the year, Zamtech issued a debt finance to the financial markets to fund its expansion plans. This was a very significant debt issue for Zamtech. After the issue, the market price of each block of debt on the market fell by approximately 12.5%. The financial press has stated that the reason for the fall is due to an increase in the company's credit risk, as the market players are worried by the size of the interest payments on Zamtech's operating cash flows.

Required:

Advise the Directors as to the financial reporting issues arising from the above scenario and explain the appropriate treatment in Zamtech's financial statements. (4 marks)

(c) IFRS 5: Non-current Assets Held for Sale and Discontinued Operations sets out principles governing the measurement and presentation of non-current assets that are expected to be realised through sale rather than through continued use. The standard also deals with reporting the results of operations that qualify as discontinued operations.

Required:

Identify two (2) conditions which must be present in order to present the results of an operation as "***discontinued***" and the accounting treatment that applies when such a classification is deemed appropriate. (4 marks)

(d) On 1 January 2020, Lindani issued 10,000 bond instruments with a face value of K100 at a market price of K95. Bond brokers charged fees totaling K18, 000 in relation to the bond issue. The bonds carry a coupon rate of 5% and are redeemable in 3 years at face value.

Lindani wishes to account for the bonds using ***IFRS 9: Financial Instruments*** amortised cost method. However, there was some confusion about how the bonds should be accounted for. Currently, the cash received from the bond issue of K950,000 has been recognised as a non-current liability. The broker fees of K18,000 were deducted from the noncurrent liability carrying amount, the coupon payment of K50,000 has been expensed in arriving at profit before tax and the effective rate of interest is 7.62%.

Required:

Justify the necessary accounting treatment of the above transaction relating to Lindani Ltd for the year ended 31 December 2020. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Corporate Governance has increasingly become important in recent years as accounting and ethical "scandals" have come to light; in some cases resulting in the collapse of a company.

Required:

(i) Briefly explain what Corporate Governance is. (1 mark)

(ii) State four (4) benefits of Corporate Governance. (4 marks)

(b) In 2010, the International Accounting Standards Board (IASB) issued a non-mandatory International Financial Reporting Standard (IFRS) Practice Statement on Management Commentary. This Practice statement provides a broad framework for presentation of a narrative report to accompany financial statements prepared in accordance with the International Financial Reporting Standards (IFRSs).

Required:

(i) State the five (5) elements of a Management commentary that are essential to a further understanding of the reporting entity. (5 marks)

(ii) For each of the elements identified above, Discuss, the needs of primary users of a Management commentary according to the table provided by IASB. (10 marks)

[Total: 20 Marks]

END OF PAPER

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

CA 3.1 FINANCIAL REPORTING

SUGGESTED SOLUTIONS

SOLUTION ONE

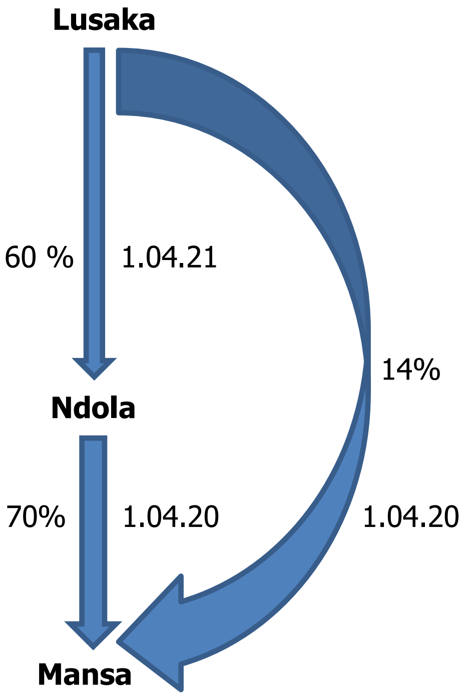
(a)

LUSAKA LTD
Consolidated statement of financial position as at 31 March 2022

Assets:	**Kmillion**
Non-current assets:	
Property, plant and equipment (720 + 550 + 650 + 17.5 + 20 + 16.3)	1,973.8
Investment properties (300 +200 +100)	600
Goodwill (W3)	199
Financial assets (160 + 10.5 + 70.5)	241
	3,013.8
Current assets(447.5 + 340.5 + 75)	863
Total assets	**3,876.8**
Equity and liabilities	
Share capital	875
Retained earnings (W5)	678.05
Other components of equity (W5)	85.05
Total equity attributable to shareholders of parent	1,638.1
Non-controlling interest (W4)	479.7
Total equity	2,117.8
Total non-current liabilities (492.5 + 382.5 + 75 + 3-define benefit liability	953
Current liabilities (357.5 + 243.5 + 198 + 7 – provision for restructuring)	806
Total liabilities	1,759
Total equity and liabilities	**3,876.8**

Workings:

(W1) Group structure



The group effective interest in Mansa Ltd is:

Direct interest	14%
Indirect interest or effective interest (60% x 70%)	42%
Group effective interest	56%
The NCI interest in Mansa Ltd is therefore (100% -56%)	44%
	100%
Consolidation of Ndola Ltd	
Group	60%
NCI (100% - 60%)	40%
	100%

The acquisition date for Mansa Ltd by Lusaka Ltd is 1 April 2021, hence the day when Lusaka Ltd gained control over Ndola Ltd; and therefore indirect control over Mansa Ltd.

(W2) Net assets

Ndola Ltd	**Acquisition date Kmillion**	**Reporting date Kmillion**	**Post-Acquisition Kmillion**
Share capital	605	605	-
Other components	27.5	40	12.5
Retained earnings	325	465	140
Fair value adjustment – Land (remaining figure)	17.5	17.5	-
	975	1,127.5	152.5
Mansa Ltd			
Share capital	400	400	-
Other components	35	47.5	12.5
Retained earnings	120	175	55
Fair value adjustment – Land (remaining figure)	20	20	-
	575	642.5	67.5

Therefore, the post-acquisition profits of Ndola Ltd is K152.5 million (K1,127.5 - K975) and that of Mansa Ltd is K67.5 million (K642.5 – K575).

(W3) Goodwill

The cost of Mansa Ltd has three elements: the cost of the direct holding, the cost of the indirect holding and the indirect holding adjustments.

Ndola Ltd	
	Kmillion
Fair value of consideration	625
NCI at acquisition (40% x K975)	390
Fair value of identifiable net assets acquired (W2)	(975)
Goodwill at acquisition	40
Impairment	(40)
Goodwill at reporting date	-

Mansa Ltd	
	Kmillion
Fair value of consideration:	
Direct holding (Fair value at date control obtained)	390
Indirect holding	635
Indirect holding adjustment (40% x K635 million)	(254)
NCI at acquisition (44% x K575 million)	253

Less fair value of identifiable net assets (W2)	(575)
Goodwill at reporting date	199
Mansa Ltd	
	Kmillion
Fair value of purchase consideration:	
Direct holding	140
Indirect holding (60% x 635)	381
NCI at acquisition (44% x K575)	253
Less fair value of identifiable net assets (W2)	(575)
Goodwill at reporting date	199

Lusaka's investment in Mansa Ltd was held at K155 million at the reporting date. Therefore, the fair value increase of K15 (K155 – K140 million) that has arisen since the date control was achieved must be removed from the consolidated statements. Retained earnings must also be reduced by K15 million.

(W4) Non-controlling interest

	Kmillion
NCI in Ndola Ltd at acquisition (40% x K975)	390
Add: NCI % of post –acquisition net assets (40% x (K1,127.5 million - K975 million)	61
Indirect holding adjustment (40% x K635 million)	(254)
NCI in Mansa Ltd at acquisition	253
NCI in post-acquisition net assets (44% x (K642.5 - K575)	29.7
	479.7

Alternative:

	Kmillion
NCI in Ndola Ltd's net assets at reporting date (40% x K1,127.5)	451
NCI in Mansa Ltd's net assets at reporting date (44% x K642.5)	282.7
NCI's share of investment in Ndola (40% x K635)	(254)
	479.7

(W5) Retained earnings

	Kmillion
Lusaka Ltd	620
Ndola Ltd: 60% x (K930 million - K650 million (W2))	84
Mansa Ltd: 56% x (K350 million - K240 million)(W2))	30.8
Gain on Mansa Ltd's investment (W3)	(15)

Impairment of goodwill (W3)	(40)
Reversal of impairment loss (W6)	5.8
Restructuring provision (W7)	(7)
Pension plan (W8)	(0.55)
	678.05

Other components of equity

	Kmillion
Lusaka Ltd	62.5
Ndola Ltd: 60% x (K40 million – K27.5 million) (W2)	7.5
Mansa Ltd: 56% x (K47.5 million – K35 million) (W2)	7
Revaluation gain (W6)	10.5
Pension plan re-measurement (W8)	(2.45)
	85.05

(W6) the office

	Kmillion
Cost of office building	45
Depreciation (45/30years)	(1.5)
Carrying amount	43.5
Revaluation loss – Profit or Loss	(6)
Fair value at 31 March 2021	37.5
Depreciation (37.5/29years)	(1.3)
	36.2
Revaluation surplus - OCI	16.3
Fair value at 31 March 2022	52.5

If no revaluation reserve exists for an item of PPE then a downward revaluation is recognized in the statement of profit or loss.

Some of this reversal can be recognized in profit or loss, but this is capped at the amount needed to increase the asset to the value it would have been had no impairment occurred. If no impairment had occurred, the asset would have been held at K42 million (K45 million – (2 x K1.5)). Therefore, the gain recorded in profit or loss is K5.8 million (K42 million – K36.2 million). The remainder of the gain is recognized in other comprehensive income.

The entries will be:

Dr property, plant and equipment	K16.3 million
Cr profit or loss	K5.8 million
Cr other comprehensive income	K10.5 million

(W7) provision for restructuring

Only those costs that result directly from and are necessarily occasioned by a restructuring may be included in a restructuring provision. This includes costs such as employee redundancy costs or lease termination costs. Expenses that relate to ongoing activities, such as relocation and retraining, are excluded.

With regard to the service reduction, a provision should be recognized for the redundancy and lease termination costs of K7 million (K4 million + K2.5 million). The sites and details of the redundancy costs have been identified.

In contrast, Lusaka Ltd should not recognize a provision for the finance and IT department's re-organisation. The re-organisation is not due to start for two years. Stakeholders outside are unlikely to have a valid expectation that management is committed to the re-organisation as the time frame allows significant opportunities for management to change the details of the plan or even to decide not to proceed with it. In addition, the degree of identification of the staff to lose their jobs is not sufficiently detailed to support the recognizing of a redundancy provision.

(W8) pension plan

In order to calculate the re-measurement component, reconcile the opening and closing net pension deficit. The re-measurement component is accounted for in other comprehensive income.

The liability recognized in the financial statements will be K3 million (that is, K17.5 million- K14.5 million)

	Kmillion
Net obligation at 1 April 2021 (K15 million – K14 million)	1.00
Net interest component (K1 million x 5%)	0.05
Contributions	(1.00)
Service cost component	0.50
Re-measurement loss (remaining figure)	(2.45)
Net obligation at 31 March 2022 (17.5 -14.5)	3.00

The service cost component and net interest component will be charged to profit or loss (K0.55 million) and the re-measurement loss to Other Comprehensive Income (K2.45 million). There will be no adjustment for the contributions, which have already been taken into account.

SOLUTION TWO

(a)

Date	Narrative	Number of shares	Time fraction	Bonus fraction	Weighted Average
1 Jan	b/d	6,000,000	x $^{3}/_{12}$	x $^{2}/_{3}$	1,000,000
1 Apr	Stock consolidation	(2,000,000)			
		4,000,000			
1 Oct	Issue @ market price	(6,000,000/3) x 2)	$^{6}/_{12}$		2,000,000
1 Oct	Issue price	600,000	X $^{3}/_{12}$		1,150,000
		4,600,000			4,150,000

Shares allotted are included from the date the cash is receivable (1 October), IAS 33 para 21(a).

Basic earnings per share = Profit attributable to equity shareholders of the parent

Weighted average number of shares

(K478, 000)/4,150,000 = 11.5 ngwee loss per share.

As the preference shares are redeemable, they are accounted for as a financial liability under IAS 32 Financial Instruments: Presentation and therefore the dividend payment is treated as a finance cost, so no further adjustment to earnings is required as the dividend is included in finance costs.

(b)

Circumstances may arise where subsequent to initial recognition, the book value of a tangible non-current asset may not be economically recovered from future business activity. Although future production may be possible, this may be insufficient to recover the current book value in the future. IAS 36 requires a write down of the book value to the recoverable amount and the reduction in value should be charged as an immediate expense in the income statement. If it reverses a previous revaluation uplift, it should be charged directly against the revaluation surplus (IAS 16).

Thus the two standards need to be consulted in this area as any impairment loss of a revalued asset requires consideration of the determination of whether the asset is impaired (IAS 36) and how this loss is going to be dealt with if the asset has been revalued (IAS 16). Additionally IAS 36 deals with the depreciation charge for an impaired asset and the reversal of an impairment loss of an asset. Again in this latter case if the asset has been revalued, both IAS 16 and IAS 36 need consulting.

After the initial recognition of an asset an enterprise may incur further expenditure on that asset. IAS 37 has stated that periodic maintenance costs cannot be accrued in advance of a shut down and decommissioning costs and other environmental costs relating to an asset must be recognised as soon as there is an obligating event. These costs cannot be built up over the life of an asset but must be provided for in full when the obligating event occurs. IAS 37 deals with the measurement and recognition of the provision (i.e. the credit entry) and IAS 16 deals with the accounting for the debit entry resulting in a smooth interaction between the two statements.

However, IAS 37 does provide for capitalization of discounted cash outflow, and eventual charge of depreciation as a fair spread of this capitalized figure, of the obligatory future costs of decommissioning and environmental clean-up. This also calls for recognition of this obligation as a liability split between non-current and current liability in the statement of financial position; with the attendant unwinding of discount treated as finance cost in the statement of profit or loss.

(c)

(i)
Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Basically it is an exit price. Fair value is focused on the assumptions of the market place and is not entity specific. It therefore takes into account any assumptions about risk. Fair value is measured using the same assumptions and taking into account the same characteristics of the asset or liability as market participants would. Such conditions would include the condition and location of the asset and any restrictions on its sale or use. Further, it is not relevant if the entity insists that prices are too low relative to its own valuation of the asset and that it would be unwilling to sell at low prices. Prices to be used are those in 'an orderly transaction'.

An orderly transaction is one that assumes exposure to the market for a period before the date of measurement to allow for normal marketing activities and to ensure that it is not a forced transaction. If the transaction is not 'orderly', then there will not have been enough time to create competition and potential buyers may reduce the price that they are willing to pay. Similarly, if a seller is forced to accept a price in a short period of time, the price may not be representative. It does not follow that a market in which there are few transactions is not orderly. If there has been competitive tension, sufficient time and information about the asset, then this may result in a fair value for the asset.

IFRS 13 does not specify the unit of account for measuring fair value. This means that it is left to the individual standard to determine the unit of account for fair value measurement. A unit of account is the single asset or liability or group of assets or liabilities. The characteristic of an asset or liability must be distinguished from a characteristic arising from the holding of an asset or liability by an entity. An example of this is that if an entity sold a large block of shares, it may have to do so at a discount on the market price. This is a characteristic of holding the asset rather than of the asset itself and should not be taken into account when fair valuing the asset.

Fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place in the principal market for the asset or liability or, in the absence of a principal market, in the most advantageous market for the asset or liability. The principal market is the one with the greatest volume and level of activity for the asset or liability that can be accessed by the entity.

The most advantageous market is the one which maximises the amount that would be received for the asset or minimises the amount that would be paid to transfer the liability after transport and transaction costs. An entity does not have to carry out an exhaustive search to identify either market but should take into account all available information. Although transaction costs are taken into account when identifying the most advantageous market, the fair value is not after adjustment for transaction costs because these costs are characteristics of the transaction and not the asset or liability. If location is a factor, then the market price is adjusted for the costs incurred to transport the asset to that market. Market participants must be independent of each other and knowledgeable, and able and willing to enter into transactions.

IFRS 13 sets out a valuation approach, which refers to a broad range of techniques, which can be used. These techniques are threefold. The market, income and cost approaches.

(ii)
When measuring fair value, the entity is required to maximise the use of observable inputs and minimise the use of unobservable inputs. To this end, the standard introduces a fair value hierarchy, which prioritises the inputs into the fair value measurement process.

Level 1 inputs are quoted prices (unadjusted) in active markets for items identical to the asset or liability being measured. As with current IFRS, if there is a quoted price in an active market, an entity uses that price without adjustment when measuring fair value. An example of this would be prices quoted on a stock exchange. The entity needs to be able to access the market at the measurement date. Active markets are ones where transactions take place with sufficient frequency and volume for pricing information to be provided. An alternative method may be used where it is expedient. The standard sets out certain criteria where this may be applicable. For example, where the price quoted in an active market does not represent fair value at the measurement date. An example of this may be where a significant event takes place after the close of the market such as a business reorganisation or combination. The determination of whether a fair value measurement is level 2 or level 3 input depends on whether the inputs are observable inputs or unobservable inputs and their significance.

Level 2 inputs are inputs other than the quoted prices in level 1 that are directly or indirectly observable for that asset or liability. They are quoted assets or liabilities for similar items in active markets or supported by market data. For example, interest rates, credit spreads or yield curves. Adjustments may be needed to level 2 inputs and if this adjustment is significant, then it may require the fair value to be classified as level 3.

Level 3 inputs are unobservable inputs. The use of these inputs should be kept to a minimum. However, situations may occur where relevant inputs are not observable and therefore these inputs must be developed to reflect the assumptions that market participants would use when determining an appropriate price for the asset or liability. The entity should maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The general principle of using an exit price remains and IFRS 13 does not preclude an entity from using its own data. For example, cash flow forecasts may be used to value an entity that is not listed. Each fair value measurement is categorised based on the lowest level input that is significant to it.

SOLUTION THREE

(a)

(i) 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 investors and their advisers, 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 a company'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's overall 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 better investments 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 of such matters in financial statements. These provide further encouragement to disclose information.

(ii) Difficulties **in recognising and measuring the financial effects of environmental matters**

- There is often a considerable delay between the activity that causes an environmental issue such as the contamination of a site due to industrial activity and its identification by the entity or the regulators.
- Accounting estimates do not necessarily have an established historical pattern and can exhibit wide ranges of reasonableness because of the number and nature of assumptions underlying the determination of these estimates.
- Environmental laws and regulations are evolving and interpretation can be difficult or ambiguous. Consultation with an adviser may be necessary to assess their impact on the measurement of assets and liabilities.
- Liabilities can arise other than as a result of legal or contractual obligations, for example, a voluntary commitment.

(b)

The previous conceptual framework was issued in **1989 and partly revised in 2010**, it was incomplete and needed improvement. There were gaps that needed to be filled, for example, guidance on measurement, presentation and disclosure, including guidance on the use of profit or loss and other comprehensive income. There was a need to update some guidance, for example the definition of assets and liabilities. Also there was a need to clarify some guidance, for example the role of measurement uncertainty and the roles of stewardship and prudence in financial reporting. The following were the primary reasons:

- To **update** the Framework for changes in markets, business practices and economic environment since the original Framework was published in 1989.
- To develop a **common** conceptual framework between US GAAP and IFRSs so that decisions are based on the same framework in the interests of harmonisation of future standards issued by both bodies.
- To provide a **better foundation** for developing principles-based and converged standards, including filling in some gaps (e.g. a lack of detail in the definition of the reporting entity).
- In addition, the IASB is interested in ensuring the conceptual framework is **suitable** for application to not-for-profit and other entities.

What has changed?

1. **New:**

a) **Measurement**: concepts on measurement, including **factors** to be considered when **selecting** a measurement basis.
b) **Presentation and disclosure**: concepts on **presentation and disclosure**, including when to classify income and expenses in other comprehensive income.
c) **Derecognition:** guidance on when **assets and liabilities are removed** from financial statements.

2. **Updated:**

a) **Definitions**: definitions of **assets and liabilities.**
b) **Recognition**: criteria for **including** assets and liabilities in financial statements.

3. **Clarified:** the following have been clarified;

a) **Prudence**
b) **Stewardship**
c) **Measurement uncertainty**
d) **Substance over form**

The **revised** conceptual framework is **more comprehensive** than the old one. However, most of the concepts are **not new**, it **clarifies** IASB thinking adopted in recent standards (for example, IFRS 16 leases). The **granularity** of guidance differs. Some chapters only highlights a list of choices for the IASB to apply when setting standards, for example, measurement, and presentation and disclosures. Conversely other chapters provide **more direction** on how IASB should make those **choices**, for example assets and liabilities. The distinction between **equity and liability** has been removed **from the revised** conceptual framework, to be dealt with as a **separate project**.

The **main changes** to the revised conceptual framework's principles have been implications for how and when **assets and liabilities are recognised and derecognised** in the financial statements. Some concepts are entirely **new**, for example the **practical ability approach** to **liabilities**. A liability will be recognised if a company has **no practical ability to avoid** it, this would result in recognition than in past **(present).**

The revised Conceptual Framework is **accompanied by a Basis for Conclusions**, as well as a **separate document that sets out the amended references** to the revised Conceptual Framework.

The concept of useful information (relevant and faithfully representative) is consistently carried across all of the chapters, and will ultimately, it is hoped, make financial information more useful to the entity's various stakeholders.

(c)

IAS 16 *Property, Plant and Equipment*

After initial recognition, IAS 16 allows property, plant and equipment (PPE) to be measured using either:

• the cost model – cost less accumulated depreciation and impairment losses
• the revaluation model – fair value less accumulated depreciation and impairment losses.

Assuming that property prices are increasing, an entity that revalues its PPE to fair value will record lower profits than one that uses the cost model. Although the gainsarising from the revaluation of PPE are recognised outside of profit,i.e. in othercomprehensive income, the depreciation charge on the revalued asset will be higherthan if the cost model was used. As such, using the revaluation model may have adetrimental impact on stakeholders' assessment of an entity's financial performance.

Moreover, the higher asset value recorded in the statement of financial position under the revaluation model might also make the entity look less efficient than one which uses the cost model when ROCE of the two separate entities are reviewed.

However, on the positive side revaluation gains will increase equity which will improve the gearing ratio. This may make the entity look like a less risky investment.

Moreover, some stakeholders may place importance on an entity's asset base, as this could be used as security for obtaining new finance. Thus, a higher PPE value in the statement of financial position could be viewed positively.

Another thing to note is that the revaluation model will make the asset position of an entity more volatile than an entity that uses the cost model. Volatility can increasethe perception of risk. However, the statement of profit or loss will be much less volatile than the statement of financial position because revaluation gains are recorded in other comprehensive income.

It should be noted that entities using the revaluation model for PPE are required to disclose the carrying amounts that would be recognised if the cost model had been used. Such disclosures enable better comparison with entities that account for PPE using different measurement models.

IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*

With regards to asset related grants, two methods of presentation are allowed in the statement of financial position:

• recognise the grant as deferred income and release to profit or loss over the useful life of the asset
• deduct the grant from the carrying amount of the asset and then depreciate the asset over its useful life.

The overall net assets and profit of an entity will not be affected by this choice. However, it could still have an impact on an investor's analysis of the financial statements.

An entity that uses the deferred income method to present asset-related grants will report higher non-current asset assets and higher liabilities than an entity that uses the 'netting off' method.

Reporting a higher level of liabilities may have a detrimental impact on certain ratios, such as the current ratio. More generally, higher liabilities may increase the perception of financial risk, potentially deterring investment.

Reporting higher levels of non-current assets could be viewed positively (as a sign of a strong asset base), or negatively (it may make the entity look less efficient at generating its profit). With regards to income related grants, two methods of presentation are allowed in the statement of profit or loss:
• present the grant as 'other income'
• present the grant as a reduction in the related expense.

The overall profit of an entity will not be affected by this choice. However, it could still have an impact when analysing financial statements. For instance, an entity that presents grant income by reducing its expenses may be perceived as having better cost control and as operating with greater efficiency than an entity that records its grants within 'other income'.

Cash flows
Accounting policy choices have no impact on the operating, investing or financing cash flows reported in the statement of cash flows.

SOLUTION FOUR

(a)

(i) The contract to supply is not sufficient to recognise revenue. It is necessary that ontrol of the goods have actually transferred to the customer. This is the case for 30,000 units.

The deferred payment does not prevent revenue from being recognised, but the consideration needs to be measured at the fair value, on the transaction date, of the amount receivable. The fair value needs to reflect a discount allowing for the time value of money, as a result of the extended credit period. The discount rate will be 10%, Zamtour's cost of capital. Hence revenue will be recognised as follows:

30,000 units x K100 x 0.909 = K2, 727, 000.

The discount will be recognised as finance income as time passes, on a time apportioned basis. As the sale took place on 31 March 2021, no time has yet passed to trigger the recognition of finance income.

Journal:	K	K
Dr trade receivables	2, 727, 000	
Cr Revenue		2, 727, 000

(recognition of revenue and trade receivables at fair value of consideration receivable)

(ii) Again, the same principles apply. Revenue is recognised when control of the goods or services are transferred to the customer. Here, cash was received in advance. Nevertheless, revenue is only recognised when the service is delivered to the customer. Any excess cash retained is recognised as deferred income, a liability. If the cash is non-refundable, this does not change the timing of recognition of revenue. However, if the customer's right to the service expires, and the customer has no right to a refund, the revenue should then be recognised.

Total cash received in year ended 31 March 2021: 2000 x K1, 000 = K2, 000,000

Total room nights provided 400

Revenue recognised = 400 X K1, 000 = K400, 000

Deferred revenue = 2,000,000 – 400,000 = 1,600,000

Journal:	K 000	K 000
Dr Cash	2,000	
Cr Revenue		400
Cr Deferred revenue		1,600

(recognition of revenue, deferred revenue and cash received)

(b)

- The debt issue must be accounted for under IFRS 9 Financial Instruments. Initial recognition is at fair value. However this would ordinarily be the amount of cash received.
- As the debt is Zamtech's own debt and is not held for trading purposes, it should ordinarily be held at amortised cost.
- The change in fair value of the debt on the market due to change in credit risk is not therefore adjusted in Zamtech's financial statements. However, it will be disclosed under IFRS 7 Financial Instruments: Disclosures.

Note: If the debt were held at fair value through profit or loss (which is unlikely in this case), the change in fair value relating to changes in the entity's own credit risk would be recognised in other comprehensive income rather than profit or loss.

(c)

- A discontinued operation is a component of an entity that either has been disposed of, or is classified as held for sale, and
- represents a separate major line of business or geographical area of operations,
- is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or
- is a subsidiary acquired exclusively with a view to resale.

Accounting Treatment

- Discontinued operations are presented separately at the end of profit or loss by including the profit after tax generated by discontinued operations. This figure should include the post-tax gain or loss on disposal of the assets of the operation or the gain or loss on remeasurement following transfer to "held for sale".
- A component of an entity comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity. In other words, a component of an entity will have been a cash generating unit or a group of cash-generating units while being held for use.
- An entity shall not classify as held for sale a non-current asset (or disposal group) that is to be abandoned. This is because its carrying amount will be recovered principally through continued use.

(d) Under IFRS 9's - amortised cost model, the financial liabilities should initially be recognised at the fair value of the cash received. Any directly attributable costs to the bond issue should be offset against the carrying amount of the liability.

Therefore, at initial recognition the bonds should be measured at:	**K**
Fair value of consideration received	950,000
Less: transaction costs	(18,000)

Carrying amount	932,000

The initial recognition and measurement of the financial liabilities has been carried out correctly in Lindani's financial statements.

The journal entires are

Dr Cash	950,000	
Cr Financial Liability		932,000
Cr Broker Fees Payable (Transaction costs)		18,000

However, IFRS 9's amortised cost method requires the bonds to be amortised over the bond term using the effective interest rate.

The instrument cash flows are:

	K
Year 0	932,000
Year 1	(50,000)
Year 2	(50,000)
Year 3	(1,050,000)

The effective interest rate which discounts back the future cash flows to the instrument's present value is 7.62% (rounded to 2 decimal places).

The amortisation schedule for the debt, using the effective interest rate, is shown below:

Year	Opening balance	Coupon payment	Finance cost @ 7.62%	Difference: to capital sum	Closing capital (capital balance)
0	932,000				
1	932,000	(50,000)	71,018	21,018	953,018
2	953,018	(50,000)	72,620	22,620	975,638
3	975,638	(1,050,000)	74,344	24,344	(18) rounding

Lindani has failed to amortise the bond using the effective interest rate, instead expensing the coupon payment in the profit or loss. Therefore, the following correcting journal entry is required:

Dr Interest expense (P&L)	K21,018	
Cr Non-current liability (SOFP)		K21,018

SOLUTION FIVE

(a) (i) Corporate Governance is a system by which organizations are directed and controlled through establishing a framework for instituting a Board of Directors to provide leadership, exercise its oversight role, promote transparency and integrity among employees and those charged with governance in all an entity's dealings.

(ii) The following are among the benefits to organizations and their stakeholders of Corporate Governance:

1. it enhances investors' confidence for investment in entities where corporate governance is practiced.
2. guarantees efficient use of organizational resources by developing sound procedures and systems for carrying-out business.
3. facilitates for better decision making and hence higher chances of corporate growth.
4. fosters good relations between an organization and its stakeholders such a employees, creditors, regulatory bodies, government, etc.
5. enhances transparency and accountability
6. protects interests of shareholders, especially minority interest shareholders

(b) (i) Management commentary includes information in the following areas because financial statements alone are not sufficient to describe all facets of an organization:

1. Nature of the business
2. Management's objectives and strategies for meeting those objectives
3. The entity's most significant resources, risks and relationships
4. The results of operations and prospects
5. The critical performance measures and indicators used by management to evaluate the entity's performance against set objectives.

(ii) The Practice Statement does not propose a fixed format of a Management commentary and hence this may vary between entities, but the following table of user needs as provided by the IASB should be the primary motivation for preparing a Management commentary:

Element	**User Needs in Management Commentary**
1. Nature of the business	Knowledge of the business of an organization preparing the management commentary and appreciation of the external environment in which an entity operates.

2. Objectives and strategies	An awareness of organizational objectives and the strategies adopted by an entity in pursuit of its objectives. Further, users want to know chances that the chosen strategies would be successful in meeting set objectives.
3. Resources, risks and relationships	A basis for determining resources at the entity's disposal to pursue its mission as well as ability to generate long-term sustainable net inflows of resources, transfer resources to others; likelihood of meeting obligations to trade contacts as well as exposure to short-term and long-term risks in the course of conducting trade.
4. Results and prospects	To assess whether an entity has achieved results in line with expectations as well as how well management has understood and exploited the entity's business environment
5. Performance measures and indicators	Evaluate critical performance measures and indicators that management employs to assess and manage the entity's performance against established objectives and chosen strategies

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 17 MARCH 2022

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

You are a Senior Audit Manager in Ndeke Chartered Accountants. You are in charge of the audit of the financial statements for Chiwala Plc. for the year ended 30 June 2021 a company in which you hold shares that you inherited from your father six years ago.

Ndeke Chartered Accountants was appointed as auditor of Chiwala Plc. at the Annual General Meeting (AGM) which was held on 22 September 2020. The agreed audit fee is K1.5 million payable in advance.

Chiwala Plc. is one of the key players in the honey industry in Zambia. It is involved in harvesting, processing, packaging and marketing of honey for both local and export markets. The receivables balance at the period end includes receivables from both local and export sales.

The Engagement Partner has already had a planning meeting with the Finance Director and he has provided you with the following information:

Zambia is a tropical country endowed with the resources that are required to boost the honey industry. However, the honey industry currently operates using old laws and regulations which were enacted before the country became independent in 1964. Obtaining a licence is very difficult and most of the players in the honey industry operate on an informal basis.

On 26 August 2020, the company started developing one of the biggest honey processing and packaging plants in the Common Market for Eastern and Southern Africa (COMESA). It is located in Ikelenge district of Zambia. It was completed in February 2021 and became operational on 1 April 2021. This was financed by a convertible debt and a government grant in the sum of K8 million.

The plant is currently operating at 40% of its full capacity, mainly due to the depressed market conditions as a result of the COVID-19 pandemic. The management accounts for the month of June 2021 show a significant decrease in profitability. Management wants to attach the audited financial statements to their application for the much needed COVID-19 relief fund, which the government has launched. The Finance Director has been instructed by the Board of Directors to direct Ndeke Chartered Accountants to use highly qualified manpower, who will focus on enquiries of accounting and finance staff and analytical procedures so that the audit work is completed quickly. The post COVID-19 sales projections provided by the Finance Director are impressive given that most nutritional advice has been placing emphasis on more use of honey to replace ordinary sugar. All export sales are on credit.

A computerized accounting system was implemented in the last quarter of the year under review in order to address most of the deficiencies identified by the previous auditors and the internal auditors. In order to motivate its workforce, the Board of Directors of Chiwala Plc. introduced a defined benefit pension scheme in 2019. The Finance Director is responsible for determining the actuarial assumptions used in the estimation of future obligations.

Chiwala Plc. requested Ndeke Chartered Accountants to represent it in a tax dispute with the Zambia Revenue Authority (ZRA) which is before the Tax Appeals Tribunal (TAT). In fact, the Managing Partner has indicated that Ndeke Chartered Accountants is considering not seeking re-election so that the firm focuses on providing consultancy services to Chiwala Plc.

The Review Department of the Zambia Institute of Chartered Accountants (ZiCA) notified the firm of the inspection (monitoring) which will be conducted next month. The newly appointed Quality Control Partner has requested you to immediately send him an email explaining the purpose of the Zambia Institute of Chartered Accountants (ZiCA) inspection.

Required:

(a) Write an email to the newly appointed Quality Control Partner, explaining the purpose of the ZiCA inspection (monitoring) of audit firms. (4 marks)

(b) Using the information in the scenario:

(i) Identify and explain four (4) ethical threats which may affect the independence of Ndeke Chartered Accountants in respect of the audit of Chiwala Plc. (6 marks)

(ii) For each threat, suggest how it may be reduced to an acceptable level. (4 marks)

(iii) Discuss five (5) factors which Ndeke Chartered Accountants should consider when opting for the provision of consultancy services to Chiwala Plc. (5 marks)

(c) Identify and explain six (6) audit risks arising in the audit of the financial statements of Chiwala Plc. for the year ended 30 June 2021. (12 marks)

(d) Analyse two (2) potential issues that the computerization of the accounting system of Chiwala Plc. will have on planning of the financial statement audit for the year ended 30 June 2021, and explain any two (2) audit procedures which will be relevant for the payroll system. (6 marks)

(e) Recommend three (3) audit procedures which should be used when auditing the actuarial assumptions in Chiwala Plc. (3 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

(a) The Zambia Institute of Accountants (ZiCA) is concerned about the level of ignorance among members regarding money laundering and fraud. It has organized a workshop in conjunction with the relevant enforcement authorities.

You work for Monde Accountants as a Technical Advisor to the Managing Partner. The Zambia Institute of Chartered Accountants (ZiCA) has invited the Managing Partner to present a paper at the workshop on the basic requirements for accountants regarding money laundering and why the risk of not detecting a material misstatement from fraud is higher than that from error. The Managing Partner has asked you prepare appropriate briefing notes which will be used at the workshop.

Required:

Prepare briefing notes to be used by the Managing Partner at the workshop, in which you to:

(i) Explain two (2) basic requirements for accountants regarding money laundering legislation in Zambia and give three (3) examples of money laundering risk indications. (5 marks)

(ii) Discuss why the risk of not detecting a material misstatement from fraud is higher than that from error. (3 marks)

(b) You are an Audit Manager in Oba Associates, a firm of chartered accountants. Ndinawe Ltd, an engineering company, is a long standing client of your firm and the financial statement audit for the year ended 31 March 2020 is in progress. An Accountant in Ndinawe Ltd confided in you that the auditor assigned to the audit of financial instruments has failed to detect fraud regarding valuation of financial instruments. This has been used to inflate reported profits and create significant fictitious assets in the statement of financial position. The financial instruments are held at fair value determined by management.

Required:

(i) Discuss the quality control implications of the failure to detect fraud regarding valuation of financial instruments. (6 marks)

(ii) Explain Oba Associates' responsibilities regarding fraud. (3 marks)

(iii) Recommend three (3) audit procedures that should be undertaken on the financial instruments in the audit of the current year's financial statements for Ndinawe Ltd. (3 marks)

[Total: 20 Marks]

QUESTION THREE

You are an Audit Manager in Kalomo Accountants, a small firm of chartered accountants. You are responsible for the financial statement audit of Kafue Ltd for the year ended 31 March 2021. The draft financial statements show revenue of K80 million (2020 – K60 million), profit before tax of K15 million (2020 – K13.7 million) and total assets of K49 million (2020 – K37 million). The final audit is nearing completion, and the following points have been noted by the Audit Senior for your attention:

1) **Liquidation of customer:**
   On 16 April 2021, a customer owing K4 million went into liquidation because of heavy trading losses and the liquidator has indicated that none of the amounts owed will be recoverable. The breakdown of the receivable of K4 million is as follows:

Date of transaction	**Amount**
	K'm
4 February 2021	1
1 March 2021	2
8 April 2021	1
Total	4

   The Directors of Kafue Ltd have written off K4 million in the financial statements. The government has pledged to provide relief funds for companies whose profits fall below a specified threshold.

2) **Legal suit:**
   The Procurement Director resigned on 31 January 2021 and on 20 February 2021, he sued Kafue Ltd for constructive dismissal. He is claiming damages of K10 million. The other information accompanying the draft financial statements has disclosed the resignation of the Procurement Director. However, there is no provision or disclosure of the claim in the financial statements because legal advice indicates that the Procurement Director's chances of success appear to be remote.

3) **Revenue recognition:**
   Kafue Ltd has embarked on various strategies aimed at growing sales and profitability.

   Among the notable strategies are:

   (i) Sale with a right of return and
   (ii) Consignment arrangements.

On 31 March 2021, goods worth K3 million were delivered to a customer on consignment basis. The goods have not been recognized as revenue but have been included in inventory.

You have noticed a few indicators of going concern problems but you believe this is a difficult area which can only be handled by the Engagement Partner.

At the de-briefing meeting for the audit of the financial statements of Kafue Ltd, the Managing Partner stated that "small firms, like Kalomo Accountants do not have to apply International Standard on Quality Control (ISQC) 1 in full to avoid "standards-overload".

Required:

(a) Discuss the statement by the Managing Partner. (6 marks)

(b) Explain why the audit of going concern can be difficult for auditors. (2 marks)

(c) For each of points 1, 2 and 3 above:

  (i) Comment on the matters that you should consider; and (9 marks)

  (ii) State two (2) audit evidence for each issue that you expect to find in undertaking your review of audit working papers. (3 marks)

[Total: 20 Marks]

QUESTION FOUR

You are a Senior Audit Manager in Abraham & Co., a medium sized accountancy firm. You are responsible for the group financial statements audit of Kariba Group of Companies for the year ended 30 June 2021, which is about to commence. Your firm has been auditing Kariba Group of Companies for four (4) years. You recently joined Abraham & Co. after working for a big company involved in mining.

At a planning meeting, the Group Engagement Partner brought the following matters to your attention:

1) Need to obtain sufficient appropriate audit evidence in relation to the consolidation process and the financial information of the components on which to base the group audit opinion. He emphasized that even if this is a continuing audit, the audit teams ability to obtain sufficient appropriate audit evidence may be affected by significant changes.
2) More audit work will be required regarding the audit of goodwill arising on consolidation to avoid problems which were experienced last year. There is need to incorporate as much detail as possible in the audit plan on the audit procedures in respect of goodwill arising on consolidation, especially for the 75% shareholding acquisition made in Ngosa Ltd during the year ended 30 June 2021. The consideration was entirely in the form of cash.
3) Effective cooperation with component auditors. The consolidation packs have already been dispatched to all component auditors. However, past experience has shown that the degree of co-operation may be limited by a number of factors.

Required:

(a) Explain the objectives of Abraham & Co. regarding the group audit of Kariba Group of Companies. (4 marks)

(b) Discuss four (4) significant changes which could affect the group engagement team's ability to obtain sufficient appropriate audit evidence in respect of the group audit of Kariba Group of Companies. (8 marks)

(c) Suggest four (4) principal audit procedures which should be carried out in respect of goodwill arising on consolidation. (6 marks)

(d) Analyze one (1) factor which may limit the degree of cooperation with component auditors. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Gede Ltd, a company which is resident in Zambia implemented a risk management system during the year under review. The Directors of Gede Ltd requested your firm to provide assurance in relation to the risk management system. However, some senior managers think this is just a waste of resources since the assurance provided on the financial statements is enough.

Required:

Explain the need for assurance in relation to the risk management system which Gede Ltd has implemented. (6 marks)

(b) You are a newly promoted Audit Manager in Zinger Chartered Accountants. As part of your training, the Managing Partner wants you to consider the following matters and the related opinions suggested by the Audit Seniors, assuming the clients are not willing to make adjustments:

Client one

This is a company listed on the Lusaka Securities Exchange (LuSE). The audit team verified the depreciation charge in the statement of profit or loss using "proof-in-total". Further investigations revealed that there was a difference of K200,000 between the depreciation calculated and the charge in the financial statements. This amount is 6% of the profit before tax and 1.2% of total assets.

The Audit Senior has recommended that a qualified opinion should be issued based on the premise that the depreciation charge does not impact the financial statements adversely and will affect decisions made by users of financial statements.

Client two

This is a family business involved in retail trade in Lusaka and Ndola. The audit team has correctly concluded that management's disclosure of related parties and transactions with such parties in the financial statements is not adequate. Elaborate discussions have been made with those charged with governance but to no avail.

The Audit Senior has recommended that since it is a family business, the matter should be included in the Key Audit Matters (KAMs) section of the audit report.

Client three

The borrowing costs capitalised in the financial statements amount to K1.5 million and evidence in the working papers after recalculation shows that there is an overstatement of K30,000. The profit before tax is K1,230,000 and total assets amount to K45,000,000.

The Audit Senior has recommended a disclaimer of opinion.

Required:

(i) Evaluate whether the standard unmodified audit report does improve understandability of the users of the audit reports. (5 marks)

(ii) For each situation, comment on the suitability or otherwise of the audit opinions recommended by the Audit Seniors. Where you disagree, explain the suitable opinion that should be given. (9 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.2 ADVANCED AUDIT AND ASSURANCE

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **ZiCA Inspection (Monitoring) of audit firms**

To: Quality Control Partner

From: Senior Audit Manager

Date: XX/XX/XX

Subject: ZiCA Inspections (Monitoring)

As per your request, the following gives the purposes of the ZiCA inspections.

The purposes of the inspection of audit firms are:

- Satisfy the legal requirements stated in the Accountants Act 2008
- Establish whether audit firms are following recommended best practice. For example, International Standards on Auditing (ISA) which are produced by International Auditing and Assurance Standards Board (IAASB), a technical standing committee of the International Federation of Accountants (IFAC).
- Recommend appropriate action(s) to take remedy deficiencies identified
- Take disciplinary action where necessary.
- In consideration of issuing a practice certificate or the on the renewal of practicing certificates.

I hope this will suffice.

Regards,

XXXXXXXXXX

(b) (i) & (ii) **Ethical threats and safeguards**

Ethical threats	**Explanations**	**Safeguards**
(1) Audit fee	The idea of the fees being paid in advance is highly questionable. It is possible that Ndeke Chartered Accountants could be faced with a serious self-interest threat. The firm may want to protect their interest by not being too critical when conducting the audit work. This will seriously impair objectivity.	Quality control reviews should be put in place. It is not normal practice to get the fee in advance of performing the audit. The firm should discuss this with those charged with governance and plan to get the fee when the audit is completed.
(2) The shares inherited by the Senior Audit Manager.	The holding of shares in Chiwala Plc. creates a self-interest threat and can impact the objectivity of the Senior Audit Manager.	The Senior Audit Manager should dispose of the shares or he should be removed from the audit team. Alternatively, quality control reviews by one not involved in the audit could be undertaken.
(3) Direction by management for the auditors to use highly qualified manpower and focus on enquiries of accounting and finance staff and analytical procedures so that the audit work is completed quickly	Ndeke Chartered Accountants must be independent in the way they select the audit team and the audit procedures to be performed. Use of highly qualified manpower could be unnecessarily expensive. In addition, enquiries and analytical procedures may not produce sufficient appropriate evidence on which to base the audit opinion. This could be taken as intimidation because auditors should be free to assign staff on audits and not influenced by the desires of the client.	The firm must not accept this, and if the Directors insist, then it may be advisable to withdraw from the engagement.
(4) Request to represent Chiwala Plc. in a tax dispute with the Zambia Revenue Authority (ZRA) which is before the Tax Appeals Tribunal (TAT)	Acting as an advocate for Chiwala Plc. before the Tax Appeals Tribunal (TAT) will create a serious advocacy threat. Chiwala Plc. will expect to be supported at all costs and this could significantly	No safeguard can reduce this threat to an acceptable level. Ndeke Chartered Accountants must not provide this service.

	impair objectivity and greatly damage the firm's image.	

(iii) **Factors which Ndeke Chartered Accountants should consider when opting for the provision of consultancy services to Chiwala Plc.**

- **Rules for providing consultancy services** – The rules for providing non-audit services are more stringent when the client is a listed or public interest entity, like Chiwala Plc. The audit firm is not permitted to carry out consultancy work on matters which would have a material effect separately or in the aggregate, on the financial statements on which the firm will express an opinion.
- **Independence and objectivity** – Auditors must be and be seen to be independent. Provision of both audit and consultancy services could severely impair independence and objectivity.
- **Engagement economics** – Auditing firms are in business. They have to strive to make a profit in order to continue in business.
- **Risk exposure** – The expected fees from an engagement should reflect the level of risk expected.
- **Competences available** – It is unprofessional to accept work when the firm lacks the required competences. Money should not be the only driving force.

(c) **Evaluation of audit risks**

1. **First year audit**
   Ndeke Chartered Accountants was appointed as auditor of Chiwala Plc. at the Annual General Meeting (AGM) which was held on 22 September 2020. The detection risk could be high given that the firm lacks the cumulative knowledge and experience. Obtaining sufficient appropriate evidence especially on opening balances could be challenging.

2. **Honey industry**
   The industry is regulated by the existing laws and regulations. There is a risk that Chiwala Plc. may be non-compliant with some laws and regulations resulting in the company being subject to penalties and possible withdrawal of the operating licence. Provisions may be misstated in the financial statements of Chiwala Plc.

3. **Export earnings**
   It is possible that management may use a wrong exchange rate (contrary to the guidance given by IAS 21 *The effects of changes in foreign exchange rates*) when translating export earnings into Zambian Kwacha. This may result in a misstatement in the export earnings and receivables.

4. **Inventory**
   The nature of the business that Chiwala Plc. is involved in is of a specialized nature in terms of determining and valuing work in progress and finished products. There is an audit risk that inventory may be misstated in the financial statements.

5. **Convertible debt**
   There is a risk that the convertible debt has not been accounted for properly in accordance with IAS 32 *Financial instruments: disclosure and presentation.* The standard requires the debt and equity elements of the convertible debt to be presented separately in the financial statements. This requires a level of judgment, which can be risky from an auditor's point of view. It is possible for profitability, equity and debt to be misstated.

6. **Government grant**
   There is a risk that the provisions of IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* may not be followed when accounting for the government grant.

   IAS 20 also requires that a grant is recognized only when there is reasonable assurance that the company will meet the condition specified by the government. Where there is doubt over this, a provision should be recognized in line with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.* The risk is that this has not been done, and that liabilities are understated and profits overstated.

7. **Computerized accounting system**
   There is a risk that employees may not be very conversant with the new computerized accounting system resulting in a number of misstatements in the financial statements. It is possible that un-reconciled balances could have been input into computerized accounting system, making the resulting financial information highly unreliable.

8. **Defined benefit scheme**
   The Finance Director is responsible for determining the actuarial assumptions used in the estimation of future obligations. It is possible that the Finance Director may not be competent in actuarial valuations and the requirements of IAS 19 *Employee benefits.* Hence, there is a risk that the actuarial assumptions and estimates of future obligations could be unrealistic. It is therefore possible that profitability and liabilities could be materially misstated. The firm may not have the expertise to verify the correctness of pension amounts in the financial statements.

9. **Provisions**
   Chiwala Plc. has a tax dispute with the Zambia Revenue Authority (ZRA) which is before the Tax Appeals Tribunal (TAT). There is a risk that a provision in respect of tax obligations has not been recognized in line with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.* The profits could be overstated while liabilities understated.

10. **Motivation to get COVID-19 relief fund:**
    The desire to get the relief fund and the requirement to attach audited financial statements might motivate management to use creative accounting in order to meet whatever conditions may help get the company get the relief fund. There is a risk of financial estimates being used to manipulate the financial statements.

(d) **Analysis of potential issues regarding computerization of accounting system and relevant audit procedures**

Potential issues

- **Manpower** – Whether Ndeke Chartered Accountants have staff with good computer knowledge, and in particular knowledge of the package that Chiwala Plc. is using.
- **Chiwala Plc.'s employees' knowledge of the computerized accounting system** – whether Chiwala Plc.'s employees have full knowledge of the computerized accounting system and are able to explain fully all the information it produces.
- **Use of computer assisted audit techniques (CAATs)** – Ndeke Chartered Accountants will need to use CAATs, mainly to test internal controls in the computerized system.
- **Balances entered into the computerized accounting system –** Ndeke Chartered Accountants will need to obtain assurance on the accuracy of the balances entered into the computerized accounting system.

Audit procedures

- Selecting a sample of employees from the data file using audit software for purpose of performing detailed substantive testing
- Use test data to check the controls that prevent processing invalid data by entering data with a non-existent employee number and seeing what happens
- Using audit software to recalculate pay and deductions for a sample of employees to confirm that the payroll system is calculating amounts correctly

(e) **Audit procedures for actuarial assumptions:**

- Obtain a general understanding of the assumptions and review the process used by the Finance Director to develop them
- Compare the assumptions with those which the Finance Director used in prior years
- Consider whether, based on their knowledge of Chiwala Plc. and the pension plan, and on the results of other audit procedures, the assumptions appear to be reasonable and compatible with those used elsewhere in the preparation of the entity's financial statements
- Obtain written representation from Directors of Chiwala Plc. confirming that the assumptions are consistent with their knowledge of the business.
- The firm may consider engaging an auditor expert to assist in assessing the assumptions used and verifying the amount determined.

SOLUTION TWO

(a) **Briefing notes for the workshop**

By: Technical Advisor

Subject: Money laundering and fraud

(i) **Introduction**

These briefing notes explain two (2) basic requirements for accountants regarding money laundering legislation in the Republic of Zambia and give three (3) examples of money laundering risk indications. It also discusses why the risk of not detecting a material misstatement from fraud is higher than from error.

Money laundering

The basic requirements for accountants regarding money laundering legislation in the Republic of Zambia are to:

- Keep records of clients' identity – Firms must maintain records of client identification, and any transactions undertaken for or with the client.
- Report suspicions of money laundering to appropriate Enforcement Agency – The Prohibition and Prevention of Money Laundering Act 2001 requires accountants to report suspicions of money laundering to the Anti-Money Laundering Investigation Unit (AMLIU) of the Drug Enforcement Commission (DEC).

Examples of money laundering risk indications include:

- Secrecy over transactions
- Large currency or bearer instrument transactions
- Excessive use of wire transfers
- High value deposits or withdrawals not characteristic of the type of account
- A pattern that after a deposit, the same (or nearly the same) amount is wired to another financial institution
- Repeated deposits or withdrawals just below the monitoring threshold on the same day
- Transactions routed through several jurisdictions

(ii) **Why risk of not detecting a material misstatement from fraud is higher**

The risk of not detecting a material misstatement from fraud is higher than from error because of the following reasons:

- Fraud may involve sophisticated schemes designed to conceal it.
- Fraud may be perpetrated by individuals in collusion.
- Management fraud is harder to detect because management is in a position to manipulate accounting records or override control procedures.

- The risk of not detecting errors is less because errors are mistakes and it is less likely that they will be concealed. The existence of effective internal controls help prevent and detect errors.

(b) **Fraud**

(i) **Quality control implications of the failure to detect fraud regarding valuation of financial instruments:**

One of the important requirements of quality control is assignment of engagements teams. Both standards on quality (ISQC 1 *Quality control for firms that perform audits and reviews of financial statements, and other assurance and related services engagements,* and IAS 220 *Quality control for an audit of financial statements*) make specific reference to assignment of engagements.

The failure by the Auditor to detect fraud regarding valuation of financial statements could mean that:

- Oba Associates has no quality control policies and procedures in place
- It is also possible that even if quality control policies and procedures are in place, these may not have been followed in the assignment of the Auditor to audit a risky area such as the audit of financial instruments.

This reflects badly on the quality control policies and procedures of Oba Associates. It is possible that the risk assessment for the financial statements audit of Ndinawe Ltd for the year ended 31 March 2021 was poorly done. Audit of financial instruments is a particularly risky area for auditors, as accounting for these instruments involves an unavoidable element of complexity, often requiring the use of management's own judgments. The amounts involved can be material, which adds not only audit risk but business risk too. This risk should have been identified at the risk assessment stage as guided by ISA 315 (Revised) *Identifying and Assessing the Risks of Material Misstatements through Understanding the Entity and its Environment.* The Partners for Oba Associates must address this deficiency as a matter of urgency.

(ii) **Oba Associates' responsibilities regarding fraud**

ISA 240 *The auditor's responsibilities relating to fraud in the audit of financial statements* gives detailed guidance in this area.

The auditor is responsible for obtaining sufficient appropriate audit evidence that the financial statements are not misstated due to fraud. Therefore, Oba Associates is responsible for maintaining professional skepticism throughout the audit and look out for any fraud that may have occurred. Where fraud is suspected or has occurred, the firm will consider the impact that this will have on the financial statements and respond appropriately as guided by the standard.

(iii) **Audit procedures for Financial Instruments:**

- Test how the management of Ndinawe Ltd made the accounting estimate and the data used. Check that fair value is arrived at in accordance with IFRS 13, using the "fair value hierarchy"
- Test the operating effectiveness of the controls over how the management of Ndinawe Ltd made the accounting estimate, together with appropriate substantive procedures

- Develop a point estimate or a range to evaluate Ndinawe Ltd management's point estimate, e.g. Oba Associates can make their own estimate of the fair value
- Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate, e.g. are there any indicators of impairment

SOLUTION THREE

(a) **Discussion of the statement by the Managing Partner**

The International Auditing and Assurance Standards Board (IAASB) has issued guidance for small firms in applying ISQC 1 *Quality control for firms that perform audits and reviews of financial statements, and other assurance and related services engagements* in form of a 'Question & Answers' document. Small firms do have to apply ISQC 1 in full, but this should not result in 'standards-overload' because ISQC 1 is drafted in such a way that it can be applied proportionately.

Hence the statement by the Managing Partner is incorrect. The regulation of audit is the same for all audit firms regardless of size. However, it is logical to see that it will impact on large and small firms differently. For example, a large firm may have international quality control procedures. If not, it will certainly have national and regional ones. In order to comply with ISQC 1's requirements, it may be necessary for small firms to make use of the services of another organization, such as another firm and a professional or regulatory body. This may be particularly helpful where ISQC 1 requires an engagement quality control review, or where there is a need for monitoring processes which could be carried out by an external person or firm.

It is therefore important for smaller firms to read ISQC 1, but they may legitimately use their judgment in tailoring it to their circumstances.

(b) **Why audit of going concern is difficult**

ISA 570 (Revised) *Going concern* states that when preparing financial statements, management should make an explicit assessment of the entity's ability to continue as a going concern. When management are making the assessment, a number of factors should be considered, such as judgments being affected by the size and complexity of the entity, the nature and condition of the business and the degree to which it is affected by external factors.

The assessment by management is highly subjective and only an auditor with appropriate skills and experience can appropriately evaluate management's assessment, collect sufficient appropriate audit evidence and arrive at conclusions which can support audit opinion. Further, most of the assumptions used in assessing going concern are futuristic and require judgment. Any matters that involve judgment and subjectivity are not easy to audit.

(c) **Matters to consider and evidence**

(1) **Liquidation of customer**

Matters to consider

Materiality

The receivable written off of K4 million is material to profit at 27% of profit before tax (4/15 X 100%). It is also material to the statement of financial position at 8% of total assets (4/49 X 100%).

Risk
There is a risk that profits and receivables are understated due to this write off. Management could be using this to solicit for funding from government.

Accounting treatment
According to IAS 10 *Subsequent events* only K3 million falls within the description of an adjusting event. The transaction of K1 million which occurred on 8 April belongs to the year ended 31 March 2022. It should reversed and written in the year ended 31 March 2022.

Evidence

- Correspondence from liquidator
- Copies of invoices/statements

(2) **Legal suit**
Matters to consider

Materiality
The claim of K10 million is material to profit at 67% of profit before tax (10/15 X 100%). It is also material to the statement of financial position at 20% of total assets (10/49 X 100%).

Risk
There is a risk that profits could be overstated while liabilities could be understated. Management may not want to significantly reduce profits to protect their jobs.

Accounting treatment
IAS 37 *Provisions, contingent liabilities and contingent assets* requires a provision to be recognized where, as a result of a past event, an outflow of economic benefits is probable. However, legal advice indicates that the Procurement Director's chance of success appears to be remote. Hence, there is no need to recognize a provision or disclose a contingent liability.

Evidence
- Correspondence with lawyers
- Copy of claim made by the Procurement Director

(3) **Revenue recognition**
Matters to consider

Materiality
The consignment goods worth K3 million are material to profit at 20% of profit before tax (3/15 X 100%). They are also material to the statement of financial position at 6% of total assets (3/49 X 100%).

Risk
There is a risk that profits could be understated while inventory could be overstated. Management has an incentive to manipulate profitability so that they could access government funding.

Accounting treatment

IFRS 15 *Revenue from contracts with customers* states that when a product is delivered to a customer under a consignment arrangement, the customer (dealer) does not obtain control of the product at that point in time, so no revenue is recognized upon delivery. This means the accounting treatment adopted by Kafue Ltd is correct.

Evidence

- Standard terms and conditions regarding consignment goods
- Copy of relevant invoices

SOLUTION FOUR

(a) **Objectives of Abraham & Co. regarding the group audit of Kariba Group of Companies**

ISA 600 *Special considerations – audits of group financial statements (including the work of component auditors)* states that the objectives of the auditor are to:

- Determine whether to act as the auditor of the group financial statements
- Communicate clearly with component auditors about the scope and timing of their work on financial information related to components and their findings
- To obtain sufficient appropriate audit evidence about the financial information of the components and the consolidation process to express an opinion.

(b) **Significant changes which could affect the group engagement team's ability to obtain sufficient appropriate audit evidence in respect of the group audit of Kariba Group of Companies**

- Changes in group structure – this could result from acquisitions or disposals of group companies.
- Changes in business activities – this may in areas where the auditors do not have the required skills and competences.
- Concerns regarding the integrity of group or component management – Management may not be honest enough to make available all the audit evidence required. They may engage in fraudulent financial reporting to protect their interest.
- Concerns regarding the competence of group or component management – Management may lack the necessary competence to be in a position to avail the group engagement team with sufficient appropriate audit evidence.

(c) **Principal audit procedures which should be carried out in respect of goodwill arising on consolidation**

- Obtain purchase agreement and review to confirm the consideration used in the computation is correct
- Agree the consideration amount to the bank statement and cashbook
- Confirm from the purchase agreement that Kariba Group has obtained 75% shareholding in Ngosa Ltd and that this gives it control
- Confirm the valuation of assets acquired as reasonable
- Check that goodwill arising on consolidation is computed according to the guidance given in IFRS 3 *Business combinations*
- Review impairment review for reasonableness

(d) **Discussion one (1) factor which may limit the degree of cooperation with component auditors**

The degree of cooperation may be limited mainly by the component auditor not being subject to the requirements of ISAs, but of different national practice or the group auditor not having any legal right to contact the auditors of a component of the company preparing group accounts. ISA 600 states that the group auditor should not accept a group audit if there are restrictions on his communication with component auditors.

SOLUTION FIVE

(a) **Need for assurance in relation to risk management system**

There are various reasons for the need for assurance in relation to the risk management system implemented and some of them are:

- Directors – they may want to assure the various stakeholders that they have a proactive approach towards risk management and the system developed is reliable. They may also want a fresh pair of eyes to examine the risk management system just in case some risks were omitted or wrongly assessed. External auditors may provide useful remedies for deficiencies identified.
- Shareholders and other stakeholders – they would want to have confidence in the risk management system implemented and get assurance that the risks taken by Directors are acceptable. External auditors are expected to be independent and hence provide more objective assurance.
- Potential investors and lenders – they may want to get assurance that any purchase of shares or other investment made in the company will not expose them to excessive risks compared to the expected returns. They may also want to be sure that effective measures are in place to address risks which could like to business failure.
- Corporate governance and internal control effectiveness – external assurance is a key requirement in most governance codes. It facilitates the introduction of best practice and current developments.

(b) **Standard audit reports and suitability of audit opinions**

(i) Evaluation of whether standard audit reports do improve understandability of the users of the audit reports

ISA 700 (Revised) *Forming an opinion and reporting on financial statements* gives the structure and contents of a standard unmodified audit report.

The standard reports description of the auditor's objectives is as follows:

'Our objectives are to obtain **reasonable assurance** about whether the financial statements as a whole are free from **material misstatement**, whether due to fraud or error, and to issue an auditor's report that includes our opinion.'

A non-specialist would struggle to understand exactly what the highlighted words means. However, ISA 700 aims to strike a balance between comparability and relevance. It is largely standardized (comparability), but the auditor must tailor specific elements of it to the individual audit (relevance). The auditor does this in the discussion of key audit matters, in any emphasis of matter/other matter paragraphs they include, and of course in the opinion expressed.

Standard reports improve understandability, because it is easier for users to understand an auditor's report that has elements in common with all other auditors' reports. It also means that auditors' reports can be more easily compared.

When a standard report is used, there is less chance of an isolated misunderstanding caused by the way one firm of auditors chooses to express itself, or in relation to the explanation of a particular issue.

In another sense, however, standard reports impair understandability because they may give the impression that all audits are alike. This misses out the differences between individual audits, e.g. the different issues that the auditor had to think about in each case. Put another way, the information in individualized auditor's reports would be totally relevant to the individual audit; by contrast, standardized reports may contain information that is not necessary relevant to each audit.

Therefore, in conclusion, some parties still argue that the auditor's report is a difficult document to understand. However, the latest version of the auditor's report is also flexible enough to be adapted by auditors working in different national jurisdictions, e.g. if the auditor has to report on 'other legal or regulatory requirements' such as listing rules.

(ii) Suitability of audit opinions

Client one

The misstatement in respect of depreciation is 4% of the profit before tax and 1.2% of total assets. This means the misstatement is immaterial to the statement of profit or loss but material to the statement of financial position. The Audit Senior's recommendation of a qualified opinion seems appropriate since the misstatement is unlikely to be pervasive.

Client two

The audit team has correctly concluded that Management's disclosure on related parties and transactions with such parties in the financial statements is not adequate. This should result in a modified opinion, since it is material by nature.

The inclusion of the matter in the Key Audit Matters (KAMs) section is not correct since a modification cannot be replaced by a KAM. In fact, KAMs are only used for matters which were resolved, which is not the case in this client. Hence, the Audit Senior's recommendation is incorrect even if this is a family business. Assuming the issue is not pervasive, a qualified opinion could be appropriate.

Client three

The borrowing costs capitalised in the financial statements is K1.5 million and evidence in the working papers after recalculation shows that there is an overstatement of K30, 000. The overstatement of K30, 000 is 2.4% of profit before tax (30,000/1,230,000 X 100%) and 0.7% of total assets (30,000/45,000,000 X 100%). This overstatement is therefore immaterial to both the statement of profit or loss and statement of financial position. The Audit Senior's recommendation is incorrect. The appropriate audit opinion is an unmodified opinion since the overstatement is immaterial.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4: ADVANCED TAXATION

THURSDAY 17 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading and planning time. Use it to study the examination paper carefully so that you understand what to do in each question. DO NOT write in your answer booklet during this TIME.

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

   Section A: ONE Compulsory Question.
   Section B: FOUR (4) Optional Questions. Attempt any THREE (3) questions from Section B.

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

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

5. **Cell 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 for paper CA3.4– Advanced Taxation (2021 Examinations)

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	5.5% of norm value
From US$4,500 to less than US$6,000	6.5% of norm value
From US$6,000 to less than US$7,500	7.5% of norm value
From US$7,500 to less than US$9,000	8.5% of norm value
From US$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing **(Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax 4%

Presumptive Tax for Transporters

Seating capacity	**Tax per annum**	**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 2 years but below 5 years		Aged 5 years and over	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 years but below 5 years		Aged 5 years and over	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463

SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463

	Aged 2 years but below 5 years		**Aged 5 years and over**	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	30,697	13,302	24,119	10,452
Panel Vans				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. **Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE - COMPULSORY

For the purposes of this question you should assume that today's date is 10 December 2020.

You are employed as a Tax Manager at Inspire plc, a manufacturing company. The company is planning to create a position for Public Relations Manager, which currently does not exist and is in the process of setting a remuneration package for the position. The Human Resources Director has drafted proposals of two remuneration packages, which he intends to discuss with Natasha Munaretto who is being considered for the position. He has scheduled a meeting with Natasha on 15 December 2020, in which the final package will be agreed on. Natasha will be required to take up the position on 1 January 2021. The Human Resources Director has requested you to provide an evaluation of the taxation implications for both Natasha and the company of each remuneration package. He has provided you with the following information relating to each of the two packages:

Remuneration Package One

The following conditions will apply under this package:

(1) Natasha's monthly basic salary will be K25,000.
(2) Her allowances as a percentage of the monthly basic salary will be:

- Monthly housing allowance	15%
- Monthly transport allowance	10%
- Monthly Utility allowance	8%
- Monthly lunch allowance	2%

(3) Natasha will be required to provide her own accommodation as this will not be provided by the company. She will pay accommodation rentals of K3,750 per month for the house she will start renting on 1 January 2021. She will additionally pay utility expenses she will incur in relation to the accommodation of K2,000 per month.
(4) She will be required to use her own personal Toyota RAV4 motor car which she acquired at a cost of K180,000 a year ago and has a cylinder capacity of 1600cc for the duties of the employment. Her total mileage is expected to be 40,000 kilometres per annum. 20% of the total mileage will be travel from her home to the premises of Inspire plc, 70% will be travel in the performance of her employment duties and 10% will be on personal trips.
(5) She will incur motor car running expenses of K2,500 per month.
(6) She will further spend K500 per month on meals for lunch in the course of performing her employment duties.

Remuneration Package Two

(1) Natasha's basic monthly salary will be K25,000.
(2) She will be provided with free meals from the staff canteen worth K500 per month.
(3) She will be accommodated in a company owned house with a market value of K800,000 and will not be required to pay any rentals for the house. If the house had

been let out, the company would have earned commercial rentals of K3,750 per month.

(4) The company will pay for all the expenses relating to the house on her behalf and these will include electricity bills of K350 per month, water bills of K150 per month and the wages for her housekeeper of K1,500 per month. she will therefore not be required to pay for these expenses.

(5) Natasha will be provided with a company owned motor car with a cylinder capacity 1,600cc on a personal to holder basis, which the company acquired a year ago at the cost of K180,000. Her annual total mileage in the car will be 40,000 kilometres. 20% of the total mileage will be travel from her home to the premises of Inspire plc, 70% will be travel in the performance of her employment duties and 10% will be on personal trips.

(6) The company will pay for the all the motor car running expenses which will amount to K2,500 per month.

Additional information

The following statutory payments will arise under both, remuneration package one and remuneration package two:

(1) Natasha's employee's National Health Insurance Scheme Contributions (NHISCs) and Inspire plc's employer's NHISCs will arise at the rate of 1% of her monthly basic salary.
(2) Natasha's employee's NAPSA contributions and Inspire plc's employer's NAPSA contributions will arise at the rate of 5% of her relevant gross monthly employment earnings.
(3) A skills development levy of 0.5% of her relevant gross monthly employment earnings will be paid by Inspire plc under each package.
(4) The earnings ceiling for NAPSA contributions purposes for the tax year 2021 should be taken to be K278,256 per annum.

Required:

(a) Compute the total amount of income tax payable by Natasha in the tax year 2021 under:

(i) Remuneration package one (6 marks)

(ii) Remuneration package two (4 marks)

(b) Advise Natasha as to which of the two remuneration packages will be beneficial for her from a taxation point of view. Your advice should be supported by a computation of the amount of annual net income after deducting statutory payments and other relevant expenses from her gross income under each of the two remuneration packages.
(12 marks)

(c) Provide a computation showing the amount of the annual tax savings arising for Inspire plc and the annual net after tax cash flow position for the company under:

(i) Remuneration package one (5 marks)
(ii) Remuneration package two (11 marks)

(d) Based on your computations in part (c) above, advise the Human Resources Director of Inspire 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

GoldCorp Ltd is a Zambian resident manufacturing company. The company owns 40% of the ordinary share capital of Platinum Inc, a company that is incorporated in a foreign country.

The Chief Executive Officer of GoldCorp is Twiza Nakazwe, who is resident and ordinary resident in Zambia. Twiza has shareholdings of 10% in each of the two companies GoldCorp Ltd and Platinum Inc. In the year ended 31 December 2021, Twiza earned annual gross emoluments of K400,000. She paid income tax of K125,910 under the Pay As You Earn system. She also paid NAPSA contributions of K13,913. In addition to the director's emoluments, Twiza also received net dividends of K68,000 from GoldCorp Ltd and K124,000 from Platinum Inc net of withholding tax at the rate 38%, deducted at source in the country in which Platinum Inc operates. Twiza owns property in Zambia which has been let out to Zambian tenants. During the year to 31 December she received annual net rental income of K54,000 from the property.

The summarised results of GoldCorp Ltd for the year ended 31 December 2021 were as follows

	K'000
Sales revenue	34,500
Cost of sales	(18,400)
Gross profit	16,100
Operating expenses	(3,200)
Interest expense	(8,000)
Profit before taxation	4,900

The following information is relevant:

(1) GoldCorp Ltd regularly exports goods to Platinum Inc which are used by Platinum Inc as inputs in one of its production processes. All intra-company transfers of goods are made at a transfer price equal to the full cost of production of the supplying company. During the year ended 31 December 2021, GoldCorp Ltd exported goods to Platinum Inc at a transfer price of K4,500,000 being the full production cost of the goods to GoldCorp Ltd. The goods were included at this amount in sales revenue in the statement of profit or loss of GoldCorp Ltd shown above. GoldCorp Ltd's normal sales margin on goods of this type on the Zambian market is 25%.

(2) Included in cost of sales are depreciation charges of K2,500,000 and amortisation charges of K500,000.

(3) All operating expenses are allowable for taxation purposes.

(4) On 1 January 2021, GoldCorp Ltd obtained a loan of K20 million from Platinum Inc, at an interest rate of 30% per annum. The loan is repayable in 5 years. The interest paid by GoldCorp during the year was computed using this rate and has been included in the interest expense in the statement of profit or loss shown above. The

commercial rate of interest on loans of this type in the country in which Platinum Inc operates is 20% per annum.

(5) GoldCorp Ltd received dividends of K360,000, from Platinum Inc on 31 December 2021, net of withholding tax amounting to K240,000 paid to the Revenue authority in the country in which Platinum Inc operates. The dividends have not been included in the statement of profit or loss shown above.

There is no double taxation agreement between Zambia and the foreign country in which platinum Inc operates. When computing Zambian income tax payable, credit is available for any foreign tax paid in the foreign country in which Platinum Inc operates.

Required:

(a) Calculate the income tax payable by Twiza Nakazwe for the tax year 2021. (8 marks)

(b) Compute the amount of company income tax payable by GoldCorp Ltd for the tax year 2021. (12 marks)

[Total: 20 Marks]

QUESTION THREE

You are employed in a tax practice and you are dealing with the tax affairs of ASB Bank plc a VAT registered business. In addition to computing the amount of tax payable by the bank, The Chief Executive Officer of ASB Bank plc, Mr Brian Mutambo, has asked you to provide advice on the tax implications of various personal financial protection products that individuals can use to protect their wealth from the adverse financial effect of illness or death.

You have been provided with the following summarised statement of profit or loss relating to ASB Bank Ltd, for the year ended 31 December 2021.

ASB BANK PLC
STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2021

	K'000
Interest income (Note 1)	94,200
Interest expense (Note 2)	(50,862)
Net interest income	43,338
Provision for loan losses (Note 3)	(7,672)
Net interest income after provision for loan losses	35,666
Non- interest income (Note 4)	19,925
Net interest and other income	55,591
Non-interest expenses (Note 5)	(37,050)
Income before taxes	18,541
Taxation (Note 6)	(1,241)

Income after tax	13,300

The following additional information is available:

(1) **Interest Income**
The total withholding tax deducted at source from total interest income during the charge year 2021 amounted to K5,120,000.

(2) **Interest expense**
This included interest of K30,240,000 paid on customer deposits, interest of K17,940,000 paid to other banks and financial institutions, hire purchase interest of K250,000 incurred on office equipment purchased under hire purchase agreements, finance charges on motor cars acquired under finance leases amounting to K112,000, and interest of K2,320,000 paid on a loan obtained to finance the purchase of new central administration offices.

(3) **Provision for loan losses**
Provision for loan losses comprises an increase in general provision of loan losses amounting to K2,705,000, increase in specific provision of loan losses of K682,000, loan losses written off during the year of K5,546,000 and loan losses previously written-off recovered during the year amounting to K1,261,000.

(4) **Non-interest income**
This comprises dividend income amounting to K1,275,000 (net) from a private limited company, rental income of K1,260,000 (net), royalty income K1,530,000 (net)foreign exchange gains of K6,200,000 (out of which K1,300,000 were unrealised) and fees from foreign exchange transactions of K9,660,000.

(5) **Non-interest expenses**
Non-interest expenses include depreciation charges of K1,270,000, employee's salaries of K27,692,000, legal cost for recovery of loans K890,000, operating lease rentals for motor vans of K180,000, donations of K260,000 to a national amateur sporting club of K500,000, ordinary share issue cost of K388,000, and miscellaneous allowable general business expenses of K5,600,000

(6) **Taxation**
The figure for taxation in the statement of profit or loss above represents the provisional company income tax paid by the company in respect of the charge year 2021.

(7) **Buildings, implements, plant & equipment**

All implements plant and machinery qualifying for wear and tear allowances were completely written to zero as at 1 January 2021. However, during the year to 31 December 2021, ASB bank incurred expenditure on the following assets:

(i) Purchase of new administration buildings at a cost of K23.2 million (VAT inclusive).

(ii) Purchase of two (2) Toyota Fortuner motor cars at a cost of K580,000 (VAT inclusive) each under a finance lease agreement. Each vehicle has a cylinder capacity of 3,000cc and have since been provided to two directors of the company on a personal to holder basis. The finance charge incurred by the company on the cars has been included within the interest expense in the statement of profit or loss shown above.

(iii) Acquisition of office equipment under a hire purchase agreement at a cost of K1,740,000 (VAT inclusive). The hire purchase interest incurred on this transaction by the company has been included within the interest expense in the statement of profit or loss shown above.

(iii) Acquisition of five (5) motor vans under an operating lease agreement paying annual operating lease rentals of K55,200 (VAT inclusive) per van. The cost of each van is K348,000. No entries have been made in the statement of profit or loss in relation to this transaction.

Required:

(a) Compute the taxable income for the bank and the total company income tax payable for the tax year 2021. (14 marks)

(b) Advise Mr Mutambo of the nature of each of the following personal financial planning products and the taxation implications associated with each product:

(i) Family income benefit (3 marks)

(ii) Term assurance (3 marks)

[Total: 20 Marks]

QUESTION FOUR

You should assume today's date is 10 January 2022 and that the income tax rates and the bands for the tax year 2021 apply throughout and that the Bank of Zambia discount rate is 19.75% per annum.

You are a tax manager in a firm of Chartered Accountants and the following information relates to your client Charity Dube:

Charity Dube, a sole trader, is a Zambian resident individual engaged in the importation of Kitchenware. Her annual turnover has always exceeded K800,000. She estimated her taxable business profit to be K1,200,000 for the tax year 2021. Due to the Corona Virus Pandemic (COVID-19) her sales were expected to reduce, as a result her estimated taxable business profit for the tax year 2021 was revised to be K1,080,000. The provisional income tax return for the tax year 2021 was submitted on 10 July 2021 when she paid the provisional income tax for the quarters ended 31 March 2021 and 30 June 2021. The provisional income tax for the third quarter and fourth quarter was paid on 5 October 2021 and 8 January 2022 respectively.

The estimated taxable business profit for the tax year 2020 was K1,500,000. Charity submitted the provisional income tax return and paid the provisional income tax for the tax year 2020 on the appropriate due dates. The actual tax adjusted business profit for the tax year 2020 was calculated to be K1,860,000. On 21 August 2021 she submitted the self-assessment income tax returns and paid the balance of income tax for the tax year 2020.

On 10 January 2022, Charity was served with a notice from the Zambia Revenue Authority (ZRA) saying that they will be coming for a tax audit. She has asked you to advise her on the possible penalties payable.

You have discovered that when computing the taxable business profit for the tax year 2020, Charity treated her nominal salary amounting to K170,000 as an allowable deduction. She has indicated to you that since the income tax for the tax year 2020 has been paid there is no need to disclose it. She has indicated that she will pay you a token of appreciation amounting to K20,000 if you do not disclose it to anyone.

Required:

(a) Explain the ethical issues concerning the non-disclosure of Charity's nominal salary and how you should deal with her suggestion of giving you a token of appreciation of K20,000. (5 marks)

(b) Explain how tax audit differs from tax investigation. (3 marks)

(c) Advise Charity of the amounts of penalties and interest on overdue taxes and tax returns charged on all payments and returns for the tax year 2020 and 2021. (12 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

The following information relates to three (3) clients:

VAN Group Plc.

VAN Group Plc is a multinational company incorporated in a country known as the Republic of Copperland. VAN Group Plc intends to invest in Zambia by formation of a new company known as VAN (Z) Limited. VAN (Z) Limited will be engaged in farming and will be managed in zambia. The directors of VAN Group Limited would like to know whether their investment in Zambia would be classified as a permanent establishment.

Arnold Mbewe

Arnold Mbewe recently graduated from a local university. On 20 December 2020 he received an offer of employment from D&A Limited which will commence on 1 January 2021. The conditions of service include a monthly salary amounting to K23,780, transport allowance amounting to 10% of the basic salary and weekend allowance of K2,100 per month. He will be accommodated in a company owned house which the company acquired at a cost of K1,300,000. The company maintains the house and it is estimated that in 2021 the maintenance expenses will amount to K1,800 per month in connection with the house, all of which the company will pay.

Arnold's job will require him to travel out of town at least twice in a month. Arnold will use his personal motor car which he acquired on 20 October 2020 at a cost of K150,000. The company will pay him a fuel allowance amounting to K5 per kilometer. He will incur total motor car running expenses amounting to K7,000 per month. It is estimated that he will drive a total of 25,000 kilometres out of which 15,000 kilometres will be in the performance of duties of employment.

He will contribute 5% of his basic salary as employee's NAPSA contributions.

Arnold wishes to know the amount of income tax payable and the net income for the tax year 2021.

Chibwe Nampungwe

Chibwe is a retiree who recently received her retirement package. She wishes to invest her money in properties and shares listed on the Lusaka Security Exchange (LuSE). She will let out the properties on a commercial basis to companies. She intends to sell the properties and the shares after ten (10) years. Alternatively, she intends to invest all her money into collective investment schemes. Chibwe wishes to know the income tax implications of the investments she intends to make.

The earnings ceiling for the purposes of NAPSA should be taken to be K278,256 where appliacble

Required:

(a) Explain what a Permanent Establishment (PE) is and advise the directors of VAN Group Plc whether their investment in Zambia will constitute a Permanent Establishment (PE).

(4 marks)

(b) Advise Arnold Mbewe of the amount of income tax payable and the net income for the tax year 2021. (8 marks)

(c) Advise Chibwe Nampundwe of the income tax implications of investing in and subsequent sale of the properties and shares. (4 marks)

(d) Explain the nature and the tax implications of collective investment schemes.

(4 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4: ADVANCED TAXATION

SUGGESTED SOLUTIONS

SOLUTION ONE

NATASHA

(a) (i) COMPUTATION OF INCOME TAX PAYABLE UNDER PACAKAGE ONE

	K
Salary (K25,000 x 12)	300,000
Housing allowance (K300,000 x 15%)	45,000
Transport allowance (K300,000 x 10%)	30,000
Utility allowance (K300,000 x 8%)	24,000
Lunch allowance (K300,000 x 2)	6,000
Gross emoluments	405,000
Less allowable deductions	
Capital allowances on motor car	
(K180,000 x 20%) x 70%	(25,200)
Motor car expenses	
(K2,500 x 12) x 70%	(21,000)
	358,800
Income Tax	
On first K82,800	9,960
On excess (K358,800 – K82,800) x 37.5%	103,500
	113,460

(ii) COMPUTATION OF INCOME TAX PAYABLE UNDER PACAKAGE TWO

	K
Salary (K25,000 x 12)	300,000
Electricity bills (K350 x 12)	4,200
Water bills (K150 x 12)	1,800
House keeper's Wages (K1,500 x 12)	18,000
Gross emoluments	324,000
Income Tax	
On first K82,800	9,960
On excess (K324,000 – K82,800) x 37.5%	90,450
	100,410

(b) (i) COMPUTATION OF NET INCOME UNDER PACKAGE ONE

	K
Gross emoluments (as already computed in (a) (i))	405,000
Less	
Income tax	(113,460)
Employee's NAPSA contributions	
(K278,256 x 5%)	(13,913)
National Health Insurance contributions	
(K300,000 x 1%)	(3,000)
Rentals (3,750 x 12)	(45,000)

Utility bills (K2,000 x 12)	(24,000)
Motor car running expenses (K2,500 x 12)	(30,000)
Meals (K500 x 12)	(6,000)
Net income	169,627

(ii) COMPUTATION OF NET INCOME

	K
Gross emoluments (as already computed in (b) (ii)	324,000
Less	
Income tax	(100,410)
Employee's NAPSA contributions	
(K278,256 x 5%)	(13,913)
National health Insurance contributions	
(K300,000 x 1%)	(3,000)
Net income	206,677

Package 2 will be more beneficial as it gives a higher net income by:

K206,677 – K169,627 = K37,050 (2 marks)

(c) (i) COMPUTATION OF TAX SAVINGS AND NET TAX POSITION UNDER PACKAGE ONE

	K
Allowable deductions	
Gross emoluments (as already computed in part (a) (i))	405,000
Employer's NHISCs (1% x K300,000)	3,000
Employer's NAPSA (5% x K278,256)	13,913
Skills development levy (0.5% x K405,000)	2,025
Total cash outflow/ Cash allowable deductions	424,538
Tax savings (K423,938 x 35%)	(148,378)
Net After tax cash outflow	275,560

(ii) COMPUTATION OF TAX SAVINGS AND NET TAX POSITION UNDER PACKAGE TWO

		K
Allowable deductions		
Gross emoluments		
(as already computed in part (a) (ii))		324,000
Other cash allowable deductions		
Employer's NHISCs (1% x K300,000)		3,000
Employer's NAPSA (5% x K278,256)		13,913
Skills development levy (0.5% x K324,000)		1,620
Motor car running expenses (K2,500 x 12)		30,000
Total cash outflow/ Cash allowable payments		372,533
Non- cash allowable deductions		
Capital allowances on personal to holder car		
(K180,000 x 20%)		36,000
Total allowable deductions		408,533
Disallowed amounts		
Staff canteen meals (K500 x12)	6,000	

Accommodation benefit		
(30% x K324,000)	97,200	
Personal to holder motor car benefit	18,000	
		(121,200)
Net allowable deductions		287,333
Company income tax saved (K287,333 x 35%)		100,567
Net After Tax cash position of company		
Total cash allowable payments		372,533
Add Non-allowable cash payments		
Staff canteen meals		6,000
Total cash payments		378,533
Less Tax saved		(100,567)
Net post tax cash outflow position		277,966

(d) From Inspire plc's point of view **remuneration package one** is more beneficial for the company from a taxation point of view because it results in a lower net after tax cash outflow for the company when compared with **remuneration package two** by: K277,966 – K275,560 = K2,406

SOLUTION TWO

(a) TWIZA NAKAZWE

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K	
Annual salary		400,000	
Foreign dividends from Platinum Inc			
(K124,000 +K76,000)		200,000	
		600,000	
Income tax			
On the first K82,800		9,960	
On the balance			
(K600,000 – K82,800) x 37.5%		193,950	
Zambian income tax charge		203,910	
Less tax paid under the Pay As You Earn system		(125,910)	
Double taxation relief on:			
Dividend from Platinum Inc (W)		(59,976)	(W)
Income tax payable		18,024	

Workings

(1) Total assessable income

	K
Income chargeable to income tax	600,000
Gross Zambian dividend (K68,000 x 100/85)	80,000
Gross Zambian rental income (K54,000 x 100/90)	60,000
Total assessable income	740,000

(2) Total amount of Zambian tax charge

	K
Income Tax	203,910
WHT on Zambian dividend (15% x K80,000)	12,000
WHT on Zambian rental income (10% x K60,000)	6,000
Total Zambian tax charge	221,910

(3) DTR on the dividends from Platinum Inc This will be the lower of:

(i) The foreign tax paid on the dividends is K76,000 (K200,000 x 38%)

(ii) The Zambian Tax Charge attributed to the dividends computed as:

$$\left(\frac{\text{K}200{,}000}{\text{K}740{,}000(\text{W}1)}\right) \text{x K}221{,}910$$

= K59,976

DTR will therefore be K59,976 being the lower amount.

(b) COMPUTATION OF FINAL TAXABLE PROFITS

	K'000	K'000	
Net profit as per accounts		4,900	
Add:			
Depreciation	2,500		
Amortisation	500		
Transfer pricing adjustments on:			
- Intra-company sale of goods (25/75 x K4,500,000)	1,500		
- Intra-company loan ((25%-15%) x K20 m	2,000		
Dividends from Platinum Inc. (K360,000 + K240,000)	600		
		7,100	
Taxable income before interest adjustment		12,000	
Add: Disallowed interest (W2)		2,500	(W1)
Final Taxable income		14,500	
Company income Tax (K14,500 x 35%)		5,075	
Less Double taxation relief (W1)		(210)	(W2)
Company income tax payable		4,865	

(1) COMPUTATION OF DISALLOWED INTEREST

	K'000
Taxable income	12,000
Add:	
Gross Interest expense	
(K8m + K2m transfer pricing adjustment)	10,000
Depreciation	2,500
Amortisation	500
Tax EBITDA	25,000
Goss interest expense	10,000
Allowable interest is restricted to (30% of Tax EBITDA)	
(K25,000 x 30%)	(7,500)
Disallowed interest carried forward	2,500

(2) COMPUTATION OF DOUBLE TAXATION RELIEF

DTR on the dividends from Platinum Inc This will be the lower of:

(i) The foreign tax paid on the dividends of K240,000; and

(ii) The Zambian Tax Charge attributed to the dividends computed as:

K600,000 x 35% = K210,000

DTR will therefore be K210,000 being the lower amount.

SOLUTION THREE

(a) ASB

COMPUTATION OF TAXABLE PROFIT

	K'000	K'000	
Income before taxes		18,541	
Add:			
Interest on loan for capital purposes	2,320		
Increase in general provision	2,705		
Depreciation	1,270		
Share issue costs	388		
Personal to holder motor car benefit (K40,000 x 2)	80		
		6,763	
		25,304	
Less:			
Dividends	1,275		
Rental income	1,260		
Royalties	1,530		
Unrealised exchange gains	1,300		
Capital allowances (W)	1,007		(W1)
Operating lease rentals (K52,200 x 25/29) x 5	225		
		(6,597)	
Taxable income		18,707	

COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K
Business profits	18,707,000
Investment income:	
Royalties (K1,530,000 x 100/85)	1,800,000
Total taxable income	20,507,000
Company income tax	
(K20,507,000 × 35%)	7,177,450
Less:	
WHT on royalties (K1,800,000 x15%)	(270,000)
WHT on interest income	(5,120,000
Provisional income tax	(1,241,000)
Income tax payable	546,450

(1) COMPUTATION OF CAPITAL ALLOWANCES

	K' 000
Administration offices	
Wear & tear allowance	
(K23,200,000 25/29 x 2%)	400
Toyota Fortuner Motor cars	
Wear & tear allowance	
(K580,000 x 20%) x 2	232
Office equipment	

Wear & tear allowance	
(K1,740,000 x 25/29) 25%	375
	1,007

(b) (i) Family Income Benefit

(1) Policies run for a set period of time known as "the term and the policy pays out where the life/lives assured die within the policy term.
(2) However, the benefits are paid as instalments of capital over the remaining policy term and not as a lump sum. For example, if a 20-year policy is taken out and the individual dies five years into this, then the policy will pay out a regular income for the remaining 15 years.
(3) Such a policy might be used where there is a need to keep premiums low or where budgeting for lump sum proceeds would present a problem

Tax Implications

Where the term is not beyond a specified number of years and the insurance is for trade purposes (e.g. insuring the life of a key employee in respect of loss of profits) the premiums will be a tax-deductible expense but the proceeds would be taxed as trading receipts.

(ii) Term Assurance

(1) Term insurance provides protection for the life (s) assured for a given or specified period of time known as the policy term.
(2) The policy only pays out the lump sum death benefit where the life/lives assured die within the policy term.
(3) The policy can be written on a decreasing sum assured basis and used to redeem a repayment mortgage or other loan which would otherwise be outstanding on the deceased's death.
(4) Decreasing sum assured basis means that any benefit to be paid reduces over time.

Tax Implications

Where the term is not beyond a specified number of years and the insurance is for trade purposes (e.g. insuring the life of a key employee in respect of loss of profits) the premiums will be a tax-deductible expense but the proceeds would be taxed as trading receipts.

SOLUTION FOUR

(a) Ethical issues
Non-disclosure of nominal salary
The principle of confidentiality requires that a member who acquires confidential information during the course of performing tax services should not use or disclose such information without authority, unless there is a legal or professional right to disclose such information.

Non-disclosure of Charity's nominal salary of K170,000 will be in breach of the principle of intergrity which requires members providing tax services not be associated with reports, returns, communications or other information where a member believes that the information contains a materially false or misleading statements or statements furnished recklessly.

The principle of confidentiality will be overridden, in this case, as the member has a legal duty to disclose Charity's nominal salary of K170,000 which was treated as an allowable deduction.

Token of appreciation
The principle of integrity requires a member to be straight forward and honest in all professional and business relationships and commitment not to mislead or deceive and truthfulness.
Therefore, the token of appreciation of K20,000 should not be accepted and the matter should be reported to the supervisor for further action.
(1 mark per valid point up to 5 marks)

(b) Tax audit is an examination of a tax return, a declaration of liability or a repayment claim, a statement of liability to stamp duty, or the compliance of a business with tax and duty legislation.
The main intention of the tax audit is to establish the correct level of tax liability and check the level of tax payer compliance with tax legislation. Tax payers may be picked randomly to be subjected to a tax audit.

On the other hand, tax investigation is an investigation carried out due to some tax evasion or tax fraud that has been reported in connection with the tax payer.
A tax investigation is carried out when there is suspicion or reports that the tax payer might be evading tax and if the tax payer has been consistently reporting losses.
(1 mark per valid point up to 3 marks)

(c) Penalties and interest
For the tax year 2020
(1) Submission of returns
The self-assessment income tax return for the tax year 2020 should have been submitted on 21 June 2021, but it was submitted on 21 August 2021. This means that the return was submitted late by 2 months.
The penalty for late submission of returns is 1,000 penalty units (K300) per month or part thereof. The total penalty for late submission of self-assessment income tax return for the tax year 2020 is 2,000 penalty units (K600).

(2) Late payment of income tax

The balance of the income tax for the tax year 2020 should have been paid not later than 21 June 2021, but it was paid 21 August 2021. The tax was paid late by two (2) months. (½ mark)

The penalty for late payment of income tax is 5% of the unpaid tax per month or part thereof plus interest on overdue tax at a rate of 2% above the Bank of Zambia discount rate. The penalty and interest is as follows:
Penalty: K135,000 x 5% x 2 = K13,500
Interest: K135,000 x 21.75% x 2/12 = K4,894.

Computation of balance of income tax for the tax year 2020

	K
Actual taxable business profit	1,860,000
Provisional income	(1,500,000)
Excess taxable profit	360,000
Income tax @37.5%	135,000

(3) Underpayment of tax

Charity under paid the tax due to her nominal salary of K170,000 which should have been added back to the profit but it was, instead, treated as an allowable deduction. The actual taxable business profit was therefore understated by K170,000.

The underpaid taxis therefore; K170,000 x 37.5% = K63,750
The penalty for underpaid tax is: K63,750 x 10% = K6,375.

For the tax year 2021

(1) Late submission of returns

The provisional income tax return for the tax year 2021 should have been submitted on 31 March 2021 but was instead submitted on 10 July 2021. The return was therefore delayed by 3 months 10 days.
The penalty is 1000 penalty units (K300) per month or part thereof. The total penalty for late submission of provisional income tax return will be:
1000 penalty units (K300) x 4 months = 4000 penalty units or K1,200.
(1 marks per valid point up to 2 marks)

(2) Late payment of tax

Quarter ended 31 March 2021
The provisional income tax installment for the quarter ended 31 March 2021 should have been paid by 10 April 2021 but it was paid on 10 July 2021. This means that the tax was paid late by 3 months.
Penalty: K95,977.50 x 5% x 3 = K14,397
Interest: K95,977.50 x 21.75% x 3/12 = K5,219

The provisional income tax installment for the quarter ended 30 June 2021 was paid on the appropriate due date, therefore no penalty will be charged.

Provisional income tax for the tax year 2021

	K
Revised estimated taxable profit	1,080,000

Computation	
First K82,800	9,960
Balance K997,200 x 37.5%	373,950
Provisional income tax	383,910

Quarterly installment = K383,910/4 = K95,977.50

SOLUTION FIVE

(a) Permanent Establishment is defined in the OECD model convention as a fixed place of business through which the business of an enterprise is wholly or partly carried on. Permanent Establishment includes a place of management, a branch, an office, a factory, a workshop, a mine. An oil or gas well, a quarry or any other place of extraction of natural resources.

A building site or construction or installation project constitutes a permanent establishment only if it lasts more than 12 months.

The investment that VAN Group Plc will make in Zambia will constitute a permanent establishment because a new company will be formed and managed in Zambia.

(1 mark per valid point up to 4 marks)

(b) Arnold Mbewe

Income tax payable for the tax year 2021

		K	K
Salary (K23,780 x 12)		285,360	
Transport allowance (K285,360 x 10%)			28,536
Weekend allowance (K2,100 x 12)		25,200	
Fuel allowance (K5 x 25,000 Km)			125,000
Maintenance expenses (K1,800 x 12)		21,600	
			485,696
Less:			
Motor running costs			
(K7,000 x 12 x 15,000/25,000)		50,400	
Capital allowances			
(K150,000 x 20% x 15,000/25,000)	18,000		
			(68,400)
Taxable income			417,296

Computation	
First K82,800	9,960
Balance K334,496 @37.5%	125,436
Income tax payable	135,396

Net income for the tax year 2021

Gross income		485,696	
Less:			
Income tax payable	135,396		
Motor car running costs			
(K7,000 x 12)	84,000		
NAPSA contributions (K278,256 x 5%)		13,913	
			(233,309)
Net income		252,387	

(c) Chibwe Nampungwe

The following are the tax implications:

Properties

(i) Rental income is subjected to withholding tax at a rate of 10% which is the final tax.
(ii) On sale of properties, property transfer tax is chargeable at a rate of 5% on the realized value.

Shares listed on LuSE
(i) Dividends receivable are subjected to withholding tax at a rate of 0% which is the final tax.
(ii) On sale of shares, property transfer tax is not chargeable as the shares listed on the LuSE are exempted from PTT.

(d) Collective investment scheme
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 or a management company.
Taxation implications
(i) Income of a collective investment scheme is exempt from income tax to the extent to which the income is distributed to participants in the collective investment scheme. This means that income generated from such a scheme by the fund manager is exempt from income tax on condition that the income is paid out to the investors.
(ii) Any income not paid out to the investors is subjected to normal company income tax at the rate of 35%.
(iii) The participating investors are liable to pay tax on the income received on distribution. The income received is subjected to withholding tax at the applicable rates since the funds are invested in various types of investments such as bonds, equity shares etc.

END OF SOLUTIONS

Zambia Institute of Chartered Accountants

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 15 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This Question is compulsory and must be attempted

QUESTION ONE

(a) Kanonga Ebo Limited (KE), is considering manufacturing and selling an economy e-reader primarily aimed at commuters enabling them to browse, buy and download books and other digital media at quick download speeds. KE aims at being the world best to the satisfaction of its shareholders and its primary objective is to maximise the shareholders' wealth. A firm of management consultants has carried out a feasibility study for the company at a cost of K250,000. The company uses a 12% cost of capital to assess its capital investments. KE expects investments to deliver positive pre-tax Net Present Value. The corporate tax is 30%.

This amount is to be paid at the end of Year 1. There would also be two requirements for production machinery:

- Some existing machinery could be modified at a cost of K1,400,000 to undertake the first stage of production.
- For testing the product, the company already has suitable machinery which is not in use; it has a book value of K800,000. This would be difficult to dismantle and dispose of and its net realisable value is K600,000.

If the project goes ahead, machinery maintenance costs of K100,000 per annum will be incurred; there would be additional working capital requirements of K600,000 at the beginning of the project that would arise. It is the primary objective of KE to maximize the shareholder's wealth.

These working capital requirements would be recovered at the end of four years. Initial marketing costs, to be paid for as soon as the project is approved, would be K300,000, and annual marketing costs would be K200,000 per annum for the full four years.
The supplier of the existing machinery has agreed to refund 50% of the total marketing costs. This refund would be given equally in Years 3 & 4 of the project.

The selling price and cost per unit is proposed as follows:

	K	K
Selling Price		500
Direct Materials	100	
Direct Labour	70	
Variable Overheads	120	290
General Fixed Overheads (absorbed)	90	
Bank Interest (absorbed)	20	110
Total		400
Profit		100

Additional Information:

- General fixed overheads do not include the costs of a specialised fabricating machine. These costs are K2,000,000 (including annual depreciation of K100,000) to be divided over the four-year useful life of the e-reader product. As this machine is a specialised machine the net realisable value is nil.

- The management consultants have suggested that the product would have a four-year life before becoming obsolete and being superseded by next generation devices.
- From market research, KE expects the sales price to increase by 10% in each of Years 2 and 3. In Year 4, as the product is reaching the expected end of its life, the sales price will revert to the Year 2 sales price to encourage sales.
- Market research also indicated that Year 1 sales can be forecast at 4,000 units. Sales volumes are likely to increase by 10% respectively in each of Years 2 and 3, but will stay at the Year 3 level in Year 4.
- All variable costs (direct materials, direct labour, and variable overheads) are expected to increase by 5% in Year 2 and remain at Year 2 levels for the remaining life cycle of the product.

Required:

(i) Calculate the Net Present Value of the investment proposal. (14 marks)

(ii) Explain how the primary objective of KE Ltd can be achieved. (6 marks)

(b) The Chief Executive Officer (CEO) of KE has expressed concerns on the current performance management system in the company that concentrates on the financial measures. She is of the view that this may be very misleading and therefore the need to revise the system to include non-financial measures. The Finance Director (FD), suggested that the balanced scorecard could be the appropriate tool to use. He said that according to Colin Drury, several different strategic performance management frameworks have been presented in the literature that seek to integrate financial and non-financial measures of performance. Such frameworks also facilitate strategy implementation and enhance performance. However, most of the management team members do not know much about the balanced scorecard as evidenced in the comment of the Sales & Marketing Director who commented as follows: *' why should we change something that is working out perfectly. I see no need in changing from the current system to the balanced scorecard.'* The FD has asked you to evaluate the balanced scorecard and how it can be implemented in KE.

Required:

(i) Evaluate the use of the balanced scorecard. (15 marks)

(ii) Explain how the balanced scorecard could be implemented in KE Ltd. (5 marks)

[Total 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Kushamisika Limited (KL) was established in 2010 by two university friends, Joseph Takawira and Rejoice Moyo. The board of KL is concerned with the company's performance in the last two years. It has experienced decline due to a pandemic and the increased market competition.

Takawira has noticed that, although budgets are prepared by all business units in the organisation, there is wide variety in the manner and extent to which each business unit uses its budgets for control purposes.

In some cases, budgets are used to implement a very formal style of control. Subordinates are expected to achieve the cost or revenue targets set out in their budgets and their annual performance is assessed solely on the basis of whether they have done so.

In other business units, although this same type of budgetary target is set, subordinates are also assigned targets in terms of quantitative but non-financial metrics (e.g., measures of customer satisfaction or product quality). In these cases the annual assessment of performance is based exclusively on whether or not the quantitative but nonfinancial targets have been achieved. Little attention is paid to whether the budgetary targets (or other financial targets) have been achieved.

A third type of situation exists in business units where budgets are prepared but (in practice) subordinates' performance does not seem to be assessed by comparing it either with budgetary targets or with any other form of targets (e.g., targets expressed in terms of quantitative but nonfinancial metrics) set at the beginning of the financial year.

Moyo also observed that the organisation needed to move from the traditional management accounting to strategic management accounting.

Required:

(a) Evaluate the appropriateness of these three approaches to budgeting mentioned above. (9 marks)

(b) Outline the criticisms of traditional management accounting. (6 marks)

(c) Advise the Board of KL how strategic management accounting could help it manage its performance. (5 marks)

[Total 20 Marks]

QUESTION THREE

Amafasho Designers (AD) Ltd is a clothing company that has been in existence for ten (10) years. AD designs and produces most of the fabric which it sells to high profile clients. It has two manufacturing divisions North and South. Division North has a capacity of 96,000 hours per annum. It manufactures two products Aee and Bee as per the following details:

	Product Aee	Product Bee
Direct material	K300	K60
Variable costs @ K80 per hour	K320	K80
Selling price	K800	K160
Maximum sales units	15,000	Unlimited

Division South produces product Cee whose particulars are as under:

	K
Imported component	800
Direct materials	120
Variable costs@K40 per hour	400
Selling price	1,450

The fixed overheads amount to K30 and K5 per annum for Division North and South respectively. With a view to minimizing the dependence on imported component, the company explored the possibility of the Division South using the product Aee as substitute for imported component. This is possible provided Division South spends two machine hours entailing an additional expenditure of K80 per component on modification of the product Aee to fit into the product Cee. the production of Cee in Division South is 5,000 units per annum. Division South seeks a discount of K80 so that the transfer price of product Aee can be set at K720 each.

Required:

Calculate the divisional and company profitability on the basis of the following conditions:

(a) Division South imports its requirement of components. (4 marks)

(b) Division South uses 5,000 units of substitute material product Aee, transferred from Division North at market price of K800 per unit. (5 marks)

(c) Division South uses 5,000 units of substitute material product Aee, transferred from Division North at a transfer price of K720 per unit. (8 marks)

The company uses Return On Investment (ROI) to access the performance of its divisions.

(d) Explain the importance of using Return On Investment (ROI) to access the performance of divisions. (3 marks)

[Total 20 Marks]

QUESTION FOUR

Tiye Limited (TL) runs a large number of computer asseccesories outlets. It was establised 2002 with one outlet, and by 2020 the number of outlets had increased by nineteen. Ciyero Phiri is one the two founders of TL and has remained the chief excutive since inception. TL measures the performance of each outlet on the basis of a target return on investment (ROI) of 18 %. Outlet managers get a bonus of 8% of their salary if their outlet's annual ROI exceeds the target each year. Once a outlet is built there is very little further capital expenditure until a full four years have passed.

TL has an outlet in Solwezi (outlet S), the provincial headquarters of North Western province. Outlet S has historic financial data as follows over the past four years:

Year	**2017**	**2018**	**2019**	**2020**
Sales (K000)	700	700	630	595
Gross profit (K000)	280	245	221	179
Net profit (K000)	46	49	35	28
Net assets at start of year (K000)	350	280	210	140

The market in which TL operates has been growing steadily. Typically, TL's outlets generate a 40% gross profit margin.

Required:

(a) Discuss the past financial performance of outlet S using ROI and any other measure you feel appropriate and, using your findings, discuss whether the ROI correctly reflects Outlet S's actual performance. (7 marks)

(b) Explain how a manager in outlet S might have been able to manipulate the results so as to gain bonuses more frequently. (4 marks)

TL has another outlet about to open in Mpika (outlet M), the provincial headquarters of Muchinga Province. It has asked you for help in calculating the gross profit, net profit and ROI it can expect over each of the next four (4) years. The following information is provided:

Sales volume in the first year will be 18,000 pieces. Sales volume will grow at the rate of 15% for years two (2) and three (3) but no further growth is expected in year 4. Sales price will start at K45 per piece for the first two years but then reduce by 7% per annum for each of the next two years.

Gross profit will start at 40% but will reduce as the sales price reduces. All purchase prices on goods for resale will remain constant for the four (4) years.

Overheads, including depreciation, will be K245,000 for the first two (2) years rising to K280,000 in years three (3) and four (4).

Outlet M requires an investment of K350,000 at the start of its first year of trading.

TL depreciates non-current assets at the rate of 25% of cost. No residual value is expected on these assets.

Required:

(c) Calculate the revenue, gross profit, net profit and ROI of outlet M over each of its first four (4) years. (9 marks)

[Total: 20 Marks]

QUESTION FIVE

Ichiloto Ltd (IL) is an automobile spares supplier that also offers services motor vehicles in Southern Africa. The directors and middle management are based at the Head Office in Zambia.

Each country operation has a manager who is responsible for daily operations and is supported by an administrative assistant. All other staff at each operation is involved in the servicing operations.

The directors of IL are currently preparing a financial evaluation of an investment of K3.5 million in a new information technology system for submission to its financiers. They are concerned that sub-optimal decisions are being made because the current system does not provide appropriate information throughout the organization. They are also aware that not all of the benefits from the proposed investment will be quantitative in nature.

Required:

(a) Explain the characteristics of three (3) types of information required to assist in decision-making at different levels of management and on differing timescales within IL, providing two examples of information that would be appropriate to each level. (10 marks)

(b) Identify and explain three (3) approaches that the directors of IL might apply in assessing the qualitative benefits of the proposed investment in a new information system. (6 marks)

(c) Identify two (2) qualitative benefits that might arise as a consequence of the investment in a new information technology system and explain how you would attempt to assess them. (4 marks)

[Total 20 marks]

END OF PAPER

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}} \left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

CA3.5 ADVANCED MANAGEMENT ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) (i) **NPV Computation**

Year	0	1	2	3	4
Contribution		840,000	1,080,200	1,454,420	1,188,220
Machinery	(1,400,000				
Working capital	(600,000)				600,000
Marketing	(300,000)	(200,000)	(200,000)	(200,000)	(200,000)
Maintenance		(100,000)	(100,000)	(100,000)	(100,000)
Testing Equipment					60,000
Marketing costs refund				27,500	27,500
Fixed costs		(40,000)	(40,000)	(40,000)	(40,000)
Net cashflow	(230,000)	14,000	38,020	102,942	196,322
DCF 12%	1.000	0.893	0.797	0.712	0.636
Present value	(230,000)	12,502	30,302	73,295	124,861

Net Present Value : K10,960
This is a financially viable project because the NPV is positive.

Workings:

1. Sales Volumes

Year	**1**	**2**	**3**	**4**
	4,000	4,000 x1.1	4,400 x 1.1	4,840 x 1
Volume	4,000	4,400	4,840	4,840

2. Contribution per unit

Year	**1**	**2**	**3**	**4**
Selling price	500	550	605	550
Variable costs	290	304.50	304.50	304.50
Contribution per unit	210	245.50	300.50	245.50

3. Total contribution

Year	**1**	**2**	**3**	**4**
Sales volume	4,000	4,400	4,840	4,840
Contribution per unit	210	245.50	300.50	245.50
Total contribution	840,000	1,080,200	1,454,420	1,188,220

(ii) **PRIMARY OBJECTIVE: MAXIMISATION OF SHAREHOLDERS WEALTH**

Shareholders wealth is maximised when their value is increased through undertaking profitable investments (investments which gives positive NPV). The value of shareholders can be measured by the stock prices and dividend earned by shareholders. If a company undertake a profitable investment, it would be to generate a healthy return on invested capital hence increase the value. If this value is created over the long term, the share price increases and the company can pay larger cash dividends to shareholders.

(b)

(i) **Balanced scorecard**

The balanced scorecard is a performance measurement tool which encourages organisations to look at both financial and nonfinancial performance of an organsation.
The ultimate goal of commercial organisations in the long run is likely to remain the maximisation of profit, however, and so the financial aspect cannot be ignored.
There is a danger that too many such measures could be reported, leading to information overload for managers, providing information that is not truly useful, or that sends conflicting signals. A further danger of NFPIs is that they might lead managers to pursue detailed operational goals and become blind to the overall strategy in which those goals are set.A combination of financial and non-financial indicators is therefore likely to be most successful.

The need to link financial and non-financial measures of performance and to identify the key performance measures provided the impetus for the development of the balanced scorecard. The balanced scorecard has four (4) perspectives, Customer, Financial, Internal Business Processes, Innovation & Learning. The balanced Scorecard intended to provide answers to four key questions:

Customer perspective – How do customers see the company?
Financial perspective – How does the organisation look to shareholders?
Internal perspective – What must the organisation excel at
Innovation & Learning – Can the company continue to improve (to be more effective) and to create value.
Performance targets are set once the key areas for improvement have been identified, and the balanced scorecard is the main monthly report.
The scorecard is 'balanced' as managers are required to think in terms of all four perspectives, to prevent improvements being made in one area at the expense of another.

Advantages of the balanced scorecard

Important features of this approach are as follows.

- It looks at both **internal and external** matters concerning the organisation.
- It is related to the key elements of a company's **strategy**.
- **Financial and non-financial** measures are linked together.

Problems with the Balanced scorecard

Conflicting measures

Some measures in the scorecard may naturally conflict (for example, a business process measure might be to speed up processing times, but cost control measures in financial perspectives may prevent the introduction of the new equipment needed to do this). It is often difficult to determine the balance between measures which will achieve the best results, but an organisation should always seek **goal congruence** between the different measures in its scorecard.

Selecting measures
Not only do appropriate measures have to be devised, but the number of measures used must be agreed. Care must be taken that the impact of the results is not lost in a sea of information.
The innovation and learning perspective is, perhaps, the most difficult to measure directly, since much development of human capital will not feed directly into such crude measures as rate of new product launches or even training hours undertaken. It will, rather, improve economy and effectiveness and support the achievement of customer perspective measures.
When selecting measures it is important to measure those which actually add value to an organisation, not just those that are easy to measure.

Expertise
Measurement is only useful if it initiates appropriate action. Non-financial managers may have difficulty with the usual profit measures. With more measures to consider this problem will be compounded.
Measures need to be developed by someone who understands the business processes concerned.

Interpretation
Even a financially-trained manager may have difficulty in putting the figures into an overall perspective.

Management commitment
The scorecard can only be effective if senior managers commit to it. If they revert to focusing solely on the financial measures they are used to, then the value of introducing additional measures will be reduced.
In this context, do not overlook the **cost** of the scorecard. There will be costs involved in measuring the performance of additional processes.

(ii) **Implementation of Balanced scorecard**
The introduction and practical use of the balanced scorecard is likely to be subject to all the problems associated with balancing long-term strategic progress against the management of short-term tactical imperatives.

Kaplan and Norton recognise this and recommend an iterative, four-stage approach to the practical problems involved.

(i)**Translating the vision**: the organisation's mission must be expressed in a way that has to be clear operational meaning for each employee.
(ii) **Communicating and linking**: the next stage is to link the vision or mission to departmental and individual objectives, including those that transcend traditional short-term financial goals.
(iii) **Business planning**: the scorecard is used to prioritise objectives and allocate resources in order to make the best progress towards strategic goals.
(iv) **Feedback and learning**: the organisation learns to use feedback on performance to promote progress against all four perspectives.

SOLUTION TWO

(a) Evaluation of the budget approaches

FIRST SITUATION

This is the most formal control style. It has the benefit of communicating clear expectations to subordinates of the results expected of them and provides certainty that achievement of the specified targets will lead to a favourable performance assessment. On the other hand, it creates risk that uncontrollable events will cause targets to be missed and sanctions applied. Hopwood's 1974 study in the US Steel industry that this style leads to mediocre financial performance and has many specific behavioural downsides especially stress, data manipulation, and a lack of collegiality. Drury (8th edition, p. 383) refers to several other researchers' findings (e.g., Wallin, 2000) that this approach encourages excessively rigid planning and incremental thinking by managers and staff.

SECOND SITUATION

The second situation is also recognisable from Hopwood's US study; he referred to it as the "non-accounting approach". He found several behavioural benefits as compared to the previous style including a much more positive and team based attitude to work. However, because of the lack of interest in financial outcomes, it is not clear that this approach can deliver the long-term financial focus of (for example) a target costing project. Emphasis is taken away from short term financial targets (which can be a good thing in itself) but it is not obviously shifted onto long-term financial outcomes. The danger is that the non-financial targets may become ends in themselves. It is not surprising that Hopwood found that this approach also led to only "mediocre" financial outcomes, on average no better than the first approach. A better approach would be to set multivariate targets consisting of financial and nonfinancial measures, since this focuses attention both on the financial outcomes per se and on the critical success factors needed in order to deliver them. As Drury (2012, p. 383) indicates, Ekhom and Wallin (2000) found evidence that few companies in Finland seriously contemplated abandoning traditional budgets but used several mechanisms such as rolling forecasts and balanced scorecard performance measurement systems to complement the traditional financially-based budget.

As for Paul's suggestion that preparing budgets is a wasteful exercise if they are not going to be used for control purposes, this is an exaggeration. Even those organisations which claim to have "gone beyond budgeting" (Hope and Fraser, 1999) typically do not mean that they no longer prepare them. Instead, they typically mean that the budgets prepared are in the nature of forecasts rather than budgets in the textbook sense, i.e., they are predictions of future outcomes rather than statements of specific targets. This forecasting role is very valuable irrespective of whether the budgets are used on the control process.

THIRD SITUATION

Following from this, the third situation described in the question may represent a judicious "beyond budgeting" approach.

In this case, subordinates performance would be assessed not by reference to budgets but by the effectiveness of their response to changing events and circumstances. Some organisations find this to be a much more appropriate control model than comparing outcomes with budgetary (or other) targets which were set a year ago and do not give a good indication of what the subordinate is expected to achieve. This approach stimulates reactive rather than purely compliant behaviour.

(b) **Limitations of traditional management accounting**

Johnson & Kaplan (1987) declared that the failure of a management accounting system is manifested via three significant results. Firstly,management accounting information presents little assistance to organizations who try to decrease costs and enhance productivity. Contrarily, productivity decreases because management accounting information needs a long time to be understood by employees who are non- accountants.

Secondly, management accounting systems do not offer the exact product costs. In particular, overhead costs are distributed to products based on estimation methods such as the direct labor cost or hours of labor. In management accounting terms, these methods might misguide the decisions relating to product pricing, product sourcing, product mix and responses to rival products. This is because the data are generated from the systems concerned with product costs only. So, many companies become victim to the risk of misguiding decision-making.

Thirdly, "cost accounting had hardly become subservient to goals of external reporting and only occasionally emerged to aid managerial decisions and control".

Management accounting, especially cost accounting, which serves external financial statements and auditors' purposes. In this sense, management accounting services external uses however, this resulted in damaging short-termism in the business view, coupled with problematic cost allocation techniques underpinning stock valuation and an over-reliance on historical information for process control.

(c) **Strategic Management Accounting**

Strategic management accounting – Unlike 'traditional' management accounting which looks primarily at internally generated financial information, strategic management accounting looks at information which relates to **external factors**, and it looks at **non-financial** as well as financial information.

Competitors' costs – For example, as well as looking at the trading company's own operating costs and margins, strategic management accounting would also encourage KL to look at competitors' costs. This will help focus attention on the need to control the trading company's costs if it is going to compete successfully with its competitors. For example, why are the trading company's wage costs proportionally so much higher than its competitors' costs?

Market growth – Strategic management accounting will also encourage KL to look at market size and growth, and the trading company's share of the market. The scenario highlights that the downturn in economic conditions has slowed the growth demand for electronic components as a whole, which could intensify competition in the market. Instead of market growth being a source of increased sales, the trading company will now have to increase its market share in order to increase its sales.
Although the scenario mentions the presence of competitors, it does not give any indication of the number of competitors or their size relative to the trading company. However, these factors could both affect the trading company's ability to compete successfully in the market.

In this respect, strategic management accounting's **external focus** is very important: KL needs to understand the market environment in order to analyse the trading company's current performance, and then to evaluate future strategies for the company.

Analysis of current performance – Strategic management accounting can contribute to the trading company's success by **monitoring its performance** and results compared to its competitors, and then assessing whether its current strategy appears to be working successfully or not.

It will be useful to compare the company's performance against its competitors, for example to see the extent to which their revenues and profits are growing or falling.
If it appears the company is performing relatively worse than its competitors, then KL should consider how it could revise its strategy to help improve the company's performance.

Forecasting – Strategic management accounting can also be used to help forecast performance. KL's forecasts should not look solely at the company's own performance but should also look at competitors' performance and market trends in general. For example, how realistic is the level of forecast sales growth in the context of a slowdown in the market?

SOLUTION THREE

(a) When division South imports its thread requirements

Division North		**Division South**	
	K'000		K'000
Contribution:		Contribution	
AEE – (15,000 units x K180)	2,700	(5,000 units x K130)	650
BEE – (36,000 units x K20)	720	-	-
Total contribution	3,420	Total contribution	650
Less Fixed costs	3,000	Less Fixed costs	500
Profit	420	Profit	150

The profit of AD Ltd is K570,000.

Working:

Products	AEE (K/unit)	BEE (K/unit)	CEE (K/unit)
Selling price	800	160	1,450
Less: Variable costs	620	140	1,320
Contribution	180	20	130
Hours required	4	1	-
Contribution per hour	45	20	
Demand in units	15,000	-	-
Hours required to meet the units demanded	60,000	36,000	

(b) When division South buys 5,000 units of product AEE at K800 per unit:

Division North		**Division South**	
	K'000		K'000
Contribution:		Sales (5,000 x 1,450)	7,250
AEE – (20,000 units x K180)	3,600	Less: Variable cost (5,000 units x K1,320)	6,600
BEE – (16,000 units x K20)	320	Less: Additional cost (5,000 x 80)	400
Total contribution	3,920	Total contribution	250
Less Fixed costs	3,000	Less: Fixed costs	500
Profit	920	Loss	(250)

The profit of AD Ltd as a whole in this case would be K670,000.

(c) Division B gets a product AEE at a transfer price K720 from Division North

Division North	K'000	**Division South**	K'000
Contribution:			
AEE – (15,000 units x K180)	2,700	Variable cost of material AEE	720
BEE – (5,000 units x K100)	500	Direct materials	120
(For Division South)		Variable overheads	400
BEE – (16,000 units x K20)	320	Additional cost	80
Total contribution	3,520	Total cost: Division North	1,320
Less: Fixed costs	(3,000)	Selling price: Division South	1,450
Profit	520	Contribution	130
		Total contribution (5,000 x 130)	650
		Less: Fixed costs	(500)
		Profit of Division South	150

Total profit of AD as a whole is K670,000**.**

(d) Return on Investment (ROI)

This a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of return on a particular investment, relative to the investment's cost.

It is calculated as ROI = (Divisional Profit/ Divisional Investment) x 100

ROI calculates the success of an investment but the investment doesn't have to be external. ROI helps also to optimize to improve investment in the future.

SOLUTION FOUR

(a) **Financial Performance**

	2017	*2018*	*2019*	*2020*
ROI	13%	17.5%	16.7%	20%
Bonus paid?	No	No	No	Yes
Sales Growth	–	0%	–10%	–5.6%
Gross margin	40%	35%	35%	30%
Overheads	K234,000	K196,000	K186,000	K151,000
Net profit % on Sales	6.5%	7%	5.6%	4.7%

The performance of store S can be assessed in various ways:

Sales Growth

Sales revenue growth is most unimpressive. We are told that the market in which TL operates is steadily growing and yet outlet S has shrunk in terms of sales over the last four years. This could be poor volumes or poor prices achieved. Given the reducing gross margin (see below) then a reducing sales price is likely. It is possible that S is subject to higher than normal levels of competition.

Gross Margin

The gross margins have also shrunk. Reducing margins can result from sales price pressure or increases in the cost of sales levels being incurred. Suppliers might have increased prices or labour could have got more expensive. The level of margin has only reached the normal level once in the last four years. Clearly S is under performing.

Overhead Control

The one area that is impressive is the apparent ability of the business to reduce overheads as sales and margin have shrunk. This is often difficult to do. It is possible that reducing these overheads could have contributed to the poor sales performance, if (for example) quality has been affected, or one could say it reflects flexible management.

Net Margin

The net margin has also fallen, primarily due to falling gross margins as overheads have reduced. Clearly a disappointing performance.

ROI

The ROI has improved in the fourth year and has exceeded the 18% target in all but one year (year 1). This is simply due to the reducing asset base as the stores assets have gradually been depreciated. Net profit levels have fallen overall and yet ROI has increased.

It is hard to argue that the ROI figures properly reflect the performance of the store. The ROI will tend to increase as assets get older and this will distort the financial performance picture. In a period of falling sales and weaker margins the manager of S has been awarded bonuses in three out of four years. This is hard to justify.

(b) **Manipulation of results**

The unethical manager would have needed to move profits out of 2018 and in to 2017. One immediate problem here is having the information in good time to respond. The manager would have to be able to anticipate the 2017 poor result and the improvement in 2018. It is likely that such a manager would have to gamble at the end of 2017 and make an adjustment in the hope of a better year in 2018.

The manager need only move K2,000 of profit from 2018 to 2017 to achieve a 15% return in both years.

Possible methods of adjustment include:

Accelerate revenue: Sales made early in 2018 could be wrongly included in 2017. He could, for example, raise an invoice before is normal, perhaps on the receipt of an order and before actual delivery. The invoice itself would not have to be sent to the customer, merely filed until the second year had begun and delivery made.

Delay the recording of 2017 cost: A supplier's invoice could be left unrecorded at the end of 2017, including it in 2018 expenses instead.

Understate a provision or accrual in 2017: This has the effect of moving cost from 2017 to 2018 (assuming that by the end of 2018 the provision is correctly stated).

Manipulate accounting policy: Inventory values (for example) are easy targets for the unethical manager. If inventory in 2017 could be overstated this would have the effect of increasing 2017 profits at the expense 2018 profits.

(C) **Outlet M forecast**

The forecast for store S is as follows:

		Year 1 (K)	*Year 2* (K)	*Year 3* (K)	*Year 4* (K)
Sales	(W1)	810,000	850,500	830,513	772,367
Gross Profit	(W2)	324,000	340,200	294,698	236,559
Overheads		245,000	245,000	280,000	280,000
Net Profit		79,000	95,200	14,698	(43,441)
Investment		350,000	262,500	175,000	87,500
ROI		22.57%	36.27%	8.40%	– 49.65%

Workings

(Working 1)

	Year 1	*Year 2*	*Year 3*	*Year 4*
Sales Volume (units)	18,000	18,900	19,845	19,845
Sales Price (K)	45.00	45.00	41.85	38.92
Revenue (K)				
(Volume × Price)	810,000	850,500	830,513	772,367

(i) 18,000 (1.05) = 18,900

(ii) 18,900 (1.05) = 19,845

(iii) 45.00 (0.93) = 41.85

(iv) 41.85 (0.93) = 38.92

(Working 2)

Gross Profit

Year 1: 40% (given). Total gross profit = K810,000 × 0.4 = K324,000

Year 2: 40% (given). Total gross profit = K850,500× 0.4 = K340,200

Year 3: (40 – 7)/100(0.93) = 35.4838709%

Total gross profit = K830,513 × 0.354838709 = K294,698

Year 4: (40 – 7 – 6.51)/(100(0.93)(0.93)) = 30.6278182%

Total gross profit = K772,367 × 0·306278182 = K236,559

Alternatively, given that variable costs are said to be constant over the four years, could calculate the variable cost in year one and hold for the four years. Gross profit is then simply sales revenue less variable costs.

Variable costs in Year 1:

K810,000 – (18,000 pieces × VC) = K324,000

VC per unit = K27.00

So year two gross profit will be:

K850,500 – (18,900 × 27.00) = K340,200

SOLUTION FIVE

(a) The management of an organization needs to exercise control at different levels within an organization. These levels are often categorized as being strategic, tactical and operational. The information required by management at these levels varies in nature and content.

Strategic information

This is required by the management of an organization in order to enable management to take a longer term view of the business and assess how the business may perform during the period. The length of this long term view will vary from one organization to another, being very much dependent upon the nature of the business and the ability of those responsible for strategic decisions to be able to scan the planning horizon.

Strategic information tends to be holistic and summary in nature and would be used by management, when for example, undertaking SWOT analysis.

In IL strategic information might relate to the development of new services such as the provision of a home-based vehicle recovery service or the provision of 24 hours servicing. Other examples would relate to the threats posed by IL's competitors or assessing the potential acquisition of a tyre manufacturer in order to enhance customer value via improved efficiency and lower costs.

Tactical information

This required in order to facilitate management planning and control for shorter time periods than strategic information. Such information relates to the tactics that management adopt in order to achieve a specific course of action. In IL this might involve the consideration of whether to open an additional outlet in another part of the country or whether to open an additional supervisor at each outlet in order to improve the quality of service provision to its customers.

The country managers in IL would require information relating to the level of customer sales, the number of vehicles serviced and the number of complaints received during a week. Operational information might be used within IL in order to determine whether staff are required to work overtime due to an unanticipated increase in demand, or whether operatives require further training due to excessive time being spent on servicing certain types of vehicle.

Operational information

Operational information relates to a very short time scale and is often used to determine immediate actions by those responsible for daily management. The country managers in IL should have daily operations information such workforce attendance, number of services performed, spares inventory levels etc. This is to help stay within the objective of the company. The daily, weekly or monthly information should be updated.

Conclusion

Perhaps the preferred approach is to acknowledge the existence of qualitative benefits and attempt to assess them in a reasonable manner acceptable to all parties including the company's bank. The financial evaluation would then not only incorporate 'hard' facts relating to costs and benefits that are qualitative in nature, but also would include details of qualitative benefits which management consider exist but have not attempted to assess in financial terms. Such benefits might include, for example, the average time saved by the country managers in analyzing information during each operating period.

(b) **Approach One**

The directors of IL may decide to ignore the qualitative benefits that could arise on the basis that there is too much subjectivity involved in their assessment.

The problem that this causes is that the investment will probably look unattractive since all the costs will be included in the valuation where as significant benefits and savings will have been ignored. This approach lacks substance and would not be recommended.

Approach Two

An alternative approach would involve attempting to attribute values to each of the identified benefits that are qualitative in nature. Such an approach will necessitate the use of management estimates in order to derive the cash flows to be incorporated in a cost benefits analysis. The problems inherent in this approach include gaining consensus amongst interested parties regarding the footing of the assumptions from which estimated cash flows have been derived. Furthermore, if the proposed investment does take place then it may well prove impossible to prove that the claimed benefits of the new system have actually been realized.

Approach Three

Alternatively, the management of IL could attempt to express qualitative benefits in specific terms linked to a hierarchy of organizational requirements.

For example, qualitative benefits could be categorized as being

- Essential to the business.
- Very useful attributes.
- Desirable, but not essential.
- Possible, if funding is available.
- Doubtful and difficult to justify.

(c) Benefits

Improved efficiency

One of the main qualitative benefits that may arise from an investment in a new IT system by IL is the improved level of service to its customers in the form of reduced waiting time which may arise as a consequence of better scheduling of appointments and inventory management. This could be accessed via the introduction of a questionnaire requiring customers to rate the service that they have received from their recent visit to an operation within IL according to specific criteria such as adherence to appointed times, time taken to service a vehicle, cleanliness of the vehicle and attitude of staff.

Alternatively a follow-up telephone call from a centralized customer services department may be made by IL personnel in order to gather such information.

Competitive advantage

Another qualitative benefit may arise in the form of competitive advantage.

- Improvement in customer specific information and service levels may give IL a competitive advantage.
- Likewise improved inventory management may enable costs to be reduced thereby enabling a 'win-win' relationship to be enjoyed with customers.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 18 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Formulae, Present Value, Annuity and normal distribution tables are attached at the end of the question paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

The Board of Directors for GG Motors Plc is considering a potential investment in a motor vehicle assembly plant. The investment would involve the construction and operation of the assembly plant. An initial investment payment of K600 million is payable immediately. The plant would be for assembling two brands of luxury cars which is projected to be on demand in Zambia for the next 10 (ten) years and after which a major investment would be required. The residual value of the plant at the end of year 10 is estimated to be K250 million after tax. The selling price and annual demand for each brand of the luxury car is provided below:

Brand Car	Units per year	Price per Unit
D4G	1,000	K450,000
E4G	750	K500,000

It's expected that for four (4) years all units produced for both brands of car would be sold. After four (4) years, it is expected that in order to sale all the units produced, the price will have to reduce for both D4G and E4G by 15% and 10% respectively. Annual operating costs are expected to be 45% of the annual revenue. Working capital required immediately is K200 million and expected to be realised at the end of the project. The project will be financed by 70% equity and 30% debt. The maturity period for debt finance is 10 years, issued at a par value of K1000 per unit and trading at par. Interest is payable annually at the rate of 10% and the debt is redeemable at a premium of 7%.

The average equity beta in the Motor Vehicle Assembly Industry is 1.21 and average gearing of 60% equity and 40% debt by market value. The risk free rate is 6% per year and equity premium of 6.8% per year. The corporate tax rate is 30% per year, payable in the same year.

However, the economic climate over the next few years is thought to be very risky and the volatility attaching to the net present value of the project is 20%. GG Motors Plc is able to delay commencing the project for three (3) years.

Required:

(a) Prepare a report advising whether GG Motors should proceed with the proposed investment or not based on the financial evaluations. All relevant calculations should form part of the report as an appendix. (23 marks)

(b) Estimate the value of the option to delay the start of the project for three years, using the Black Scholes option pricing model. (13 marks)

Professional marks for report appropriate format and coherence. (4 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

For this question, assume the Zambian Kwacha (K) and the South African Rand (ZAR) are freely traded on the futures and other derivatives markets.

ZMS Ltd is a Zambian Company that imports goods from other countries including China and South Africa and sales them to customers in Zambia mainly retail chains stores and supermarkets. The vast majority of ZMS Limited's foreign suppliers insist on invoicing the Company in their own currency and it has proved impossible to insist on paying for imported items in Kwacha.

The board of ZMS has always refused to devote any attention to the currency risks associated with importing as it has always absorbed minor fluctuations by taking a slightly larger or smaller profit on sales. Larger fluctuations have been passed on to customers in the form of increased selling prices. Certain members of the board have always argued that ZMS's competitors are subject to the same currency risks and so the market will always be forced to accept the impact of currency movements, in which case there is very little point in taking active steps to manage currency risks.

ZMS Ltd has imported goods from South Africa and has been invoiced for South African Rand (ZAR) 940,000 payable on 30th June 2020.

The following data is available:

Current ZAR/K 1.5210 - 1.5240

June K Options contracts - Contract size is K25,000

Exercise price	**June Option (premiums in cents/K)**	
	Calls	**Puts**
ZAR 1.50	7.15	3.50
ZAR 1.55	4.10	5.85
ZAR 1.60	1.25	9.20

ZMS Ltd decides that it wishes to hedge using options.

Required:

(a) Evaluate the views of certain Board Members concerning there being no need to manage ZMS Ltd's currency risks. (10 marks)

(b) Show how ZMS Ltd can hedge against foreign exchange rate risk using currency options, clearly identifying the exercise price that the company may trade, and also show the position of the hedge assuming 30th June 2020 spot rate (ZAR/K) is 1.4680 - 1.4725 (10 marks)

[Total: 20 Marks]

QUESTION THREE

Two (2) Directors recently met at a Directors' conference where they were being taught about setting financial objectives and the three (3) key policy decisions listed below amid the COVID-19 global pandemic:

1. Investment decision;
2. Financing decision; and
3. Dividend decision.

One (1) of the Directors works for a large healthcare company listed on the Lusaka Securities Exchange, the other works in the public sector health service where all services are provided free of charge to users at the point of delivery. The public sector health service is financed through an annual cash budget funded entirely by taxes and Government borrowing and has no Treasury Department.

The following extracts are from their conversation after the conference:

Listed Healthcare Company Director

"Life must be so much easier for you. We have to raise finance from various sources to fund any new investment. We also have to ensure that we pay a dividend that keeps our shareholders happy."

Public Sector Health Service Director

"I don't think you would find a cash-constrained life, as we experience it, very easy."

"I would like to be able to raise money on the Securities market to fund our business requirements."

"I would also much prefer to have my own Treasury Department to go to at any time rather than having to wait and see what we have been allocated in our annual budget."

"You see life is not easy"

Required:

(a) Identify in which of the three key policy decisions listed above, the public sector health service would have least involvement, and explain in which of the three key policy decisions listed above , the Treasury Department would be most involved in, and why. (4 marks)

(b) Describe each of the three key policy decisions listed and discuss the importance of each of them to the shareholders in the healthcare company. (8 marks)

(c) Describe the main methods of raising new equity finance on the Securities Market, recommending the most appropriate method for the healthcare company.

(8 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) A major transportation company, Abacus Ltd has surplus cash which it is considering investing in bonds for at least five (5) years. The company has asked you as a Financial Consultant to evaluate and provide advice on which potential investment has a shorter recovery period. Information on two fixed income securities is as follows:

Bond	Redemption	Nominal Value (K)	Redemption value	Coupon Rate	Price (K)
A	redeemable in 5 years	1,000	At par	7	950
B	redeemable in 6 years	1,000	At 5% premium	7.5	1,010

Required:

(i) Determine the Yield To Maturity of each bond using the IRR method.

(4 marks)

(ii) Compute the Macaulay Duration, and advise Abacus Ltd on the best investment option, for it to achieve its investment goal.

(8 marks)

(b) Abacus Ltd is also considering diversifying in a project in Chilanga to start a quarry business. The industry beta is 1.6 with equity to debt ratio of 2:1.

The following information was extracted from its financial statements:

Income statement	
	K'000
Profit before tax	42,000
Taxation (30%)	(12,600)
Profit after tax	**29,400**
Statement of Financial Position	
Net Non-Current Assets	102,000
Working Capital	33,000
	135,000
Financed By	
Share Capital	85,000
Retained earnings (Income	15,000

Surplus)	
	100,000
Long Term Debt	35,000
	135,000

The Long Term Debt of the company is considered risk free with a gross redemption yield of 10%, and the beta coefficient of the company's equity is 1.2, while the average return on the stock market is 15%.

Required:

(i) Compute the Weighted Average Cost of Capital (WACC), to appraise the quarry business, if Abacus Limited will maintain its capital structure after the implementation of the quarry project. (5 marks)

(ii) Determine the WACC to apply if the company will change its capital structure to 20% debt and 80% equity. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

DUMBO HYDRO Plc is a Zambian private sector company that produces hydroelectricity that it sells to the national power company for distribution to the mining sector in Zambia. The company is listed on the Lusaka Securities Exchange and it has been successful over the years.

Following the Zambian Government's pronouncement to allow private sector companies to distribute power directly to their customers, DUMBO HYDRO Plc wishes to construct a new hydroelectricity power plant over a period of three (3) years. The project requires US$250 million which may be raised by way of a Eurobond at an annual interest rate of 12% and redeemable at the end of the fifteen (15) year. The company's Chief Finance Officer attended a conference in the mid–east at which the Islamic Banks discussed their availability to provide Islamic Finance to African countries. The Islamic Banks discussed the use of Sukuk and compared it to the conventional Bonds. Based on this, the Chief Finance Officer has now recommended to the board that asset backed Sukuk Finance should be raised instead of issuing a Euro bond.

The companies Generation Director is of the view that a joint venture may be formed with another company, LWANGWA HYDRO Plc to enable a larger hydroelectricity power plant to be built at a cost of US$500 million. This would produce 500 megawatts of power instead of 200 megawatts of power which would be produced if DUMBO HYDRO Plc built the hydroelectricity power plant individually. Under the joint venture, both DUMBO HYDRO Plc and LWANGWA HYDRO Plc would provide funds in equal proportions and would also appoint an equal number of Directors on the Board of Directors. DUMBO HYDRO Plc will contribute the amount that it will raise by way of Sukuk. Once the plant is completed, the two companies will have an equal share in the profits.

LWANGWA HYDRO Plc has already approached FADAR Bank, an Islamic Bank for the finance that it would have to contribute to the construction of the Hydroelectricity plant. FADAR Bank may provide the finance under either a Musharaka contract or a Mudaraba contract. These other forms of raising Islamic finance were not discussed at the conference that DUMBO HYDRO Plc's Chief Finance Officer attended.

FADAR Bank would provide Islamic Finance based on a Musharaka contract because finance is required over a long period of time and there are uncertainties surrounding the success of the plant as a new Government in Zambia may reverse the decision. Under this arrangement, FADAR Bank will have to appoint some representatives to the Board of Directors. Had the project been a small short term project, FADAR Bank would have provided the finance under a Mudaraba contract where LWANGWA HYDRO Plc would manage the project without any representation from FADAR Bank.

Required:

(a) Discuss four (4) reasons DUMBO HYDRO Plc may prefer the use of asset backed Sukuk to conversional bonds when financing the investment in the hydroelectricity plant. (4 marks)

(b) Discuss four (4) reasons FADAR Bank may consider providing the finance that LWANGWA HYDRO Pc requires based on a Musharaka contract instead of a Mudaraba contract, and the key concerns DUMBO HYDRO Plc may raise because of the arrangement between LWANGWA HYDRO Plc and FADAR Bank. (10 marks)

(c) Discuss five (5) key disadvantages of Islamic Finance as a source of finance for public sector and private sector companies. (6 marks)

[Total: 20 Marks]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i (E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 \times \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 \times \frac{(1 + i_c)}{(1 + i_b)}$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

To: GG Motors Board
From: Financial Consultant
Date: xxxxxx
<u>Subject: Evaluation of Proposed Investment</u>

This report provides the financial evaluation results of the proposed investment. The financial evaluation show a positive net present value (NPV) of K894.86 million. Therefore, the investment is financially viable because it would increase the shareholders wealth by K894.86million.

Further, the financial evaluation show that if the project is delayed for three (3) years, the value of the call option is K894.94 million and therefore the full value of the project at the current time is K1,789.8million (K894.86m + K894.94m).

SIGN

FINANCIAL CONSULTANT

Appendix: Financial Evaluation (K)						
Period	2 to 5	6 to 11				
Sales	825,000,000	720,000,000				
Operating costs	(371,250,000)	(324,000,000)				
Taxable Cash flows	453,750,000	396,000,000				
Tax@30%	(136,125,000)	(118,800,000)				
Net Cash flows	317,625,000	277,200,000				
Discount@12%	3.218	1.827				
Present Values	**1,022,117,250**	**506,444,400**				

Total Present Values	1,528,561,650					
First Initial payment	(600,000,000)					
Initial working capital(200m x 0.893)	(178,600,000)					
Residual Value (K250m x 0.322)	80,500,000					
Working capital(K200m x 0.322)	64,400,000					
NPV	**894,861,650**					
Sale	2 to 5	6 to 11				
D4G Units	1,000	1,000				
Selling Price	450,000	382,500				
Sales	450,000,000	382,500,000				
E4G						
Units	750	750				
Selling Price	500,000	450,000				
Sales	375,000,000	337,500,000				
Total Sales	**825,000,000**	**720,000,000**				
Cost of Capital						
Ba = Be x Ve/Ve+Vd(1-t)						
Ba = 1.21x 0.6/0.6+0.4(1-0.3) =0.825						
0.825=Bex0.7/0.7+0.3(1-0.3)						
Be=1.07						
Cost of equity = 6% + 1.07(6.8%) =13.28%						

Cost of debt						
Interest cost after tax= K1000 x 10% (1-0.3) = 70						
Period		Cash flow	Dis@10 %	PV	Dis@5 %	PV
0	MV	(1,000)	1.000	(1,000)	1.000	(1,000)
1 to 10	Interest	70	6.145	430	7.722	541
10	Redeem	1,070	0.386	413	0.614	657
				(157)		198
Cost of debt = 5% + 198/(198+157) (10%-5%) = 7.79%						
Cost of Capital = (13.28% x 0.7) + (7.79%*0.3) =11.63% round off to 12%						
Annuities						
2 to 6 @12% = 4.111-0.893= 3.218		3.218				
6 to 11@ 12% = 5.938-4.111= 1.827		1.827				

b)

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

P_a = Current PV of project = 1,494,861,650 or 1,495million

P_e = Capital Expenditure = 600,000,000 or 600million

t= 3 years

r= 6%

s= 20%

$$C = \frac{\ln(1495/600) + (0.06 + 0.5(0.2)^2)3}{0.2(3)^{1/2}}$$

$$d_1 = \frac{0.913 + 0.24}{0.346} = 3.33$$

$d_2 = 3.33 - 0.2(3)^{1/2} = 2.98$

$N(d_1) = 0.4996+0.5 = 0.9996$

$N(d_2) = 0.4986 + 0.5 = 0.9986$

$C = 1495(0.9996) – 600(0.9986)\, e^{-0.06 \times 3}$

= **K894.94million**

SOLUTION TWO

Part (a)

Arguments for some of the Board Members concerns ZMS Ltd's exposure to fluctuations in the cost of materials or items because the currency movements is reduced by the fact that many of ZMS Ltd's purchases will be for generic items that can be sourced from many different countries. That flexibility of supply means that will be able to switch to Zambian suppliers if the cost of importing from China or South Africa increases because of a currency movement.
Where item prices are driven by currency changes then ZMS Ltd's competitors will be subject to many of the same pressures. For example, seasonal factors will affect the source of certain items in the course of the year.

Arguments against some of the Board Members' concerns Futures can be used to fix prices in advance, though, and ZMS may be taking the risk that competitors have fixed their input prices using derivatives. In that case there will be times when ZMS Ltd is uncompetitive.

The majority of ZMS Ltd's customers maybe are major corporate or supermarket chains. These companies are notorious for pressing suppliers to provide keen prices and they may refuse to accept cycles in ZMS Ltd's costs. Supermarkets may be prepared to bully ZMS Ltd into accepting little or no profit in the short term when prices are high, in the knowledge that the markets will probably reverse in the future.

Conclusion
Currency risks do have the potential to be serious enough to threaten the continuation of the company. Having said that the approach recommended by ZMS Ltd's Board involves relatively little in the way of transaction or management costs. If it is a major importer from around the world then a comprehensive management of currency risks would require a sophisticated treasury system that would cost a great deal to staff. Economic risk is difficult to manage in the long term unless the company can create a natural hedge so that its cash flows tend to even out regardless of the value of the company's home currency. Active management using financial instruments will really only delay the effects of price rises and may prevent ZMS Ltd from taking advantage of price reductions.

Part (b)

ZMS Ltd's due to pay ZAR 940,000, therefore, the relevant option would be the June Kwacha Put options. The hedge set up has been prepared on the following assumptions;

1. The premium is payable immediately using the current spot rate where appropriate
2. Any under hedged or over hedged amount will be traded (receivable or payable) on the open market at the time of closing the deal on 30th June

	@1.50	@1.55	@1.60
ZAR 940,000 in Kwacha	K626,666	K606,452	K587,500
No. of contract required	25.1	24.2	23.5
Available contracts – no partial	25	24	24
Amount covered (contracts x size)	K625,000	K600,000	K600,000
Amount covered in Rands (ZAR)	R937,500	R930,000	R960,000
Under/(over) hedged amount (ZAR)	R2,500	K10,000	(R20,000)
Premium cost at each price (ZAR)	R21,875	R35,100	R55,200
Premium cost in K@spot rate (1.5210)	K14,382	K23,077	K36,292
Under/(over) hedged amount in K	K1,703	K6,812	(K13,624)
Outcome at each exercise price;			
Amount hedged	K625,000	K600,000	K600,000
Under/(over) hedged amount in K	K1,703	K6,812	(K13,624)
Premium cost	K14,382	K23,077	K36,292
Net cost (Total amount on options)	**K641,085**	**K629,889**	**K622,668**

The preferable exercise prices would be ZAR 1.6 as this results in the lowest amount required to buy the R940,000 required to pay the supplier.

If the spot market on 30th June was ZAR 1.4680, the outcome on the market would be K640,327 before the premium cost. Therefore, it is better to exercise the option and sell the kwacha at ZAR 1.6 to get the required Rands.

SOLUTION THREE

(a) **Key policy decisions**

The public sector health service will have little involvement in a dividend decision.

This determines how much of the surplus cash is returned to shareholders. As the public sector health service does not have shareholders, this is not relevant; surplus cash is used to provide additional services.

A Treasury Department in a private sector company is likely to have most involvement in the financing decision. Although the Department may be involved in the dividend decision and, to some extent, assessing investment opportunities, this is to the extent that they impinge on their primary role. This is to ensure that funds are available when needed and that surplus funds are put to good use.

(b) **Importance to shareholders**

The investment decision considers the benefits of investing cash, either in projects or in working capital, or even in high yield deposit accounts. This is important to shareholders, as it will determine the cash flows which are generated by the company and will ultimately affect the dividends paid and the share price. Assessing projects in the healthcare industry can be difficult as large investments are often required which promise the possibility of returns over many years, making the cash flows hard to estimate. Shareholders will also be concerned to compare the risk as well as the return between profits, as a higher risk investment should carry a higher return as compensation.

The financing decision considers the source of the finance required for the business operations. This will be a mixture of equity and long-term debt finance; companies need to balance the benefits to their shareholders – debt is a cheaper form of finance as the returns required are lower (due to lower risk) and the debt interest is tax allowable, but excessive gearing can increase the risk to the company, and hence the shareholders, dramatically.

The dividend decision looks at how much of the surplus cash generated should be paid out to the shareholders, and how much retained for future investments.

Companies often make two payments a year, and shareholders generally prefer a predictable, steadily rising, dividend rather than one, which follows the fluctuations of the profits. A dividend policy is often declared for a number of years to give this predictability. A company which then delivers what it promised will generally be regarded as less risky, and hence more valuable, by shareholders.

(c) **Raising equity finance**

Equity can be raised via a placing, an offer for sale or a public offer.

A placing is when shares are offered to a small number of investors, usually institutions.

The costs are likely to be lower but will concentrate ownership.

An offer for sale allots shares to an issuing house which then offers them to the public.

Issuing costs are higher, but it will create a wider share base.

In a public offer, the company itself offers them to the public. This will involve high issue costs to cover publicity and underwriting.

The healthcare company is already listed on the Securities Exchange; it is likely that a rights issue, in which existing shareholders are given the right to subscribe for more shares, will be the method used. The shareholders buy them at a price below the market price, but can sell these rights if they cannot afford to subscribe. Theoretically, although the proportional shareholdings may change, an investor should be no worse off or better off whether they take up or sell the rights.

SOLUTION FOUR

(a)

Yield to Maturity for Bond A

Using IRR

Year		NCF	DF (10%)	PV	DF (8%)	PV
0	Purchase	(950)	1	(950)	1	(950)
1 - 5	Interest	70	3.791	265.37	3.993	279.51
5	Redemption	1000	0.621	621	0.681	681
				(63.63)		**10.51**

$$\textbf{YTM=} \quad \frac{A+[NPVa]}{[NPVa - NPVb]} \quad X\,(B\text{-}\,A)$$

$$\textbf{YTM=} \quad \frac{8+[10.51]}{[10.51\text{-}(63.63)]} \quad X\,(10\ \text{-}8)$$

=8+ (10/74.14) x 2

=8 + 0.27 =8.27= <u>8.3%</u>

Duration Computation

Year	NCF	DF (8.3%)	PV	Year	PV * Year
1	70	0.923	64.61	1	64.61
2	70	0.853	59.71	2	119.42
3	70	0.787	55.09	3	165.27
4	70	0.727	50.89	4	203.56
5	1070	0.671	717.97	5	3,589.85
			948.27		**4,142.71**

Duration =	<u>PV * Year</u>	= <u>4141.71</u>	= 4.4 years
	PV	948.27	

Alternatively

Year	CF	DF	PV	Weight	Year * Weight

		(8.3%)			
1	70	0.923	64.61	0.068	0.068
2	70	0.853	59.71	0.063	0.126
3	70	0.787	55.09	0.058	0.174
4	70	0.727	50.89	0.054	0.216
5	1070	0.671	717.97	0.757	3.785
			948.27		**4.4 years**

Yield to Maturity for Bond B

Using IRR

Year		NCF	DF (9%)	PV	DF (7%)	PV
0	Purchase	(1010)	1	(1010)	1	(1010)
1 - 6	Interest	75	4.486	336.45	4.767	357.53
6	Redemption	1050	0.596	625.8	0.666	699.3
				(47.75)		46.83

$$\textbf{YTM=} \frac{A+[NPVa]}{[NPVa - NPVb]} X(B-A)$$

$$\textbf{YTM=} \frac{7+[46.8]}{[46.83 - (47.75)]} X(9-7)$$

=7+ [(46.83/94.58) x 2] = 7.99%

Duration Computation

Year	CF	DF (7.99%)	PV	Year	PV * Year
1	75	0.926	69.45	1	69.45
2	75	0.857	64.28	2	128.7
3	75	0.794	59.55	3	178.65
4	75	0.735	55.1	4	220.8
5	75	0.681	51.08	5	255.4
6	1,125	0.631	709.88	6	4259.28
			1,009.34		**5,111.78**

Duration = PV x year = 5,112.78 = 5.06 years approx.

PV	1,009341

Financial Advise

The company should invest in Bond A, since it has a shorter duration of 4.4 years, compared to 5.06 years of Bond B, implying that it would take longer to recover the principal and interest. Bond B is therefore more risky.

(b)

i) The company is diversifying its business and this means the financial risk is likely to change. Adjustments are necessary to account for different degrees of financial risk, which requires ungearing and regearing the beta.

The beta of the the industry is first ungeared by removing the effects of its financial risk, computed as:

Step 1 - Ungear

*B*a = [*B*e x (Ve)]/[Ve + Vd (1-t)]

= [1.6 x (200)]/[2+1(1-0.3)]

= 3.2/2.7 = **1.19**

The ungeared beta is called "asset beta" because it reflects the business risk of the assets in that industry**.**

Step 2, Re-gear

Once the ungeared beta`is calculated, it is adjusted for the capital structure of the new project or comapny. That is the asset beta is re -geared to arrive at an estimate of the equity beta for the project or company of interest.

*B*e is the unknown variable, with *Ba*=1.19:

*B*a = [*B*e x (Ve)]/[Ve+Vd(1-t)]

1.19 = [*B*e x 100,000]/[(100,000+35,000(1-0.30]

1.19 = ^{Be} x 0.803

^{Be} =1.48

Step 3 – Estimate Cost of Equity

Having quantified a project-specific geared beta, CAPM is used to estimate the cost of equity:

Ke=Rf+^{B} (Rm-Rf)

=10+1.48(15-10)

=10+7.4

=17.4%

We need to compute the cost of debt before we can calculate the WACC.

Kd=*i* (1-t)

=10(1-0.3)

=7%

WACC = [KeMVe +(KdMvd)]/[MVe+MVd]x100

= [(0.174 X100,000)+(0.07x35,000)]/[(100,000+35,000)]X100

= 19,850/135,000 x 100

= 14.7%

(ii) Where capital structure of the company in focus of our analysis is 80% equity and 20% debt.

Ba =1.19 (this will not change)

1.19 = *Be X 80/80+20(1-0.03)*

1.19= *Be* X 0.851

Be =1.4

Ke = 10 + 1.4(15-10)

=10+1.4(5)

=17%

WACC = [KeMVe +(KdMvd)]/[MVe+MVd]x100

= [(0.17 X80)+(0.07x20)]/[(80+20)]X100

= [13.6+1.4]/100 x 100

= 15%

SOLUTION FIVE

(This solution is only indicative. Credit should be given for alternative valid discussions)

(a) Sukuk refers to Islamic bonds. Sukuk finance is defined by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) as 'certificates of equal value representing undivided shares in the ownership of tangible assets, usufructs and services or (in the ownership of) the assets of particular projects or special investment activity.'

This finance may be provided to finance investment in long term projects covering between three (3) and five (5) years undertaken by public sector and private sector entities. No interest is payable on Sukuk because interest is prohibited in Islamic Finance. Instead, the providers of Sukuk share in the ownership of the underlying asset and profits from the project in which the funds are invested and therefore known as asset backed Sukuk. This gives rise to asset backed Sukuk finance bearing characteristics of both conventional debt and conventional equity finance.

DUMBO HYDRO Plc may prefer the use of asset backed Sukuk to the conventional Eurobonds because asset backed Sukuk would not require interest to be paid to financiers while the hydro-electricity power plant is being constructed. Asset backed Sukuk financiers would only start sharing in the profits once the electricity starts being distributed to the mining sector. With conventional Eurobonds, DUMBO HYDRO Plc would be under obligation to pay interest even during the construction period of the hydro-electricity plant when no income would be earned at all since no electricity would be produced for distribution.

DUMBO HYDRO Plc would share any risks of the project with the asset backed Sukuk financiers. If there are no profits after the project has been completed, DUMBO HYDRO Plc would not be under obligation to provide any returns to the asset backed Sukuk financiers. With the conventional Eurobonds, DUMBO HYDRO Plc would bear all the risks and as a result, it would be required to service the Eurobond with interest payments as agreed even when the project was not profitable.

(b) Both a Mudaraba contract and a Musharaka contract are Islamic finance contracts with characteristics similar to conventional equity finance.

A Mudaraba contract would require any profits which LWANGWA HYDRO Plc makes from the joint venture to be shared according to a pre-agreed arrangement when the contract is created between LWANGWA HYDRO Plc and FADAR Bank. However, losses would be borne solely by FADAR Bank as the provider of the finance. Provisions may be incorporated into the contract to enable any losses be carried forward and written off against future profits from the joint venture. FADAR Bank would not be involved in the executive decision-making process. In effect, FADAR Bank's role in the relationship would be similar to an equity holder, holding a small number of shares in a large entity.

A Musharaka contract would also require the profits which LWANGWA HYDRO Plc makes from the joint venture to be shared according to a pre-agreed arrangement just like under the Mudaraba contract. However, any losses would normally be shared according to the capital or other assets and services contributed by LWANGWA HYDRO Plc and FADAR bank. Since LWANGWA HYDRO Plc would not contribute any capital, a value could be put to the contribution-in-kind made by LWANGWA HYDRO Plc and any losses would be shared by FADAR Bank and LWANGWA HYDRO Plc accordingly. Within a Musharaka contract, FADAR Bank can also take the role of an active partner and participate in the executive decision-making process. In effect, the role adopted by FADAR Bank would be similar to that of a venture capitalist.

With the Mudaraba contract, LWANGWA HYDRO Plc would essentially be an agent to FADAR Bank, and many of the agency issues facing companies would apply to the arrangement, where LWANGWA HYDRO Plc can maximise its own benefit at the expense of FADAR Bank. LWANGWA HYDRO Plc may also have a propensity to undertake excessive risk because it is essentially holding a long call option with an unlimited upside and a limited downside.

FADAR Bank may prefer the Musharaka contract in this case, because it may be of the opinion that it needs to be involved with the project and monitor performance closely due to the inherent risk and uncertainty of the venture, and also to ensure that the revenues, expenditure and time schedules are maintained within initially agreed parameters. In this way, it may be able to monitor and control agency related issues more effectively and control LWANGWA HYDRO Plc’s risky actions and decisions. Being closely involved with the venture would change both LWANGWA HYDRO Plc’s and FADAR Bank’s roles and make them more like stakeholders rather than principals and agents, with a more equitable distribution of power between the two parties.

DUMBO HYDRO Plc’s concerns would mainly revolve around whether it can work with FADAR Bank and the extra time and cost which would need to be incurred before the construction works would commence. If LWANGWA HYDRO Plc had not approached FADAR Bank for funding, the relationship between DUMBO HYDRO Plc and LWANGWA HYDRO Plc would be less complex within the joint venture. With asset backed Sukuk that DUMBO HYDRO Plc will raise, the Sukuk financiers would not be involved in the manner that is similar to the participation of FADAR Bank. Although difficulties may arise about percentage ownership and profit sharing, these may be resolved through negotiation and having tight specific contracts. The day-to-day running, management and decision-making process could be resolved through negotiation and consensus. Therefore having a third party involved in all aspects of the joint venture complicates matters.

DUMBO HYDRO Plc may feel that it was not properly consulted about the arrangements between LWANGWA HYDRO Plc and FADAR Bank, and LWANGWA HYDRO Plc would need to discuss the involvement of FADAR Bank with DUMBO HYDRO Plc and get its agreement prior to formalising any arrangements. This is to ensure a high level of trust continues to exist between the parties. Unresolved issues may lead to the failure of the project being considered.

DUMBO HYDRO Plc may want clear agreements on ownership and profit-sharing. They would want to ensure that the contract clearly distinguishes them as not being part of the Musharaka arrangement which would exist between LWANGWA HYDRO Plc and FADAR Bank. As a result, negotiation and construction of the contracts may need more time and may become more expensive and complex.

DUMBO HYDRO Plc may have felt that it could work with LWANGWA HYDRO Plc on a day-to-day basis and could resolve tough decisions in a reasonable manner. It may not feel the same about FADAR Bank initially. Clear parameters would need to be set up on how executive decision making will be conducted by the three parties, DUMBO HYDRO Plc, LWANGWA HYDRO Plc and FADAR Bank.

The above issues would indicate that the relationship between the three parties is closer to that of stakeholders, with different levels of power and influence, at different times, as opposed to a mere principal–agent relationship. This would create an environment which would need ongoing negotiation and a need for consensus, which may make the joint venture hard work. Additionally, it would possibly be more difficult and time consuming to accomplish the aims of the joint venture.

(c) The use of Islamic finance does not remove all commercial risk. Indeed, there may even be additional risk from the use of Islamic finance. The following are the disadvantages that arise from the use of Islamic finance.

(1) There is no international consensus on Sharia interpretations, particularly with innovative financial products. Certain financial products may be acceptable in some markets but not in others. For example, some Murabaha contracts have been criticised because their products have been based on prevailing interest rates rather than economic or profit conditions.

(2) There is no standard Sharia model for the Islamic finance market, meaning that documentation is often tailor-made for the transaction, leading to higher transaction costs than for the conventional finance alternative.

(3) Due to the need to comply with normal financial laws and Sharia restrictions, Islamic finance institutions are subject to additional compliance work which can also increase the costs of developing new products and transaction costs. Information asymmetry between the borrower and the institution will also mean that due diligence work is required.

(4) Islamic banks cannot minimise their risks in the same way as conventional banks, as hedging is prohibited.

(5) Some Islamic products may not be compatible with international financial regulation. For example, a diminishing Musharaka contract may not be an acceptable mortgage instrument in law.

(6) Trading in Sukuk products has been limited. Since the financial crisis, issuance of new Sukuk products has decreased.

(7) Corporations may not be able to demonstrate that contracts are effectively debt and they therefore may not attract a tax shield, meaning that their cost of capital will increase.

(8) Because Islamic financial institutions take an active role on some contracts, it may become more complicated for companies to balance the interests of the financial institution with those of other stakeholders.

(9) The longer focus of arrangements may mean Islamic institutions are slower to react to market changes and may lack short-term flexibility. Approval of new products can take time.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 18 MARCH 2022

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 Office of the Auditor-General (OAG) in the Republic of Chiparamba is aware of widespread concerns among the Government and the General Public about irregularities regarding the management of the Constituency Development Funds (CDF). The Constituency Development Funds (ZAF) is disbursed from the Treasury by the Secretary to the Treasury and administered by the Ministry of Local Government and Housing through the Local Government Act.

The Auditor General (AG) is the head of the Office of the Auditor General (OAG). You are an Audit Manager in the Office of the Auditor General (OAG) and you are responsible for all assignments involving Constituency Development Fund (ZAF). You have received the following email from the AG:

To: Audit Manager

From: Auditor-General (AG)

Regarding: Ngosa Municipal Council – CDF audits

Hello

Yesterday, I had a meeting with the Controlling Officer and the members of the Audit Committee regarding CDF audits. I am now confident you can finalize the plans for the performance and forensic audits since you have been the Audit Manager for Ngosa Municipal Council for over nine (9) years. The IT audit will be conducted later together with the financial and compliance audits.

I have attached the relevant details and I expect the audit field work to commence as soon as possible. I have also included some of the audit procedures suggested by the Audit Senior regarding the performance audit which I would like you to evaluate.

The audit reports will assist Parliament in its oversight responsibilities over application of CDF resources and execution of programmes by the Executive.

Regards

Email attachment

Ngosa Municipal Council was established in 2003. It has a Constituency Development Fund Committee tasked with the responsibility of ensuring the Constituency Development Fund Guidelines and Procurement Procedures are followed. The Area Member of Parliament is a member of the Constituency Development Fund Committee and he normally dominates decision making. During the year ended 31 March 2020, he verbally instructed a Contractor to drill ten (10) boreholes at a total cost of K600,000. The council only became aware of the said verbal contract when the contractor approached the Council for 80% advance payment. The Council initially refused to pay the Contractor on account that the Constituency

Development Fund Guidelines and Procurement Procedures were not followed. However, the Contractor was later paid due to pressure from the Area Member of Parliament and the Community Members who wanted the boreholes drilled as a matter of urgency.

The boreholes were sunk but not equipped since the Contractor wanted an additional payment of K400,000 in order to import the required equipment. The Council made the additional payment but the Contractor only equipped six (6) boreholes and demobilized. According to one of the Councilors, the Council Engineers have never inspected the boreholes and only three (3) boreholes are functional.

The Audit Committee Members noticed significant increases in expenditure in CDF related projects, especially the payroll costs and they suspect fraudulent payments (billing schemes). There is a high possibility of payments to non-existent employees and payments to suppliers for goods or services that have not been supplied. This is being discussed on the social media given that the employee in charge of the payroll is the son to the Minister of Local Government. The husband to the Audit Senior supplies stationery to Ngosa Municipal Council and the Human Resources Director at OAG is currently negotiating a business partnership with him.

It has been agreed that a forensic audit should be conducted and the following are some of the audit procedures suggested by the Audit Senior to confirm the existence of the alleged fraudulent payments to ghost workers and fictitious suppliers:

1. Ghost workers
   (i) Recalculate benefits and deductions for a sample of employees
   (ii) Select a sample of employees from the payroll and carry out physical spot checks

2. Fictitious suppliers
   (i) Perform a confirmation of accounts payable for a sample of suppliers
   (ii) Vouch a sample of invoices to supporting payment vouchers

The Councilors have promised the forensic audit team members residential plots if the forensic audit is completed within two (2) weeks.

Required:

(a) Explain the following types of audits which are carried out in the public sector:

(i) Performance audit. (2 marks)
(ii) Forensic audit. (3 marks)
(iii) IT audit. (2 marks)

(b) Discuss the *problem orientated* approach to performance audit and explain its relevance to the performance audit in Ngosa Municipal Council. (6 marks)

(c) Recommend six (6) audit procedures which should be performed in a performance audit regarding the CDF in Ngosa Municipal Council. (6 marks)

(d) Identify and explain six (6) ethical threats in the forensic audit regarding the alleged fraudulent payments in Ngosa Municipal Council and suggest suitable safeguards.

(15 marks)

(e) Evaluate each audit procedure recommended by the Audit Senior. (6 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

(a) Following an advertisement by the Office of the Auditor General (OAG), you applied for a job and were called to attend interviews. One of the panelists asked for the following:

(i) An explanation of why the Government continues to fund the Office of the Auditor General (OAG) when there are internal auditors in public institutions. (2 marks)

(ii) An explanation of the relationship between Parliament, the Office of the Auditor General (OAG) and the executive. (6 marks)

Required:

Respond to the questions by the panelist.

(b) You are part of a three (3) man team sent to Motswana by the International Organization for Supreme Audit Institution (INTOSAI) for a peer review of the set up and operations of the Supreme Audit Institution (SAI) of that country.

The team travelled to Motswana on a fact finding missions to establish the operations of the Supreme Audit Institution (SAI) and established the following.

The Supreme Audit Institution (SAI) is a Department under the Office of the President. The Head of the Supreme Audit Institution is appointed by the President on recommendation of a Committee of Cabinet. The Head of the Supreme Audit Institution (SAI) is employed on a four year renewable contract. At the end of the four (4) year period, the Committee of Cabinet evaluates the performance during the four (4) year period just ended and makes recommendations renewal of the contract.

During the past three (3) years, the Government, with the support of donors, introduced Internal Audit Departments in one third of the Government Ministries. The Committee of Cabinet that oversees the operations of the Supreme Audit Institution (SAI) recommended to the Supreme Audit Institution (SAI) that priority of audits should be on those institutions that do not have internal audit departments. Further, it is a requirement that the Supreme Audit Institution (SAI) shall submit a program of its planned audits each quarter for consideration of funding by the Ministry of Finance.

A review of the staffing levels in the Supreme Audit Institution (SAI) indicated that most of the staff in the lower levels are not sufficiently trained and do not have the necessary skills and competences to carry out public sector audits. A majority of these were transferred from other Ministries under a policy of rotating staff in the finance Departments as a control measure.

In the last three (3) years, only one audit report was published to the public. The reports for the other two (2) years were not published because the contents of the reports bordered on state security arising from misapplication of funds in the security services. The argument for not publishing these reports is that since Members of Parliament who represent the citizens are privy to the reports there is transparency.

Required:

Evaluate the operations of the Motswana Supreme Audit Institution (SAI) against the concepts of the Lima Declaration. (12 marks)

[Total: 20 Marks]

QUESTION THREE

Impala General Hospital is a public hospital which is wholly owned by the Government. In the last two (2) years, the health care standards have been deteriorating. The Government is concerned because the conditions of service for all medical personnel were improved three (3) years ago and therefore expected a corresponding improvement in the standard of healthcare.

You are an Audit Manager in the Office of the Auditor General (OAG) and you are currently planning a performance audit regarding the activities of Impala General Hospital. You have been involved in the various audit assignments for Impala General Hospital for several years.

At an initial planning meeting with the Director-General (DG) and the Principal Accountant (PA), a number of issues were highlighted, including the following:

1. Government updated policy states that every public hospital must be adequately staffed in order to provide the required standard of health care which must be in line with the World Health Organization's (WHO's) guidelines. At the moment, Impala General Hospital is failing to meet the WHO guidelines.
2. The World Health Organisation has launched a special fund for public hospitals for the procurement of essential medical equipment and drugs. The findings of the performance audit will be used in determining the level of funding which will be accessed by each hospital. Value for money is non-negotiable for World Health Organisation funding.
3. The Director General invited the Auditor General to join him at a meeting to be held with World Health Organisation (WHO) officials. According to the Director General, this is normal practice in the public sector and could also provide an excellent opportunity for the Auditor General (AG) to negotiate a lucrative job for her husband who is one of the Junior Medical Doctors at Impala General Hospital.

4. The Minister of Health, who has a strong background in public health, commented that following a number of successful years, Impala General Hospital embarked on a programme of expansion by opening new specialized clinics without requesting for additional medical staff. It is possible this could have negatively impacted on the standard of healthcare. The Director General (DG) is agreeable but the other Senior Managers do not agree with the Minister of Health's comments. They think that a cautious approach should be taken so that the problem is addressed professionally.

The Director General (DG), verbally instructed the Engagement Audit Director for the performance audit for Impala General Hospital to ensure that sufficient appropriate evidence is collected in support of the Minister of Health's comments, failure to which he will request for a different team in future audits.

The World Health Organisation (WHO) emphasized that the performance audit report should be comprehensive, convincing, timely, reader-friendly and balanced. The Audit Supervisor, who is normally used on financial statement audits has asked you to advise him on the main features of a balanced performance audit report.

Required:

(a) (i) Explain what is meant by *"cause"* and *"effect"* in performance audit. (2 marks)

(ii) Discuss the importance of understanding the nature of the relationship between "cause" and "effect" in the performance audit of Impala General Hospital.

(7 marks)

(b) Describe four (4) ethical threats in the performance audit of Impala General Hospital. (6 marks)

(c) In relation to performance audit reports, advise the Audit Supervisor on the main features of a *balanced* audit report. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The Office of the Auditor General (OAG) is appropriated public funds for it to use in carrying out of audits of public institutions according to its mandate. At strategic level, the Supreme Audit Institution (SAI) plans for the audits that will be carried out in the long term of between three to five years. On an annual basis, subjects of audits are identified based on risk assessments done. Based on the planned audits, budgets are prepared which form the basis of the request for funding for the year.

Because the Supreme Audit Institution (SAI) is a recipient of public funds, it is required that it is transparent and accountable on how it uses the public funds.

You are an employee of the Supreme Audit Institution (SAI) of the Republic of South Africa. As part of the bilateral agreement with regards to the operations of the Supreme Audit Institutions (SAIs) of the two countries you have been assigned to carry out a peer review of the operations of the Office of the Auditor General (OAG) in Zambia.

You are planning to carry out procedures to obtain evidence on accountability of the Office of the Auditor General (OAG) with regards to how public funds have been used by the office. In line with the provisions of ISSAI 20 *Principles of Transparency and Accountability* you wish to establish whether the funds have been spent economically, efficiently and effectively.

Required:

Discuss the matters you will consider in evaluating how the principles of economy, efficiency and effectiveness are applied by the Office of the Auditor General (OAG) in Zambia. (9 marks)

(b) You are reviewing the working papers of the audit of the financial statements of two (2) public sector companies under the Industrial Development Corporation (IDC).

The following information relates to the findings by the audit team:

Client one:
The audit team has a matter of concern in relation to the reliability of the trade receivables at the period end. In the view of the audit team, the amount provided for is insufficient because 60% of the receivables are over 120 days. The team carried out a circularization (confirmation) of a sample of the receivables and of those who responded the majority did not agree with the balances being confirmed. A sizeable number of the receivables simply did not respond to the confirmation letters.

The amount involved is considered material to the financial statements of this client. The matter of concern will adversely impact on the decisions made by users of the financial statements.

Client two:
The audit team of this client could not obtain evidence on the valuation inventory at the period end. All the inventory records were lost through a fire that occurred after finalization of the inventory valuation but before the audit team could perform any audit procedures.

The audit team failed to confirm the inventory quantities at the period end. During the inventory count for the previous year, a lot of differences between the physical inventory and the inventor records were observed resulting in the write off of a large amount of inventory.

Inventory is a material figure in the financial statements of this client and this matter will impact adversely the decisions of the users of the financial statements.

The Principal Auditor on the audit of these two (2) clients has requested you to suggest suitable opinions for the two (2) audit clients. He has requested you to make an appointment with the Management of the two (2) entities for you to go and explain the suggested forms of opinions before finalizing and issuing the audit reports.

Required:

(i) Evaluate and suggest suitable forms of opinion for each of the two (2) public sector entities. (6 marks)

(ii) Explain the impact on the auditor's report of the opinion suggested in (i) above. (3 marks)

(iii) Explain the need to communicate with those with governance, the circumstances leading to a modification of the opinion. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

You are employed at the Supreme Audit Institution (SAI) as an Audit Manager, in a Country called Bangweulu. The SAI is not a member of the International Organisation of Supreme Audit Institutions (INTOSAI), the country's Minister of Finance thinks membership does not add any value and is a waste of resources. The SAI provides independent external audits in the public sector.

The SAI is considered to be a sensitive institution and is therefore not subject to any form of external review. The SAI performs its duties under a legal framework that only covers conditions regarding the appointment and dismissal of the Auditor General (AG). The Auditor General (AG) is the head of the SAI and is not subject to control or direction by any other person. He is recommended by the accountancy profession and is formally appointed by the Members of Parliament through at least a 75% majority vote.

To ensure that the SAI is effective, its mandate, responsibilities, mission and strategy are only known by the Republican President and his Cabinet Ministers. This uncertainty has made the SAI one of the most feared public institutions in that Country.

You are responsible for the following two (2) assignments:

1. **Audit of the financial statements of Racecourse General Hospital for the year ended 31 December 2019:**

   The draft financial statements for Racecourse General Hospital for the year ended 31 December 2019 recognise a surplus of K2.05 million (2018 = K2.12 million) and total assets of K78 million (2018 =K63 million).

The following issues arising during the final audit have been noted on a schedule of points for your attention:

(i) A patient successfully sued Racecourse General Hospital in November 2019 after suffering internal bleeding due to a negligently performed surgical operation. On 6 January 2020, the court awarded the patient K150,000 in damages. The Finance Director has not provided for this liability and has not made any disclosures in relation to the matter.

(ii) During the year, Racecourse General Hospital sold an old X-ray machine to a private hospital, realizing a surplus of K20,000. The minutes of the Board meeting at which the sale was approved record that one of the Senior Doctors declared interest in the matter and did not participate in the approval of the transaction. The Senior Doctor in question is a director at the private hospital and his wife is the major shareholder and Chief Executive Officer of the hospital.

(iii) On 10 February 2020, a chemical leakage from one of the refrigeration units in the pharmacy department caused contamination to some drugs. Management has not disclosed this since they consider it to be clearly trivial.

2. Forensic investigation at the Ministry of Home Affairs:

The Ministry of Home Affairs is responsible for maintaining peace and security in the country. The following allegations have been made by an investigative journalist:

(i) The Ministry of Home Affairs' employees undertake a lot of trips both within the Country and overseas. It is alleged that internal auditors have on a number of occasions exposed fraudulent travel claims but these have been ignored by Management.

(ii) Valuable exhibits are lost at most Police Stations. This is one of the contributors to low levels of successful convictions.

(iii) Record keeping is poor in most Police Stations, especially those situated in rural areas. They attribute this to inadequate funding and supervision. It is alleged that documents are tampered with. When official stationery runs out, the police officers use exercise books to record cases.

(iv) Procurements are initiated and approved by the Stores Officer at each police station. Stores Officers regularly conduct business transactions with their respective Police Stations through their personal companies and most of them live beyond their means.

Required:

(a) Define transparency and evaluate whether the SAI in Bangweulu is transparent in its operations.

(6 marks)

(b) Describe the professional guidance on the actions to take regarding communication and correction of misstatements. (6 marks)

(c) Evaluate four (4) fraud risk factors in the forensic investigation at the Ministry of Home Affairs. (8 marks)

[**Total: 20 Marks]**

END OF PAPER

CA 3.7 PUBLIC SECTOR AUDIT AND ASSURANCE

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) **Type of public sector audits:**

(i) Performance audit – ISSAI 3000 defines performance auditing as an independent, objective and reliable examination of whether government undertakings, systems, operations, programs, activities or organizations are operating in accordance with the principles of economy, efficiency and/or effectiveness and whether there is room for improvement.

(ii) **Forensic audit –** Unlike terms such as performance audit or compliance audit there is no precise definition of forensic audit provided by International Organization of Supreme Audit Institutions (INTOSAI). This reflects the varied nature of the possible forensic audit assignments in the public sector.
A dictionary definition of 'forensic' would refer to 'the application of scientific methods or techniques to the investigation of crime'. Forensic audit can be defined as the process of gathering, analyzing and reporting on data, in a predefined context, for the purpose of finding facts and/or evidence in the context of financial/legal disputes and/or irregularities and the provision of related advice.

(iii) **IT audit** – INTOSAI defines IT audit in ISSAI 5300 *Guidelines on IT Audit* as an examination and review of IT systems and related controls to gain assurance or identify violations of the principles of legality, efficiency, economy and effectiveness of the IT system and related controls.

(b) **Problem orientated approach**

A problem-orientated approach examines and analyses the causes of particular problems or deviations from criteria. A problem-orientated 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 a 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.

In Ngosa Municipal Council, there is a known deviation from what should or could be according the CDF Guidelines and Procurement Procedures, and the main objective is not just to verify the problem, but to identify its causes. The Area Member of Parliament and the Community Members could have a lot to share so that the problem could be identified and solutions found. This could significantly contribute towards ensuring that the same problem does not recur and everyone focuses on getting value for money from the resources provided under CDF.

(c) **Recommended audit procedures**

- Economy
    - Compare the total cost per borehole to the budgeted amount

- Compare the total cost per borehole to the average market prices
- Efficiency
  - Engage an expert to evaluate the performance of the functional boreholes
  - Inspect the boreholes and inquire of the Community Members regarding the performance of the boreholes
- Effectiveness
  - Inquire of management why the Contractor abandoned the contract
  - Check whether the boreholes meet the recommended specifications

(d) (i) & (ii) Ethical threats and safeguards

Ethical threats	Explanations	Safeguards
(1) Audit Manager for Ngosa Municipal Council for over nine (9) years	Long association with Ngosa Municipal Council is a clear source of familiarity threat which could impair independence and objectivity. Audit Manager could be too sympathetic to the Council's interests and fail to exercise the required levels of professional skepticism.	The Audit Manager should be replaced.
(2) Area Member of Parliament is a member of the CDF Committee and he normally dominates decision making.	This could result in intimidation threat for the forensic audit team members as a result of significant political influence. They may not be able to execute their responsibilities independently especially that the integrity of the Area Member of Parliament is questionable.	Use experienced Senior Staff on the forensic audit.
(3) The husband to the Audit Senior supplies stationery to Ngosa Municipal Council.	The Audit Senior's independence and objectivity may be highly questionable given that the husband could also be implicated. This will create a serious self-interest threat. Independence in appearance is as important as independence in fact,	The Audit Senior should declare interest and must be replaced.

	otherwise independence may be impaired.	
(4) The Human Resources Director at OAG is currently negotiating a business partnership with the husband to the Audit Senior.	The Human Resources Director could directly or indirectly exercise undue influence on the forensic audit team members to protect his personal interests. This could affect their independence or objectivity.	Appropriate consultation should be made with the Ethics Committee and the Audit Committee.
(5) Audit procedures suggested by the Audit Senior.	Forensic audit requires a mindset and working practices that are different from the financial statement audit. Audit Senior may not be competent enough to suggest audit procedures. In addition she is faced with a serious conflict of interest.	All the suggested audit procedures must be reviewed by an appropriately qualified and experienced member of staff.
(6) The Councilors have promised the forensic audit team members residential plots if the forensic audit is completed within two (2) weeks.	The forensic audit team members should not engage in any conduct that may discredit the OAG. The gift of the residential plots could be misunderstood. It is also possible that the forensic audit team members could cut corners in order to meet the two (2) weeks deadline. This will adversely impact on quality.	This gift should not be accepted.
(7) This is already being discussed on the social media.	There is a serious threat to confidentiality. Forensic audit team members could leak confidential information on the social media. Forensic audit team members must not disclose any information acquired as a result of their work without proper and specific authority, unless there is a legal or	All forensic audit team members must sign secrecy declarations and must be informed of the consequences of any breach. Forensic audit team members must keep confidentiality in mind when discussing work related issues with colleagues. It will also be important to maintain

	professional right or duty to do so.	confidentiality within the family and social environment, including social media. All portable IT equipment must be kept secure and there will be need to maintain confidentiality of passwords.

(e) **Evaluation of suggested audit procedures:**

(1) **Ghost workers:**

- Recalculate benefits and deductions for a sample of employees – this is used to confirm whether the computations are correct. Hence, it may not be useful in confirming the existence of ghost workers.
- Select a sample of employees from the payroll and carry out physical spot checks – this is an important procedure used in detecting the existence of ghost workers. However, the visit should be not be announced.

(2) **Fictitious suppliers:**

- Perform a confirmation of accounts payable for a sample of suppliers – this could assist in confirming the existence of fictitious suppliers. However, this will depend on whether the Council could supply the required details for the confirmations e.g. address of suppliers, contact person, reliable balances etc.
- Vouch a sample of invoices to supporting payment vouchers – This could be key audit procedure when confirming that appropriate amounts are paid. It may not be very useful in confirming existence of fictitious suppliers. To confirm existence, the auditor should vouch a sample of accounts payable balances to supporting documentation, such as purchase orders, goods received notes (GRNs) and supplier invoices.

SOLUTION TWO

(a) (i) **Office of the Auditor General and Internal audit:**

The roles of the Internal Audit Department in government and other Government
agencies is different from that of the role of the Office of the Auditor General. While internal auditors may use the same procedures to perform their work, internal auditors are part of the internal controls put in place to help safeguard the assets of Government. They lack the independence required to be objective in the performance of their work.

The Office of the Auditor General (OAG) is the external auditor of Government Institutions. Although it is part of Government, its governance and operating systems are outside any Government Institution and have a high degree of independence and objectivity.

It is for these reasons that having and funding the Office of the Auditor General is a necessary in a democracy because it helps hold custodians of public funds to be transparent and accountable on how they spend public funds.

(ii) **The Accountability triangle:**

The relationship between Parliament, the Executive and the Office of the Auditor general is commonly referred to as the accountability triangle.

The general citizenry elect Members of Parliament who represent them in making laws of the Country. Parliament then confers responsibility to the executive and other Government Agencies to spend public funds in accordance with the mandate governing the use of those funds including the budget. Parliament requires the Executive to prepare accountability reports on how they have spent the public funds.

Parliament also confers responsibility to the Office of the Auditor General to perform audits on the Executive and other Government Agencies and report back on how they have used the funds entrusted in them and also to report any lapses observed.

On receipt of the reports from the Office of the Auditor General, parliament through the Public Accounts Committee (NAC) holds the Controlling Officers of the Executive accountable and summons them to explain the shortcoming in the audit reports.

(b) **Evaluation of the Supreme Audit Institution of Motswana:**

The Lima Declaration contains concepts containing best practice when setting up Supreme Audit Institutions (SAIs) by member countries of the International Organization for Supreme Audit Institutions (INTOSAI).

The evaluation of the Supreme Audit Institution (SAI) of Botswana has revealed the following:

1. The fact that the Supreme Audit Institution (SAI) is under the Office of the President is contrary to the provisions of the Lima declaration which require that the Supreme Audit Institution should enjoy administrative autonomy in order to retain its independence and objectivity. The President is part of the executive on which the Supreme Audit Institution (SAI) will hold accountable on how public funds have been used for.
2. The Lima declaration requires that the appointment of the Head of the Supreme Audit Institution (SAI) should be enshrined in the Country Constitution. Further the removal must be clearly spelt out in the Constitutions and he should be assured of tenure of office and removed only on grounds specified in the Constitution.

   The appointment of the Head of the Supreme Audit Institution (SAI) under the general appointment guidelines of civil servants is contrary to guidance given in the Lima declaration.
3. It is required by the Lima Declaration that a clear distinction should be made between the roles of the internal audit departments and that of the Supreme Audit Institution (SAI) who is the External Auditor of Government Agencies.
   The suggestion by the Committee of Cabinet that priority in public sector audits should be on those agencies with no Internal Audit Departments is contrary to the provisions of the Lima Declaration. The Supreme Audit Institution (SAI) is required to audit all regardless of whether there is an Internal Audit Department or not.
4. The Lima Declaration recommends that the Supreme Audit Institution (SAI) should decide on its own program without influence of third parties. The office should decide the subjects to audit based on risk assessment made. The requirement that before funding, the Supreme Audit Institution(SAI) should submit the audit plan for the coming year in order to obtain funding for the following year is contrary to the Lima Declaration which states that the SAI should have financial autonomy and funds should be appropriated to it directly.
5. Further, the Supreme Audit Institution (AI) should decide on the subjects that will be audited and not subject to approval by the Ministry of Finance.
6. With regards to the skills and competences of staff of the Supreme Audit Institution (SAI), this is in compliance with the Lima Declaration because the staff are largely qualified and have the skills and competences required to perform public sector audits.
7. The Supreme Audit Institutions (SAI) should have the mandate to publish its reports on its findings without restriction from anyone in accordance with the Lima Declaration. The case where some parts of the report are considered of a security nature hence restricting release of the report is contrary to the provisions of the Lima declaration.

SOLUTION THREE

(a) (i) **Meaning of "cause" and "effect" in a performance audit**

"Cause" is the reason for the occurrence while "effect" is the result/outcome from the occurrence of something.

(ii) **Importance of understanding the nature of the relationship between "cause" and "effect"**

There could be many relationship between "cause" and "effect" and it important that these are clearly established to avoid arriving at wrong conclusions and recommendations.

- There may be a direct relationship between cause and effect. For example, the health care standards could have been deteriorating due to undue focus on the expansion programme as indicated by the Minister of Health.
- There may be a reverse relationship in cause and effect. For example, deteriorating health standards could be due to half-baked graduates being produced by medical schools.
- An apparent cause-and-effect relationship may be coincidental. For example, there may be poor management and underfunding funding in Impala General Hospital, but it would be difficult to say that one thing is a cause of the other.

This understanding of the nature of the relationship between cause and effect will therefore contribute significantly towards providing realistic constructive recommendations that may address the weaknesses or problems identified by the performance audit.

(b) **Ethical threats**

Ethical threats	Explanations
(1) Audit Manager has been involved in various audit assignments for Impala General Hospital for several years	It is possible that the Audit Manager could have established a close relationship over the years, and therefore creating a familiarity threat. The Audit Manager is likely to be too sympathetic to the interests of Impala General Hospital. This may seriously impair objectivity and therefore he or she may be inclined to accept what the responsible party tells him/her.
(2) Invitation by DG to the Auditor-General (AG) to join him at a meeting to be held with WHO officials next week	The AG will be faced with a serious advocacy threat. A loss of independence will occur if the AG promotes Impala General Hospital's viewpoint to the point where her objectivity is brought into question.
(3) AG negotiating lucrative job for her husband who is one of the Junior Medical Doctors at Impala General Hospital	The AG will be faced with a self-interest threat which could deter her from acting objectively. The AG would want to impress the DG so that the husband gets the lucrative job.

(4) Verbal instructions by the for the audit team to collect sufficient appropriate evidence in support of the Minister of Health's comments, failure to which the entire audit team will be replaced	This will create an intimidation threat which could impair objectivity. The audit team may not want to be retired and will do as instructed by the DG.

(c) **Main features of a balanced performance audit report**

To present a balanced report, it is useful to:

- Present findings objectively and fairly, in neutral terms and avoiding biased information
- Present different perspectives and viewpoints: Where different views can legitimately be expressed, these should be presented in order to ensure balance and fairness
- Be complete: The report should include both good and bad points, and give credit where it is due. Facts should not be suppressed, and minor faults should not be exaggerated. Explanations, especially from the audited entity, should always be sought and critically evaluated.

SOLUTION FOUR

(a) **Accountability in the Office of the Auditor General(OAG)**

The Office of the Auditor General (OAG) is a recipient of public funds which it uses to fulfil its mandate. The institution is required to lead by example in terms of transparency and accountability with regards to how it uses the funds appropriated to it.

One of the principles of ISSAI 20 *Principles of Transparency and Accountability* requires that the Supreme Audit Institution should manage their operations economically, efficiently and effectively.

The Office of the Auditor General (OAG) in Zambia will achieve the above principle in the following ways:

Economy – This relates to the cost of carrying out the audits that the Office of the Auditor General (OAG) has planned to perform. Could the audits have been performed at a cost that is lower than what has been spent? The objective of meeting this principle is that the lowest cost should have been incurred but without compromising the quality of the audits.

Efficiency – This is with reference with the comparison of the inputs and outputs. In the case of the Office of the Auditor General (OAG), could more audits have been performed with the same amount of resources, human and financial? Could the audits that have been carried out in a particular period have been performed using lesser resources?

Effectively – This is with reference to whether or not the Office of the Auditor General (OAG) will have met its objectives. This could relate to objectives set at the strategic level, the annual level and the individual audit level. This will help evaluate whether it is beneficial to the Country to spend public funds on funding the Office of the Auditor General (OAG).

(b) (i) **Evaluation of information and suggested opinions:**

Client one

It is clear in this case that the auditor obtained sufficient appropriate audit evidence which forms the basis of the opinion.

In this case, the matter of concern regarding the realizability of the receivables figure in material to the financial statements.

This means that the financial statements will be misstated to the extent of the insufficiency of the provision for receivables.

The misstatement will impact adversely on the decisions made by users of the financial statements. In accordance with the provisions of ISSAI 1705 *Modifications to the opinion in the independent auditor's report* requires that if the matter of concern is both material and pervasive to the financial statements then an adverse opinion should be issued.

In this case the matter is both material and pervasive to the financial statements and so the recommended opinion will be an adverse opinion will be the appropriate form of modification.

Client two
In the case of client 2, it is clear that the auditors were not able to obtain sufficient appropriate evidence on which to base their opinion.

Inventory is a material figure in the financial statements of this client and the misstatement will have an adverse impact on the users of the financial statements.

In accordance with ISSAI 1705 *Modifications to the opinion in the independent auditor's report* guides that in this case the opinion of the auditor should be a disclaimer of opinion.

The suggested opinion will therefore be a disclaimer of opinion and in the auditor's responsibility the auditor shall explain that they were not able to obtain sufficient appropriate audit evidence.

(ii) **Impact on auditor's report of modification of opinion:**
Modification of the auditor's opinion will have an impact on the auditor's report as follows:

The Opinion paragraph – depending on the form of modification the opinion paragraph will change to either adverse opinion or disclaimer of opinion.

In the paragraph on the responsibilities of the auditor, the auditor will state that they obtained sufficient appropriate audit evidence which formed the basis for the modified opinion in this case an adverse opinion.

The basis of opinion paragraph – this too will change to basis for adverse opinion or basis for disclaimer of opinion.

In the paragraph on the responsibilities of the auditor, the auditor shall state that they were not able to obtain sufficient appropriate evidence to provide a basis for an audit opinion.

(iii) **Need to communicate with those with governance:**
ISSAI 1705 *Modifications to the opinion of the independent auditor's report* requires that when the auditor expects to express a modified opinion, this must be communicated with those charged with governance explaining the circumstances leading to the expected modification.

The need to communicate arises in order to:

- To let those in charge of governance know in advance the reasons for the intended modification of the opinion and avoid a disagreement at a later stage.
- To give those charged with governance an opportunity to respond to the matters causing the modification by providing more information and explanations on matter giving rise to the modification.

SOLUTION FIVE

(a) **Transparency**

ISSAI 20 *Transparency and accountability* deals with transparency and accountability in the SAI itself, rather than transparency and accountability of entities audited by the SAI. INTOSAI requires SAIs to lead by example in promoting transparency and accountability.

Transparency refers to timely, reliable, clear and relevant public reporting by the SAI about its mandate, strategy, activities, financial management and performance. It also includes the obligation of SAIs to make public reports on their audit findings and conclusions. 'Transparency is a powerful force that, when consistently applied, can help fight corruption, improve governance and promote accountability'.

If the requirements of ISSAI 20 are used in the evaluation, then it is highly questionable whether the SAI in Bangweulu is transparent in its operations mainly because of the following:

- o The SAI is considered to be a very sensitive institution and is therefore not subject to any form of external review. This means financial management and performance within the SAI is considered to be confidential and therefore not made public.
- o To ensure that the SAI is effective, its mandate, responsibilities, mission and strategy are only known by the Republican President and his Cabinet Ministers. This is contrary to the requirement of ISSAI 20.

The SAI performs its duties under a legal framework but this does not cover transparency. The question is silent on public reporting and it is therefore difficult to make any meaningful evaluation on this matter.

(b) **Actions to take regarding communication and correction of misstatements**

ISSAI 450 *Evaluation of misstatements identified during the audit* gives detailed guidance in this area. The Auditor shall communicate (on a timely basis) all misstatements accumulated during the audit with the appropriate level of Management, and should ask Management to correct those misstatements. Timely communication of misstatements to the appropriate level of management is important: it enables Management to evaluate the misstatement, inform the Auditor if they disagree, and take action as necessary. The appropriate level of management is usually where responsibility and authority lies for evaluating the misstatements and taking the necessary action.

- o If Management refuses to correct some or all of the misstatements communicated by the Auditor, the Auditor should learn Management's reasons for not making the corrections and shall take their reasons into account when evaluating whether the financial statements as a whole are free from material misstatement.
- o Law or regulation may restrict the Auditor's communication of certain misstatements to Management. For example, laws or regulations may specifically prohibit a communication, or other action, that might prejudice an investigation by an appropriate authority into an actual, or suspected, illegal act.

The Auditor should inform those charged with governance about uncorrected misstatements and the effect that they may have, individually or in aggregate, on the opinion in the audit report. Where appropriate to the Public Sector Auditor's mandate, this communication with those charged with governance may include instances of non-compliance with authorities and control deficiencies. Public Sector Auditors may also need to communicate misstatements, instances of non-compliance with authorities and control deficiencies to additional parties such as Government Officials.

(c) **Evaluation of fraud risk factors in the forensic investigation at the Ministry of Home Affairs**

- Allegations of fraudulent travel claims ignored by Management – this could be an indication that the control environment is weak or Management is involved. This provides an opportunity for employees to engage in fraudulent activities. If this is true, Management need to be replaced.
- Inadequate physical safeguarding over exhibits – the loss of valuable exhibits at most police stations could be an indicator that Police Stations do not have secure places for storing exhibits. This provides an opportunity for the misappropriation of valuable exhibits. The Police Stations will continue losing exhibits unless proper investments are made in secure storage facilities.
- Record keeping is poor in most Police Stations – this provides a fertile ground for fraudulent activities since employees will know that it will be very difficult for an investigator to gather sufficient appropriate evidence to secure a conviction. Recording in such institutions should be a priority.
- Inadequate funding and supervision – this provides a huge incentive to ignore procedure and engage in fraudulent activities. It is very easy to use inadequate funding as an excuse for not following procedure.
- No segregation of duties – procurements are initiated and approved by the Stores Officer at each Police Station. This is a significant deficient in internal controls which could provide an opportunity for fraud.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 18 MARCH 2022

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

The Government of Country Y commenced reviewing one of the four year project of a parastatal company involved in manufacturing plastics. The company had applied for a grant to enable it expand its business to other parts of the country. The following NPV estimates were made for the project all figures are in K'000million.

Year	**0**	**1**	**2**	**3**	**4**
Revenue		33.00	46.00	59.00	37.00
Direct Cost		(30.00)	(44)	(50)	(36)
		3	2	9	1
Tax		(0.6)	(0.4)	(1.8)	(0.2)
Investment	(15)				
Cashflow	(15)	2.4	1.6	7.2	0.8
DF 10%	1	0.909	0.826	0.751	0.683
	(15)	2.1816	1.3216	5.4072	0.5464

NPV -5.5432million

Notes

In calculating the Net Present Value of the project, the following notes were made:

(i) The project requires initial investment of K15m.
(ii) The social opportunity cost method was used to compute the NPV
(iii) It is anticipated that the entire project will be funded by a grant from the government.
(iv) There some other non-financial factors which should be considered in the appraisal.

Required:

(a) Calculate the Internal Rate of Return for the project and make recommendations whether the project should be implemented or not. (5 marks)

(b) Explain the three (3) main differences between capital investment appraisal in the public sector and capital investment appraisal in the private sector. (6 marks)

(c) Explain what management should include in the capital budget planning process of the project they are embarking on. (6 marks)

(d) Identify the non - financial criteria to be considered before undertaking a project. (7 marks)

(e) Describe the steps that should be taken by Government to ensure that the parastatal company it intends to finance using Government resources implements the projects identified effectively. (16 marks)

[Total: 40 Marks]

SECTION B

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

QUESTION TWO

Koms consultancy managing director has just returned from a conference on the importance of the Public Expenditure and Financial Accountability Framework (PEFA).

The conference was held in Europe and was sponsored by the World Bank. The aim of the conference was to create a standard methodology and reference tool which would allow assessment and reporting on the strengths and weaknesses of public financial management systems by using evidence based measurement against performance indicators.

This would harmonise the assessment of Public Finance Management and enable comparative analysis both between countries and over a period of time in an individual country.

The Managing Director was among delegates from several country around the world who attended the meeting. He is so keen to share this information with staff at his firm. However, he is uncertain if there are other measurement frameworks apart from PEFA.

He has asked you for knowledge of other similar frameworks to PEFA.

Required:

(a) Briefly explain to the Managing Director six (6) other frameworks apart from PEFA, that can be used to assess Public Financial Management (PFM) systems. (18 marks)

(b) Explain the three (3) essential outcomes that a PFM measurement framework should provide. (2 marks)

[Total: 20 Marks]

QUESTION THREE

The Secretary to the Cabinet of Country Z attended a meeting discussing the findings of Public Expenditure Financial Accountability (PEFA) assessment of the Country. During the presentation, it was indicated that the assessment focused on three fiscal and budgetary outcomes which are aggregate fiscal discipline, strategic allocation of resources and efficient service delivery. It was also emphasized that the country should continue with implementation of financial management reforms.

Required:

(a) PEFA provides very important building block from which to measure the effectiveness of Public Financial Management (PFM) systems, discuss the three fiscal and budgetary outcomes PEFA focuses on.

(6 marks)

(b) Explain the benefits of undertaking assessments on public financial management systems. (6 marks)

(c) Explain the limitation of the PEFA framework (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Governments world over, have a strategic objective of increasing government spending each year a budget is projected. It's the desire of every government to align its expenditure towards health and education. The objective is to reduce the gap in social inequalities and also improve skills among citizens.

Below is a table of projected government spending per functional classification:

Functional Category	**Amount (K) million**	**Percentage %**
General Public services	10,790	9.7
Defence	2,305	2.1
Public Order and safety	5,204	4.7
Economic Affairs	10,300	9.3
Environmental Protection	7,940	7.2
Housing and Community Amenities	5,100	4.6
Health	30,132	27.3
Recreation, Culture and Religion	425	0.4
Education	20,641	18.7
Social Protection	17,690	16.0
	110, 527	

Required:

(a) Explain the reasons for government undertaking public expenditure. (2 marks)

(b) Examine the functional classification table, indicating the purpose of each functional category in public expenditure as per Zambian context. (9 marks)

(c) The COVID 19 Pandemic has resulted in many economies not operating efficiently. Some economies have had challenges in allocating resources and applying them in the most productive manner. This has led to market failure in most Governments.

Required:

Define market failure and explain four (4) types of market failure that can lead to government expenditure. (9 marks)

[Total: 20 Marks]

QUESTION FIVE

A Parastatal in charge of supplying electricity has surplus funds which it intends to invest in order to improve the supply of electricity to its citizens and also earn foreign exchange. It has three options in which it can invest the surplus funds in either (i) Hydro Power (ii) Solar Power (iii) Wind mill. The returns were dependent on how quickly the economy will grow. The probability weighted average of all possible values is as indicated below:

S/N	Option	High Growth	Low Growth	Recess
		Probability – 10%	Probability – 40%	Probability – 50%
1.	Hydro Power	80 m	4m	-40m
2.	Solar Power	120m	24m	0m
3.	Windmill	40m	30m	30m

Required:

Using the table above:

(a) Calculate the expected value (3 marks)

(b) Explain the best option that a decision maker might select for investment. (3 marks)

(c) Explain three (3) ways of determining probability for a situation or event. (3 marks)

(d) Advise management on how to improve risk management as a Government parastatal. (11 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_oD}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \text{ x spread}\right)$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$\text{WACC} = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad f_0 = s_0 x \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

YEAR	CASH FLOW	DF 2%	PV
0	-18	1	-18
1	2.4	0.9804	2.35296
2	1.6	0.9612	1.53792
3	7.2	0.9423	6.78456
4	9.6	0.9238	8.86848
NPV			**1.54392**

IRR COMPUTATION

$$IRR = 2\% + \frac{1.54392}{1.54392+2.5328} \times 10\%-2\%$$

$$IRR = 2\% + \frac{1.54392}{4.07672} \times 8\%$$

IRR=2% + 3.03

IRR **5.03%**

The IRR is K5.03% therefore it should not be accepted because the IRR is lower than the cost of capital.

S/N	(b) **Explain the three (3) main differences between capital investment and appraisal in the public sector and capital investment in the private sector**
	The main difference is the wider focus of the decision making for a public sector entity, which reflects more complex objectives in the public sector. For a private entity the overriding objective is to increase profits and also to maximize shareholder wealth. For the public sector the outcomes of a project will be a range of benefits to society. Some of these may be quantifiable like an increase in GDP while others may not be quantifiable e.g biodiversity. Because of the more complex outcomes that public sector organisations seek to achieve, investment appraisal in the public sector is therefore focused not on how the cash flows of the individual entity will be impacted by a capital investment decision but rather on the net value of the project to society as a whole.

	(c) **Explain what management should include in the capital budget planning process of the project they are embarking on.** • Identification of company objectives. • Identification of suitable projects to achieve those objectives. • Appraisal of potential projects. • Selection of best project. • Making of capital expenditure in chosen project. • Comparison of actual and planned results from project. Investigate deviations from plan where necessary. Monitoring of benefits arising from project.
	(d) **Identify the non - financial criteria to be considered before undertaking a project.** • Meeting the requirements of current and future legislation • Matching industry standards and good practice • Improving staff morale, making it easier to recruit and retain employees • Improving relationships with suppliers and customers • Improving your business reputation and relationships with the local community • Developing the capabilities of your business, such as building skills and experience in new areas or strengthening management systems • Anticipating and dealing with future threats, such as protecting intellectual property against potential competition
	(e) **Describe the steps that should be taken by government to ensure that the parastatal company it intends to finance using government resources implements the projects identified effectively**. • **Get Management and Stakeholder Commitment** In the first instance, you need to have the real commitment of management and stakeholders, the people who will benefit from the project. Be sure that your project has a sustainable business case and that it can deliver real business benefits, so understand both its business and technical objectives. • **Define Scope, Goals and Objectives** The scope of a project defines what business areas and processes will be affected. Define it clearly and communicate it to all stakeholders. To avoid any doubt, government should not be afraid to say what is not in the scope. Once defined, manage the scope carefully to avoid "scope creep," or widening of what the project will cover. • **Written Plan** The best way to manage your project is with a written plan. Any project over about one weeks duration or needs one. • **Manage Project Resources and Encourage Team Working** A typical project involves lots of people, including end users or customer staff; technical staff; administrative and financial staff; consultants; contractors; suppliers; external advisors and outside agencies. The attendant relationships create additional dependencies and risks that you need to manage. Therefore, there is a clear need for a skilled project manager and for an effective team, working together and committed to the project. • **Manage Communications**

		Maintain good communications within the project team and with the wider group of stakeholders and affected groups. The team must not become isolated from the rest of the business environment or from the ultimate customer and users. • **Manage Suppliers and External Sub-contractors** Modern complex projects usually involve suppliers, sub-contractors, consultants and other external resources. They create further dependencies and risks. Base agreements with suppliers and other external parties on clearly specified requirements that identify the performance standards expected and the products or systems to be designed, developed, and delivered. • **Put in Effective Control Processes** Control processes are used to make sure that the project is proceeding as planned and that deliverables meet required standards. Put simple processes in place. Hold regular project meetings, every week for most projects, to review progress against the plan. • **Close the Project** Lastly, bring the project to a formal close and advise all stakeholders and participants that it is complete and has achieved its objectives. Put a lot of work into tying up any last loose ends. When the project is finally over, make sure the required support and operational arrangements are in place. Wrap up project documentation and prepare the final project report.

SOLUTION TWO

(a)

1) **Public expenditure tracking survey.**

   This is designed to provide information on actual public spending from different tiers of Government by collecting micro level data from frontline service delivery facilities. It examines characteristics of the facility, financial flows, outputs and accountability arrangements.

2) **OECD principles of budgetary Governance**.
   They give guidance, providing an overview of good practice across the budget cycle based on ten principles. Also provides support for other aspects of good public governance.

3) **The open budget index**.
   It is an independent comparative measure of central government budget transparency. Focuses specifically on whether the government provides the public with timely access to comprehensive budget information.
4) **SIGMA Principles of Public Administration**.
   These are public reform principles based on internationally recognized good governance principles such as accountability, reliability, predictability, participation, openness transparency, efficiency and effectiveness.

5) **The IMF fiscal transparency code**
   It is an international standard for disclosure of information about public finances. Comprises principles based on four pillars: (i) Fiscal forecasting and budgeting (ii) fiscal reporting. (iii) Fiscal risk analysis and management. (iv) resource revenue management.

6) **CIPFA Whole system Approach.**
   This is a framework for the assessment of PFM with an explicit focus on the whole system context including international sponsors and the framework within which PFM underpins the delivery of public services and helps achieve sustainable social outcome

(b) **THREE ESSENTIAL OUTCOMES**
1) An overview of the PFM system
2) An understanding of how the system will affect PFM outcomes, including the delivery of public goods and services and fiscal sustainability.
3) Provide the foundation from which reforms can be planned and made.

SOLUTION THREE

S/N	
	(a) **PEFA provides very important building block from which to measure the effectiveness of PFM systems, discuss the three fiscal and budgetary outcomes PEFA focuses on.** • Aggregate fiscal discipline requires effective control of the total budget and the management of fiscal risks; • Strategic allocation of resources involves planning and executing the budget in line with government priorities aimed at achieving policy objectives; • Efficient service delivery requires using budgeted revenues to achieve the best levels of public services within available resources
	(b) **Explain the benefits of undertaking assessments on public financial management systems.** • It provides governments, legislatures, citizens and those who provide financing with an overview of the PFM system; • It gives those stakeholders an understanding of how this will affect PFM outcomes, including the delivery of public goods and services and fiscal sustainability; • It provides the foundation from which reforms can be planned and made.
	(c) **Explain the limitation of the PEFA framework** • The PEFA indicators focus on the operational performance of key elements of the PFM system rather than on all the various inputs and capabilities that may enable the PFM system to reach a certain level of performance. • PEFA also does not involve fiscal or expenditure policy analysis that would determine whether fiscal policy is sustainable. • PEFA does not provide recommendations for reforms or make assumptions about the potential impact of ongoing reforms on PFM performance. • For the purpose of a PEFA assessment elements of the defense, public order and safety function may not be included if information is not available.

SOLUTION FOUR

S/N	
	(a) E**xplain the reasons for government undertaking public expenditure** • To address inefficiencies in the operation of markets and or/institutions in order to achieve economic objectives; and • To achieve an equity objective such as protecting individuals from destitution or reducing inequality between regions within a country.
B	(b) **Examine the functional classification table , indicating the purpose of each functional category in public expenditure according to the Zambian Context** • **General Public Services-** It is a functional category that covers a significant amount of the non-discretionary budget including domestic debt payments and external debt payments • **Defence -** is an example of a public good. Meant to cover operations of Defence wings. • **Public Order and Safety -** Public order and safety is another example of a public good. This expenditure includes improvements to security infrastructure such as prisons. • **Economic Affairs -** expenditure is aimed at the expansion and diversification of the economy. Expenditure in this area is therefore primarily aimed at addressing market failures, particularly in the delivery of essential infrastructure such as roads and electricity generation and supply, but also wider equity objectives to ensure development objectives are met throughout the country. • **Environmental Protection -** Expenditure in this area is focused on providing public goods and addressing negative externalities such as pollution. In addition to an ongoing focus on waste management to ensure a clean environment. • **Education and Skills Development** - Education is an example of a merit good that would be undersupplied by the market but also an equity objective as access to education is agreed to be a fundamental human right. Skills development expenditure can address the positive externality issue we previously highlighted, as firms will underinvest in skills development if workers can take those newly acquired skills to other companies. • **Health** - Health is also a merit good and an equity objective. Most expenditure is on the salaries of health workers, the procurement of drugs and medical supplies and allocated to medical infrastructure and equipment. • **Housing and community amenities** - Expenditure allocation towards the rehabilitation and construction of

	water supply and sanitation infrastructure, solid waste management programmes and housing development programmes. • **Recreation, culture and religion -** Expenditure in this area is focused on supporting Tourism and Arts in the management of the National Parks and Wildlife Areas, and sport and child development programmes. • **Social protection -** Under Social protection significant areas of budgeted expenditure include the Social Cash Transfer Scheme which aims to address extreme poverty by making regular non-contributory cash payments to individuals.
	(c) **Define Market Failure and explain four examples of market failure that can lead to government expenditure** • Market failure means that the operation of the markets distort economic outcomes, and that require some measure of government intervention to improve efficiency. • Public goods – these are goods that are 'non-rival' or 'non-excludable' when used or consumed. Subject to issues such as free-riding which means an exclusively market-based provision would therefore lead to too few public goods being produced. • Merit goods – are similar to public goods but they are not non-rival or non-excludable. From the perspective of social policy, externalities and equity objectives, pure market based provision would lead to too few merit goods being produced from the perspective of society as a whole. • Externalities – occur when an activity produces costs and benefits that are not directly priced into the market. Leads to sub-optimal behaviour as costs and benefits are borne by others. • Market power – arises due to a lack of sufficient competition to ensure efficient markets. Barriers to entry in markets such as high start-up costs and the existence of natural monopolies can lead to organisations having too much market power to enable competition and pricing decisions that are efficient from a societal perspective

SOLUTION FIVE

(a) Expected value

S/N	Option	High Growth	Low Growth	Recess	Expected Value
		Prob. – 10% K	Prob. – 40% K	Prob. – 50% K	
1.	Hydro Power	80m (8)	4m (1.6)	-40m (-20)	-10.4m
2.	Solar Power	120m (12)	24m (9.6)	0m (0)	21.6 m
3.	Windmill	40m (4)	30m (12)	30m (15)	31 m

(b) The public sector decision maker will need to make a judgement based on their own and organization attitude to risk. In the public sector, officials must consider that the resources they are using are not private funds but provided by tax payers and other resource providers and they have a duty to ensure value for money on their use. They will also need to weigh up wider political and policy considerations. It may be for example that although an option caries significant risk, it is a key manifesto commitment of the government or provides significant benefits not captured in the probability assessment.

In the case of the above assessment, and assuming that the government is risk neutral and they are no other key political pronouncements, it would be advisable for the parastatal to go for option three, which is windmill project, which has a high expected value of K31m.

(c) **Explain three (3) ways of determining probability for a situation or event.**

- A Priori Probability – Those that can be determined without any empirical information
- Objective Probability values – Those that can be determined on the basis of past empirical data
- Subjective Probability values – These are not based on quantitative data from the but rather subjective judgement, which will depend on the expertise and knowledge of the individual who is making the judgement.

(d) **Advise management on how to improve risk management as a Government parastatal.**

Building blocks which include:

- Creating positive risk management behavior and culture.
- Establishing rules and responsibility
- Communicating risk information
- Building risk capacity , including training for risk practitioners

Routine Processes Include:

- Identifying risks , including those responsible for managing items
- Assessing risks and establishing Tolerance
- Addressing risks , including contingency arrangements
- Reviewing and monitoring risks , including deep dives
- Reporting on risks

Recommended Periodic activities include:

- Assuring the board that risks is being properly managed
- Assuring risks from arm's length bodies

- Scanning the horizon/environment, including risk register
- Building risk maturity
- Peer reviews
- Learning lessons
- Exploiting data and data analytics
- Building and testing resilience framework

END OF SOLUTIONS