CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

Attempt all ten (10) multiple choice questions.

QUESTION ONE

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

1.1 According to the IASB's Conceptual Framework, which of the following are fundamental characteristics of financial information?

(i) Relevance
(ii) Faithful Representation
(iii) Timeliness
(iv) Comparability

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

(2 marks)

1.2 Kachesa and Kachepa are in partnership sharing profits and losses in the ratio 2:1. The statement of profit or loss for the year ended 31 March 2020 showed a net profit of K60,800. Kachepa is entitled to a salary of K12,000 per annum. During the year, Kachesa and Kachepa made drawings amounting to K2,600 and K3,500 respectively. Calculate Kachepa's total share of profits for the year ended 31 March 2020.

A. K32,267
B. K24,767
C. K20,267
D. K28,267

(2 marks)

1.3 A business sold a motor van which originally cost K20,000. The accumulated depreciation at the date of sale was K7,500. The sale proceeds were K13,322.
What is the profit or loss on disposal?

A. Loss of K822
B. Profit of K822
C. Profit of K5,822
D. Loss of K5,822.

(2 marks)

1.4 A sale return of K80 has been wrongly posted to the debit side of the receivables account, but has been correctly posted in the sales returns account.

Which of the following statements is correct in respect of the trial balance totals?

A. The Debit side will be more than the Credit side by K80
B. The Debit side will be more than the Credit side by K160
C. The Debit side will be less than the Credit side by K80
D. The Debit side will be less than the Credit side by K160

(2 marks)

1.5 Kabwe runs a business as a timber merchant. On 1 January 2018 his net assets amounted to K71,205. During the year ended 31 December 2018 he introduced K21,300 into the business and made drawings amounting to K25,100. As at 31 December 2018 his net assets amounted to K82,400.
How much profit or loss did Kabwe make in the year ended 31 December 2018?

A. K14,995 profit
B. K35,205 profit
C. K14,995 loss
D. K7,395 profit

(2 marks)

1.6 The following information was extracted from the books of Kariba Limited for the year ended 30 April 2019:

	K
Revenue	540,000
Cost of sales	310,000
Inventory	60,000
Receivables	70,000

What was the inventory turnover times for the year ended 30 April 2019?

A. 10.33 times
B. 5.17 times
C. 7.71 times
D. 4.43 times

(2 marks)

1.7 The following information was extracted for the purposes of preparing the statement of cash flows:

	K
Profit before tax	8,900
Profit on disposal of non-current assets	2,300
Depreciation	15,100
Decrease in inventory	3,400
Increase in receivables	7,000
Increase in Payables	1,700
Proceeds from sale of non-current assets	6,000

Calculate the amount of cash flows from operating activities.

A. K21,000
B. K25,800
C. K19,800
D. K16,400

(2 marks)

1.8 The opening balances in the rental expenses account were; K1,400 accrual and K800 prepayment. During the period the rentals paid amounted to K28,520. At the end of the period the rental expenses account showed an accrual of K1,800 and a prepayment of K2,000.

What amount should be posted to the statement of profit or loss as rental expenses?

A. K26,920
B. K28,920
C. K27,720
D. K29,720

(2 marks)

1.9 The following information was extracted from the books of Annie for the year ended 31 March 2020:

	K
Receivables at 1 April 2019	15,000
Cash received from customers	112,700
Receivables at 31 March 2020	25,000
Discounts allowed	4,500
Dishonored Cheques	10,000

What was the value of credit sales in the year to 31 March 2020?

A. K117,200

B. K137,200
C. K108,200
D. K88,200

(2 marks)

1.10 Which of the following accounting concepts should be considered if the owner of the business withdraws goods from the business for personal consumption?

A. The going-concern concept
B. The business entity concept
C. The accruals concept
D. The money measurement concept

(2 marks)

[Total: 20 Marks]

SECTION B

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

QUESTION TWO - (COMPULSORY)

The following trial balance was extracted from books of Mulonga Limited as at 31 May 2019:

	K	K
Land and Buildings (Land – K100,000)- cost	600,000	
Plant & Equipment – Cost	400,000	
Accumulated depreciation – 1 June 2018:		
Buildings		85,000
Plant & Equipment		102,500
Inventory – 1 June 2018	60,000	
Purchases	320,000	
Revenue		941,325
Trade and other Receivables	130,000	
Investment income		8,000
Distribution expenses	130,200	
Administration expenses	180,900	
Debenture interest paid	4,125	
Cash and Cash Equivalents	57,200	
Trade and other Payables		80,000
Investments	40,000	
Retained earnings – 1 June 2018		161,600
7.5% Debentures		110,000
Equity shares of K0.50 each		300,000
Share premium		134,000
	1,922,425	1,922,425

The following additional information is relevant:

(1) The inventories at 31 May 2019 were valued at K55,000.
(2) Distribution expenses outstanding amounted to K21,000 as at 31 May 2019.
(3) Administration expenses prepaid amounted to K15,000 as at 31 May 2019.
(4) Income tax for the year ended 31 May 2019 has been estimated to be K41,250.
(5) Depreciation is provided for as follows:

(i) Buildings at 2% per annum, straight line and chargeable to administration expenses.
(ii) Plant & Equipment at 15% per annum, reducing balance and is charged to cost of sales.

Required:

(a) Prepare Mulonga Limited's Statement of Profit or Loss for the year ended 31 May 2019 in accordance with IAS 1 Presentation of Financial Statements. (9 marks)

(b) Prepare Mulonga Limited's Statement of Financial Position as at 31 May 2019 in accordance with IAS 1 Presentation of Financial Statements. (11 marks)

[Total: 20 Marks]

QUESTION THREE

Below are the statement of financial position for Bonilinda Company Limited at 31 December 2020 and 31 December 2021 and the income statement for the year ended 31 December, 2021.

	2021	2020
	K'000	K'000
ASSETS		
Non-current assets:		
Property, plant and equipment	528	447
Development costs	110	93
	638	**540**
Current assets:		
Inventories	413	380
Trade receivables	238	215
Investments	28	-
Cash	111	4
	790	599
TOTAL ASSETS	**1,428**	**1,139**
EQUITY AND LIABILITIES		
Equity :		
Ordinary shares K1	240	200
Share premium	140	120
Revaluation surplus	100	-
Retained earnings	538	530
	1,018	**850**
Non-current liabilities		
Provision for warranties	30	25
6% loan note	150	-
	180	25
Current liabilities		
Income tax payable	37	32
Trade payables	193	232
	230	264
TOTAL EQUITY AND LIABILITIES	1,428	1,139

Statement of profit or loss for the year ended 31 December, 2021

	K'000
Revenue	900
Cost of sales	(550)
Gross profit	350
Expenses	(245)
Finance costs	(9)
Profit on sale of equipment	7
Profit before tax	103
Income tax expense	(30)
Profit for the period	73

Additional information

1. Deferred development expenditure amortized during 2021 was K25, 000.
2. Additions to property, plant and equipment totaling K167, 000 were made. Proceeds from the sale of equipment were K58,000, giving rise to a profit of K7, 000. No other items of property, plant and equipment were disposed of during the year.
3. Finance costs represent interest paid on the new 6% loan note (2021-2027) issued on 1 January 2021.
4. Current asset investments represent treasury bills acquired. The company deems these to represent cash equivalents.
5. Dividends paid during the year amounted to K65,000.

Required:

(a) Prepare a statement of cash flow for Bonilinda Company for the year ended 31 December 2021, using the indirect method in accordance with *IAS 7: Statement of Cash Flows*. (15 marks)

(b) Distinguish between Capital and Revenue expenditure, (give one example of each). (5 marks)

[Total: 20 Marks]

QUESTION FOUR

Kabwe and Kamba are in partnership, sharing profits and losses in the ratio 4:3 respectively. Below is the trial balance of Kabwe and Kamba partnership as at 31 March 2021:

	K'000	K'000
Opening inventory	43,000	
Buildings at cost	384,000	
Machinery at cost	192,000	
Accumulated depreciation:		
Buildings		168,000
Machinery		76,800
Purchases	503,000	
Sales		995,000
Returns inwards	5,248	
Carriage inwards	7,840	
Returns outwards		20,500
Rent	76,000	
Bank	137,500	
Bank charges	12,005	
Selling expenses	5,461	
General expenses	9,449	
Trade receivables and trade payables	211,600	325,505
Wages and salaries	321,000	
Current accounts at 1 April 2020: Kabwe		31,913
Kamba	31,070	
Drawings: Kabwe	64,000	
Kamba	175,070	
Capital accounts: 1 April 2020: Kabwe		85,000
Kamba		67,050
Allowance for receivables		8,475
10% loan note		400,000
	2,178,243	2,178,243

The following additional information is available as at 31 March 2021:

(i) Inventory was valued at K41.2 million.

(ii) Interest on drawings for the year was:
Kabwe K2.145 million
Kamba K1.424 million

(iii) The 10% loan was given to the partnership by Kamba on 1 April 2020. The accrued interest on the loan has not yet been accounted for.

(iv) Kamba is entitled to a salary of K14.5 million per annum commencing 1 January 2021.

(v) Rent amounting to K5 million was paid in advance.

(vi) Irrecoverable debts of K2.2 million are to be written off and an allowance for receivables is to be adjusted to 4% of receivables remaining balance.

(vii) Depreciation is to be provided for as follows:

Buildings 25% reducing balance method
Machinery 10% straight line method
(viii) Partners receive 5% interest per annum on their capital contribution.

Required:

Prepare the following statements for Kabwe and Kamba partnership:

(a) The statement of profit or loss and appropriation account for the year ended 31 March 2021. (15 marks)

(b) The partners current accounts. (5 marks)
Note: the statement of financial position as at 31 March 2021 is not required.

[Total: 20 Marks]

QUESTION FIVE

Yamfwa is a sole trader who does not keep a complete set of accounting records. He has provided you with the following extract for his assets and liabilities at 1 April 2020:

	K'000
Property at cost	60,500
Property Accumulated depreciation	40,750
Equipment at cost	98,170
Equipment Accumulated depreciation	57,915
Inventory	4,655
Receivables	1,790
Bank balance	41,630
Payables	10,750
10% bank loan	40,000

The following were receipts and payments from Yamfwa's bank account during the year to 31 March 2021:

	K'000
Receipts	
Cash sales banked	290,000
Receivables	13,165
Payments	
Wages and salaries	52,990
Rent and rates	37,500
Drawings	5,235
Electricity	6,005
Bank charges	4,070
Loan interest	3,000

Miscellaneous expenses	8,960
Trade payables	185,070

The following additional information is relevant for the year ending 31 March 2021:

(i) All sales for cash had been paid into the bank with an exception of K29 million of which K27.5 million was taken by Yamfwa for personal use and K1.5 million was spent on miscellaneous expenses.

(ii) During the year ended 31 March 2021, irrecoverable debts amounting to K1.75 million were written off.

(iii) Rent and rates were prepaid by K3.7 million and electricity expense amounting to K2.1 million was owing.

(iv) Yamfwa took goods amounting to K1.3 million for personal use in December 2020. No record of this had been made yet.

(v) The loan will be repaid in 2025.

(vi) Depreciation is to be charged on property at 10% per annum on cost and 15% reducing balance on equipment.

(vii) Other balances at 31 March 2021 were as follows:

	K'000
Inventory	16,200
Trade receivables	2,100
Trade payables	13,930

Required:

(a) Calculate Yamfwa's capital at 1 April 2020. (3 marks)

(b) Prepare Yamfwa's statement of profit or loss for the year ended 31 March 2021. (9 marks)

(c) Prepare Yamfwa's statement of financial position as at 31 March 2021. (8 marks)

[Total: 20 Marks]

QUESTION SIX

(a) The objective of financial statements is to provide information about an entity's assets, liabilities, equity, income and expenses that is useful to financial statements users in assessing the prospects for future net cash inflows to the entity and in assessing management's stewardship of the entity's resources and sets out the going concern assumption.

The trial balance is an internal control check to confirm the arithmetic accuracy of the general ledger. Control accounts are impersonal accounts and part of the double entry system. If the control accounts do not balance, then it is obvious that a mistake has taken place in the respective ledger

A bank reconciliation statement matches the cash balance on a company's cash book to the corresponding amount on its bank statement. Reconciling the two accounts helps determine if accounting changes are needed. Bank reconciliations are completed at regular intervals to ensure that the company's cash records are accurate. They also help detect fraud and any cash manipulations.

Required:

(i) Identify and explain the five (5) elements of financial statements. (5 marks)

(ii) Describe three (3) errors that can be detected by the trial balance. (3 marks)

(iii) State three (3) reasons for having control accounts. (3 marks)

(iv) Identify three (3) characteristics of reconciling items in a bank reconciliation statement. (3 marks)

(b) The Assistant Accountant for Tatwafilwapo Ltd was preparing its reconciliation for the month of November 2021 and noted a difference between its bank statement balance and the balance on the bank account in its general ledger. The bank statement shows a balance of K3,192 cash at bank. The balance on the bank account (cash book) in the general ledger was K1,348 (credit).

The following seven (7) reasons accounted for the difference:

1. Five (5) cheques paid to suppliers have not yet been presented at the bank. These are:

Cheque No.	K
120005	8,750
120006	4,564
120007	6,566
120008	1,708
120009	1, 218
	22,806

2. Cheque number 120005 was lost and was cancelled. Tatwafilwapo have not yet recorded the cancellation of the cheque.

3. Cheque number 120010 was incorrectly recorded in Tatwafilwapo's cash book as K5,914. The cheque was correctly debited to the bank statement on 5 November 2021 as K5,518.

4. Bank Charges of K5,362 were debited by the bank on 29 November 2021.

5. A customer's cheque amounting to K4,480 was returned by the bank in November as the customer had insufficient funds in his account. Tatwafilwapo is yet to record the returned cheque in their books.

6. A deposit of K11,900 entered in Tatwafilwapo's cash book on 30 November 2021 was credited on the bank statement on 3 December 2021.

7. The bank has incorrectly credited Tatwafilwapo's account with an interest of K3,080. This is interest on a deposit account personally held by the Managing Director personally. The bank had not corrected the error by 30 November 2021.

Required:

(i) Prepare Tatwafilwapo's adjusted cash book including the necessary correcting entries as at 30 November 2021. (3 marks)

(ii) Prepare a reconciliation of the bank statement balance to agree with the cash book balance as at 30 November 2021. (3 marks)

[Total: 20 Marks]

END OF PAPER

CA1.1 – FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) Mulonga Limited

Statement of profit or loss for the year ended 31 May 2019

	K
Revenue	941,325
Cost of sales (w 1)	(369,625)
Gross profit	571,700
Distribution expenses (130,200 + 21,000)	(151,200)
Administration expenses (w 2)	(175,900)
Profit from operations	244,600
Investment income	8,000
Interest expense (110,000 x 7.5%)	(8,250)
Profit before tax	244,350
Income tax expense	(41,250)
Profit for the year	203,100

(b) Mulonga Limited

Statement of financial position as at 31 May 2019

Assets	K	K
Non-current Assets		
Property, plant & Equipment (W3)		757,875
Investments		40,000
		797,875
Current Assets		
Inventory	55,000	
Trade & Other Receivables	130,000	
Cash & Cash equivalents	57,200	
Prepayments	15,000	
		257,200
Total Assets		1,055,075
Equity & Liabilities		
Equity		
Equity shares of K0.50 each		300,000
Share premium		134,000
Retained earnings (K161,600 + K203,100)		364,700
		798,700
Non-current Liabilities		
7.5% Debentures		110,000
Current Liabilities		
Trade & other Payables	80,000	
Taxation	41,250	
Accrued Interest (K110,000 x 7.5%) – K4,125)	4,125	
Accrued expenses	21,000	
		146,375
Total equity & liabilities		1,055,075

Workings

1. Cost of sales

	K
Opening inventory	60,000
Purchases	320,000
Depreciation on plant & equipment (400,000 – 102,500) x 15%	44,625
Closing inventory	(55,000)
	369,625

2. Administration expenses

	K
As per trial balance	180,900
Depreciation on buildings (600,000 – 100,000) x 2%	10,000
Prepaid expenses	(15,000)
	175,900

3. Property, plant & Equipment

	K
Land & Buildings (K600,000 – K85,000 – K10,000)	505,000
Plant & Equipment (K400,000 – K102,500 – K44,625)	252,875
	757,875

SOLUTION THREE

(a)

Bonilinda Company

Statements of Cash flow for the year ended 31 December, 2021 (indirect method)

		K'000	**K'000**
Cash flows from operating activities			
Profit before taxation Adjustments for:			
		103	
Depreciation			
Amortization		135	
Interest expense		25	
Profit on disposal of equipment			
	9		
Increase in trade receivables			
	(7)		
Increase in inventories			
Decrease in trade payables	265		
Increase in provisions		(23)	
		(33)	
Cash generated from operations			
		(39)	
Interest paid			
Income taxes paid	5		
Net cash from operating activities		175	
			141
		(9)	
		(25)	

Cash flows from investing activities		
Development expenditure	(42)	
Purchase of property, plant and equipment	(167)	(151)
Proceeds from sale of equipment	58	
Net cash used in investing activities		
Cash flows from financing activities	60	
Proceeds from issue of shares (240+140) –(200-120)	150	
Proceeds from issue of loan note	(65)	
Dividends paid		
		145
Net cash from financing activities		
		135
Net increase in cash and cash equivalents		4
Cash and cash equivalents at the beginning of period		
Cash and cash equivalent at end of period (28+11)		139

Workings:

W 1: Property, plant and equipment Account

	K000		K000
Balance brought forward	447	Disposals	51
Additions during the year	167	Depreciation	135
Revaluation surplus	100	Balance carried forward	528
	714		714
Balance brought down	528		

W 2. Development expenditure account

	K000		K000
Bal. b/f	93	Amortisation	25
Cash paid	42	Bal. c/f	110
	135		135
Bal b/f	110		

(b)

Capital expenditure, is expenditure which results in the acquisition of non-current assets, or an increase/improvement in their earning capacity. They lead to non-current assets being capitalized in the statement of financial position. Examples of capital expenditure include acquisition of all forms of non-current assets like motor vehicles, plant and equipment, office furniture etc.

Revenue expenditure is incurred for the purpose of trade or to maintain the existing earning capacity of the non-current assets. Examples of revenue expenditure include purchase of goods for resale, payment for all forms of operating expenses like wages and salaries, stationery, rent, insurance etc.

Capital expenditure is generally a one-off expense, and its benefit is derived over several accounting periods, for example replacing a machine, whereas revenue expenditure is recurring and it is incurred repeatedly, for example repairing a building. Capital expenditure appears in the statement of financial position and is a debit to the non-current asset account and a credit to either cash or accounts payable, whereas revenue expenditure is a debit to the income statement and a credit to either cash or accounts payable. The whole of revenue expenditure is shown as an expense in the income statement whereas a proportion of capital expenditure is shown in the income statement (depreciation) with the balance shown in the statement of financial position. The effect of capital expenditure is long-term, its benefits are not exhausted within one year and are received for a number of years, whereas with revenue expenditure the benefit is received within one accounting year.

SOLUTION FOUR

a) Kabwe and Kamba Partnership statement of profit or loss and appropriation account for the year ended 31 March 2021.

		K'000
Revenue		995,000
Less returns in		(5,248)
Net sales		989,752
Less cost of sales:		
Opening inventory	43,000	
Purchases	503,000	
Carriage inwards	7,840	
Returns outwards	(20,500)	
Net purchases	533,340	
Less closing inventory	(41,200)	(492,140)
Gross profit		497,612
Less expenses		
Rent (28,000-5,000)	23,000	
Bank charges	12,005	
Selling expenses	5,461	
General expenses	9,449	
Wages and salaries	321,000	
Loan interest	40,000	
Receivables expense(2,200-99)	2,101	
Depreciation expense:		
Buildings (25% x (384-168)	54,000	
Plant (10% x 192,000)	19,200	(486,216)
Net profit before appropriation		11,396
Less appropriation:		
Add interest on drawings:		
Kabwe		2,145
Kamba		1,424
Total for distribution to partners		14,965
Less: interest on capital:		
Kabwe (5% x 85,000)	4,250	
Kamba (5% x 67,050)	3,353	
Salary – Kamba (14,500 x 3/12)	3,625	(11,228)
Residual profit		3,737
Share of residual profit		
Kabwe (4/7 x 3,737)		(2,135)
Kamba (3/7 x 3,737)		(1,602)
		0

b) Partners current accounts

	Kabwe	Kamba		Kabwe	Kamba
	K'000	K'000		K'000	K'000
Balance b/f		31,070		31,913	-
Interest on drawings	2,145	1,424	interest on cap	4,250	3,353
Drawings	64,000	175,070	Salary		3,625

			Profit share	2,135	1,602
			Loan interest	-	40,000
			Balances c/d	27,847	158,984
	66,145	207,564		66,145	207,564

WORKINGS

		K'000
1.	Receivables b/f	211,600
	Less ire debts	(2,200)
		209,400
	Allow. For receivables:	
	(4% x 209,400)	(8,376)
	Closing receivables	201,024

Therefore, movement in allowance for receivables equals:

	K'000
Allowance for receivables b/f	8,475
Decrease in allowance	(99)
Allowance for receivables c/f	8,376

SOLUTION FIVE

a) Capital at start:

		K'000
Assets at start		
Property (60,500 – 40,750)		19,750
Equipment (98,170 – 57,915)		40,255
Inventory		4,655
Trade receivables		1,790
Bank		41,630
		108,080
Less current liabilities		
Trade payables	10,750	
10% bank loan	40,000	(50,750)
Capital		57,330

b) **Yamfwa's statement of profit or loss for the year ended 31 March 2021.**

	K'000	K'000
Sales (15,225 W1 + 29,000 note (i) + 290,000)		334,225
Cost of sales:		
Opening inventory	4,655	
Purchases (W2 188,250 – 1,300)	186,950	
Closing inventory	(16,200)	(175,405)
Gross profit		158,820
Less expenses:		
Wages and salaries	52,990	
Irrecoverable debts written off	1,750	
Rent and rates (37,500 – 3,700)	33,800	
Electricity (6,005 + 2,100)	8,105	
Depreciation:		
Property (10% x 60,500)	6,050	
Equipment (15% x 40,255)	6,038	
Miscellaneous (8,960 +1,500)	10,460	
Loan interest accrued	4,000	
Bank charges	4,070	(127,263)
Net profit		31,557

c) **Yamfwa's statement of financial position as at 31 March 2021.**

Non current assets	K'000 Cost	K'000 Accumulated depreciation	K'000 Carrying amount
Property	60,500	(46,800)	13,700
Equipment	98,170	(63,953)	34,217
	158,670	110,753	47,917
Current assets			
Inventory		16,200	
Trade receivables		2,100	
Bank (W3)		41,965	

Rent and rates prepaid	3,700	63,965
Total assets		111,882
Capital and liabilities		
Capital at start (answer (a))		57,330
Plus net profit		31,557
Less drawings (1,300 + 27,500 + 5,235)		(34,035)
Capital at the end		54,852
Non current liabilities		
10% bank loan		40,000
Current liabilities		
Trade payables	13,930	
Loan interest owing (4,000 – 3,000)	1,000	
Electricity owing	2,100	17,030
Total capital and liabilities		111,882

WORKINGS	**K'000**
1. Credit sales	
Closing balance	2,100
Plus irrecoverable debts	1,750
Plus cash receipts	13,165
Less opening balance	(1,790)
Equals credit sales	**15,225**
2. Credit purchases	
Closing balance	13,930
Add cash payments	185,070
Less opening balance	(10,750)
Equals credit purchases	**188,250**
3. Closing bank balance	
Opening balance	41,630
Plus cash sales	290,000
Cash receipts from custom	13,165
Less payables	(185,070)
Less wages/salaries	(52,990)
Less electricity	(6,005)
Less rent and rates	(37,500)
Less bank charges	(4,070)
Less loan interest	(3,000)
Less miscellaneous expens	(8,960)
Less drawings	(5,235)
Equals closing balance	**41,965**

SOLUTION SIX

a)

i)

Asset. A present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits.

Liability. A present obligation of the entity to transfer an economic resource as a result of past events.

Equity. The residual interest in the assets of the entity after deducting all its liabilities.

Income. Increases in assets or decreases in liabilities that result in increases in equity, other than those relating to contributions from holders of equity claims.

Expenses. Decreases in assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to holders of equity claims*.*

ii) 3 Errors that can be detected by the trial balance are:

- Transposition
  A transposition error is a simple error of data entry that occurs when two digits that are either individual or part of a larger sequence of numbers are accidentally reversed when posting a transaction. If one is reversed and the other is correct.
- Omission (if it's one sided/partial omission)
- Commission (**If** one sided, or two debit entries are made)

iii) Reasons for having control accounts

- They provide a check on the accuracy of entries made in the personal accounts in the receivables and payables ledger.
- Control accounts also assist in the location of errors.
- Where there is a separation of clerical duties, the control account provides an internal check.

iv) Features of bank reconciliation statement

- It is not part of books of accounts.
- It is prepared periodically depending on the volume of transactions. It could be weekly, monthly or quarterly.
- It's meant for transactions which affect both bank accounts in the books of the company (cash book) and its bank statements.
- **Company Prepares the Statement**
  The first and foremost feature of this statement is that it is the company which prepares this statement and bank has no role to play in this exercise. The only thing which company needs while preparing this statement is the bank account statement from the bank.
- **Starting Point is Important**
  The starting point is important as far as this statement is concerned because if company starts with balance as per cash book of the company than treatment of various items like interest credited by the bank, cash deposits made in the bank directly, cheques issued but not presented for payment will be different as opposed to that treatment if the starting point is the balance in bank account statement of the company.

- **Not Compulsory**
  Unlike financial statements like balance sheet and profit and loss account which are compulsory to prepare a bank reconciliation statement is not compulsory as no law requires a company to prepare this statement. This statement is basically prepared for the convenience of the company and also for early fraud detection as the majority of fraud involves bank account and if the company can put check and balance in the bank account then a company can save itself from any major fraud.

b)

i)

BANK ACCOUNT IN GENERAL LEDGER(CASH BOOK)			
	K		**K**
Error In Recoding Cheq (2)	396	Opening Balance	1,348
Cancelled Cheque (1)	8,750	Bank Charges (3)	5,362
		Return Cheque (4)	4,480
Closing Balance	2,044		
	11,190		**11,190**

ii)

Tatwafilwapo
Bank Reconciliation Statement for November 2021

	K	**K**
Balance Per Bank Statement		3,192
Less :		
Unpresented Cheques (22, 806 – 8, 750)(1)	14,056	

Interest Incorrectly Credited (6)	3,080	(17,136)
		(13,944)
Outstanding Deposit(5)		11,900
Balance Per Cash Book		**(2,044**)

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.2: BUSINESS STATISTICS

WEDNESDAY 15 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

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

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

8. Present legible and tidy work.

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

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

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

SECTION A – (COMPULSORY)

Attempt all the ten (10) multiple choice questions.

<u>QUESTION ONE</u> (MULTIPLE CHOICE)

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

1.1 In case there are too many outliers in the data set, which of the following will be most affected?

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

(2 marks)

1.2 The time t (in seconds) taken by an athlete to run 400 meters on ten successive days were: 53.2, 55.7, 54.2, 52.7, 53.6, 56.8, 54.0, 53.7, 59.3, 53.8

The mean time of the athlete is?

A. 53.8
B. 54.7
C. 53.9
D. 53.75

(2 marks)

1.3 Studies in the year 2020 have reviewed a strong connection in severity of COVID-19 in patients based on their Age (x) and presence of respiratory disorders (y). A study of 10 adults COVID-19 patients above the age of 40 years gave the following results regarding the relationship between past number of times diagnosed with respiratory infection and their age.

$$\sum x = 583 \; \sum y = 79 \quad \sum x^2 = 35629 \; \sum y^2 = 723 \quad \sum xy = 4947$$

Find the Pearson's correlation coefficient, r , between age and having a respiratory disorder.

A. 0.71
B. 0.68
C. 0.85
D. 0.99

(2 marks)

1.4 The Economics Association of Zambia estimated the chance of successfully paying off all debts the nation owed to its creditors. If measures were calculated as probabilities, the possible correct value of limits (range) of probability would be;

A. $-1 \ to \ 1$
B. $-\infty \ to \ \infty$
C. $0 \ to + 1$
D. $-1 \ to \ 0$

(2 marks)

1.5 Further assessment indicated that the coefficient of determination for the regression analysis was 0.87. Calculate the coefficient of correlation.

A. 0.93
B. 0.87
C. 0.75
D. 0.65

(2 marks)

1.6 The table below is the distribution of the mean number of children per family:

Number of children	0	1	2	3	4	5	6
Number of families	10	18	24	14	6	4	2

The mean number of children per family is:

A. 2.1
B. 3.1
C. 4.1
D. 5.1

(2 marks)

1.7 A researcher has collected the following data. 4, 6, 13, 4, 3. The mean of the sample is 6. Calculate the coefficient of variation.

A. 60.55%
B. 67.7%
C. 81.24%
D. 147.71%

(2 marks)

1.8 Peps Corporation produces many types of soft drinks, including Orange Cola. The filling machines are adjusted to pour 350 milliliters of soda into each 350-milliliter can of Orange Cola. However, the actual amount of soda poured into each can is not exactly 350 milliliters; it varies from can to can. It has been observed that the net amount of soda in such a can has a normal distribution with a mean of 350 milliliters and a standard deviation of 0.55 milliliters.

What is the probability that a randomly selected can of Orange Cola contains 340 to 348 milliliters of soda?

A. 0.0005
B. 0.0025
C. 0.0002
D. 0

(2 marks)

1.9 The following data represent the final examination scores (in %) obtained by a sample of students in a computation analysis class.

40 42 47 48 50 51 52 57 58 59

What is the standard deviation of the performance?

A. 50.4
B. 6.45
C. 41.6
D. 5.5

(2 marks)

1.10 A newspaper trader wishes to supply newspapers to a learning institution. The probability that the trader will supply newspapers to the learning institution is 0.2. The probability of making sales in two visits is:

A. 0.8
B. 0.2
C. 0.64
D. 0.04

(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 yield of 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 tons per acre, and the rainfall x, in centimeters, for seven successful years are given in the table below:

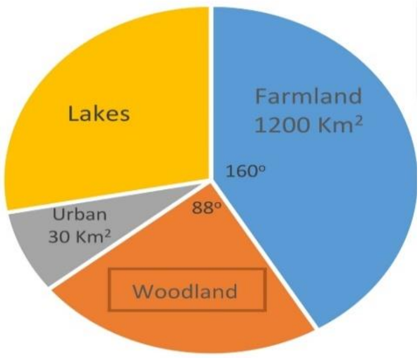
Rainfall (x)	12.3	13.7	14.5	11.2	13.2	14.1	12.0
Yield (y)	6.25	8.02	8.42	5.27	7.21	8.71	5.68

(i) Find the equation of the least squares regression line suitable for this data. (8 marks)

(ii) Given that the yield in a subsequent year was 8.08 tons per acre, estimate the rainfall in the growing season of that year. (2 marks)

(iii) Calculate the correlation coefficient, r. (4 marks)

(b) The pie chart, which is not drawn to scale, shows the distribution of various types of land and water in certain province.



Required:

Calculate:
(i) the area of Woodland, (2 marks)
(ii) the angle of the Urban sector, (2 marks)
(iii) the total area of the province. (2 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Use a pie chart to represent the following data:

Mukuba Mall Plc.

Shareholders owning more than 100,000 shares

Type of owner	Number of shares
Insurance companies	95
Banks and nominee companies	240
Pension funds	125
Individuals	190
Others	150
Total	800

(7 marks)

(b) The table below shows the probability distribution of the sales of a particular crop X in thousands of kwacha:

X (000)	6	7	8	9	10
P(X=X)	0.13	0.2	0.41	0.18	0.08

Required:

(i) Compute the mean sales (3 marks)
(ii) Compute the standard deviation of the sales. (5 marks)
(iii) Compute the coefficient of variation of the sales. (2 marks)

(c) The number of false fire alarms in a suburb of Lusaka averages 3.2 per month. Find the probability that there will be 4 false alarms in a particular month. (3 marks)

[Total: 20 Marks]

QUESTION FOUR

A cost accountant has derived the following data on the weekly output of standard size from a factory.

Week	Output (x) (thousands)	Total cost (y) (k'000)
1	25	65
2	7	30
3	9	31
4	28	71
5	23	54
6	19	53
7	15	40
8	13	23
9	18	45
10	13	38

$\sum x = 170, \quad \sum y = 450, \quad \sum xy = 8554, \quad \sum x^2 = 3316, \quad \sum y^2 = 22450$

Required:

(a) Plot a scatter diagram of the data (3 marks)

(b) Compute the coefficient of correlation. (5 marks)

(c) Find the regression equation of the total cost on the output. (7 marks)

(d) What is the fixed cost of the factory? (2 marks)

(e) In a given week it is planned to produce 20,000 standard size boxes. Use your regression equation to estimate the total cost of producing this quantity. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) The quarterly production units of a product X in 2019 and 2020 are shown in the table below:

YEAR	**QUARTER**			
	1	2	3	4
2019	50	60	40	70
2020	55	45	60	50

Required:

Calculate:

(i) 4 quarter moving average trend values. (8 marks)

(ii) Seasonal variation values by additive model. (4 marks)

(b) An hypothetical research carried out produced the following two sets of X and Y results:

X	5	4	6	7	3
Y	4	8	10	6	7

Required:

Compare the variation between set X and Y results. (8 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Given that $P(A) = 0.25,\ P(B) = 0.45$ and $P(A \cap B) = 0.15$. Calculate:

(i) $P(A|B)$ (2 marks)

(ii) $P(B|A)$ (2 marks)

(iii) $P(A \cap B')$ (2 marks)

(b) The scores of a particular test are known to have a normal distribution with mean 35 and variance 64.

Required:

Calculate the probability that the score is:

(i) Between 35 and 45 (2 marks)

(ii) Less than 20 (2 marks)

(iii) More than 39 (2 marks)

(c) The table below shows the distribution of salaries of the workers at a small bakery in Mansa.

SALARY (000)	**NUMBER OF WORKERS**
50 < 60	10
60 < 70	14
70 < 80	9
80 < 90	11
90 < 100	6

Required:

Calculate:

(i) the mean salary (2 marks)
(ii) the modal salary (3 marks)
(iii) the median salary (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.2 BUSINESS STASTISCS

SUGGESTED SOLUTIONS

SECTION A

SOLUTION ONE

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

1.10 D

SOLUTION TWO (COMPULSORY)

X	Y	X2	Y2	XY
12.3	6.25	151.29	39.0625	76.875
13.7	8.02	187.69	64.3204	109.874
14.5	8.42	210.25	70.8964	122.09
11.2	5.27	125.44	27.7729	59.024
13.2	7.21	174.24	51.9841	95.172
14.1	8.71	198.81	75.8641	122.811
12	5.68	144	32.2624	68.16
91	**49.56**	**1191.72**	**362.1628**	**654.006**

(i)

Therefore,

$$\beta = \frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - \left(\sum X\right)^2} = \frac{7\times 654.006 - 91\times 49.56}{7\times 1191.72 - (91)^2} = 1.115$$

and

$$\alpha = \overline{Y} - \beta\overline{X} = \frac{49}{7} - 1.115\left(\frac{91}{7}\right) = -7.5$$

Hence, the least–squares regression line is

$$y = \alpha + \beta x = -7.5 - 1.115x$$

(ii) $y = \alpha + \beta x$

$$8.08 = -7.5 + 1.115x$$
$$x = 13.97$$

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

$$= \frac{7(654.006) - (91)(49.56)}{\sqrt{[7(1191.72) - 91^2][7(362.16) - 49.45^2]}}$$

$$\boldsymbol{r = 0.98}$$

(b)

(i)

160° represents 1200 km^2 Therefore 88° represents $\frac{1200}{160} \times 88 = 660\ km^2$

(ii)

1200 km^2 is represented by 160° Therefore 30 km^2 is represented by $\frac{160}{1200} \times 30 = 4^{\circ}$

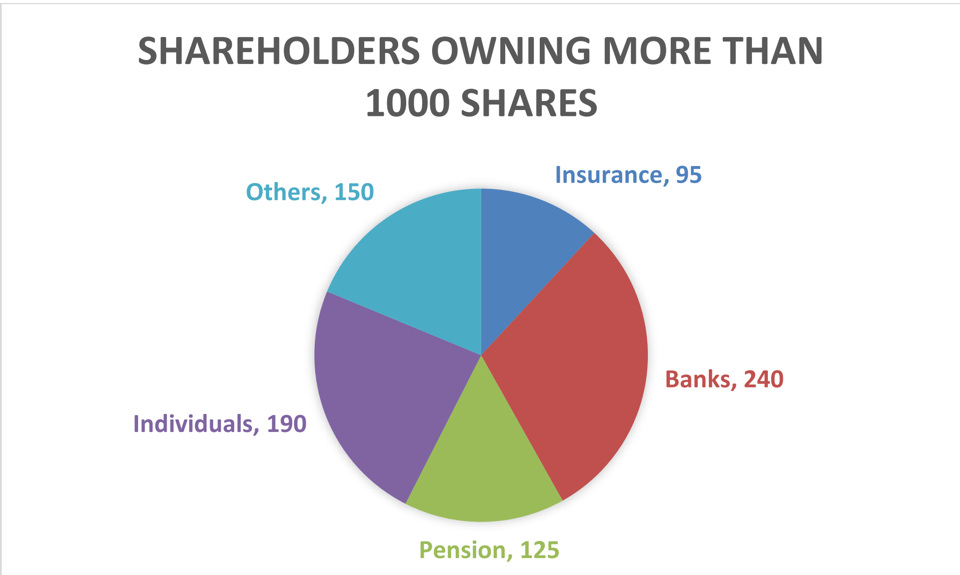
(iii)

160° represents 1200 km^2 Therefore 360° represents $\frac{1200}{160} \times 360 = 2700\ km^2$

SOLUTION THREE

(a)

Type of owner	Number of shares	Relative frequency	Slice of the pie
Insurance companies	95	$\frac{95}{800} = 0.11875$	$67.5°$
Banks and nominee companies	240	$\frac{240}{800} = 0.3000$	$108°$
Pensions	125	$\frac{125}{800} = 0.15625$	$56.25°$
Individuals	190	$\frac{190}{800} = 0.2375$	$85.5°$
Others	150	$\frac{150}{800} = 0.1875$	$67.5°$
Total	800	1.0000	$360°$



(b)

(i)

$$E(X) = \sum X \cdot P(X = x) = (6 \times 0.13) + (7 \times 0.2) + (8 \times 0.41) + (9 \times 0.18) + (10 \times 0.08) = 7.88$$

(ii)

$$E(X^2) = \sum X^2 \cdot P(X = x)$$
$$= \sum (6^2 \times 0.13) + (7^2 \times 0.2) + (8^2 \times 0.41) + (9^2 \times 0.18) + (10^2 \times 0.08) = 63.3$$

Therefore, $(X) = E(X^2) - [E(X)]^2 = 63.3 - 7.88^2 = 1.2$.

$$Standard\ deviation = \sqrt{1.2} = 1.1$$

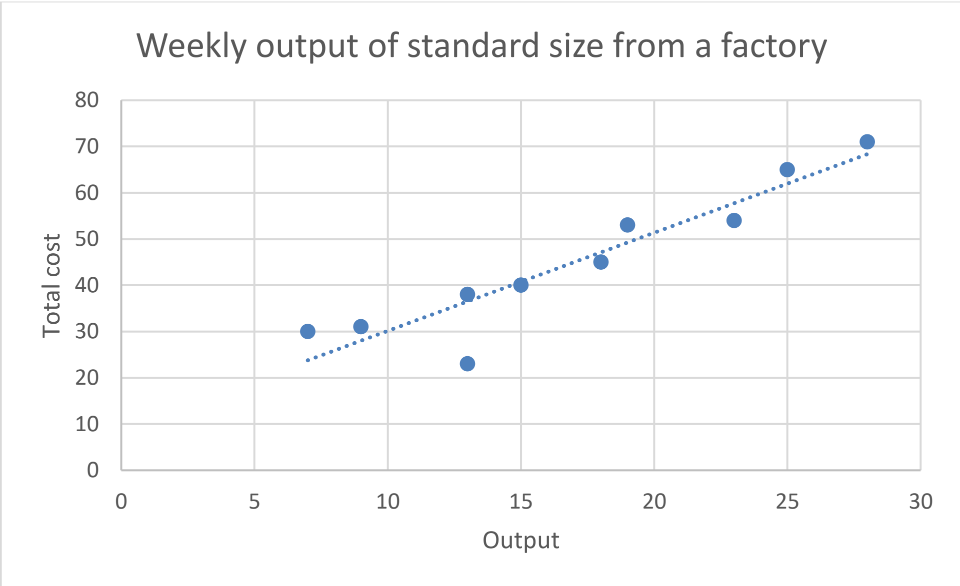
(iii) $CV = \frac{S}{\bar{x}} \times 100$, $CV = \frac{1.1}{7.88} \times 100 = 13.96\%$

(c)

$$P(X = x) = \frac{e^{-\mu}\mu^x}{x!}$$
$$P(X = 4) = \frac{e^{-3.2}3.2^4}{4!} = 0.1781$$

SOLUTION FOUR

(i)



(ii) the coefficient correlation is

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}} = \frac{10(8554) - (170)(450)}{\sqrt{(10(3316) - (170)^2)(10(22450) - (450)^2)}}$$

$$r = \frac{9040}{\sqrt{(42600)(22000)}} \approx 0.93$$

(iii)

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}} = \frac{8554 - \frac{(170)(450)}{10}}{3316 - \frac{(170)^2}{10}} = \frac{904}{426} \approx 2.122$$

$$a = \bar{y} - b\bar{x} = \frac{450}{10} - 2.122\left(\frac{170}{10}\right) = 8.925$$

$$\hat{y} = 8.925 + 2.122x$$

(i) When $x = 0$, $\hat{y} = 8.925$ i.e. the fixed cost is 8.925

(ii) When $x = 20$. $\hat{y} = 8.925 + 2.122(20) = 13.169$

SOLUTION FIVE

(a)

YEAR	Q	UNITS	MAT	MA	CA(T)	SV
2019	1	50				
	2	60				
			220	55		
	3	40			55.6	-15.6
			225	56.25		
	4	70			54.4	15.6
			210	52.5		
2020	1	55			55	0
			230	57.5		
	2	45			55	-10
			210	52.5		
	3	60				
	4	50				

(b)

$$\bar{X} = \frac{\sum X}{n} = \frac{5+4+6+7+3}{5} = \frac{25}{5} = 5$$

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

$$s = \sqrt{\frac{135}{5} - 5^2}$$

$$s = 1.41$$

$$CV = \frac{S}{\bar{x}} \times 100,\ CV = \frac{1.41}{5} \times 100 = 28.2\%$$

$$\bar{Y} = \frac{\sum Y}{n} = \frac{4+8+10+6+7}{5} = \frac{35}{5} = 7$$

$$\boldsymbol{s} = \sqrt{\frac{\sum y^2}{n} - y^2}$$

$$s = \sqrt{\frac{265}{5} - 7^2}$$

$$s = 2$$

$CV = \frac{s}{\bar{y}} \times 100$, $CV = \frac{2}{7} \times 100 = 28.6\%$

Comment:

There is very little variation between X and Y as there is only 0.4% difference in the coefficient of variation (CV).

SOLUTION SIX

(a)

(i) $P(A|B) = \frac{P(A \cap B)}{P(B)} = \frac{0.15}{0.45} = \frac{1}{3}$

(ii) $P(B|A) = \frac{P(A \cap B)}{P(A)} = \frac{0.15}{0.25} = \frac{3}{5}$

(iii) $P(A) = P(A \cap B) + P(A \cap B')$

$$0.25 = 0.15 + P(A \cap B')$$

$$P(A \cap B') = 0.25 - 0.15 = 0.10$$

(b)

(i) $P\left(\frac{35-35}{8} < Z < \frac{45-35}{8}\right) = P(0 < Z < 1.25$

$= 0.3944$

(ii) $P(X < 20) = \frac{20-35}{8} = \frac{-15}{8} = -1.88$

$= 0.5 - P(Z = 1.88)$

$= 0.5 - 0.4699$

$= 0.0301$

(iii) $P(X > 39) = \frac{39-35}{8} = \frac{4}{8} = 0.5$

$= 0.5 - P(Z = 0.5)$

$= 0.5 - 0.1915$

$= 0.3085$

(C) (i)

$$\bar{X} = \frac{\sum Xf}{\sum f}$$

X	f	Fx
55	10	550
65	14	910

75	9	675
85	11	935
95	6	570
375	50	3640

$$\bar{X} = \frac{\sum Xf}{\sum f} = \frac{3640}{50} = 72.8 = K72800$$

(ii) $$Modal\ salary\ = \ 60 + \left(\frac{14-10}{2(14)-10-9}\right)(10)$$

$$= \ 60 + \left(\frac{4}{28-19}\right)(10)$$

$$= \ K64.444$$

(iii)

SALARY	f	Cf	
50 < 60	10	10	
60 < 70	14	24	
70 < 80	9	33	25th
80 < 90	11	44	
90 < 100	6	50	

$$Median\ position = \frac{\sum f}{2} = \frac{50}{2} = 25th$$

$$Median\ salary = 70 + \left(\frac{25-24}{9}\right)(10)$$

$$= \ 70 + \left(\frac{1}{9}\right)(10)$$

$$= \ 71.1111$$

$$= K71111.1$$

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.3: BUSINESS ECONOMICS

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

<u>QUESTION ONE</u>

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

1.1 Which of the following statements below is always TRUE?

A. Opportunity cost is equal to total revenue minus total variable cost.
B. Opportunity cost is constant.
C. Opportunity cost is the cost in terms of the best foregone alternative.
D. Opportunity cost is equal to a firm's supernormal profits.

(2 marks)

1.2 In a free market economy the basic function of the price mechanism is to:

A. Provide a means of allocating resources.
B. Ensure that consumer wants are satisfied.
C. Enable the government to control prices.
D. Ensure the goods that society needs are produced.

(2 marks)

1.3 Which one of the following will shift the supply curve for good X to the right?

A. A decrease in labour productivity in industry X.
B. A fall in the price of raw materials used to produce good
C. An increase in real wages in industry X.
D. A government sales tax on the product in of good X.

(2 marks)

1.4 Which of the following is not a characteristic of an inferior good?

A. The income elasticity of demand is negative.
B. The income elasticity of demand is between zero and one.
C. The demand for the good increases as income falls.
D. The demand will rise if its price falls.

(2 marks)

1.5 The total output and the average physical product of the variable factor increase as long as the marginal physical product of the variable factor is:

A. Positive.
B. Above its average physical product.
C. Increasing.
D. Below its average physical product.

(2 marks)

1.6 Which one of the following statements about market structure is TRUE?

A. Perfect competition is distinguished from all other market structures because of the assumption of no barriers to entry/exit from the industry.
B. Firms under monopolistic competition face horizontal demand curves for their products.
C. A monopoly will find that its average revenue is always greater than its average costs.
D. Under perfect competition, in the long run, each firm will find that its marginal cost is equal to its average cost of production.

(2 marks)

1.7 If the business community decreases its investment expenditures by $4 billion, causing equilibrium national income to fall by $12 billion, the marginal propensity to spend is

A. 4/5.
B. 2/3.
C. 1/3.
D. 2/5.

(2 marks)

1.8 As a result of an economic policy change interest rates and consumption rise but investment falls. The new policy is:

A. An expansionary fiscal policy.
B. An expansionary monetary policy.
C. A contractionary fiscal policy.
D. A contractionary monetary policy.

(2 marks)

1.9 If the central bank has to intervene in the foreign exchange markets to prevent the home currency from appreciating, then its foreign exchange reserves will:

A. Decrease and the domestic money supply rise.
B. Decrease and the domestic money supply fall.
C. Increase and the domestic money supply rise.
D. Increase and the domestic money supply fall.

(2 marks)

1.10 Which of the following would constitute a supply side economic policy for reducing unemployment?

A. Increasing social security benefits.
B. Increasing the money supply.
C. Reducing corporate and personal taxation.
D. Increasing government expenditure aimed at exploiting the multiplier effect.

(2 marks)

[Total: 20 Marks]

SECTION B

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

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

Large-scale egg producers account for about 89% of total egg production in Zambia, including one company accounting for more than 20% share of the egg production. Egg production in Zambia is concentrated in the Copperbelt, which is close to the major export market in the DRC and to markets in Northern Zambia. Production is also high in Lusaka. Wholesale/retail prices of table eggs have remained flat for over two years, making it the cheapest protein source. This has driven up demand for eggs, especially among poorer urban households and made cost-efficiency critical in production. There is also a steady increase in the number of suppliers for eggs, ranging from backyard egg production to big commercial poultry farmers. The increase in the number of egg suppliers has also opened an opportunity for firms that produce feed and/or feed supplements for the birds.

The table below shows the daily demand and supply of eggs in Lusaka.

Price (ZMK)	Quantity Demanded	Quantity Supplied
0.50	110	5
1.00	90	46
1.50	78	78
2.00	68	100
2.50	63	115
3.00	60	123

Required:

(a) Using the information in the table above, draw demand and supply curves for eggs, and label it correctly. (4 marks)

(b) Determine the equilibrium price and quantity traded for eggs. (2 marks)

(c) Explain what happens to the equilibrium price and quantity in each of the following:

(i) There is an increase in the cost of feed. (3 marks)

(ii) Doctors recommend the consumption of eggs as a good source of protein. (3 marks)

(d) Explain what happens if the price is:

(i) Above the equilibrium price (4 marks)
(ii) If suppliers are given a subsidy. (4 marks)

[Total: 20 Marks]

QUESTION THREE

The equilibrium position of a firm may differ between the short run and long run production periods. The short run is when the firm cannot fully react to changes in conditions, and the long run is when the firm can fully adjust to changes in demand or cost conditions. Firms choose the output at which marginal cost equals marginal revenue. This maximizes profits (or minimizes losses). If profits are positive, the firm produces this output. If profits are negative, it checks whether losses are reduced by shutting down.

Required:

(a) Use the information in the table below to compute average costs and marginal costs. (6 marks)

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

(b) Explain the following as they relate to the long run average costs;

(i) Increasing returns to scale (2 marks)
(ii) Constant returns to scale (2 marks)
(iii) Decreasing returns to scale (2 marks)

(c) Describe the relationship between average costs and marginal costs (4 marks)

(d) Explain why a firm may still continue to produce even when it can only sell at a loss. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

"The negative effects of the Novel Corona Virus 2019 remained a dominant influence on global and domestic economic performance in the first half of 2020. Various forecasts now show that the Zambian economy shrinking between 2.4 and 5.2% from an initial growth projection of around 3% before the impact of the pandemic. Business activity hit new record low in the second quarter of the year as firms cut back production and headcount due to a slump in trade activities and consumption resulting from the lockdown and other national health emergency measures that were effected. Business sentiment was negatively affected by the material effect that Covid-19 had over a relatively short period of time" ZANACO Bulletin, 12 August 2020.

Required:

(a) What do you understand by the term 'GDP growth'? (4 marks)
(b) Explain any four (4) factors that can bring about GDP growth in Zambia. (8 marks)
(c) State any four (4) benefits of GDP growth in Zambia. (4 marks)
(d) State any four (4) disadvantages of GDP growth (4 marks)

[Total: 20 Marks]

QUESTION FIVE

One of the perennial problems with Zambia businesses is limited access to credit. There is always demand for loans and there are credit worthy potential borrowers. Whenever new loans are granted deposits are created. There is, however, no guarantee that the 'correct' or 'appropriate' amount of loans will be granted. Banks may sometimes create excessive amounts of money, while at other times they might be unwilling to grant loans because of the risk associated with those loans. In fact, the banking system tends to be inherently unstable and this is where the Bank of Zambia enters the scenario. A growing economy requires a growing money stock, but money growth should also not be excessive, since it cause inflation. The Bank of Zambia regulates the money creation process and attempts to prevent the creation of excessive amounts of money (in order to control inflation) as well as situations in which too little money is created, which may stifle economic activities. To achieve this, the Bank of Zambia uses monetary tools available to it which include changes in the Reserve Requirement (cash ratio), Open-Market Operations that control the amount of reserves held by banks, and adjusting the Discount Rate, which may influence the amount of reserves banks borrow from the Bank of Zambia.

Required:

(a) What do you understand by the statement that 'banks create money whenever they grant loans'? (2 marks)

(b) If all the banks in the Zambian economy have received an initial cash deposit of K10,000,000 and the required reserve or cash ratio is set at 16%.

(i) Find the value of the credit multiplier (2 marks)
(ii) The value of the total deposits by the banking system (2 marks)
(iii) How much money has been created by the banking system (2 marks)
(iv) Outline any two (2) limitations of credit creation by banks (4 marks)

(c) Assuming that Zambia is experiencing inflationary pressure to excessive credit creation by banks leading too much money in circulation, explain how the Bank of Zambia can use the following monetary policy tools to reduce money supply:

(i) Required reserves or cash ratio (3 marks)
(ii) Open Market Operations (3 marks)
(iii) Discount Rate (2 marks)

[Total: 20 Marks]

QUESTION SIX

As countries develop and get richer, one of the first things people want is a car. The income elasticity of demand for cars has been estimated at around 2. China, one of the fastest-growing economies in the world, now has an insatiable appetite for cars. With rapidly rising incomes, the once common bicycle is fast giving way to the car. In 1949 the world's most populous economy had a mere 1800 cars. By 2005 that figure was 24 million, making China second only to the US in the size of its car market. In 2009 China became the biggest market in the world in terms of cars. In that year, the number of cars sold in China increased by 49 per cent compared to 2008. **(David Berg et al, 2015)**

Required:

(a) Explain whether the price elasticity of demand for sport-utility vehicles (SUVs) will increase, decrease, or remain the same when each of the following events occurs?

(i) Other car manufacturers, decide to make and sell SUVs. (1 mark)

(ii) SUVs produced in foreign countries are banned from the Chinese market. (1 mark)

(iii) Due to ad campaigns, the Chinese believe that SUVs are much safer than ordinary passenger cars. (1 mark)

(iv) The time period over which you measure the elasticity lengthens. During that longer time, new models such as four-wheel-drive cargo vans appear. (1 mark)

(b) Assume that the car industry in China operates in an oligopoly competitive structure.

(i) Outline any three (3) pricing strategies an oligopolist might adopt. (6 marks)

(ii) Illustrate with the use of a diagram, the kinked demand curve of oligopoly. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.3 BUSINESS ECONOMICS

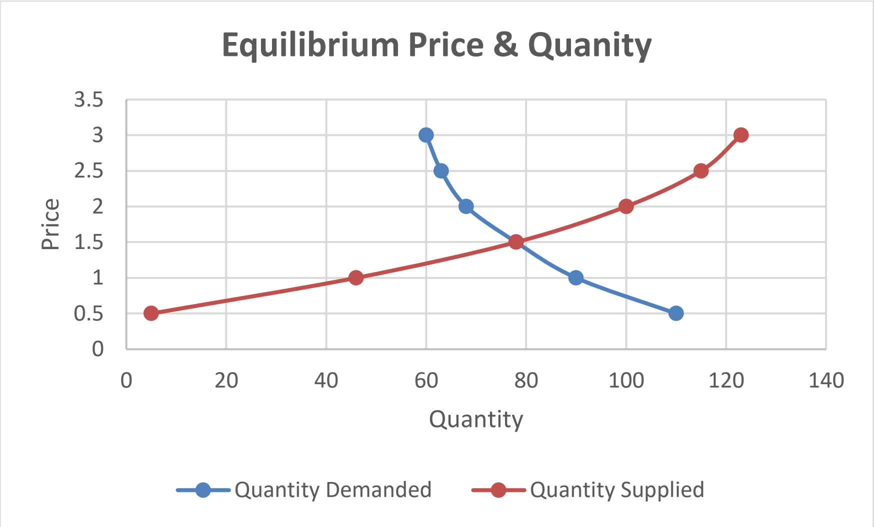
SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a)



b) Looking at the information in the table, as well as the point where the demand and supply curves intersect, the equilibrium price is **K1.50** and the equilibrium quantity is **78 eggs**.

c)

i) When there is an increase in the cost of feed, it will become more costly for suppliers to supply eggs. Therefore, they will buy less feed because of the increase in its cost, thereby only be able feed few layers, hence the reduction in the number of eggs supplied.

ii) Following doctor's recommendation that eggs are a good source of proteins, there is likely to be an increase in the demand for eggs.

d)

i) If the price is set above equilibrium price, this will create excess supply (surplus). Suppliers will be willing to supply more at higher prices, but consumers will only be willing to buy less. This state of disequilibrium will pull down the price until a state of equilibrium is restored.

ii) If suppliers are given a subsidy, it means that there cost of production will be cushioned. This will enable them to produce more eggs and supply more eggs at the same prices. This will create a temporal a surplus which will quickly be resolved as the price will be pulled down to a new equilibrium point, at a lower price and higher quantity.

SOLUTON THREE

a) **Compute AC and MC**

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

b) **Returns to scale**

- Increasing returns to scale (or economies of scale): when all the inputs of production are increased by the same factor and the output produced increases more than proportionally.
- Constant returns to scale: when all the inputs of production are increased by the same factor and the output produced increases by the same factor.
- Decreasing returns to scale (or diseconomies of scale): when all the inputs of production are increased by the same factor and the output produced increases less than proportionally

c) **Relationship between AC and MC**

When MC is below AC, AC decreases. When MC is above AC, AC increases. Furthermore, MC and AC cross at the point where AC reaches a minimum.

d) **Why a firm would continue even when it is making losses**

In the short run, a firm continues to cope with losses so long as the average revenue is greater or equal to the average variable cost (AR≥AVC), because, by covering variable costs, the firm is incurring the loss of fixed cost only which it has to incur even when production is discontinued. The firm hopes that in the long run, it can make adjustments which can improve the situation. If this doesn’t work, in the long run, a firm will have to shut down.

SOLUTION FOUR

a) GDP growth simply refers to the increase in the quantity of goods and services produced in a country during a given period of time, usually a year

b) Economic growth is a steady increase in national income brought about as a result of an increase in the productive capacity of the economy. There are main sources of economic growth. An increase in supply of factor inputs such as:
   - An **increase in the working age population** and an **increase in the number of women participating in economic activities** lead to increases in the labour force participation rate which in turn raises output.
   - **Increases in the stock of physical capital** due to positive net investment and **increase in natural resources by discovering more natural economic sites** such as mineral deposits and tourism sites. This means more consumer and capital goods can be produced in the future.
   - **Technological developments** where improved production techniques or machinery are innovated and bring about the exploitation of more economies of scale.
   - **Growth in human capital** which would be achieved through increased investment in improved education and training, improved working arrangements, and more effective management.
   - Political stability which encourages foreign investment

c) The following are the benefits of GDP growth to a country:
   - Increased employment opportunities
   - Improved investment climate
   - Reduced poverty level
   - Increased living standards
   - Reduction in social vices like petty crimes, prostitution, etc

d) The disadvantages of GDP growth include the following:
   - Increased pollution of the environment or waste of natural resources
   - Maximized economic growth may also fail to resolve socioeconomic problems or may exacerbate them
   - Rapid economic growth through technological change in many instances increases worker obsolescence (workers no longer have skills needed in the labour market), brings about new anxieties and insecurities, and undermines family relationships as the workplace takes on greater importance than human relationships
   - Although attempts are being made to curb pollution, industrial waste is a by-product of increased output. It therefore can be expected that water, land, and air pollution will increase with time
   - Waste of economic resources may also result when least-cost methods dictate current resource use with little attention paid to the possible effect that current use may have upon future generations
   - There is no guarantee that growth resolves socioeconomic problems such as poverty. Poverty in an economy is relative to the economy's standard of living. Thus, growth does not resolve the problem of relative poverty, which is only resolved by a redistribution of current income.

SOLUTION FIVE

a) Credit creation is the increase of credit lent to customers by banks who lend money deposited with them on to other banks who lend it to their customers the rough the use of cheques

b) i) Credit Multiplier = 1/Cash ratio = 1/0.16 = **6.25**

   i) Total deposits D = Initial cash deposit/Cash ratio = C/r = K10,000,000/0.16 = **K62,500,000** or simply D = initial cash deposit x credit multiplier = K10,000,000 x 6.25 = K62,500,000

   ii) Total credit created = Total deposits – Initial deposit = K62,500,000 – K10,000,000 = **K52,500, 000.**

   iii) Limitations of credit creation by banks are:

   - Cash leaks out of the banking system into less formal accumulations
   - Customers might not want to borrow at the interest rates the bank would charge
   - Banks should not lend high-risk customers without good security

c) To reduce money supply, the Bank of Zambia would use its monetary policy tools as follows:

- **Reserve-Requirement**: Required reserves represent the amount of money, expressed as a percentage, that every deposit accepting institution must keep with the Bank of Zambia to meet their legal requirements. To reduce money supply, the bank of Zambia increases the required reserves. An increase in the reserve requirement (monetary tightness) decreases the excess reserves of banks and in turn their capacity to create credit. While reserve-requirement variation is a powerful means of changing the money supply, it is used infrequently.
- **Open-Market Operations.** Open-market operations consist of the purchase and sale of government securities by the Bank of Zambia. When the Bank of Zambia sales government securities, it receives payment for these bonds by debiting the deposit accounts banks have at the Bank of Zambia. Since reserves include these deposits, such security sales reduce bank reserves and eventually the amount of loans granted by banks, thereby reducing money supply.
- **Discount Rate**. A bank may borrow reserves (discount) from the Bank of Zambia when it has a reserve deficiency; the rate of interest it pays the Bank of Zambia is the discount rate. Banks are encouraged to remedy a deficiency by borrowing the excess reserves of other banks in the interbank market rather than borrow at the Bank of Zambia. So, the Bank of Zambia frequently changes the discount rate. A discount rate change is newsworthy in that it confirms the direction of the movement in the discount rate and interest rates in general. To reduce money supply, the Bank of Zambia would increase the discount rate making it more expensive for banks to borrow. This reduces the banks reserves and the banks' capacity to create credit.

SOLUTION SIX

a) Elasticity

i) The price elasticity of demand for SUVs will increase because more substitutes are available.

ii) The price elasticity of demand for SUVs will decrease because fewer substitutes are available.

iii) The price elasticity of demand for SUVs will decrease because other cars are viewed as less of a substitute.

iv) The price elasticity of demand for SUVs will increase over time because more substitutes (such as four-wheel-drive cargo vans) become available.

b) Oligopoly

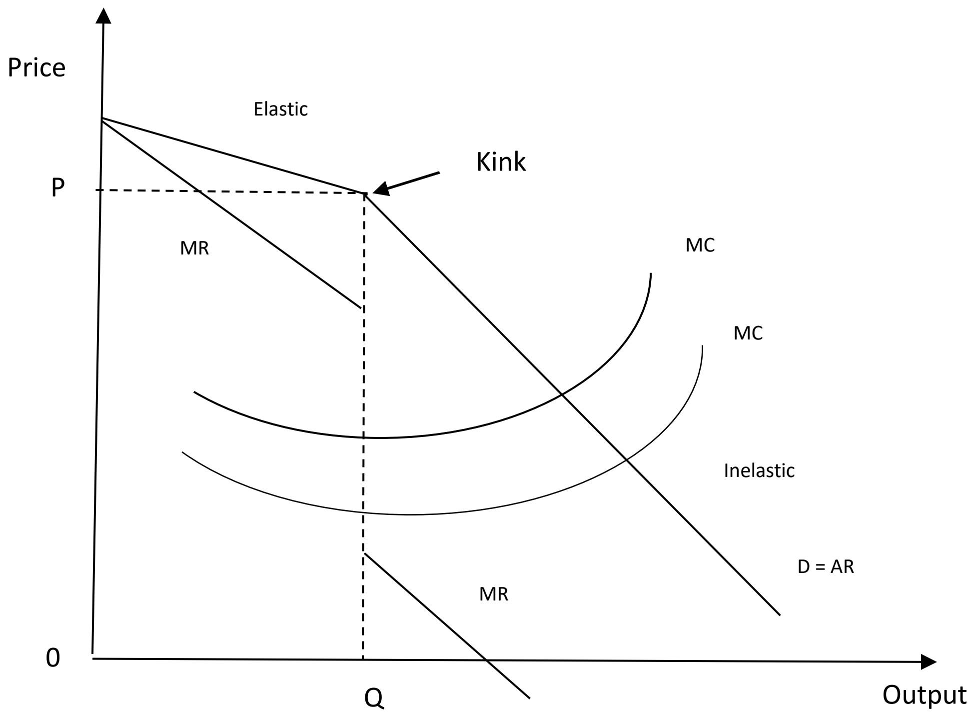
i) Pricing strategies

- **Collusive oligopoly**; this is where large firms agree to a common policy on pricing and market sharing.
- **Kinked demand curve**; this is where individual firms make their own decisions regarding pricing. The effect of this will depend on how rivals react.
- Become a **price follower** and respond to the actions of a price leader.
- **Do nothing**; the firm may feel it would be disadvantageous to change its price, again based on the kinked demand curve.

ii) The Kinked Demand curve

The kinked demand curve helps to explain how an oligopolist might have to accept price stability in the market. Assume that, on one hand, the oligopolist decides to raise his price above P, competitors are likely to keep their prices lower so that more customers may buy from them instead. As a result of this, the firm will eventually restore the original price. Demand would be elastic at increased prices.

If, on the other hand, the oligopolist were to reduce his price below P, competitors would follow suit. Total market demand might rise, but the increase in demand for the individual firm would be quite low. Demand is therefore less elastic (inelastic) at lower prices, hence a 'kink' in the demand curve.



CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

<u>QUESTION ONE</u>

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

1.1 Which one of the following best defines a Common law legal system?

A. The legal system in which laws are based on precedent, i.e., the recorded reasons given by judges for their decisions, which are adopted by judges in later cases with similar facts.

B. The legal system derived from Roman law that focuses on the development of a comprehensive legislated code.

C. The rules of law administered by the courts of equity.

D. The rights and duties that each person has in society.

(2 marks)

1.2 Which of these is not true about a tort?

A. The relevant law is private law.

B. The accused owes an obligation to the plaintiff.

C. The plaintiff sues the accused.

D. The usual remedy is punishment via sentence.

(2 marks)

1.3 An intention to create legal relations:

A. Is determined by a test of whether the parties themselves actually intended to enter into a contract.

B. Is determined by a test of whether a reasonable person would believe the parties intended to enter into a contract.

C. Is usually presumed in a family context but not a business context.

D. Is determined by a test put by the court (2 marks)

1.4 Discharge by frustration happens when the frustrating event occurs after the contract was made and external circumstances:

A. Create unforeseen hardship on one or both of the parties and make future performance impossible to do.

C. Undermine the purpose of the contract in that performance would mean something much different than originally intended by the parties.

D. Impossible to infuse new terms given the frustration

(2 marks)

1.5 When an agency relationship is ratified, which of these is not true?

A. Acceptance by the principal may be implied by the principal's behavour.

B. Ratification must occur within a reasonable time after creation of the contract.

C. The principal may accept only part of the agreement.

D. The principal can ratify the contract

(2 marks)

1.6 The definition of a Contract of Sale has been defined differently by so many scholars, which one of the following is the most acceptable one:

A. The purchaser makes the contract with the vendor, even if the vendor still has something to do to put the goods into a deliverable state.

B. The purchaser notifies the vendor he is ready to receive delivery.

C. The Seller transfers or agrees to transfer the property in the goods to the buyer for a money consideration called the price.

D. Passing of property has occurred**.**

(2 marks)

1.7 What determines whether a business relationship constitutes a partnership?

A. The substance of the relationship, not the form.

B. The forming of an entity with a common view of making and sharing of profits

C. Factors such as contribution of property or labour, participation in management, and holding oneself out as a partner.

D. The intention of the parties to carry on a business.

(2 marks)

1.8 This remedy requires payment of a reasonable amount to cover work done, even though there was no agreed upon sum or the work is less than what was contracted for:

A. Specific performance
B. Injunction
C. Rescission
D. Quantum meruit

(2 marks)

1.9 In general, under the Sale of Goods Act, a purchaser becomes responsible for risk of loss or damage to goods he has purchased when:

A. The purchaser makes the contract with the vendor, even if the vendor still has something to do to put the goods into a deliverable state.

B. The purchaser notifies the vendor he is ready to receive delivery.

C. The purchaser receives delivery.

D. Passing of property has occurred.

(2 marks)

1.10 Which of the following specific remedy under the Sale of Goods Act allows a seller to receive full payment if a buyer refuses to take delivery, even though title has passed:

A. Liquidated damages

B. Specific performance

C. Action for the price

D. Lien

(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)

(a) 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]

<u>QUESTION THREE</u>

The company's articles state that the company has been formed solely in order to produce and sell toy guns and anything related to that particular business. The articles further provide that the Board must secure a shareholder resolution approving any contract to commit the company for more than K700,000.00. Annually, the Board of Directors approves a list of personnel authorized to enter into contracts on behalf of the company with third parties. The company however has debt and decided to involve itself in drugs supply. One major shareholder is dissatisfied with the change of company objectives and would like to have this company wound up.

Required:

(a) Explain to him on the suitable mode of winding up this entity. (10 marks)

(b) In the event the company had thought of reducing share capital, explain on the appropriate procedure for the same. (10 mark)

[Total: 20 Marks]

QUESTION FOUR

Belinda Lubinda owns a saloon in the Northern Province of Zambia. She is the sole proprietor of the Saloon Lubi's Beauty Parlor. However, for the past few weeks she suffered a toothache which made it impossible for her to continue managing the business. She first went to see a Dentist in Mongu where she had her tooth extracted, but since then she has suffered a severe head ache. After several attempts at the same clinic to seek treatment, she developed an infection after which she was referred to the University Teaching Hospital in Lusaka. She made arrangements to travel to Lusaka, upon arrival in Lusaka she decided to go to a private clinic called Dental Star Surgery hoping to receive prompt treatment because she could not stand the queues at UTH. She underwent surgery which unfortunately, resulted in the damage of one of her alveolar veins.

Due to the pain that she has suffered since the time she was in Mongu; the money she spent in total on hospital bills; and her loss of profits back home in Mongu, Belinda Lubinda is envisaging suing. However, she is not sure who to sue and under what course of action.

Required:

In explaining to Ms Lubinda on who is to be sued:

(a) Explain to her on how liability will accrue to either Mongu Dental Clinic or Dental Star Surgery in Lusaka. (10 marks)

(b) Since Ms Lubinda has suffered losses in her business due to being a sole proprietor. Explain to her as to what businesses she can convert her sole proprietorship business to for continuity purposes. (6 marks)

(c) Explain the difference between her suing in the Law of Tort or Law of Contract. (2 marks)

(d) Define an employment contract. (2 marks)

[TOTAL: 20 Marks]

QUESTION FIVE

Explain the following:

(a) Any three (3) duties of employers and any three (3) duties of the employees (6 marks)

(b) Wrongful and unfair dismissal (5 marks)

(c) Agency by estoppel (5 marks)

(d) Vicarious liability (4 marks)

[Total: 20 Marks]

QUESTION SIX

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

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

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

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

Required:

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

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

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

[Total: 20 Marks]

END OF PAPER

CA 1.4: COMMERCIAL AND CORPORATE LAW

SUGGESTED SOLUTIONS

SOLUTION ONE

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

1.10. C

SOLUTION TWO

(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 to 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

SOLUTION THREE

(a) Compulsory liquidation (by court order)

He needs to petition the court for Compulsory liquidation. This process starts with an application to the court alleging that one or more of the required grounds exist. The application may be brought by the company or a majority of its directors, or by the Registrar of Companies, or by a creditor. Applications by creditors are by far the most important and common. In this case, the company is in debt and is now trading in drugs and beyond its object clause.

- The company is now indulging on illegality
- The Company is unable to pay its debt
- It is just and equitable that the company be wound up

(b) Reduction of share may be done by a company at any point provided the appropriate procedure is followed. This is so because reduction of share capital affects creditor's security. The law has put in place measures deliberately meant to protect the interest of creditors. Any alteration of company's share capital can be made after a special resolution and the special resolution must be lodged with the registrar within 21 days of being passed.

Section 150 of the Companies Act provides for reduction of share capital,

- A court order must be obtained by the company intending to reduce its capital
- The articles of the company must permit for reduction of share capital
- A special resolution must be passed for this activity to happen
- The resolution, minutes and court order must be lodged with the registrar within 21 days.
- All creditors must consent in writing for a reduction of share capital.

The powers of court in reduction of share capital are provided for under section 150 of the Companies Act. The company must pass a special resolution to reduce share capital and thereafter apply to court to for an order to reduce share capital.

SOLUTION FOUR

(a) There are two main institutions that can be sued in the circumstances. Firstly, the Mongu Dental Clinic or Dental Star Surgery. In determining who exactly is liable, it is important to look at the most substantive and effective cause of Madam Lubinda's injury. In determining liability in the law of tort, it is important to consider the issue of causation. This is done by making a connection between the defendants wrongful conduct and the damage suffered by the plaintiff. If the damage was caused by some other factor then the defendant will escape liability. The 'but for' test is applied. **Bernett v Chelsea and Kensignton Hospital Mnagement Committee [1969].**

Therefore, Mongu Clinic was responsible for the headache suffered by Madam Lubinda but the most effective and substantive cause of the damage to the alveolar veins was caused by Lusaka Dental Surgery. Hence Madam Lubinda must sue Lusaka Dental Surgery.

Secondly the most appropriate course of action to pursue this action is the tort of negligence, which is not taking care in particular circumstances as required by the law. The three main elements of negligence are duty of care, breach of duty and resultant damage

(b) Madam Lubinda can covert her business to a partnership where two or more people come together to run a business with a view to make a profit. She can also consider staring up a private company where she can also form it with some other people then the business will continue running even in her absence.

(c) Liability in contract mainly arises where there is pre-existing contractual relationship where as in tort it is not necessary that there is a pre-existing contractual relationship. Secondly in the law of contract a person can recover damages A from a pure economic loss, but in the law of tort there should be an injury that causes the financial loss. Hence the most appropriate branch of law she can sue under I the law of tort as her loss was not purely financial.

(d) An employment contract is a contract between an employer and an employee where an employee renders service to the employer in return for remuneration known as a salary

SOLUTION FIVE

1. **Duties of employee**

i) Obedience. ...
ii) Dealing honestly with the **employer**. ...
iii) Working with reasonable care and skill. ...
iv) Not disclosing information to others. ...
v) Disclosing any possible conflict of interest. ...
vi) Caring for the **employer's** property, equipment, and facilities

2. Duties of employer

2. Remunerate employee
3. Indemnify employee
4. make the workplace safe.
5. prevent risks to health.
6. ensure that plant and machinery is safe to use.
7. ensure safe working practices are set up and followed.
8. make sure that all materials are handled, stored and used safely.
9. provide adequate first aid facilities.

(b) Wrongful dismissal is a claim based in contract law and it essentially the common law action for breach of contract, and **unfair dismissal** is a statutory construction which aims to ensure that employers do not dismiss employees without a demonstrable reason and utilize a fair procedure in any.

(c) A situation in which a reasonable person may assume **agency** agreement exists when it does not. For example, if a person or company allows another person or company to use proprietary letterhead to send out correspondence, **agency by estoppel** may exist.

(d) Vicarious liability is a legal doctrine that assigns *liability* for an injury to a person who did not cause the injury but who has a particular legal relationship to the person who did act negligently. It is also referred to as imputed Negligence.

SOLUTION SIX

i. **Procedure of winding up a Company by the Court**

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

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

A winding up by the Court will occur when the Directors of the Company make a statutory declaration before the Court in which they declare that the Company will not be able to settle and/or pay its debts within a twelve months period. Once satisfied as to the contents of the declaration, the Court will then make an Order to wind-up the Company.

The effective date of a winding up by the Court is traced back to when the petition for dissolution is actually presented to the Court, save for instance in which there was already an earlier resolution regarding a voluntary dissolution.

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

Suffice it to note that there mere fact that a petition for the dissolution of a company has been presented does not then entail that the Court is bound to make an Order, the Court upon reviewing the circumstances of the case may Order the Petition holds off for a   A contract can, at law be discharged in any one of the following ways:

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

ii. Ordinarily, one that occasions a particular tortious act against another should be primarily responsible for such an act, however, there is at law a principle known as

Vicarious Liability. This principle makes it possible at law for a Third Party to be responsible for the acts of another person.

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

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

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

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

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

<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. Each question is allocated two (2) marks.

1.1 What are the three interpersonal roles of managers?

A. Figurehead, leader and liaison
B. Spokesperson, leader, coordinator
C. Director, coordinator, disseminator
D. Communicator, organizer, spokesperson

(2 marks)

1.2 Which one is **NOT** a recognized key skill of management?

A. Conceptual skills
B. Human skills
C. Technical skills
D. Writing skill

(2 marks)

1.3 Which one of the following is **NOT** a characteristic of a bureaucratic organization?

A. Authority
B. Regulations
C. Command structure
D. Change

(2 marks)

1.4 A statement about what an organization wants to become, which sets out an organizations future, is referred to as:

A. Mission
B. Values
C. Organizational goals
D. Vision

(2 marks)

1.5 Which one of the following is an example of an internal stakeholder?

A. Shareholders
B. Customers
C. Suppliers
D. Financiers

(2 marks)

1.6 Which one of the following types of organization culture did Harrison name the Greek God "Athena"?

A. Power
B. Existential
C. Task
D. Role

(2 marks)

1.7 What is the guiding principle of scientific management?

A. Experimentation
B. Fluid working relationships
C. Freedom of association
D. One best way to do a job

(2 marks)

1.8 Which one of the following is **NOT** one of the ways public sector organizations raise money?

A. Raising taxes
B. Making charges for their goods and services
C. Borrowing
D. Receiving subsidies.

(2 marks)

1.9 The following is an advantage of Performance appraisal.

A. Promotes formation of trade Unions
B. Promotes relationship with management
C. Promotes sharing of profits between managers and employees
D. Employees get to know their salaries

(2 marks)

1.10 Which of the following is an advantage of Virtual offices?

A. Good for internet users
B. Good to work away from the office
C. Customers cannot see the product physically
D. Provides limited time to work

(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)

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

Required:

(a) Explain the aspects of managerial authority (6 marks)

(b) Describe the stages of group development according to Tuckman. (12 marks)

(c) Define the term "fiduciary duty" in legal form. (2 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

Trade kings has opened a new branch in Kitwe from Lusaka in order to spread widely and this has excited the residents of Kitwe who are queuing up there in great numbers for different reason.

Required:

(a) Describe the move made by Trade Kings. (8 marks)

(b) What six (6) key conditions do you suggest will make the move by Trade Kings successful? (12 marks)

[Total: 20 Marks]

<u>QUESTION FOUR</u>

Rosemary has just completed her master's degree studies in psychology. She is so excited that she has achieved her goals and her parents are overjoyed by the news.

Required:

(a) What six (6) characteristics of goal setting suggested by Locke and Lathan helped her to achieve her goal? (12 marks)

(b) What are the two (2) implications of goal setting on Rosemary? (8 marks)

[Total: 20 Marks]

QUESTION FIVE

After independence in 1964, the government practiced what is commonly known as communist economical system and most of the mines including most of the companies were managed and controlled by the government. In the early 90s, the government privatized most of the government owned companies and they become private entities. However, some of the companies are still government owned and are providing public services.

Required:

(a) Define the public sector organizations. (2 marks)

(b) Explain the differences between public and private limited companies. (16 marks)

(c) What are the main objectives of public sector organizations? (2 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Define the following:

(i) Virtual teams. (4 marks)
(ii) Network organizations. (3 marks)
(iii) Matrix organization structures. (3 marks)

(b) Explain the two (2) advantages and three (3) disadvantages of a matrix structure. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5 – MANAGEMENT THEORY AND PRACTICE

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a. Explain the aspects of managerial authority
   - Making decisions within the scope of the authority that the manager has been give.
   - Giving tasks to subordinates.
   - Expecting and requiring satisfactory performance of these tasks by subordinates.

b. Describe the stages of group development according to Tuckman
   - Forming (Step 1)

     The team is just coming together and each member wishes to impress his/her personality on the group. Individuals will be trying to out about each other and the aims and norms of the team.
   - Storming (Step 2)

     Involves open conflict between team members. There may be changes agreed in the original objectives, procedures and norms established for the group. Then more realistic targets are set and trust between group members increase.

   - Norming (Step 3)

     A period of settling down. There will be agreements about work sharing, individual requirements and expectations of outputs. Norms and procedures may evolve which enable methodical working to be introduced and maintained.

   - Performing (Step 4)

     The team sets to work to execute its task. The difficulties of growth and development no longer hinder the group's objectives.

c. Define the term "fiduciary duty" in legal form.

   A duty imposed upon certain persons because of the position of trust and confidences in which they stand in relation to another. The duty is more onerous than generally arises under a contractual or tort relationship. It requires full disclosure of information held by the fiduciary, a strict duty to account for any profits received as a result of the relationship, and a duty to avoid conflicts of interest.

SOLUTION THREE

a) The move made by Trade Kings is called decentralization. It means decisions are spread widely and managers from the main center have some decision-making authority. It therefore implies increased delegation, empowerment and autonomy at lower levels of the organization.

b) The following key conditions of decentralization move by trade kings.
   - Each division must have properly delegated authority and must be accountable to head office.
   - Each unit must be large enough to support the quantity and quality of management.
   - The unit must not rely on head office for excessive management support
   - Each unit must have a potential for growth in its own area of operations
   - There should be scope and challenge in the job for the management of each unit
   - If units deal with each other, it should be as an arm's length transaction

SOLUTION FOUR

a) The following are the characteristics of goal setting suggested by Locke and Lathan:
   - Clarity of goals
   - Complex goals. Specific and difficult goals lead to better performance than simple or vague goals
   - Challenging goals
   - Feedback information about actual performance it helps to improve performance an achieve goals.
   - Involvement
   - Challenging

b)
   - Specific performance goals directed her behavior and maintained her.
   - She was given complete, accurate and timely feedback of results and her performance which motivated her.
   - She set her own goals and agreed to them.

SOLUTION FIVE

a) Public sector organizations are owned and run by the government.

b) The differences between public and private limited companies are.

Private limited companies	Public
• Shares are owned by the company's founders • – they are able to retain control over the business because they own a majority of shares. • Not mandated to disclose profits. • Owns private shares	• Shares are traded on Lusaka stock exchange. • They are able to raise large amounts of capital on the stock exchange. • Because of their sizes, banks are willing to lend them money • Investors are able to buy shares without having to become involved in running the business • Ability to borrow at low interest rates • Special skills of employees

c) The objectives of public sector organizations are to provide a benefit or service to the community. Some may also be expected to make a profit but this is not always.

SOLUTION SIX

a) Definitions

i. Virtual teams are temporary or permanent collection of geographically dispersed individuals, groups, organizations that depends on electronic linking in order to complete the production process

ii. Network organization is a fluid form of organization and the structure of informal relationship that exists in most organizations alongside the formal structure.

iii. Matrix structure is an organizational design that combines functional organizations with project managers.

b) The following are the two (2) advantages and three (3) disadvantages of a matrix structure.

i. **Two advantages**

-Creates responsibility for individual customers or projects and responsibility for individual customer projects and responsibility

-Managers can specialize in particular products, projects or customers

ii. **Three disadvantages**

-May create a dual chain of command leading to some employees taking orders from two bosses e.g. functional and project manager.

-It may create confusion because employees may not know who they should take orders from.

-Project managers may rely on functional managers for support and cooperation support in order to get employees to do as they ask. They may need to relay on persuasion to get employee assist them willingly.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA CERTIFICATE IN ACCOUNTANCY

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 15 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: Ten (10) compulsory multiple choice questions.
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8. Present legible and tidy work.

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

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SECTION A – (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

1.1 CAD is a good example of ……

A. Management Information System
B. Executive Information System
C. Knowledge Work System
D. Decision Support System

(2 marks)

1.2 Which of the following is a type of application control?

A. Automatic revalidation
B. Data controls
C. Hardware
D. Software (2 marks)

1.3 Which type of a malware copies itself from one machine to another machine?

A. Logic bomb
B. Worm
C. Trojan
D. Hoaxes (2 marks)

1.4 During the process of turning data into information, the stage when data collected is compared against yardsticks is known as:

A. Data evaluation
B. Interpretation
C. Data collection
D. Data analysis

(2 marks)

1.5 Which of the following sets classify the four (4) main types of IT solutions to security Concerns:

A. Authorisation, validation, backup, recovery
B. Recovery, backup, validation, documentation
C. Backup, documentation, authorisation, validation
D. Validation, authorisation, technical controls, documentation

(2 marks)

1.6 Which of the following is a good example of a channel direction of communication?

A. Internal communication
B. Informal communication
C. Lateral communication
D. Unofficial communication (2 marks)

1.7 A group of people coming together for the purpose of resolving problems or making decisions is called a _______________

A. Resolution
B. Conference
C. Seminar
D. Meeting

(2 marks)

1.8 A ___________ is diagram that is useful for showing the relative sizes of component elements of total value or amount.

A. Line graph
B. Bar chart
C. Pie chart
D. Excel chart

(2 marks)

1.9 What does the second S in the mnemonic KISS stands for?

A. Structure
B. Short
C. Simple
D. Style

(2 marks)

1.10 What is to decode?

A. Forward the ideas in the message

B. Understanding the ideas in the message

C. Originating ideas to be communicated

D. Choosing an effective channel of communication for feedback

(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</u> - (COMPULSORY QUESTION)

SCENARIO

Mr. Chileshe a proprietor at Ubumi Company offers goods and services to the community within his residential area at Mtendere market. He has put everything in place in trying to comply with the Covid 19 regulations for companies that offer services to the public. However, a random check up by health inspectors revealed that his customers as well as his staff were not complying with the covid 19 regulations.This situation put Ubumi company in a difficult position as relevant health authorities has threatened to shut down the work premises within 48 hours if no action is taken to comply with the covid 19 regulations.

Required:

(a) Write a memo on behalf of Mr. Chileshe to all members of staff, outlining the non-compliance of the situation on covid 19 regulation. In the Memo, include any five (5) measures that have been put in place in order to resolve the situation. (12 marks)

(b) Briefly explain any four (4) reasons electronic mail is preferred to written memos hard copies. (8 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) The Internet has improved the way communication is carried between different entities. One of its main advantages is the speed. Despite the many advantages, internet communication poses a number of security issues.

Required:

Outline any four (4) security issues related to electronic communication. (8 marks)

(b) Microsoft Office suite is equipped with a lot of features that enable users to work different applications to produce different types of documents.

Required:

Briefly explain the following features of the word processing software.

(i) Editing facilities (4 marks)
(ii) Spell and grammar checker (4 marks)

(c) The processing power of a computer is determined by a number of different factors. Explain how the factors below contribute the processing speed of the computer.

(i) Clock speed (2 marks)

(ii) Cache Memory (2 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Accounting Information Systems (AIS) store and provides valuable business information. As such reliability is very important.

Explain any four (4) basic principles important to AIS reliability. (8 marks)

(b) When using spreadsheet for calculations, it is advisable to use cell references instead of the values contained in the cells for formulae.

Required:

(i) Explain cell referencing. (2 marks)

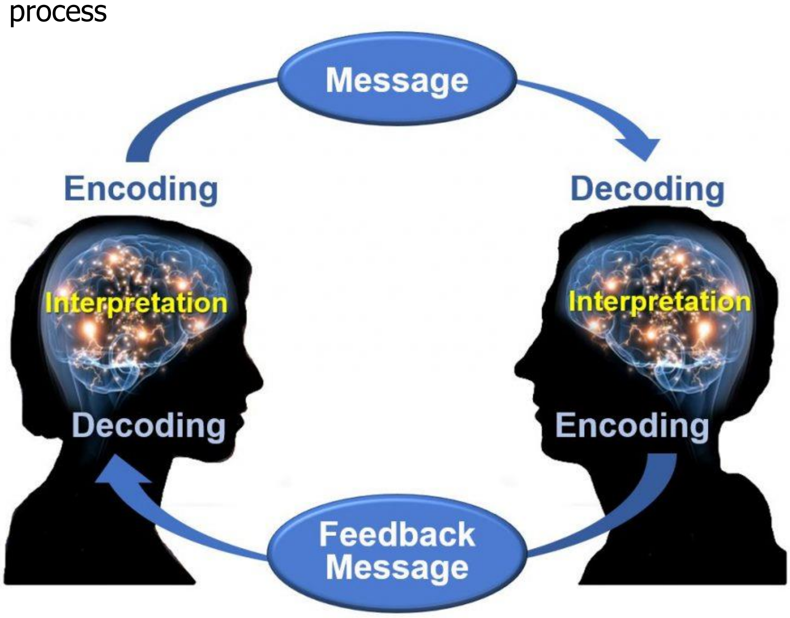
(ii) State one (1) reason cell references are better than cell contents in formulae. (2 marks)

(c) Explain any four (4) roles of Information Systems in organisations. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

Below is a picture that is stuck on one of the walls in your office. An intern who has been engage in your organization under your tutorage has been looking at it for some time now. You notice that s/he is having challenges interpreting it, so you want to help her or him understand the communication process



Required:

(a) In view of the diagram, explain the role of the sender and receiver in the communication cycle. (10 marks)

(b) Explain any five (5) factors that might influence the medium of communication one might use in the communication process. (10 marks)

[Total: 20 Marks]

QUESTION SIX

SCENARIO

The year 2020 has not been easy for the organization that you work for due to the fact that there has been a pandemic called corona virus followed by a lock down of all business activities. Production slowed down and in some cases almost coming to a halt. Suppliers and other stake holders have not been paid for quite some time. This situation worried management who decided to resolve this problem by communicating to its stake holders after receiving a letter from KMB company reminding them to settle the outstanding balance of K250,000.

Required:

(a) Write a letter KMB company requesting to clear the outstanding balance in two (2) instalments. In your letter, include information on how the pandemic affected the operations of your company. (15 marks)

(b) State five (5) features of a semi blocked format of a business letter. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA1.6 BUSINESS COMMUNICATION

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO **(a)**

CHILESHE GENERAL DEALERS

MEMORANDUM

Ref : Chi/10/10

Date : Any date during examination time

To : All staff

From : The Supervisor Accounts department

Subject : Compliance of Covid 19 Regulations

It has come to Management's attention that both staff and customers are failing to comply with the Covid 19 regulations. This was revealed by a random check by health inspectors at our premises.

The position of the company's operations has been threatened as relevant authorities have only given the company up to 48 hours to resolve the problem all else risk the premises being shut down.

In view of that You are kindly advised to comply with the following:

- Masking up all the time
- Encouraging members of staff to mask up all the time
- Sanitizing or washing hands when necessary
- Maintaining social distance
- Keeping our work premises clean all the time

Take this as an official notification. Your consideration in this matter will be appreciated

Senders signature

Mr, J, Gondwe

<u>SOLUTION TWO</u> (b)

An electronic mail is preferred over a written memo for the following reasons:

- It is very fast.
- Email messages can be checked any time.
- Messages can easily be sent to many recipients at the same time.

Stationary is easily saved in the organization

SOLUTION THREE (a)

(a) In the communications process, the sender's transmission of information or message through a chosen channel to the recipient overcoming obstacles affecting its speed to the receiver. The communication process is cyclical as it starts with the sender and finishes in the form of feedback from the receiver.

Sender

The send is the originator of the message. This is the first stage through which information is transmitted. During this stage, the sender main task is to produce.

1. Encode

The second stage in communication is encoding, here the message goes through the encoding process which means the message is symbolically represented in terms of words, images, gestures etc.

2. Channel

Channel refers to the way or mode the message flows or is transmitted. The sender needs to send the message through a channel that is effective and convenient to the receiver. The message may be oral or written and it may be transmitted through a memo, email, telephone, apps or television.

Receiver

The receiver is the person or group to whom the message is intended. He could be a listener or a reader or a viewer. Some error on the receiver's part will make the contact ineffective. The recipient must understand the message sent in the best possible way, so that the communication's true intent is accomplished.

1. Decode

Decoding refers to the translating of a message into a language that one can understand. That is, it means understanding the word. The recipient interprets the message and tries to explain it in the best way possible.

2. Feedback

After the receiving point, the receiver sends some kind of information that shows that the receiver has in fact received and understood the message. The response and feedback stage is very important as it shows whether or not communication has been effective.

SOLUTION FOUR

- The agency of the matter that needs to communicated
- The audience or receiver
- Cost and time
- Confidentiality and sensitivity of the message
- The need for a written record
- The circumstances of the recipient
- Urgency of the matter
- The need for interaction
- The safety and security of the message

<u>SOLUTION FIVE</u> (a)

Kuyesa General dealers

Po.box 31460

Lusaka

Ref : KUY/ 165/01

Date : any date during exam time

KMB Company

Po. Box 31309

Lusaka

Dear Sir,

Outstanding balance of K250,000

We write to inform you about the delayed payment of the outstanding amount of K250,000 for the services that you rendered to our company two months ago.

We apologies for the late payment and hope that you ll be able to work with us during this difficult time.

This situation has been caused by very slow cash inflows due to the corvid 19 lock down. Most of our customers who owe us are failing to clear the outstanding amounts. This has also affected our us in a negative way as we have struggled for weeks to meet our operational expenses.

However, the bright side of this situation is that despite the late payment, we are doing everything possible to secure the cash and then clear the outstanding balance. We are hopeful that with the lifting up of the lockdown, business activities will soon improve. We are therefore asking for more time that will allow us to source for funds and also that the payment be made in two instalments beginning this month end.

We appreciate all the professional work that you have done for us so far. Your consideration in this matter will be appreciated. Thank you for your understanding.

Yours faithfully

Sender’s signature

Mr. K. Kapamba.

<u>SOLUTION SIX</u> (b)

The features of a semi blocked format of a business letter are:

- Addresses are punctuated
- Salutation is punctuated
- Subject is centered
- Complementary close is centered
- Complementary close is punctuated

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ZAMBIA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.1: FINANCIAL REPORTING

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

8. Present legible and tidy work.

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

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)

Peace Ltd company has shareholdings in two other companies, Love Ltd and Joy Ltd. Peace bought 150 million ordinary shares in Love on 1 August 2018, when the retained earnings of Love were K22 million. The cash consideration was agreed at K110 million for these shares. In addition to this, Peace agreed to pay a further amount on 1 September 2020 that was contingent upon the post-acquisition performance of Love. At the date of acquisition Peace assessed the fair value of this contingent consideration at K100 million, but by 31 July, 2020 it was clear that the actual amount to be paid would be only be K90 million (Ignore discounting). Peace has recorded the cash payment and provided for the initial estimate of K100 for the contingent consideration.

On 1 August 2019, Peace bought a 40% holding in the ordinary shares of Joy when the retained earnings balance in Joy's books stood at K26 million. The consideration was an immediate cash payment of K25 million and an issue at par K10 million 6% loan note. Both considerations have also been recorded by Peace. The Directors of Peace negotiated the right to appoint 7 Directors to Joy's 15-person board as a result of its investment. Statements of Financial Position are shown below for all three companies as at 31 July 2020.

Statements of Financial Position as at 31 July, 2020

	Peace Ltd	**Love Ltd**	**Joy Ltd**
Non-current assets	**K million**	**K million**	**K million**
Property, Plant and Equipment	250.0	72.5	50.0
Investments	260.0	24.0	2.5
	510.0	96.5	52.5
Current assets			
Inventories	90.0	25.5	11.5
Trade receivables	32.0	12.0	6.5
Cash & Bank	12.0	6.5	4.0
	134.0	44.0	22.0
	644.0	**140.5**	**74.5**

Equity			
Equity share of K0.25 each	225.0	50.0	30.0
Retained earnings	179.0	32.5	30.5
	404.0	82.5	60.5
Non-current liabilities			
6% Loan Notes	60.0	40.0	-
Current liabilities			
Contingent consideration	100		
Trade payables	71.5	18.0	9.0
Dividends Declared	8.5	-	5.0
Total liabilities	240.0	58.0	14.0
Total equity & liabilities	**644.0**	**140.5**	**74.5**

The following additional information is relevant:

(i) At the date of acquisition, Peace conducted a fair value exercise on Love's net assets which were equal to their carrying amounts with the exception of the following:

(a) A property held by Love had a fair value of K10 million in excess of its carrying value. 75% of the value of this property relates to buildings with a useful economic life of 10 years at the date of acquisition and the remainder to non-depreciable assets.

(b) Love had an unrecorded deferred tax liability of K7 million, which was unchanged as at 31 July 2020.

(c) At the date of acquisition, love had a brand which had a fair value of K40 million below its carrying value. Shortly after acquisition, Peace's Directors used an independent professional expert based in Lusaka to value the brand and the expert found the brand to have no recoverable amount and Love wrote it off.

(ii) Peace's policy is to value any Non-Controlling Interests (NCI) at their proportionate share of identifiable net assets at the acquisition date.

(iii) Immediately after the acquisition, Love issued K40 million of 6% loan notes, K8 million of which were bought by Peace Ltd. This investment has been correctly recorded in the books of Peace under the heading "Investments". All interest due on loan notes as at 31 July 2020 has been paid and recorded.

(iv) During the financial year ended 31 July 2020, Love had sold goods to Peace amounting to K30 million. The purchase price included a mark-up of 20% on cost. Love's normal mark-up on goods sold is 30%. Of these goods, one-quarter remained in the closing inventory of Peace at the reporting date.

(v) Peace has not accounted for any dividend receivable from its group companies. Both Peace and Joy have declared dividends as shown in current liabilities. Joy's declared dividend relates entirely to the post acquisition period. No other dividends were paid or declared in the year.

(vi) Recorded in the books of Peace was an intra-group trade payable of K10 million owed to Love at the year-end. However, the books of Love showed a balance of K11 million owed by Peace. It transpired that Love's computer system had automatically charged to Peace's account, interest of K1 million due to late payments. It was subsequently agreed that Love would waive this interest.

(vii) Investment in Love and Joy is shown in the statement of financial position of Peace at cost.

Required:

(a) Prepare the Consolidated Statement of Financial Position for the Peace group as at 31 July 2020 in accordance with International Financial Reporting Standards. (32 marks)

(b) In accordance with *IFRS 3: Business Combinations*, identify three (3) factors that account for a negative Goodwill and indicate its accounting treatment when it occurs in the preparation of consolidated financial statements. (4 marks)

(c) IFRS 3 permits a non-controlling interest at the date of acquisition to be valued by using one of the two methods:

(i) at its proportionate share of the subsidiary's identifiable net assets; or

(ii) at its fair value.

Required:

Explain the difference each of these alternative methods of valuing non-controlling interest would have on consolidated financial statements, including their impact on the reported amount of goodwill. (4 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

Mboo Plc's trial balance at 31 December 2021 is as follows:

	K'000	**K'000**
Revenue (note i)		640,000
Cost of sales	272,770	
Distribution costs	45,280	
Administrative expenses	53,900	
Dividends paid	3,750	
Bank interest	1,100	
Building at valuation (note ii)	200,000	
Plant and equipment at cost (note ii)	304,300	
Accumulated depreciation at 1 January 2021:		
Plant and equipment		69,450
Inventory at 31 December 2021	95,100	
Trade receivables	104,300	
Trade payables		48,500
Bank		10,700
Equity shares of 50 ngwee each		87,500
Share premium		63,500
Retained earnings at 1 January 2021		70,450
10% convertible loan notes (note iii)		75,000
Current tax (note)		5,800
Deferred tax (note)	9,600	
	1,080,500	1,080,500

The following notes are relevant:

(i) Revenue includes the full amount in respect of credit sales of K60 million made in the last week of December 2021. Customers are given a 10 percent cash discount if they settle within a month. None of the customers has settled yet though, based on their past practice, they are expected to settle within the first week of January 2022.

(ii) Mboo Plc has adopted the IAS 16 revaluation policy in respect of its building. The building which cost K250 million on 1 January 2016 and whose total useful economic life was estimated at 50 years was last revalued on 31 December 2020. The building is depreciated on a straight line basis with a nil residual value. Depreciation on the building is included in administrative expenses. The building is yet to be revalued at 31 December 2021 to a fair value of K230 million.

Plant and equipment is depreciated at 15% reducing balance basis. Depreciation on plant and equipment is included in cost of sales.

(iii) Mboo Plc issued 75 million 10% K1 convertible loan notes on 1 July 2021 at par. The loan notes pay interest on 30 June each year over their 3 year term to maturity. The loan note holders are entitled to convert each loan note into one 50 ngwee equity share at any time after 30 June 2023. Any notes not converted will be redeemed at par on 30 June 2024. Mboo Plc was in a position to issue similar loan notes but without conversion rights at a market interest rate of 13%.

The present values of K1 receivable at the end of each year, based on discount rates of 10% and 13%, are :

		10%	13%
End of year	1	0.909	0.885
	2	0.826	0.783
	3	0.751	0.693

(iv) On 1 October 2021, Mboo Plc made a rights issue of its equity shares at a rate of 1 rights share for every 4 existing shares at a price of 80 ngwee per share. The rights issue has been accounted for.

(v) The balance on current tax represents the under/ over provision of the tax liability for the year ended 31 December 2020. A provision of K42 million is required for current tax for the year ended 31 December 2021 and at this date the deferred tax liability was assessed at K5.4 million.

Required:

(a) Prepare the Statement of Profit or Loss and other Comprehensive Income for Mboo for the year ended 31 December 2021. (9 marks)

(b) Prepare the Statement of Changes in Equity for Mboo for the year ended 31 December 2021. (3 marks)

(c) Prepare the Statement of Financial Position for Mboo Plc as at 31 December 2021. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Zamcargo Plc would like to acquire the entire equity of a viable Zambian private company. It has obtained the following draft financial statements for two companies, Bukata Ltd and Busuma Ltd.

Statement of Profit or Loss account for the year ended 31 December 2020

	Bukata Ltd	Busuma Ltd
	K'000	**K'000**
Revenue	12,000	20,500
Cost of sales	(10,500)	(18,000)
Gross profit	1,500	2,500
Operating expenses	(240)	(500)
Finance costs	(210)	(600)
Profit before tax	1,050	1,400
Income tax expense	(150)	(400)
Profit for the year	**900**	**1,000**
Note: Dividends paid during the year	250	700

Statements of Financial position as at 31 December 2020

Assets	**Bukata Ltd**	**Busuma Ltd**
Non-current assets	**K'000**	**K'000**
Freehold factory (note(i)	4,400	-
Owned plant (note (ii))	5,000	2,200
Leased plant (note (ii))	-	5,300
	9,400	7,500
Current assets		
Inventory	2,000	3,600
Trade receivables	2,400	3,700
Bank		-

	600	
	5,000	7,300
Total assets	**14,400**	**14,800**
Equity and liabilities		
Equity shares of K1 each	2,000	2,000
Property revaluation reserve	900	-
Retained earnings	2,600	800
	5,500	2,800
Non-current liabilities		
lease obligations (note (iii))	-	3,200
7% loan notes	3,000	-
10% loan notes	-	3,000
Deferred tax	600	100
Government grants	1,200	-
	4,800	6,300
Current liabilities		
Bank overdraft	-	1,200
Trade payables	3,100	3,800
Government grants	400	-
lease obligations (note (iii))	-	500
Taxation	600	200

	4,100	5,700
Total equity and liabilities	**14,400**	**14,800**

The following information is also made available

(i) Both companies operate from the same premises.

(ii) Additional details of the two companies' plant are:

	Bukata Ltd	**Busuma Ltd**
	K'000	**K'000**
Owned plant – Historical cost	8,000	10,000
Leased plant – original fair value	-	7,500

There were no disposals of plant during the year by either company.

(iii) The interest rate implicit within Busuma Ltd's leases is 7.5% per annum. For the purpose of calculating ROCE and gearing, all lease obligations are treated as long-term interest bearing borrowings.

(iv) Both companies, have been in existence for the past 25 years and operate in the same industry.

(v) The managements of both companies have indicated that they would be receptive to a takeover.

Required:

(a) As a Consultant write a report to Directors of Zamcargo Plc, assess the relative financial performance and financial position of Bukata Ltd and Busuma Ltd for the year ended 31 December 2020. (16 marks)

(b) Identify and discuss how the two (2) fundamental qualitative characteristics of financial information benefit users of an entity's financial statements. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Mumbi Plc (Mumbi) is a retailer of fashion clothing operating from a number of shopping malls.

On 1 January 2019, Mumbi commenced a four (4) year lease of premises from Kwenje Property Developers Limited (Kwenje), a company that owns a number of shopping malls. Mumbi made alterations to the premises on 1 January 2019 in order to meet their shop design requirements before starting to use the premises. The lease requires these alterations to be reversed at the end of the lease term and the premises restored to their original state. Mumbi has estimated that the present value (at 1 January 2019) of the cost of restoration is K35,000 after discounting at a rate of 10%. The rental payable by Mumbi (due at the end of each year of the lease) will be K240,000 for the first two years and K300,000 for the last two (2) years. The Directors of Mumbi and Kwenje are concerned about how the lease must be accounted for in their respective financial statements for the year to 31 December 2019. The interest rate implied in the lease is 10%.

The property from which Kwenje has let out premises to Mumbi was acquired on 1 January 2015 at a total cost of K10 million (including K1.1 million for land). It was last revalued on 31 December 2018 to a fair value of K12 million (including K1.2 million for land). Kwenje has yet to revalue the property at 31 December 2019 to a fair value of K9.5 million (including K0.9 million for land). The property has an estimated total life of 30 years. Kwenje uses the **IAS 40 Investment Properties** Cost Model in accounting for investment properties. Kwenje also uses the **IAS 16 Property Plant and Equipment** Revaluation Model in accounting for owner occupied properties.

Required:

(a) Briefly explain how lessee must account for leases within the scope of IFRS 16 Leases. (6 marks)

(b) Explain how Mumbi Plc must account for the lease contract with Kwenje in its financial statements for the year to 31 December 2019, computing amounts involved and showing financial statement extracts. (8 marks)

(c) Explain how Kwenje Property Developers Plc must account for the property that has been leased out to Mumbi Plc and the lease with Mumbi in its Financial Statements for the year to 31 December 2019, computing amounts involved and showing financial statement extracts. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

The IASB conceptual framework for financial reporting provides for the basis and structure of how financial statements are prepared and reported. To this effect, the conceptual framework contains among others, the following topics:

(i) Qualitative characteristics of useful financial information
(ii) The elements of financial statements

(iii) Recognition and de-recognition of elements of financial statements
(iv) Measurement of the elements of financial statements

Required:

(a) Briefly explain two (2) reasons why it is important to have a conceptual framework for financial reporting. (2 marks)

(b) Identify and briefly explain any three (3) qualitative characteristics of useful financial information. (6 marks)

(c) Identify and explain the elements of Financial Statements that are related to the Statement of Profit or Loss and Other Comprehensive Income. (2 marks)

(d) Explain the criteria for derecognition of Assets and Liabilities. (2 marks)

(e) Explain four (4) advantages and four (4) disadvantages of the historical basis of measurement (8 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.1 FINICIAL REPORTING SOLUTIONS

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Consolidated Statement of Financial Position of Peace Group Ltd as at 31 July 2020

	K million
Non-current assets	
Property, plant and equipment (250+72.5 +8.5 (W7)	331
Goodwill (W3)	183.75
Investment in Associate (W6)	36.8
Other investments (260-110-100 -25 -10 +24-8)	31
	582.55
Current assets	
Inventories (90+25.5-1.25(W8))	114.25
Trade receivables (32+12-1(W9)-10(W9))	33
Dividend receivable from Associate (W10)	2
Cash & Bank (12+6.5)	18.5
	167.75
Total assets	**750.30**
Equity	
Equity shares	225
Retained earnings (W2)	227.86
	452.86
Non-controlling interest (W5)	20.44
	473.30
Non-current liabilities	

6% Loan note (60+40-8)	92
Current liabilities	
Trade payables (71.5+18-10(W9)	79.5
Deferred tax liability	7
Dividends Declared	8.5
Contingent consideration	90
	277
Total equity & liabilities	**750.30**

Workings

W1. Group structure:

Peace

150m/200m x 100 = 75% — NCI= 25% — 100%

1/08/2018

2 years ago

40%

1/08/2019

1 year ago

Love — Joy

Peace owns 150m shares out of 200m in Love. This gives 75% ownership in Love for 2 full years therefore Love is a subsidiary.

Peace has 40% ownership in Joy for the full year and can appoint directors, hence significant influence is exerted. Therefore, Joy is an associate.

W2. Net assets

	Acquisition Km	Reporting Km	Post-acquisition Km
Share capital	50	50	0
Retained earnings	22	32.5	10.5
Fair value adjustment	10	8.5	(1.5)

Deferred tax	(7)	(7)	0
PURP	0	(1.25)	(1.25)
Interest charged	0	(1)	(1.00)
Inventories			
Fair value of Brand	(40)	0	40
	35	81.75	46.75

W3 - Goodwill

Cost of investment - Cash	110
- Contingent consideration	100
	210
NCI (25% x 355)	8.75
	218.75
Fair value of Net assets	(35.00)
	183.75

W4- Non - Controlling Interest		**Km**
25% x K 81.75	**20.44**	

W5. Group retained earnings		Km
Peace (100%)	179.0	
Decrease in contingent consideration (100 -90)	10	
Share of post-acquisition profit of associate (40% x Km 4.5)	1.8	
Dividend Receivable (40% x K5m)	2.0	
Share of post-acquisition profit – Love (75% x Km 46.75)	35.06	
	227.86	

W6 Investment in Associate - Joy

		Km
Cost of acquisition (25 +10)	35	
Share of post-acquisition reserves 40% x (30.5 -26)	1.8	
Total	**36.8**	

W7 Fair value adjustments (note (iv)):

	At acquisition	Movement	At rep. date
Property Joy	K10m	(K1.5m) **	K8.5m

**Movement = depreciation of the adjustment to the buildings component only for 2 full years since acquisition:

K10m * 75% / 10 yrs * 2 yrs = K1.5m. This is charged to the earnings of the company which holds (and therefore depreciates) the asset. Hence:

Dr PPE	K8.5m	
Dr Retained earnings – Joy	K1.5m	
Cr goodwill (FV net assets)		K10.0m

W8 Intra-group trading of goods

Unrealised profit (URP) on goods held in closing inventory:

(K15m * 20/120) * 1/4 (sold by Love therefore NCI IS affected) K1.25m

Adjustment to reduce reserves (Love) and Inventory:

Dr Retained Earnings (Love) K1.25m

Cr Inventory

K1.25m

W9 Intra-group balance outstanding & interest charged – Peace & Love Eliminate interest K1m:

Dr Retained earnings (Love) K1.0m

Cr Trade receivables (Love)

K1.0m

Following the above adjustment, the intra group receivables and payables now balance at K10.0m. Hence we must cancel those balances.

Dr Trade payables	K10.0m	
Cr Trade receivables		K10.0m

W10 Dividends

Joy's Declared dividend	K5m	
Amount payable to parent company (40%)		K2m

Adjustment to show dividend receivable by Peace and increase retained earnings (Peace).

Dr Dividends receivable K2.0m

Cr Retained earnings (Peace) K2.0m

(b)Factors that account for a negative goodwill and treatment of negative goodwill.

Where the cost of the business combination is greater than the net assets acquired, the investor has paid for something more than the net assets of the acquired business. The difference is called goodwill and is measured in accordance with (IFRS 3: Business Combinations - revised). Purchased goodwill is positive when the cost of investments exceeds the net fair value of identifiable assets, liabilities and contingent liabilities. In accordance with IFRS 3; Business combination, negative goodwill occurs when the acquired net assets exceed cost of investment.

Factors accounting for negative goodwill includes but not limited to:

1. The acquirer may be good in the negotiations of the purchase consideration than the acquiree.
2. The acquiree has no knowledge of the value of its business before and during the sale transaction
3. The acquire is desperate to sell in a force sale transaction

Accounting treatment of purchased goodwill

Positive purchased goodwill is capitalised on the statement of financial position and subject to an impairment test annually. Subsequent impairment test is charged to profit or loss as expenses. Impairment tests are conducted at least at each year end. Any resulting impairment loss is first recognized against consolidated goodwill.

However, purchased goodwill if negative is not capitalized since it represents a gain to the acquirer and hence IFRS3 business combination requires that it is recognized in the statement of profit or loss immediately after the reassessment and confirmation.

(c)

IFRS 3 allows (as an option) a non-controlling interest to be valued at its proportionate share of the acquired subsidiary’s identifiable net assets; this carries forward the only allowed method in the previous version of this Standard. Its effect on the statement of financial position is that the resulting carrying value of purchased goodwill only relates to the parent’s element of such goodwill and as a consequence the non-controlling interest does not reflect its share of the subsidiary’s goodwill. Some commentators feel this is an anomaly as the principle of a consolidated statement of financial position is that it should disclose the whole of the subsidiary’s assets that are under the control of the parent (not just the parent’s share). This principle is applied to all of a subsidiary’s other identifiable assets, so why not goodwill?

Any impairment of goodwill under this method would only be charged against the parent’s interest, as the non-controlling interest’s share of goodwill is not included in the consolidated financial statements.

The second (new) method of valuing the non-controlling interest at its fair value would (normally) increase the value of the goodwill calculated on acquisition. This increase reflects the non-controlling interest’s ownership of the subsidiary’s goodwill and has the effect of ‘grossing up’ the goodwill and the non-controlling interests in the statement of financial position (by the same amount). It is argued that this method reflects the whole of the subsidiary's goodwill/premium on acquisition and is thus consistent with the principles of consolidation. Under this method any impairment of the subsidiary's goodwill is charged to both the controlling (parent's share) and non-controlling interests in proportion to their holding of shares in the subsidiary.

SOLUTION TWO

(a) Mboo Plc statement of profit or loss and other comprehensive income for the year ended 31 December 2021.

		K'000	K'000
Revenue	(640000-60000X10%)		634,000
Cost of sales	(W1)		(307,998)
Gross profit			326,002
Distribution costs		(45,280)	
Administrative expenses	(W2)	(33,900)	(79,180)
Operating profit			246,822
Finance costs	13%X69,683(W4)X6/12 =4529+1100 (bank interest)		(5,629)
Profit before tax			241,193
Income tax expense(W5)			(32,000)
Profit for the financial year			209,193
Other comprehensive			
Revaluation of building (W3)			10,000
Other comprehensive income for the year			10,000
Total comprehensive income for the year			219,193

Workings to SPLOCI:

W1. Cost of sales

	K'000
Given amount	272,770
Depreciation on plant 15%(304300-69450)	35,228
	307,998

W2. Administrative expenses

		K'000
Given amount		53,900
Depreciation on building	200000/(50-5)	4,444
Revaluation gain/loss to report in SPL (W3)		(24,444)
		33,900

W3. Revaluation of building

FV at 31.12.2020 (carrying amount) b/d 1.1.21	200,000
Depreciation for y/e 31.12.2021 (W2)	(4,444)
Carrying amount at 31.12.2021 before revaluation	195,556
Revaluation gain at 31.12.21 (balancing amount)	34,444

Fair value at 31.12.21	230,000

Reporting the gain:

Cost model carrying amount:

Original cost	250,000
Accumulated depreciation 250000/50X6	(30,000)
	220,000

Gain restoring cost model carrying amount to be reported in SPL	(220000-195556)	24,444
Gain to report in OCI	(230,000-220,000)	10,000
Total gain		34,444

W4. Splitting the 10% convertible loan notes between the liability and equity components:

		K'000	K'000
Issue proceeds	K1X75 million		75,000
Liability component	(PV of future cashflows discounted at 31%:		
End of year			
1 – 3 interest	10%X75m (0.885+0.783+0.693)	17,708	
3 Principal	75mX0.693	51,975	(69,683)
Equity component (Share options reserve) – balance			5,317

W5. Income tax expense

		K'000
Current Tax		
Provision for the liability on txable profits for y/e 31.12.21		42,000
Over provision for last year's tax liability		(5,800)
		36,200
Deferred Tax		
Laibility at 31.12.21	5,400	
Less liability at 1.1.21	(9,600)	(4,200)
Income tax expense		32,000

(b) Mboo Plc statement of changes in equity for the year ended 31 December 2021.

	Share capital K'000	Share premium K'000	Retained earnings K,000	Reval. reserv. K'000	Share Option K'000	Total K'000
Balances b/d	70,000	53,000	70,450	-	-	193,450
Total CI			209,193	10,000		219,193
Rights issue	17,500	10,500				28,000
Lon notes					5,317	5,317
Dividends			(3,750)			(3,750)
Balances c/d	87,500	63,500	275,893	10,000	5,317	442,210

(c) Mboo Plc Statement of Financial Position as at 31 December 2021

		K'000		K'000
Assets				
Non current				
Property plant and equipment(230000+304300-69450-35,228)				429,622
Current				
Inventory	95,100			
Trade receivables (104300-10%X60000)	98,300		193,400	
Total assets			623,022	
Equity and liabilities				
Equity				
Equity Shares				87,500
Share premium				63,500
Retained earnings (70450+209193-3750)				275,893
Revaluation reserve				10,000
Share options reserve (W3 in part (a))				5,317
Total equity				442,210
Non current liabilities				
10% convertible loan notes (W4 in part (a))		69,683		
Deferred tax		5,400		
				75,083
Current liabilities				
Bank		10,700		
Trade payables		48,500		
Current tax		42,000		
Accrued Finance costs on loan notes (see SPL)		4,529		105,729
Total equity and liabilities				623,022

SOLUTION THREE

REPORT

To: The Board of Zamcargo Plc

From: Consultant

Date: (Date of exam)

Subject: **Assessment of the relative performance and financial position of Bukata Ltd and Busuma Ltd for the year ended 31 December 2020**.

Introduction

This report is based on the draft financial statements supplied and the ratios shown as per appendix. Although covering many aspects of performance and financial position, the report has been approached from the point of view of a prospective acquisition of the entire equity of one of the two companies.

Profitability

The ROCE of 20·9% of Busuma Ltd is far superior to the 14·8% return achieved by Bukata Ltd. ROCE is traditionally seen as a measure of management's overall efficiency in the use of the finance/assets at its disposal. More detailed analysis reveals that Busuma Ltd's superior performance is due to its efficiency in the use of its net assets; it achieved a net asset turnover of 2·3 times compared to only 1·2 times for Bukata Ltd. Put another way, Busuma Ltd makes sales of K2·30 per K1 invested in net assets compared to sales of only K1·20 per K1 invested for Bukata Ltd.

The other element contributing to the ROCE is profit margins. In this area Busuma Ltd's overall performance is slightly inferior to that of Bukata Ltd, gross profit margins are almost identical, but Bukata Ltd's operating profit margin is 10·5% compared to Busuma Ltd's 9·8%. In this situation, where one company's ROCE is superior to another's it is useful to look behind the figures and consider possible reasons for the superiority other than the obvious one of greater efficiency on Busuma Ltd's part. A major component of the ROCE is normally the carrying amount of the non-current assets. Consideration of these in this case reveals some interesting issues. Busuma Ltd does not own its premises whereas Bukata Ltd does. Such a situation would not necessarily give a ROCE advantage to either company as the increase in capital employed of a company owning its factory would be compensated by a higher return due to not having a rental expense (and vice versa). If Busuma Ltd's rental cost, as a percentage of the value of the related factory, was less than its overall ROCE, then it would be contributing to its higher ROCE.

There is insufficient information to determine this. Another relevant point may be that Busuma Ltd's owned plant is nearing the end of its useful life (carrying amount is only 22% of its cost) and the company seems to be replacing owned plant with leased plant. Again this does not necessarily give Busuma Ltd an advantage, but the finance cost of the leased assets at only 7·5% is much lower than the overall ROCE (of either company) and therefore this does help to improve Busuma Ltd's ROCE. The other important issue within the composition of the ROCE is the valuation basis of the companies' non-current assets. From the question, it appears that Bukata Ltd's factory is at current value (there is a property revaluation reserve) and note (ii) of the question indicates the use of historical cost for plant. The use of current value for the factory (as opposed to historical cost) will be adversely impacting on Bukata Ltd's ROCE. Busuma Ltd does not suffer this deterioration as it does not own its factory.

The ROCE measures the overall efficiency of management; however, as Zamcargo is considering buying the equity of one of the two companies, it would be useful to consider the return on equity (ROE) – as this is what Zamcargo is buying. The ratios calculated are based on pre-tax profits; this takes into account finance costs, but does not cause taxation issues to distort the comparison. Clearly Busuma Ltd's ROE at 50% is far superior to Bukata Ltd's 19·1%. Again the issue of the revaluation of Bukata Ltd's factory is making this ratio appear comparatively worse (than it would be if there had not been a revaluation). In these circumstances it would be more meaningful if the ROE was calculated based on the asking price of each company (which has not been disclosed) as this would effectively be the carrying amount of the relevant equity for Zamcargo Ltd.

Gearing

From the gearing ratio it can be seen that 71% of Busuma Ltd's assets are financed by borrowings (39% is attributable to Busuma Ltd's policy of leasing its plant). This is very high in absolute terms and double Bukata Ltd's level of gearing. The effect of gearing means that all of the profit after finance costs is attributable to the equity even though (in Busuma Ltd's case) the equity represents only 29% of the financing of the net assets. Whilst this may seem advantageous to the equity shareholders of Busuma Ltd, it does not come without risk. The interest cover of Busuma Ltd is only 3·3 times whereas that of Bukata Ltd is 6 times. Busuma Ltd's low interest cover is a direct consequence of its high gearing and it makes profits vulnerable to relatively small changes in operating activity. For example, small reductions in sales, profit margins or small increases in operating expenses could result in losses and mean that interest charges would not be covered. Another observation is that Bukata Ltd has been able to take advantage of the receipt of government grants; Busuma Ltd has not. This may be due to Bukata Ltd purchasing its plant (which may then be eligible for grants) whereas Busuma Ltd leases its plant. It may be that the lessor has received any grants available on the purchase of the plant and passed some of this benefit on to Busuma Ltd via lower lease finance costs (at 7·5% per annum, this is considerably lower than Busuma Ltd has to pay on its 10% loan notes).

Liquidity

Both companies have relatively low liquid ratios of 1·2 and 1·3 for Bukata Ltd and Busuma Ltd respectively, although at least Bukata Ltd has K600,000 in the bank whereas Busuma Ltd has a K1·2 million overdraft. In this respect Busuma Ltd's policy of high dividend pay outs (leading to a low dividend cover and low retained earnings) is very questionable. Looking in more depth, both companies have similar inventory days; Busuma Ltd collects its receivables one week earlier than Bukata Ltd (perhaps its credit control procedures are more active due to its large overdraft), and of notable difference is that Bukata Ltd receives (or takes) a lot longer credit period from its suppliers (108 days compared to 77 days). This may be a reflection of Bukata Ltd being able to negotiate better credit terms because it has a higher credit rating.

Summary

Although both companies may operate in a similar industry and have similar profits after tax, they would represent very different purchases. Busuma Ltd's sales revenues are over 70% more than those of Bukata Ltd, it is financed by high levels of debt, it rents rather than owns property and it chooses to lease rather than buy its replacement plant. Also its remaining owned plant is nearing the end of its life. Its replacement will either require a cash injection if it is to be purchased (Busuma Ltd's overdraft of K1·2 million already requires serious attention) or create even higher levels of gearing if it continues its policy of leasing. In short although Busuma Ltd's overall return seems more attractive than that of Bukata Ltd, it would represent a much more risky investment. Ultimately the investment decision may be determined by Zamcargo's attitude to risk, possible synergies with its existing business activities, and not least, by the asking price for each investment (which has not been disclosed to us).

Appendix

Ratio	**Formula**	**Bukata Ltd**	**Busuma Ltd**
Gross profit margin	Gross Profit/Revenue	1,500/12,000*100 =12.5%	2,500/20,500*100 =12.2%
Operating profit margin	Profit before interest and tax/Revenue	1,260/12,000*100 =10.5%	2,000/20,500*100 =9.8%
ROCE	Profit before interest and tax/(Shareholders' fund + Long-term interest bearing borrowings)	1,260/(5,500+3,000)* 100 =14.8%	2,000/(2,800+6,7 00)*100 =21%
Return on equity	Profit after Tax/Shareholders' funds	900/5,500*100 =16.4%	1,000/2,800*100 =35.7%
Pre-tax Return on equity	Profit before Tax/Shareholders' funds	1,050/5,500*100 =19.1%	1,400/2,800*100 =50%
Net assets turnover	Revenue /(Total Assets – Total liabilities)	12,000/5,500 =2.2 times	20,500/2,800 =7.3 times
Current ratio	Current assets/Current liabilities	5,000/4,100 =1.2:1	7,300/5,700 =1.3:1

Acid test ratio	(Currents assets - Inventory)/Current liabilities	(5,000-2,000)/4,100 =0.73:1	(7,3003,600)/5,700 =0.65:1
Interest cover	Profit before interest and tax/Interest	1,260/210 =6 times	2,000/600 =3.3 times
Closing inventory holding period	Closing inventory x 365 days Cost of sales	2,000 x 365 10,500 =70 days	3,600 x 365 18,000 =73 days
Trade receivables collection period	Trade receivables x 365 days Revenue	2,400 x 365 12,000 =73 days	3,700 x 365 20,500 =66 days
Trade payables payment period	Trade payables x 365 days Cost of sales	3,100 x 365 10,500 =108 days	3,800 x 365 18,000 =77 days
Gearing ratio	Interest bearing debt/(Interest bearing debt + Shareholders' fund) *100	3,000/(3,000+5,500)* 100 =35.3%	6,700/(6,700+2,8 00)*100 =70.5%
Dividend cover	Profit after tax/Dividends	900/250 =3.6 times	1,000/700 =1.4 times

(b)

Fundamental qualitative characteristics of useful financial statements

Relevance and faithful representation are the fundamental qualitative characteristics of useful financial information, by the IFRS Framework.

(i) **Relevance**

Relevant financial information is capable of making a difference in the decisions made by users. Financial information is capable of making a difference in decisions if it has predictive value, confirmatory value, or both. The predictive value and confirmatory value of financial information are interrelated.

Materiality is an entity-specific aspect of relevance based on the nature or magnitude (or both) of the items to which the information relates in the context of an individual entity's financial report.

(ii) **Faithful representation**

General purpose financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only be relevant, but must also represent faithfully the phenomena it purports to represent. This fundamental characteristic seeks to maximise the underlying characteristics of completeness, neutrality and freedom from error. Information must be both relevant and faithfully represented if it is to be useful.

SOLUTION FOUR

(a) IFRS 16 requires that all leases with its scope must be capitalised by lessees by recognising lease liabilities and Right Of Use Assets (ROUA). However, a lesse may not capitalise a lease but merely account for lease rentals if any of the two exemptions has been used:

- The lease is of a small value asset
- The lease has a term of not more than 12 months

Lease liabilities must initially be measure at the present value of the lessee's Minimum Lease Payments (MLPs) payable in future discounted at the interest rate implicit in the lease. The ROUA is initially measured at the aggregate of:

- Cash incurred at inception of the lease
- Initial carrying amount of lease liability
- Provision for decommissioning the lease.

Subsequently, lease liabilities must be measured at amortised cost using the interest rate implicit in the lease, charging the finance costs in the SPL. ROUA must normally be amortised on a straight line basis over the shorter of the asset under lease's useful economic life and the lease term.

(b) Initially, on 1.1.2019, Mumbi must recognise a lease liability and a ROUA computed as follows:

1. Lease liability

Date (31.12)	MLP	DF	PV
	K'000	@10%	K'000
2019	240	1.1^-1	218
2020	240	1.1^-2	198
2021	300	1.1^-3	225
2020	300	1.1^-4	205
Initial carrying amount of lease liability			846

2. ROUA

		K'000
Cash incurred on 1.1.2019		-
Initial lease liability		846
Provision for decommissioning the lease (restoration)	35	
Initial carrying amount of the ROUA		881

The required double entries will be:	K'000
Dr ROUA	881
Cr Lease liability	846
Cr Provision for decommissioning lease	35

Subsequently, the lease liability must be measured at amortised cost as follows:

		K'000
Total Liability at 31.12.2019	846X1.1-240	690.1
Non current portion of total liability at 31.12.2019		
	690.1X1.1-240	519.7
Current portion of total liability at 31.12.2019		
	(690.1-519.7)	170.4
A finance cost to charge in SPL for y/e 31.12.2019		
	10%X846	84.6

Subsequently, the ROUA will be amortised over four years (shorter than remaing life of the building under lease) on a straight line basis. Amounts to report for the year to 31.12.2019 are:

		K'000
Carrying amount of ROUA at 1.1.2019		881
Amortisation to charge in the SPL for y/e 31.12.2019		
	881/4	(220.3)
Carrying amount of ROUA to report in SFP at 31.12.2019		660.8

Subsequently, the lease decommissioning provision will increase by the unwinding of the discount (interest). The carrying amount report in the SFP at 31.12.2019 in respect of the provision will be K38.5 million (ie 35X1.1). The increase in the decommissioning provision to report in the SPL for the y/e 31.12.2019 will be K3.5 million (ie 10%XK35m)

(c) In accordance with IFRS 16, accounting for the property under lease by Kwenje, the lessor will depend on whether the lease is a finance lease or an operating lease. It appears Kwenje's lease with Mumbi must be an operating lease as the lease term is much shorter than the remaining useful economic life of the property at the inception of the lease (only 4 years compared to the 26 years remaining life at 1.1.2019). The lease does not therefore transfer substantially all risks and economic benefits relating to the property to the lessee. Kwenje must therefore continue to recognise and account for the property.

It appears Kwenje owns the property for letting out. Accounting for the property will therefore fall within the scope of **IAS 40 Investment Properties.** Kwenje uses the IAS40 cost model to account for investment properties. This requires using IAS 16 Property Plant and Equipment in accounting for investment properties. The property will therefore be accounted for by Kwenje as follows for the year to 31.12.2019:

	Building K'000	Land K'000
Carrying amount b/d 1.1.2019 (FV at 31.12.2018)	10,800	1,200
Depreciation y/e 31.12.2019 10800/26	(415)	-
Carrying amt at 31.12.2019 before revaluation	10,385	1,200
Revaluation gain/(loss) – balancing amt	(1,785)	(300)
Fair Value to report at 31.12.2019	8,600	900

Reporting the revaluation losses:

IAS 16 Cost model carrying amount:		
Original cost	8,900	1,100
Accum deprec 8,900/30X5	(1,483)	-
	7,417	1,100
Loss to report in SPL (1100-900)	-	200
Loss to report in OCI (balance)	1,785	100

The total Minimum Lease Payments (MLPs) receivable by Kwenje from Mumbi over the lease term must be recognise as income in the SPL over the lease term on a straightline basis as follows:

	K'000
Total rentals and other amounts receivable (240X2+300X2)	1,080
Rental income to recognise in SPL for y/e 31.12.2019 1080/4	270
Total amounts received to date at 31.12.2019	(240)
Accrued Income at 31.12.2019 (a receivable)	30

Financial statement extracts – y/e 31.12.2019:

	K'000
SPLOCI	
PL	
Depreciation of building	(415)
Revaluation loss on land	(200)
Rental Income	270
OCI	
Loss on Building	(1,785)
Loss on land	(100)
SFP	
Non current assets	
PPE	9,500
Current assets	
Rent receivable	30

SOLUTION FIVE

(a) A conceptual framework for financial reporting is a statement of generally accepted theoretical principles which provide a frame of reference for financial reporting. A conceptual framework is important for the following reasons;

- It provides a coherent and logical basis for the development of international financial reporting standards (IFRSs)
- It acts a barrier against lobby groups and other interest groups from interfering with the practice of accounting and skewing the standard setting process in their favour.
- It provides guidance on faithful presentation of transactions in situations where no specific accouting standard exist.

(b) Qualitative characteristics of useful financial information.

- **Relevance:** relevant information is material information that is capable of influencing the decision of its user. Information is normally capable of influencing decisions if it has predictive value, confirmatory or both.
- **Faithful presentation**: useful information must faithfully present the picture or position it purports to represent. Such information is normally expected to be complete, neutral and free from error.
- **Comparability:** useful information should be comparable and allow for performance assessment either of the same entity over different time periods or against other entities for the same period.
- **Verifiability:** useful financial information should be capable of being verified either directly or indirectly. Verifiability means that independent and knowledgeable individuals should be able to reach consensus that the information is a faithful representation of the state of affairs.
- **Timeliness:** useful financial information should be available to decision makers on time to in order to influence their decisions. Care must be taken to ensure the need to be on time does not result in the provision of unreliable information.
- **Understandability:** useful financial information should be understandable in that it should be concise and clear in its classification, characterization and presentation. The understandability of financial information is normally premised on a user who has some business, economics and accounting knowledge.

(c) The elements of the financial statement that relate to the statement of profit or loss and other comprehensive income are:-

(i) **Income**: Income is increases in assets, or decreases in liabilities, that result in increases in equity, other than those relating to contributions from holders of equity claims.

(ii) **Expenses:** Expenses are decreases in assets or increases in liabilities, that result in decreases in equity, other than those relating distributions to/from holders of equity.

(d) Derecognition of Assets and Liabilities

Derecognition is the removal or all or part of a recognized asset or liability from the statement of financial position and occurs when the definition of those elements are no longer met.

- Assets: an asset is normally derecognized when an entity loses control of all or part of the asset.
- Liabilities : a liability is normally derecognized when the entity longer has a present obligation for all or part of a recognized liability.

(e) Advantages and disadvantages of historical cost measurement.

Advantages

- The amounts used are objective and free from bias
- Its is easily understood even by non finance individuals
- It reduces the opportunities for creative accounting
- Figures in the statement of financial position can easily match the figures in the statement of cash flows.

Disadvantages

- It can lead to the understatement of assets in the statement of financial position
- In times of high inflationary pressures, an entity would report higher 'paper' profits as a result of lower and possibly distorted depreciation and cost of sales figures.
- Cost of replacing assets can rise rapidly when there is high inflation and this can result in lower asset replacement frequency than is necessary.
- Overstated profits can lead to higher distribution to shareholders, leaving little for investment purposes.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This Question is compulsory and MUST be attempted.

QUESTION ONE – (COMPULSORY)

Kasama Coffee Processing Ltd is a manufacturing company in the Northern Province of Zambia. The management accountant is in the process of preparing budgets for the period July to September 2020. The following information has been provided to assist in the budgeting process:

1. Budgeted monthly sales revenue is as follows:

	K
July	80,000
August	140,000
September	100,000
October	90,000

Sales are 20% cash and 80% credit. Credit sales are collected over a three month period, 15% in the month of sale, 70% in the month following sale and 15% in the second month following sale. Bad debts of 5% are anticipated on all credit sales.

Total sales revenue in May amounts to K60,000 and June's total sales revenue amounts to K72,000.

2. Cost of sales is expected to amount to 60% of sales revenue each month.

3. The business maintains its closing inventory levels at 75% of the following month's cost of sales. Inventory at the beginning of July is expected to amount to K36,000.

4. 50% of inventory purchased is paid in the month of purchase. The remaining 50% is paid for in the month following purchase. At the 30th June amounts owed for purchases are K23,400.

5. A grant of K40,000 is expected to be received in mid-July.

6. A van which cost K16,000 when purchased second hand three years ago is expected to be sold in September 2020 for K6,000. At this time the expected net book value of the van is K3,600.

7. Equipment costing K9,000 will be purchased and paid for in August. The equipment will be depreciated on a straight line basis over three years.

8. Operating expenses are paid as incurred. These have been estimated as follows:

K

July	21,600
August	33,800
September	25,200

The above figures excludes depreciation on existing assets of K4,000 per month.

9. The cash balance on 1 July is expected to amount to K16,000.

Required:

(a) Explain the role of Management Accounting in meeting the needs of wider stakeholders, particularly in relation to sustainability. (10 marks)

(b) (i) Explain what you understand by responsibility accounting (2 marks)

(ii) Explain three (3) types of responsibility centres and give an example under each type. (6 marks)

(c) Calculate the purchases figure for each month from July 2020 to September 2020. (5 marks)

(d) Prepare a cash budget on a monthly basis and in total for the period July 2020 to September 2020. (12 marks)

(e) Outline any five (5) potential benefits from the preparation of a cash budget such as the one you prepared in part (d). (5 marks)

[Total: 40 marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

Zamiwe Ltd (Z Ltd) manufactures a single product using two materials, X and Y. The company operates a standard costing system and analysis of variances is made every month. The standard cost card for the product is as follows:

		K
Material X	10kgs x K0.50	5.00
Material Y	18Kgs x K1.50	27.00
Direct Labour	6hrs x K8.50	51.00
Variable overhead	6hrs x K1.50	9.00
Fixed overhead	6hrs x K3.00	18.00
Standard cost per unit		110.00
Standard selling price		125.00
Standard profit		15.00

The following actual and budgeted data for September, 2020 is available as follows:

	Budget	**Actual**
Production units	3,000	2,600
Units sold	3,000	2,800
Sales value	K375,000	K355,600
Hours worked	18,000	15,000
Wages paid	K153,000	K129,000
Variable overhead	K 27,000	K22,000
Fixed overhead	K54,000	K52,600

Information relating to raw materials and finished goods inventories is as follows

	X	Y

Opening Inventories	12,000Kg	14,000kg
Closing Inventories	48,000Kg	80,400kg
Raw materials Purchases	63,000Kg for K32,200	112,800Kg for K167, 000

Opening finished goods inventories: K44,000
Closing finished goods inventories: K22,000

Required:

(a) Prepare an actual profit statement for September 2020 for Z Ltd. (4 marks)

(b) Prepare a budgeted profit statement for September 2020 for Z Ltd. (1 mark)

(c) Calculate the following variances

(i) Sales price and sales volume variances (2 marks)
(ii) Direct material price, mix and yield variances (3 marks)
(iii) Direct labour rate and efficiency variances (2 marks)
(iv) Variable overhead expenditure and efficiency variances. (2 marks)
(v) Fixed overhead expenditure, efficiency and capacity variances. (3 marks)

(d) Prepare a statement reconciling the budgeted profit with the actual profit.

(3 marks)

[Total: 20 Marks]

QUESTION THREE

Goma Ltd is a manufacturing company based in Katete. The company makes three products using the same method and machines. The company has thus far been using a conversional product costing system but now wishes to change to an activity based costing (ABC) system. The following information is applicable to the products that the company manufactures in a typical period.

Product	Hours per unit		Materials	Output
	Labour	Machine	K	Units
S	2.0	1.5	35.00	950

T	1.5	3.0	18.00	1,100
R	1.0	2.5	15.50	850

Direct labour costs K20 per hour and production overheads are absorbed on a machine hour basis. An overhead absorption rate of K24 per machine hour is used for the period under consideration.

Required:

(a) Determine the total budgeted production overhead costs for the period. (2 marks)

(b) Calculate the cost per unit for each product using the conventional method. (6 marks)

Further analysis of the production overheads shows the following distribution:

Cost	Allocation (%)
Costs relating to set-ups	15
Costs relating to machinery	30
Costs relating to materials handling	20
Costs relating to inspection	35
Total production overhead	**100**

The following information is also relevant for the period:

	Set ups	Material handling	Inspections
Product S	160	55	30
Product T	70	24	61
Product R	110	76	49
	340	155	140

(c) Calculate cost per unit for each product using Activity Based Costing (ABC) principles (12 marks)

[Total: 20 Marks]

QUESTION FOUR

The COVID-19 global pandemic has affected many businesses including the economic performance of Zambia in the year 2020. The onset of the COVID-19 global pandemic early in the year 2020 resulted in many businesses in the country shutting down, reducing their operations significantly or smaller ones being taken over by other larger companies.

GSS Limited, a smaller company has recently been taken over by a much larger company. For many years the budgets in GSS have been set by adding an inflation adjustment to the previous year's budget. The new owners of GSS are insisting on a 'zero-base' approach when the next budget is set, as they believe many of the indirect costs in GSS are much higher than in other companies under their control.

During one of the budget review meetings of the new budget-setting procedures, the management accountant made the following comment;
"It's impossible to make this system work because directors want budgets to be a challenging target whereas as the finance department we require an accurate forecast."

Required:

(a) Explain the main features of 'zero-based budgeting' (ZBB). (6 marks)

(b) Discuss the problems that might arise when implementing a ZBB approach in GSS Limited. (8 marks)

(c) Discuss the issues raised in the comment by the management accountant, and advise on practical action that could be taken to alleviate the situation described. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

EC Limited is a company that manufactures office chairs. The demand for office chairs has been on the increase following the recent regulations providing tax incentives for companies in the Zambia.

EC has projected the following demand and production costs for the two (2) types of chairs it manufactures:

	Executive	**Comfort**
Maximum demand (units)	800	600
Price per unit	K3,400	K2,700
Costs:		
Leather (K50 per metre)	1,500	900
Mukwa (K100 per metre)	600	400
Mukula lining (K150 per metre)	300	450
Other production costs (fixed)	660	475

EC limited has enough supply of leather to cover any required production of Executive and Comfort chairs. However, during the period, the supply of Mukwa and Mukula will be limited only to the following available quantities:

Material	**Quantity**
Mukwa	6,000 metres
Mukula	3,000 metres

The other production costs are fixed in nature and relate to labour, and overheads costs. These costs are attributable to the products using specific overheads absorption rates based on the maximum demand.

Required:

(a) Calculate the profit maximization production mix for the company and the maximum total contribution at this optimal output of its products. (10 marks)

(b) Calculate the margin of safety percentage for each product produced using the available resources. (6 marks)

(c) Advise the management of the company on the non-financial factors that should be considered in the process of making the decision regarding the production of the chairs.

(4 marks)
[Total: 20 Marks]

END OF PAPER

CA2.2 MANAGEMENT ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) There are a variety of different groups or individuals whose interests are directly affected by the activities of a business. These groups or individuals are referred to as stakeholders. The various stakeholder groups in a business can be classified as internal, connected and external. The stakeholders in a business will have different goals. For example, ordinary shareholders will be interested in maximising the wealth which they have as a result of the ownership of the shares in the company.
The actions of stakeholder groups in pursuit of their various goals can exert influence on strategy and objectives of an organisation. The greater the power of the stakeholder, the greater their influence will be. Each stakeholder group will have different expectations about what it wants, and the expectations ofthe various groups may conflict. Each group, however, will influence strategic decision making.
Sustainability is ensuring that development meets the needs of the present without compromising the ability of future generations to meet their own needs. Management accountants need to play a role in ensuring that sustainability aims are recognised, objectives are set and performance is measured. The information provided by the management accountant will help support decision making.
Sustainability involves developing strategies that balance environmental, economic and social needs.
The eventual aim is that the organisation only uses resources at a rate that allows them to be replenished, and that emissions of waste are at a level the environment is able to absorb.

(b) **Responsibility accounting** is a method of budgeting and comparing actual costs to budgets for each of the responsibility centres. **Responsibility centres** are areas of the business for which costs or revenues are gathered and compared to budgets for control purposes. There are a variety of different types of responsibility centre depending upon the type of cost and/or revenue that the centre deals with and for which the manager is
responsible. The following are examples of responsibility centres:
(i) A **cost centre** is an area of the business for which costs can be ascertained. This may be the 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) A **revenue centre** is an area of the business for which revenues can be ascertained. The revenue Centre manager will be responsible for revenue.
(iii) A **profit centre** 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) An **investment centre** 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.

(c) **Purchases**

	July	August	September
	K	K	K
Sales	80,000	140,000	100,000
Cost of sales	48,000	84,000	60,000
Opening Inventory	36,000	63,000	45,000
Purchases	75,000	66,000	55,500

(d) **Cash budget**

	July	August	September	Total
	K	K	K	K
Inflows				
Grant	40,000			40,000
Receipts from sales (W2)	70,264	94,728	115,000	279,992
Sale of van			6,000	6,000
Total cash inflow	110,264	94,728	121,000	325,992
Outflows				
Equipment		9,000		9,000
Operating expenses	21,600	33,800	25,200	80,600
Purchases (W1)	60,900	70,500	60,750	192,150
Total cash outflow	82,500	113,300	85,950	281,750
Net cash flow	27,764	(18,572)	35,050	44,242
Opening balance	16,000	43,764	25,192	16,000
Closing balance	43,764	25,192	60,242	60,242

Workings

(W1) Payment for Purchases

	July	August	September
	K	K	K
Purchases	75,000	66,000	55,500
50% month following purchases	23,400	37,500	33,000
50% month of purchase	37,500	33,000	27,750
	60,900	70,500	60,750

(W2) Receipts from Revenue

	May	June	July	August	September
	K	K	K	K	K
Revenue	60,000	72,000	80,000	140,000	100,000
Receipts					
Cash (20%)			16,000	28,000	20,000
Credit (80% x 95%)					
15% same month			9,120	15,960	11,400
70% following month			38,304	42,560	74,480
15% 2 months later			6,840	8,208	9,120
			70,264	94,728	115,000

(c)

- A cash budget should be one component of a company's financial goals. Budgeting cash and tracking actual cash provides a way to monitor the company's financial operations and to make planning adjustments where necessary. A cash budget also helps everyone focus on company finances.

- By planning cash receipt and payments, a company can operate its business with less working capital. In addition, a cash budget indicates when surplus cash is available to make short-term investments. This improves the use of money.
- When cash is available, the purchasing manager can use it to negotiate purchasing discounts with vendors.
- If the company needs a loan, the lender will request information in order to assess the financial health of the company. The cash budget provides some of the information required..
- A cash budget helps you track expenses more closely.
- Repaying debt on time is critical in maintaining a good credit rating and maintaining good relationships with suppliers. A cash budget provides the person responsible for finances a means to ensure that bills are paid on time. If there is an anticipated shortfall, the financial manager will know he may have to borrow money in the short term.

SOLUTION TWO

(a) Actual profit statement for September 2020

	K	K
Sales		355,600
Opening Inventory	44,000	
Add:Material Usage (W.1)	81,600	
	125,600	
Less: Closing Inventory	(22,000)	
Production cost	103,600	
Direct labour	129,000	
Variable overheads	22,000	
	(307,200)	
Actual profit		48,400

Workings

(W.1)	**Material X** Kg K	**Material Y** Kg K
Opening Inventory	12,000 x K0.5 = 6,000	14,000 x K1.5 =21,000
Add: Purchases	63,000 32,200 75,000 38,200	112,800167,000 126,800 188,000
Less: Closing Inventory	(48,000) X K0.5=(24,000)	(80,400) x K1.5 =(120,600)
Material usage	27,00014,200	46,400 67,400
Total usage	K14,200 + K67,400 = K81,600	

(b) Budgeted profit statement for September 2020
Sales (3,000 x K125) = K375, 000
Less: cost of sales (3,000 x K110) = K330, 000
Budgeted profit **K45, 000**

(c) (i) Sales Variance price. Sales Volume price.
K K Volume units
Standard 2,800 x K125 = 350,000 3,000
Actual 355,6002,800
5,600(F) 200(A)
X15
= K3, 000(A)

(ii) Direct material Price: X Y
K K
Standard(63,000 x K0.5) = 31,500 112,800 x K1.5 = 169,000
Actual 32,200167,000
700(A)2,200(F)

Materials Mix Variance
Standard Mix Actual Mix Price/Kg Variance (K)
X(10/28) 26,214 27,000 786(A) K0.5 393(A)
Y (18/28) 47,186 46,400 786(F) K1.5 1,179(F)
73,400 73,400 786(F)

Materials Yield Variances
Budgeted usage Standard Mix Variance K
X 26,000 26,214 214(A) K0.5 107(A)
Y 46,800 47,186 386(A) K1.5 579(A)
72,800 686(A)

(iii) Direct Labour Rate Labour Efficiency
K
Standard (15,000hrs x K8.50) =127,500 (2600 x 6hrs) = 15,600
Actual 129,000 15,000 hrs
1,500(A) 600 hrs(F)
X K8.50
= K5,100(F)
(iv) VOH Expenditure VOH Efficiency
K
Standard (15,000hrs x K1.5) = 22,500 600 hrs (F) x K1.5
Actual 22,000 = K900 (F)
500(F)

(v) FOH Expenditure FOH Efficiency FOH Capacity

K Hours

Budgeted 54,000 600hrs (F) xK3 18,000

Actual 52,600 15,000
1,400(F) = K1,800(F) 3,000 hrs (A)
X K3 K9,000(A)

(d) Reconciliation Statement

	K	
Budgeted profit(3,000units x K15)	45,000	
Sales price variance		5,600(F)
Sales volume variance		3,000(A)
		47,600

Cost Variances

	ADV	FAV
Direct Material Price		
X	700	
Y		2,200
Direct Material Mix		786
Direct Material Yield	686	
Direct Labour Rate	1,500	

Direct Labour Efficiency		5,100	
VOH Expenditure		500	
VOH Efficiency		900	
FOH Expenditure		1,400	
FOH Efficiency		1,800	
FOH Capacity	9,000		
11,88612,686800(F)			
Actual Profit			48,400

SOLUTION THREE

(a) Budgeted production overhead for the period

Product	S	T	R	Total
Output	950	1100	850	
Machine hrs/unit	1.5	3.0	2.5	
Machine hrs	1425	3300	2125	6850
				× K24/hr
				K164,400

(b) Cost per unit using absorption costing

Product	S	T	R
	K	K	K
Material	35.00	18.00	15.50
Labour	40.00	30.00	20.00
Overheads	36.00	72.00	60.00
Cost per unit	**111.00**	**120.00**	**95.50**

(c) Cost per unit using ABC(K)

Product	S	T	R
Material	33,250	19,800	13,175
Labour	38,000	33,000	17,000
Overheads			
Set up costs	11,605	5,077	7,978
Machinery costs	10,260	23,760	15,300
Material handling	11,667	5,091	16,122
Inspections	12,330	25,071	20,139
Total cost	**117,112**	**111,799**	**89,714**
	÷	÷	÷
	950	1,100	850
	K123.28	**K101.64**	**K105.55**

SOLUTION FOUR

Part (a)
The main features of Zero Based Budgeting (ZBB) include:
• Each element of cost within the budget has to be explicitly justified each year; this is in contrast to adding an increment to the previous year's budget to allow for inflation;
• ZBB forces judgements to be made on priorities as to whether expenditure should be included in the budget and at what level;
• In practice ZBB often forces an organisation to consider whether activities are best out-sourced or undertaken internally;
• One method of implementing ZBB requires the activities of an organisation to be described as a set of decision packages. For example, in the case of a local government organisation, providing day-care for the elderly could be a decision package. All the decision packages are then ranked in priority order and resources are allocated accordingly;
• ZBB seeks to act as a control to increase efficiency, and so this approach is used particularly in the public sector where competitive markets do not provide a control on efficiency.

Part (b)
There are problems in implementing this approach. Successful implementation of ZBB is extremely difficult. There are very few examples of "successful" implementations of ZBB, and many disaster stories – it is high risk.
• Implementation will only be effective if the staff of GSS is convinced of the value of undertaking ZBB. Thus to effect the necessary "culture change", additional problems may arise and additional expenditure is usually required.
• Some of the judgements needed in the ZBB process are very sensitive, particularly regarding reducing indirect costs of GSS. These decisions can prove difficult to make and can be divisive.
• It is usually expensive in terms of staff time; empirical evidence indicates this is frequently more so than expected. The business case for implementing ZBB prepared by the new owners of GSS must allow for this.
• ZBB usually needs consultants to aid the implementation. This adds the further problems of managing consultants and may add substantial cost. The benefits of implementing ZBB must be substantial to outweigh these costs and difficulties.
• Important aspects of work can be omitted from the activities included in the ZBB exercise, yet will still have to be undertaken.

Part (c)
The comment highlights the well-known issue of forecast versus motivation and control. When preparing the whole company's budget it is important to have a realistic forecast of what is likely to happen, particularly for cash, purchases, labour and capital budgets. However, for a budget to be effective for motivation, targets must be set that are challenging. It is also argued that for control purposes the budget must be a realistic benchmark against which actual performance can be compared, that is, it must be close to a forecast.
The difficulty is that both of these objectives are valid and beneficial. Thus the issue becomes whether one budget can do both tasks or whether companies need to choose which task the budget will be used for.
Virtually all companies prepare one version of the budget that is a forecast. Some have two sets of budgets – one as a forecast and another as a motivating and controlling budget for managers. However, having two budgets can cause other problems. Some companies separate forecasting and motivation. Thus they set a single budget as a forecast, but have an incentive scheme that

rewards performance that exceeds budget, or they have separate incentive targets for motivation purposes.

SOLUTION FIVE

Part (a)

Determination of the limiting factor(s);

Material	Executive	Comfort	Total materials	Available	Comment
Mukwa	4,800m (6m x 800)	2,400m (4m x 600)	7,200m	6,000m	Limiting factor
Mukula	1,600m (800 x 2m)	1,800m (600 x 3m)	3,400m	3,000m	Limiting factor

Linear programming using either a graphical or algebra approach could be used to determine the optimal solution.

Using simultaneous equations, the optimal solution is where the limiting factor resources are fully utilized and furtherest away from the origin but within the feasible region. This is where the equations for the constraints for Mukwa and Mukula intersect.

Let x = the number of executive chairs produced;

Let y = the number of comfort chairs produced

Let c = maximum contribution; 1,000x + 950y

Key constraints

X less than or equal to 800, y less than or equal to 600

M1 (Mukwa); 6x + 4y = 6,000

M2 (Mukula); 2x + 3y = 3,000

Solution by elimination or substitution; x= 600 and y = 600

Optimal contribution = K1,170,000 (K1,000 x 600 units) +(K950 x 600units)

Total fixed = K813,000 (800 units x K660) +(600 units x K475)

Profit; K1,170,000 – K813,000 = KK357,000

Part (b)

Details	Executive	Comfort
Total fixed costs	K528,000	K285,000
Contribution per unit	K1,000	K950
BEP (Fixed costs/contribution	528 units	300 units
Margin of safety units	72 units	300 units

Margin of safety %	12% (72/600 x 100)	50% (300/600x100)

Part (c)

Before making the decision, management should consider the following factors;

1. Whether the limiting factor materials shall be available in the next period to plan production;
2. Whether alternative materials could be used in place of the limiting materials;
3. The concerns of customers that would be not supplied products and whether they shall continue being loyal to the company;
4. Use of the spare capacity resulting from limited production; and
5. Employee moral especially those that might be made redundant due to decreased operating capacity.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

Twange Ltd is a company in the manufacturing of a wide range of baby foods which it supplies to wholesalers and retailers through a retail outlet at the manufacturing plant. 90% of the sales are local and 10% are exports to neighboring countries.

The bulk of the sales to wholesalers are on credit. Recently the company introduced sales by way of consignment whereby the customers pay for the supplies when they have sold the goods. Twange Ltd is responsible for any supplies that expire and require being withdrawn from the shelves. Food & Nutrition Commission monitors manufacturers of baby food in order to ensure they do not use prohibited food preservatives when manufacturing baby foods.

Twange Ltd has been an audit client of Coopers Chartered Accountants for the past three (3) years. The policy of the company is that it changes its external auditors every three (3) years. At the end of the agreement with Coopers Chartered Accountants, Twange Ltd put the audit services to tender. Manix & Associates bid for offering of audit services to Twange Ltd and at a recent annual general meeting of the company it was resolved to nominate Manix & Associates to be auditor for the next three years. Despite the offer of a three (3) year contract to offer audit services, Manix & Associates have a policy of annual continuance assessments of its clients.

Below is an explanation of the sales system of Twange Ltd:

The company receives both written and verbal orders which are recorded in the electronic order record maintained by the Sales Assistant. Each order is assigned an internal order number which is used for monitoring execution of the order. The order register is independently checked by the Sales Supervisor and this is evidenced by signing the printed copy at the end of every day.

If the goods ordered are in stock, a sales invoice and goods dispatch note is raised. A copy of the invoice is used to post the details in the accounting records on a daily basis. These are checked against the order record by the Sales Assistant who updates the order record to show that the order has been executed. The invoice and the dispatch notes are presented to stores who raise a delivery note in quadruplet. The last copy is sent to the Sales Assistant as evidence of executing the order. The first three copies accompany the goods and are signed by the customer as evidence of receipt of goods. The original is retained by the customer and two copies are returned and circulated to accounts and one is retained by sales as proof of delivery.

The goods supplied are checked by an independent person for correct goods supplied and also the correct quantity. The delivery note has a provision for checking on the face of it where the person checking signs as evidence of doing so. At the gate before goods leave the plant, all deliveries are recorded in a daily gate register showing details of the order number, invoice number and customer details. The gate record is independently checked against the daily sales summaries showing all sales made daily. Any discrepancies are investigated.

Goods are returned by customers if they were damaged in transit or the wrong goods were supplied. Sequentially numbered credit notes are raised only when there is a remark by the customer on the face of the delivery note stating the reasons for returning the goods and there is evidence that the damaged or wrong goods have been received back into stores. All credit notes are approved by the Credit Controller. A receivables ledger is maintained and on a monthly basis, the Financial Controller checks the balance in the receivables ledger against the balance in the sales ledger control account and this is evidence in writing. Currently there is no age analysis of the receivables and Twange Ltd estimates bad debts. It is company policy that allowance for receivables should be made at 2% of the receivables at the period end.

The company values inventory in accordance with IAS 2 *Inventory* and the company conducts physical counts of its stocks at the period end. For goods supplied on consignment, the company relies on the returns made by the consignee at the end of the financial year.

In planning the audit of the financial statements of Twange Ltd the auditors will need to carry out a risk assessment in line with ISA 315 (Revised) *Assessing and identifying the risk of material misstatements through understanding the entity and its environment*. The following questions were extracted from the internal control questionnaires used by Coopers Chartered Accountants in the previous audits:

1. Are goods examined before dispatch to customers for quantity and quality?
2. Can credit notes be raised to customers when no goods have been returned?

Required:

(a) Explain five (5) matters that could have been included in the bid for audit services by Manix & Associates. (5 marks)

(b) Using questions (1) and (2) in the scenario, explain the meaning and use of Internal Control Questionnaires (ICQs) and Internal Control Evaluation Questionnaires (ICEQCs). (6 marks)

(c) Identify and explain six (6) internal controls in the sales system of Twange Ltd. (9 marks)

(d) Explain the control objective for each of the six (6) controls in (c) and suggest the test of control that should be performed. (12 marks)

(e) Identify and explain four (4) audit risks in Twange Ltd clearly explaining the related financial statement figures affected. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

You are an Audit Manager in Kafeka & Mande, a firm of chartered accountants, and are finalizing the audit of the financial statements of Natwange Ltd for the year ended 31 August 2020 and the financial statements are due to be signed soon. The draft financial statements of Natwange Ltd for the year ended 31 August 2020 show profit before taxation of K13 million (2019 = K9 million) and total assets K51 million (2019 = K42 million).

The following four (4) matters have been brought to your attention by the Audit Senior:

1. **Bank balance**
   The bank balance shown in the Financial Statements does not include bank transfers as at 31 August 2020 amounting to K200,000 from receivables. This is because receipts for the said amount were only raised by the Cashier on 1 September 2020. The Audit Senior is proposing a qualified opinion.

2. **Director's loan**
   During the year, one of the Directors obtained an interest free loan amounting to K30,000 from Natwange Ltd. This has been included in the figure for "other receivables" and the details have been adequately disclosed in the notes to the Financial Statements. The Audit Senior is proposing an unmodified opinion.

3. **Receivables**
   On 24 September 2020, the Directors received notification from a liquidator that a customer owing Natwange Ltd K700,000 was declared bankrupt on 17 September 2020. The liquidator advised that whatever will be raised from selling the customer's assets will only cover a small portion of the customer's indebtedness to the Zambia Revenue Authority (ZRA). The directors have written off this amount in the financial statements for the year ended 31 August 2020. The Audit Senior has proposed that this must be included in the Key Audit Matter paragraph as it was extensively discussed with those charged with governance.

4. **Depreciation**
   Depreciation of K2 million has not been provided for on assets acquired in September 2020. It is company policy to provide a full year's depreciation on all assets acquired during the year. The Audit Senior has proposed that this should be included in other matter paragraph.

You have requested the Directors to provide written representations on their responsibility regarding designing and implementation of effective controls. However, they have refused.

Required:

(a) Explain the nature of the circumstances which may result in the modification of an audit opinion and clearly state the types of modified opinion which may be given. (4 marks)

(b) (i) Explain the quality and reliability of written representations as audit evidence. (2 marks)

(ii) Discuss the actions which Kafeka & Mande should take regarding management's refusal to provide written representations on their responsibility regarding designing and implementation of effective controls. (4 marks)

(c) Evaluate each of the Audit Senior's proposals, assuming that the directors are not willing to make any adjustments which may be deemed necessary. (10 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) You are the Audit Manager on the audit of one of your firm's audit clients. The Audit Assistant has come to you for consultation regarding a matter discovered during the audit. He established that the client has two sets of sales invoices for the same transactions. He was given the 'wrong' series of invoices which showed sales values at much higher amounts than the amounts appearing on the sales invoices posted in the financial statements.

The Financial Accountant pleaded with him that he should not disclose this to anyone else because these are not the same invoices used to post to the revenue accounts. There is another series of invoices showing lower sales values which are used to determine sales revenue for the financial statements.

When pressed to explain, the Financial Accountant admitted that this is being done in order to evade paying high taxes by understating revenue.

Required:

Explain the fundamental principle of confidentiality and suggest the action the audit team should take in view of the findings by the Audit Assistant. (6 marks)

(b) You have been assigned to the audit of Bronze Ltd for the year ending 31 September 2020 as Senior Auditor. The audit team comprising the Engagement Partner, the Audit Manager and four newly recruited Audit Assistants has been put in place.

This is the first time that your firm will audit the Financial Statements of Bronze Ltd and you are at the planning stage of the audit. As part of the planning of the audit you wish to assign staff to carry out the risk assessment and evaluation of the internal controls of Bronze Ltd. The Audit Manager has requested you to call for a pre-audit meeting with the rest of the audit team. He wants you to brief the team on the need for carrying out risk assessments and the need for all members of the audit team to observe professional skepticism throughout the audit and to use professional judgment during the audit.

It is your intention to place reliance on the effectiveness of the internal controls in Bronze Ltd. You will only be able to do this if the results of the tests of controls suggest that the internal controls are effective. In order to carry out tests of controls it is necessary that during the planning for the audit the accounting and control systems are recorded.

Required:

(i) Explain four (4) methods that the audit team may use in assessing risk and gaining an understanding of Bronze Ltd at the planning stage of the audit.
(4 marks)

(ii) Explain any two (2) methods that Audit Assistants should use to record the accounting and control systems of Bronze Ltd and give two (2) disadvantages of using each method. (6 marks)

(iii) Explain the meaning of professional skepticism and professional judgment and give one (1) example each where they can be applied during the audit of Bronze Ltd.
(4 marks)
[Total: 20 Marks]

QUESTION FOUR

(a) You are an Audit Assistant on the audit of the Financial Statements of Builders Ltd. This is the third year that you have been assigned to this audit. John is a newly recruited Audit Assistant and he too has been assigned to this audit under your supervision.

You are planning the audit of the Financial Statements for the current year. You are assessing risk of material misstatements in accordance with guidance in ISA 315 (Revised) *Identifying and assessing the risks of material misstatements through understanding the entity and its environment.*

As part of risk assessment and gaining an understanding of the petty cash system, you request John, the Audit Assistant to perform walk through tests of the petty cash system before performing tests of controls.

The following system relates to the management of petty cash in Builders Ltd:

The company maintains a petty cash float of K10,000 under the responsibility of the Petty Cashier. Payments out of petty cash are only made on the basis of approved petty cash vouchers signed by the Office Manager. All paid petty cash vouchers and the supporting documents are required to be stamped with a PAID stamp before submission for reimbursement.

Required:

(i) Explain the meaning and use of walk through tests performed at the planning stage of the audit. (2 marks)

(ii) Explain the meaning and purpose of performing tests of controls in the audit of Financial Statements. (4 marks)

(iii) State two (2) tests of controls that should be performed over the petty cash system of Builders Ltd. (2 marks)

(b) You are the Audit Senior in the audit of the Financial Statements of Zebra Ltd for the year ended 30 September 2020.

You are planning to perform the audit procedures that should be performed on the figure of trade receivables and you wish to assign John the Audit Assistant to do the work. The Statement of Financial Position has an amount of K980,000 described as trade and other receivables. The client has provided you with an age analysis of the trade receivables by customer and amount owing.

In addition to other audit procedures on receivables, you wish to circularize confirmation a sample of receivables. Through circularization confirmation of the receivables, it is hoped that you will confirm a number of assertions relating to trade receivables.

Required:

(i) Explain the responsibility for the circularization (confirmation) of receivables between management and the firm. (2 marks)

(ii) Explain any four (4) assertions that will be tested through the circularization (confirmation) of trade receivables of Zebra Ltd. (4 marks)

(iii) Describe the procedure for the circularization (confirmation) of the receivables of Zebra Ltd from sample selection to follow-up. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

You are an Audit Senior in Kanyama & Co, a firm of Chartered Accountants. Kanyama & Co. was, for the first time, appointed as auditor of Mwembe Ltd, a company involved in recycling plastic waste and you are in charge of the audit of the financial statements for the year ended 30 June 2020. Mwembe Ltd has processing plants in Lusaka, Ndola and Livingstone and it has agents who collect the plastic waste throughout the Republic of Zambia.

The company has five (5) agents who are paid after 30 days. All the agents have proper accounting systems and their accounts are reconciled by the Accounts Supervisor on a monthly basis. However, during the year ended 30 June 2020, the company's policy on corporate social responsibility was enhanced. It is now a requirement that 5% of the company's supplies must be sourced locally from cooperatives run by youths. These do not have proper accounting systems and statements are not sent resulting in the accounts remaining unreconciled. Goods Received Notes (GRNs) are raised for all purchases.

Asset verification was carried out in May 2020 but the company's non-current assets register has not been updated. The Accountant with the rights for updating the computerized non-current register is on a six (6) months study leave. The company does not want to appoint someone in an acting capacity to avoid corrupting the non-current register. Management has provided a manual list of all non-current assets as at 30 June 2020.

The company is expected to have significant inventories of raw materials and work in progress as at 30 June 2020. Arrangements have been made for a full inventory count to be conducted at the year end. The Chairman of the Audit Committee availed you the inventory count instructions.

The Engagement Partner reviewed the inventory count instructions and is satisfied that they can be relied upon as a basis for valuing closing inventory. He has instructed you to ensure four (4) auditors attend the inventory count during which he expects them to use audit sampling. He also wants you to use audit software in the audit of payables.

Required:

(a) (i) Explain what is meant by audit sampling according to ISA 530 *Audit sampling*. (2 marks)

(ii) Suggest two (2) criterion which can be used to select items for testing during the statutory audit of inventory count for Mwembe Ltd. (4 marks)

(b) Explain four (4) ways of how audit software can be used in the audit of payables in Mwembe Ltd. (4 marks)

(c) Identify and explain four (4) audit risks in the audit of the Financial Statement of Mwembe Ltd. and suggest suitable audit responses. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.3 AUDITING PRINCIPLES AND PRACTICE

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Matters to include in bid for audit services:

1. The experience of the firm in auditing and how the firm hopes to meet the requirements and expectations of Twange Ltd.
2. The qualifications and experience of the key personnel in the firm including the partners.
3. An indication of the fee and the basis for determining the audit fee that will be charged.
4. Details of how the firm proposes to meet the requirements of Twange Ltd.
5. The presence of the firm if it has a national presence.
6. References of clients in the industry that Twange Ltd is in that the firm has audited.
7. The fact that the firm is registered with the ZiCA as auditor and has the necessary licence showing this.

(b) Meaning and use of ICQs and ICEQs in the audit of Twange Ltd:

During the risk assessment of the audit of the financial statements of a client company the auditors require to record the accounting and control systems of the client. The auditors then evaluate the system and the related controls to enable the auditor perform tests of control and make a decision as to whether a combined approach to the audit will be followed.

Two of the methods available to the auditors to record the client systems are through the use of questionnaire which are in two categories as explained below. The auditors are required to design a set of questions, the answers of which will help the auditor record and evaluate the system.

Internal Control Questionnaire (ICQ)

The design of questions in the ICQ is such that the auditor wishes to establish whether or not expected controls exist in the client's system. Usually a NO answer suggests that the expected control is not in existence. In the case at hand, the first question is an example of a question that would be contained in an Internal Control Questionnaire (ICQ).

Internal Control Evaluation Questionnaire (ICEQ)

The design of question in the case of ICEQs is that that the auditor wishes to establish whether certain errors could occur without being detected. Usually an answer of YES suggests a weakness in the system.

Of the two suggested questions in the question the second question would be included in the Internal Control Evaluation Questionnaire (ICEQ) because it seeks to establish whether credit cotes could be raised in favor of customers when no goods have been returned. This is an error which is undesirable and should be prevented.

(c) Internal controls in Twange Ltd:

The following are the internal controls in the sales system of Twange Ltd:

1. All orders received whether verbal or written are recorded in an order record and assigned an internal order number.
2. The order record is independently checked by the sales supervisor and this is evidenced by signing on the daily order printed record.
3. Goods are only released from stores based on an invoice and evidence of payment being a receipt issued by the cashier.
4. Delivery notes raised by the stores department are required to be signed by the customer as evidence of receipt of the goods.
5. Before goods are given to the customer they are independently checked for correctness and this is evidenced in writing.
6. All goods sold and leaving the premises are checked at the gate and recorded in a register in order of invoice number. The register is independently checked against details in the daily sakes summaries.
7. Credit notes are only raised when there is evidence that goods have been returned and received back in stores. All credit notes are approved by the credit controller.
8. A monthly reconciliation of the receivables control account and the general ledger is done and any differences investigated. This is evidenced in writing the reviewer signing on the face of the reconciliation.

(d) Control objectives and tests of control for the controls in Twange Ltd:

The control objectives and the tests of control are in the same order for the controls in (c) above. The solution in (c) and (d) could have been presented in tabular form showing the control, the control objective and the test of control.

1. **Control objective:**
   The objective of the control to record and assign internal order number for all orders received is to ensure that all orders received are executed and be able to identify unfulfilled orders.

   Test of control
   For a sample of sales orders executed and obtained from the sales records confirm that they were recorded in the order register on receipt of the order.

2. **Control objective:**
   Independent checking of the sales order and evidenced in writing is to ensure that valid order are executed and there are explanation for outstanding orders.

   Test of control
   Review a sample of the executed order record and ensure that it was independently checked by signing by the person who checked.

3. **Control objective:**
   The objective of the control to release goods on the strength of an invoice and proof of payment is meant to prevent goods not paid for from being issued.
   Test of control
   For a sample of cash sales made examine the delivery note and other documents to ensure that the order and evidence of receipt of cash is attached.

4. **Control objective:**
   The requirement that the customer signs the delivery note is meant to obtain proof of receipt of goods and avoid any dispute that may arise.
   Test of control
   For a sample of delivery notes raised, examine and confirm that they have been duly signed by the customer.

5. **Control objective:**
   The independent checking of goods before being sent to the customer or collected is meant to ensure that the correct items as ordered and paid for are being given.
   Test of control
   For a sample of sales during the period, confirm that they have been independently checked by checking that they are signed for checking.

6. **Control objective:**
   The aim of the control at the gate of checking all goods leaving the premises is to ensure that only goods for which sales invoices and payment have been received are allowed out of the premises.
   Test of control
   For a sample of sales made during the period under review follow up and confirm that they were recorded in gate register as required.

7. **Control objective:**
   The control over the raising of credit notes and approval of the credit notes is aimed at preventing unauthorized credit notes being given to the receivables. Lack of control over credit notes could result in loss of revenue by the company.
   Test of control
   For a sample of credit notes raised during the period under review, inspect the documentation and ensure that there is evidence of return of goods and that the credit notes have been approved as required.

8. **Control objective:**
   The monthly reconciliation between the receivables control account and the receivables ledger is aimed at ensuring that any errors highlighted are promptly investigated and corrected. The total in the control account is supposed to agree with the total of the amounts in the receivables ledger.

Test of control

Inspect a sample of reconciliations carried out during the period and confirm that reconciling items have been cleared and also that the reconciliation is signed as per procedure.

(e) Audit risks in the audit of financial statements of Twange Ltd:

1. **Recoverability of credit sale receivables:**
   The bulk of the sales of Twange Ltd to the wholesalers are on credit. There is a risk that credit sales could be made to customers who are not credit worthy and result in the amounts not collectable and subsequently written off unless stringent credit policy is followed.

   The figure of receivables in the financial statements of Twange Ltd may be misstated arising from receivables that are not recoverable.

2. **Credit notes and allowances for receivables:**
   Credit notes are only raised when there is a remark on the delivery note by the customer stating the reason why goods have been returned. This suggests that when goods are returned and there is no remark no credit note is raised. This could result in disputes with customers on the amount owing.
   Further, allowance for receivables is made at the end of the year based on 2% of the receivables balance and there is no age analysis showing the age of the receivables balance.

   The above matters could result in the **receivables balance** in the financial statements of Twange Ltd being misstated.

3. **Valuation of returned goods:**
   Inventory at the period end should be valued at the lower of cost and net realizable value in accordance with IAS 2 *Inventory.* In view of the fact that customers do return damaged goods supplied to them suggests that at the period end there will be stocks of damaged goods whose net realizable value may be less than the cost. There is a risk that such returned damaged goods may be valued inappropriately resulting in the financial statements being misstated.

   The impact of valuing such inventory wrongly may result in the misstatement of the **inventory figure** in the financial statements of Twange Ltd.

4. **Valuation of expired baby foods:**
   Twange Ltd is likely to have stocks of expired inventory at the period end. The realizable value of such inventory is likely to be lower than the cost and should be valued at the realizable amount. There is a risk that expired foodstuffs are valued at cost which may result in the misstatement of the inventory value in the financial statements.

5. **Non-compliance with laws and regulations:**
   There is a legal requirement that expired foodstuffs should be withdrawn from the shelves. There are penalties for non-compliance with the regulations and there is a risk that Twange Ltd will not have complied with the regulations.
   There is a risk that the company will not comply with regulations regarding the use of preservatives in food products which could result in penalties in accordance with the provisions of the law.

   Non-compliance with the regulations requires that appropriate provisions should be recognized in the financial statements. There is a risk that this has not be done resulting in provisions and financial statements being misstated.

6. Determination of inventory held by thirds parties – consignment sales:
   The goods held by consignees belong to Twange Ltd and is supposed to be included in the inventory value at the period end. Twange Ltd relies on the returns from the consignees to determine the inventory held on consignment.

   There is a risk that the consignment stocks are misstated resulting in the inventory figure in the financial statements being misstated.

SOLUTION TWO

(a) Nature of the circumstances and type of modified audit opinions:
ISA 705 *Modifications to the opinion in the independent auditor's report.* The nature of the circumstances and the resulting modified audit opinions are as follows:

(1) Financial statements are materially misstated. If this is material but not pervasive, a qualified opinion will be given. However, if this is both material and pervasive, an adverse opinion will be given.

(2) Auditor unable to obtain sufficient appropriate audit evidence. If this is material but not pervasive, a qualified opinion will be given. However, if this is both material and pervasive, a disclaimer of opinion will be given.

(b) Quality & reliability of written representations:

(i) Quality and reliability of written representations as audit evidence
Written representations are written statements by management provided to the auditor to confirm certain matters or to support other audit evidence. They are more reliable than oral representations, since oral representations can be retracted.
However, although written representations are a form of audit evidence, they are from an internal source and on their own they do not provide sufficient appropriate audit evidence about the issues they relate to.

(ii) Actions to take:
If management does not provide written representations on their responsibility regarding designing and implementation of effective controls, the auditor shall:

- Discuss the matter with management
- Re-evaluate the integrity of management and evaluate the effect this may have on the reliability of representations and audit evidence in general
- Take appropriate actions, including determining the impact on the auditor's report.

(c) Evaluation of Audit Seniors proposals:

(1) Bank balance
The bank transfers omitted represents 0.4% of total assets (K200,000/K51,000,000 X 100%) and is therefore immaterial. The omission means that the bank balance is understated while receivables are overstated although there is no impact on the figure for total assets. Since the matter is immaterial, the audit opinion should be unmodified. Hence, the proposed qualified opinion is inappropriate.

(2) Director's loan
The Director's loan is material by nature since it is a requirement of the law that such transactions must disclosed. The accounting treatment and disclosures are correct and therefore, the proposed unmodified opinion is appropriate.

(3) Receivables

The amount written off represents 5.4% of profit before tax (K700,000/K13,000,000 X 100%) and 1.4% of total assets (K700,000/K51,000,000 X 100%). This is material to both the statement of profit or loss and the statement of financial position. The accounting treatment is correct since this is an example of an adjusting event. According to ISA 701 *Communicating key audit matters in the independent auditor's report* defines key audit matters as those matters that, in the auditor's professional judgement, were of most significance in the audit of the financial statements of the current period. Key audit matters are selected from matters communicated with those charged with governance. Hence, it may be appropriate to include this under the Key Audit Matters paragraph although this is not mandatory for unlisted companies like Natwange Ltd.

(4) Depreciation

The depreciation amount represents 15% of profit before tax (K2,000,000/K13,000,000 X 100%) and 3.9% of total assets (K2,000,000/K51,000,000 X 100%). This is very material to both the statement of profit or loss and the statement of financial position. The accounting treatment is incorrect and the opinion is supposed to be modified as the matter is very material. The Audit Senior's proposal of the use of the other matter paragraph is wrong since this cannot replace a modification of opinion. Hence, the appropriate audit could be a qualified opinion since the matter is unlikely to be pervasive.

SOLUTION THREE

(a) **The meaning of confidentiality:**

Confidentiality is one of the five fundamental principles for accountants. This states that the auditor should not disclose to third parties information that comes to their attention in the carrying out of their work.

There are exceptions to this general rule whereby the auditor may disclose such information without the permission of the client. One such exception is where the client is involved in a criminal offence. In this case the auditor will be required to report this to appropriate authorities.

Action that should be taken:

In the case in question, tax evasion is clearly against the law and is a criminal case. The client is declaring less revenue in the financial statements that are used to calculate taxes due in order to avoid paying the correct taxes.

The auditor in this case will require to discuss this with management and those charged with governance and inform them that he is obliged to report this to the competent authorities.

If the auditor is not sure about his position and fearing to be in breach of the fundamental principle of confidentiality he may seek independent legal advice.

(b) **(i) Methods of gaining an understanding of Bronze Ltd:**

1. **Inquiry of management and others:**
   This is done by the auditor obtaining any information that they need through enquiry of management, internal audit when one exists and others within the organization.

2. **Analytical procedures:**
   This is the evaluation of information financial and non-financial contained in the financial statements and analyzing the relationship in this data.

3. **Observations and inspection:**
   These methods are used to confirm the information gathered from inquiries and also simply observing how the organization is operating and obtaining any procedural manuals that may exist and reading through to gain an understanding of the entity.

4. **Industry information:**
   This is obtaining industry information where it is available. The industry in which the client company is involved in and this information is useful in understanding the nature of the business of the client company.

5. **Prior knowledge from other clients in similar industry:**
   This is knowledge that the audit firm may have from having audited other clients in a similar industry as the current client.

6. **The website of the client company:**
   Most organizations have website on which a lot of information about their activities is available. The auditor could gain an understanding of a client company by browsing on the website of the organization.

(ii) Methods of recording the accounting and control systems:

1. **Narrative notes** – this involves the auditor gathering information through inquiry and then write notes describing the system and the related controls.

   Disadvantages:
   - Making changes in future is challenging particularly where manually recorded. With the advent of computers documents could be edited much easily and faster.
   - Could take more time to prepare and could easily be misunderstood.

2. **Flowcharts** – this is a graphic presentation of the systems and controls prepared by way of the flow of information and documents in the system. Flow charts are used to depict the sequence of the processes and controls.

   Disadvantages:
   - Most appropriate and suitable for describing standard systems. May not be suitable for systems involving unusual transactions which may be better described using narrative notes.
   - Major amendments may be difficult to do which may require complete redrawing.

3. **Internal Control Questionnaires (ICQs) –** This is the use by the auditor of a set of questions aimed at establishing whether desired controls exist in a particular accounting system. The questions are designed to establish how good the system is. It is common that a NO answer to the questions suggest that the controls are poor. For each major accounting system a set of questions will be designed.

   Disadvantages:
   - They may leave out unusual controls which could be relevant and necessary in certain circumstances.
   - It might be difficult to prepare a set of suitable questions to record a particular system. This may be overcome after gaining experience.
   - May be drafted vaguely hence easily misunderstood resulting in important controls not being identified.

4. **Internal Control Evaluation Questionnaires(ICEQs)** – This is recording of the system and controls by designing a set of questions aimed at establishing specific errors or fraud are possible rather than whether certain desirable controls are present. Common that a YES answer requires an explanation in other words the error or fraud can occur.

(iii) Professional skepticism:

This is an attitude of being alert and having a questioning mind and being alert for conditions that may indicate possible misstatement due to error or fraud and being able to critically assess evidence.

Professional skepticism could be used by the auditor when inspecting documents when gathering audit evidence to look out for any signs of the documents being forged for example.

Professional judgment:

This is the application of relevant training acquired by the auditor, using knowledge acquired through experience in making decisions during the audit process.

Professional judgment is used in different areas during the audit including determining the nature, timing and extent of audit procedures and drawing conclusion based on the evidence that has been obtained.

SOLUTION FOUR

(a)(i) The meaning of walk through tests:

During the planning stage of audits of financial statements, the auditors records the accounting and control systems of a client company.

Walk through tests are performed by the auditor by selecting a few items in a particular system and following them through the system as recorded. The objective of the auditor performing walk through tests is to confirm that they have recorded the system correctly.

(ii) Meaning of tests of controls:

Tests of controls are procedures that are performed by the auditors by selecting a number of transactions and subjecting them to the controls that have been recorded in gaining an understanding of the entity.

Tests of controls that are performed should cover the whole period under audit i.e. the financial year.

The purpose of tests of control:

The objective of carrying out tests of control by the auditor is for the auditor to establish whether or not the internal controls in a client company are operating as expected.

Depending on the results of the tests of control the auditor will respond as follows:

- If the results of the tests of control reveal that the controls are operating effectively in the period under review, the auditor will place reliance on the effectiveness of the controls in designing the nature and extent of substantive audit procedures. The auditor may perform less substantive procedures in view of the effectiveness of the controls.
- If on the other hand the results of the tests of control reveal that the controls were not operating effectively during the period, the auditor will not rely on the controls but rather rely more on substantive tests in carrying out the audit.

(iii) Tests of control over the accounting for petty cash could be the following:

- For a sample of petty cash payments in the period confirm that they have been approved by the departmental head as required.
- For a number of reimbursements made during the period verify that all the supporting documents have been stamped with a **PAID** stamp as evidence of payment.

(b) (i) Responsibility for circularization (confirmation) of trade receivables:

Management prepares the financial statements and prepare the age analysis of the trade receivables of Zebra Ltd.

The auditor is the one who wishes to gather evidence that the trade receivables are not materially misstated. The auditor is responsible for selecting receivables to circularize (confirmation). The auditor then requests the management to write to the receivables selected on the letter head of Zebra Ltd requesting the receivables to confirm directly to the auditors their indebtedness.

(ii) Financial statements assertions tested by circularization (confirmation):

Existence – This assertion is in relation to the claim that the receivables included in the figure in the draft financial statements existed at the period of Zebra Ltd.

Valuation – this is a claim that the receivables as recorded in the balance at the period end are included at the correct amounts and are recoverable.

Completeness – that the receivables include all those that existed at the period end.

Rights and obligations – that the receivables recorded at the period end relate to Zebra Ltd and the entity controls the rights to the related receivables.

(iii) Procedure for receivables circularization:

1. The auditor selects receivables for circularization (confirmation) from the age analysis provided by Zebra Ltd.
2. A copy of the list of receivables to circularize (confirm) is given to the management of Zebra Ltd requiring that the company writes to the receivables using the company letter head requesting the receivables to respond directly to the auditors.
3. The signed letters are handed back to the auditors who confirm that they have been written to the correct receivables.
4. The auditor inserts pre stamped and pre addressed envelopes together with the confirmation letters and posts the letters.
5. The auditor receives the responses from the receivables and evaluates the responses and identify any disputes.
6. The auditor with the help of the management make follow up of any non responses that may exist.

SOLUTION FIVE

(a) Audit sampling:

(i) Audit sampling

Audit sampling is the application of audit procedures to less than 100% of items within a population of audit relevance such that all sampling units have a chance of selection. This will enable the auditor to obtain and evaluate audit evidence about some characteristic of the items selected in order to provide the auditor with reasonable basis on which to draw conclusions about the entire population. Audit sampling can be applied using either statistical or non-statistical approaches.

(ii) Criteria for selecting items:

The following criteria can be used to select items for testing:

- High value or key inventory items – the auditor may select high value inventory items or inventory items that are suspicious, unusual or prone to error
- All inventory items over a certain amount – selecting items this way may mean a large proportion of the population can be verified by testing a few items.

(b) Use of audit software in the audit of payables in Mwembe Ltd

- Performing calculations and comparisons in analytical procedures
- Sampling programs to extract data for audit testing, e.g. select a sample of payables for confirmation
- Scanning a file to ensure that all documents in a series have been accounted for or to search for large and unusual items
- Comparing data elements in different files for agreement (e.g. prices on purchases invoices to agreed prices in master file)
- Re-performing calculations e.g. totaling purchases ledger
- Preparing documents and reports e.g. payables' confirmation letters and reconciliations against supplier statements.

(c) Audit risks in the audit of the Financial Statements of Mwembe Ltd:

Audit risks	Explanations	Audit responses
(1) Your firm was recently appointed as auditor of Mwembe Ltd	Kanyama & Co, lacks cumulative knowledge and understanding of the business which may increase detection risk. Furthermore, opening balances may be misstated.	Perform audit procedures as recommended by ISA 315 (Revised) *Identifying and assessing the risks of material misstatement through understanding the entity and its environment.* Carry out appropriate audit procedures to ensure opening balances are properly brought forward.
(2) Unreconciled accounts for cooperatives	Misstatements in the accounts for cooperatives may go	Match a sample of GRNs for cooperatives to invoices before agreeing to

	unnoticed. The payables balance for cooperatives is likely to be understated.	payment vouchers or payables list. Agree a sample of post year-end payments to cooperatives to the payables list.
(3) Company's non-current assets register has not been updated	The non-current assets balance may be wrongly stated in the financial statements. Additions and disposals may not be accounted for properly.	For a sample of non-current assets which physically exist agree that they appear on the manual list of non-current assets. For a sample of non-current asset disposals in the cashbook, check whether they appear on the manual list.
(4) The company is expected to have significant inventories of raw materials and work in progress as at 30 June 2020	The valuation of inventories could be incorrect.	For a sample of inventory items, establish the lower of cost and Net Realisable Value (NRV) and compare with the figures included on the final inventory valuation sheet.

END OF SUGGESTED SOLUTIONS

CA-ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.4: TAXATION

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: ONE (1) Compulsory Question.
   Section B: Four (4) Optional Questions. Attempt any THREE (3) questions

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

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

5. **Cell phones** are **NOT** allowed in the examination room.

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

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

8. Present legible and tidy work.

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

10. A Taxation table is provided from page 2 to page 6 of the question paper.

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

Taxation table for paper CA2.4– Taxation (2021 Examinations) Taxation Table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%
On income from manufacture of products made out of copper cathodes	15%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	5.5% of norm value
From US$4,500 to less than US$6,000	6.5% of norm value
From US$6,000 to less than US$7,500	7.5% of norm value
From US$7,500 to less than US$9,000	8.5% of norm value
From US$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% of norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% of gross value
Gemstones	6% of gross value
Precious Metals	6% of norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Plant used normally	25%
	Used in Manufacturing and Leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing **(Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax 4%

Presumptive Tax for Transporters

Seating capacity	Tax per annum	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 K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 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

Mathews, Luke and Abraham are in partnership sharing profits and losses in the ratio of 4:3:1, respectively after allowing for partnership salaries of K120,000 per annum for each. The partners run a retail business and prepare accounts annually to 31 December.

On 31 May 2021, Abraham retired from the partnership and, with effect from that date, the partnership agreement was changed. Profits and losses and partners' annual salaries were to be provided for as given below:

	Mathews		Luke
	K		K
Salaries per annum	150,000		140,000
Share of balance of profits or losses	2	:	1

The partnership statement of profit or loss for the year ended 31 December 2021 was as follows:

	Note	K	K
Gross profit			2,420,000
Less:			
Wages and salaries	(1)	1,355,000	
Motor car running expenses	(2)	172,000	
Legal and professional expenses	(3)	80,000	
Depreciation	(4)	92,000	
General expenses	(5)	47,000	
			(1,746,000)
Net profit			674,000

Notes

(1) **Wages and salaries**
Wages and salaries include employees' wages of K1,075,000 and partners' salaries amounting to K280,000.

(2) **Motor car running expenses**
The details on the motor car running expenses are as follows:

	K
Delivery van used exclusively for business	60,000
Pool car (old)	32,000
Mathews' motor car	25,000
Luke's motor car	10,000
Abraham's motor car	45,000
Total	172,000

The partners use their own private motor cars in the partnership business. The private use has been agreed with the Commissioner General as follows:

	%
Mathews	20
Luke	15
Abraham	30

The Delivery van and the old pool car were bought on 1 July 2015 at a cost of K320,000 and K110,000 respectively. The partners' private motor cars are all 2000cc Toyota Camry cars and were bought on 3 March 2021 at K160,000 each. When Abraham retired on 31 May 2021, he left his motor car in the partnership at an agreed valuation of K190,000. The partners made the car available for use by employees as a pool car. On 1 September 2021, the old pool car was sold for K30,000 incurring a loss of K25,000. The loss is included in the general expenses. The partnership always claims maximum capital allowances every tax year.

(3) **Legal and Professional expenses**

These comprise the following:

	K
Legal fees in connection with drafting employees' service contracts	12,000
Legal fees in connection with making changes to the partnership agreement	15,000
Fees for personal tax planning advice to Abraham following his retirement	10,000
Accountancy and audit	43,000
Total	80,000

(4) **Depreciation**

Depreciation relates to tangible non-current assets wholly and exclusively used in the business.

(5) **General expenses**

The figure for general expenses includes K8,000 for entertaining suppliers, fines for breach of labour laws amounting to K7,000, partners' traffic fines incurred whilst conducting the partnership business of K4,200, loss on disposal of old pool car of K25,000 and the balance is made up of revenue expenses which are all allowable for tax purposes.

(6) **Other partnership assets**

At 1 January 2021, the other partnership assets qualifying for capital allowances were as follows:

	Cost	Income tax value
	K	K
Office equipment	75,000	18,750
Cash registers	28,500	21,375
Fixtures and fittings	33,500	0

(7) **Other information**

On 1 November 2021, Abraham was employed as a Managing Director by Western Distributors (Zambia) Ltd, on a four (4) year contract. The all-inclusive salary was K90,000 per month. He was provided with free accommodation in a company owned house. During the tax year 2021, he paid utility bills amounting to K13,500. The company also provided him with a brand new Nissan Almera car (3000cc) on a personal-to holder basis. The motor car cost K450,000 and the motoring expenses during the tax year 2021, totaled K73,500. These were paid by the company. The private motoring was agreed with the Commissioner General at 30%. Income tax paid under the PAYE system was K39,600.

(8) For the year ended 31 December 2020, the partnership incurred a tax adjusted loss and the following unrelieved tax loses allocated to each partner were brought forward as at 1 January 2021:

	K
Mathews	60,000
Luke	40,000
Abraham	15,000

(9) Provisional income tax paid by Mathews, Luke and Abraham for the tax year 2021 was K143,000, K80,000 and K20,000 respectively.

Required:

(a) Explain the tax treatment of trading tax losses suffered by partners. (3 marks)

(b) Calculate the partnership's tax adjusted business profit for the year ended 31 December 2021, before division between the partner. (15 marks)

(c) Calculate the amount of business profits on which each partner will be assessed for the year ended 31 December 2021. (11 marks)

(d) Calculate the final Income Tax payable by Mathews, Luke and Abraham for the tax year 2021. (11 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

You are employed 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:

(i) The role and functions of the Zambia Revenue Authority (ZRA)

(ii) The main ethical threats faced by tax practitioners in the course of providing tax services.

The Tax Manager has additionally provided you with the following information relating to James Enrique, a new client of your firm who is seeking tax advice from the firm:

James Enrique was born in a country known as Gracia in 1980. He has always lived in Gracia, where he is also domiciled and has been employed by DLX International, a company which was incorporated and resident in Gracia. On 20 November 2021 DLX International acquired a 100% stake in a Zambian resident company known as TLX Zambia Ltd. Enrique was immediately appointed the Chief Executive Officer for TLX Zambia Limited, on a three (3) year contract commencing on 1 December 2021. He will relocate back to Gracia permanently on the expiry of his contract after three years. Enrique arrived in Zambia to take up the position on 1 December 2021. He is entitled to annual gross director's emoluments of K720,000. Enrique additionally received management and consultancy fees from Zambian sources which was generated in the month of December 2021 amounting to K34,000 net.

Enrique holds various investments in Gracia. These include properties that are let out on a in Gracia, shares in Gracian resident companies and a savings account with a Gracian resident bank. The currency of Gracia is known as the Gracian dollar (G$). On 31 December 2021, the following investment income was credited to his Zambian bank account in respect of these investments:

Dividends from Gracian companies	G$8,960
Savings account interest from Gracian Bank	G$1,800
Rental income from property let out in Gracia	G$60,000

The amount of the dividends was net of withholding tax at the rate of 36% deducted in Gracia and the amount of the savings interest and rental income was net of withholding tax at the rate of 10% deducted in Gracia.

There is no double taxation agreement between Zambia and Gracia. When computing Zambian income tax payable, credit is available for any foreign tax paid in Gracia. An exchange rate of K21.50 per G$1 should be used where relevant.

Enrique wishes to know whether he will be liable to Zambian income tax on any of the above income.

Required:

(a) Prepare notes to be used in the training workshop explaining:

(i) Any (4) four functions of the ZRA. (4 marks)

(ii) How the provision of taxation services may create self-review and advocacy threats. (4 marks)

(b) Explain the reasons, why Enrique will be subjected to Zambian income tax in the tax year 2021. (2 marks)

(c) Compute the amount of income tax payable by Enrique in the tax year 2021. (10 marks)

[Total: 20 Marks]

QUESTION THREE

Charles Chiyesu is a sole trader who has been in business for many years. He runs farming and retail businesses. The turnover from each business has always exceeded K800,000. At the start of the tax year 2021, he estimated his tax adjusted business profits to be K225,000 from farming and K510,000 from the retail business. He calculated the provisional income tax on these profits. The provisional income tax was paid on the relevant due dates.

The following are the actual results for the year ended 31 December 2021:

Profit from farming	K820,000
Profit from retail trade	K600,000

The following additional information is available:

(1) The results from farming business are the tax adjusted profit before capital allowances. There were no implements, plant and machinery qualifying for capital allowances at 1 January 2021. Charles incurred the following capital expenditure relating to farming business:

Purchase of Farm Tractor	K61,200
Purchase of Irrigation pump	K32,600
Construction of cow shed	K40,000
Construction of a farm dwelling for a new employee	K30,000
Expenditure on water conservation	K19,000
Expenditure on prevention of soil erosion	K15,000

(2) The profit from retail trade is the final tax adjusted business profit after capital allowances.

(3) Charles received royalties amounting to K55,250 (Net). Withholding tax had already been deducted at source.

Required:

(a) Calculate the amount of provisional income tax paid by Charles for the tax year 2021. You should clearly state the due date when the provisional income tax was paid and the amount paid on the relevant due date. (6 marks)

(b) Calculate the amount of income tax payable by Charles for the tax year 2021. (14 marks)

[Total: 20 Marks]

QUESTION FOUR

Lennox Ltd is a VAT registered business dealing in both taxable and exempt supplies. The following transactions took place during the month of November 2021:

(1) Sales revenue totalled K5,600,000 comprising standard rated sales of K3,360,000, Zero rated sales of K1,400,000, with the balance being exempt sales. The company offers its customers a discount of 2% for prompt payment, and all the customers take up this discount.

(2) Purchases for the month totalled K3,596,000 comprising standard rated purchases of K2,157,600 (VAT inclusive) zero rated purchases of K899,000 and exempt purchases of K539,400.

(3) Standard rated operating expenses, totalled K939,600 (VAT inclusive) comprising entertainment expenses for customers of K58,000, entertainment expenses for employees of K150,800, motor vehicle servicing expenses of K55,600, with the remainder being general overheads. All of the operating expenses were incurred in making both taxable and exempt supplies in the proportion of sales.

(4) The company sold an old pool car for K85,000 and an old delivery van for K126,000.

(5) The company bought a new delivery truck at a cost of K464,000 (VAT inclusive), a Toyota Fortuner car at a cost of K348,000 (VAT inclusive) and office equipment at a cost of K60,320 (VAT inclusive). The delivery truck is used in making both taxable and exempt supplies in the proportion of sales, whilst the remaining non-current assets are used 60% in making taxable supplies and 40% in making exempt supplies.

(6) Unless stated otherwise, all of the above figures are exclusive of VAT.

Required:

(a) Calculate the Value Added Tax payable by the company for the month of November 2020. You should clearly indicate using a zero (0) each item on which VAT is not chargeable or irrecoverable. (14 marks)

(b) Explain the meaning of the Tax Point and state why it is important for VAT purposes.

(3 marks)

(c) Describe two (2) circumstances in which the basic tax point can be amended.

(3 marks)
[Total: 20 Marks]

QUESTION FIVE

You are employed in a firm of Chartered Accountants. You have been presented with the following information relating to two (2) clients:

Chanda Pezo
Chanda is a sole trader running a retail business. On 24 February 2021, she imported a second hand 2,400 cc Toyota Alphard car at a cost of US$5,100 free on board. She paid insurance costs of US$1,020 and freight charges of US$1,500 up to the port of Durban. Other incidental costs of transporting the car from Durban up to Chirundu border post amounting to US$1,100. She incurred US$500 to transport the vehicle from Chirundu border post to Lusaka. The motor vehicle was manufactured in the year 2019. The Toyota Alphard car is classified as a station wagon.

The exchange rate quoted by Chanda's bank at the date of importation was K21.56 per US$1. The Bank of Zambia exchange rate at the same date was K20.85 per US$1 which the Commissioner General Approved.

William Chimeya
William retired from employment in the year January 2021. He intends to commence trading as a sole trader selling stationery materials. In order for him to raise capital he sold the following asset February 2021:

(1) On 12 January 2021 he sold his piece of land at a cash price of K170,000. He bought this piece of land in 2015 at a cost of K80,000. The open market value of the land was determined to be K155,000 by the government valuations department. The cost of hiring the valuations expert amounted to K10,000.

(2) On 14 January 2021 he sold his two (2) bedroomed house to his first born son at a cash price of K100,000. The house was determined to have an open market value of K520,000 at the date of sale.

(3) On 18 January 2021 he sold a Toyota Prado car to his nephew at cash price of K60,000. The open market value of the Prado car was K90,000 at the date of sale. It was necessary to carry out some repair works before selling the vehicle. The cost of repair amounted to K5,000. The repairs were incurred by William.

(4) On 2 February 2021 he sold his 1,000 equity shares held in DFG Limited a private company at a price of K10 per share. The nominal value of each share was K1. The open market value of the shares determined to be K11 per share.

(5) On 10 February 2021 he sold his 300 shares held in SDK Plc a company listed on the Lusaka Securities Exchange at a cash price of K5 per share. The nominal value of each share is K0.5. The open market value of the shares was K4 each.

He is unsure whether he should register for turnover tax or income tax once his business starts.

Required:

(a) In relation to motor vehicle imported by Chanda Pezo:

(i) Explain the conditions that must be met for the transaction value method to be used by the customs officers in the valuation of the imported Toyota Alphard for the purposes of assessing import duties arising. (4 marks)

(ii) Calculate the total amount of import taxes paid by Chanda Pezo on the importation of the Toyota Alphard Station Wagon. (6 marks)

(b) Explain the property transfer tax implications of the disposals of assets made by William Chimeya during the year. Your answer should include a computation of property transfer tax arising on each transaction where applicable. (10 marks)

[Total: 20 marks]

END OF PAPER

CA 2.4: TAXATION

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Tax Treat Treatment of Tax Losses for partnerships

(1) A trading tax loss should be carried forward by each partner and be relieved against each partner's share of future partnership profits.

(2) The tax loss carried forward can only be offset against future profits arising from the same trade or source as the one which incurred loss.

(3) The loss can only be carried forward for five (5) years, after which it is not possible for the trading loss to be relieved.

(b) MATHEWS, LUKE AND ABRAHAM
COMPUTATION OF PARTNERSHIP'S TAX ADJUSTED BUSINESS PROFIT FOR THE YEAR ENDED 31 DECEMBER 2021

	K	K	
Net profit per accounts		674,000	
Add:			
Partners' salaries	280,000		
Motor car running expenses:			
Mathews (K25,000 X 20%)	5,000		
Luke (K10,000 X 15%)	1,500		
Abraham (K45,000 X 30%)	13,500		
Loss on disposal of old pool car	25,000		
Fees for personal tax planning	10,000		
Depreciation	92,000		
Entertaining suppliers	8,000		
Fines for breach of labour laws	7,000		
Partner's traffic fines	4,200		
		446,200	
		1,120,200	
Less:			
Capital allowances (W1)		(33,875)	(W1)
Tax adjusted business profits		1,086,325	

WORKINGS

COMPUTATION OF CAPITAL ALLOWANCES ON PARTNERSHIP'S ASSETS

	Value	Capital allowances
	K	K
Delivery van		
Income tax value b/f	0	
Wear & tear allowance	0	0
Income tax value c/f	0	
Pool car (old)		
Income tax value b/f	0	
Disposal	(30,000)	
Balancing charge	(30,000)	(30,000)
Office equipment		
Income tax value b/f	18,750	
Wear & tear allowance (25% X 75,000)	(18,750)	18,750
Income tax value c/f	0	
Cash registers		
Income tax value b/f	21,375	
Wear & tear allowance (25% X 28,500)	(7,125)	7,125
Income tax value c/f	11,625	
Fixtures and fittings		
Income tax value b/f	0	
Wear & tear allowance	0	0
Income tax value c/f	0	
Pool car (new)		
Cost	190,000	
Wear & tear allowance (20% X 190,000)	(38,000)	38,000
Income tax value c/f	152,000	
Total capital allowances		33,875

(c) MATHEWS, LUKE AND ABRAHAM

CALCULATION OF THE AMOUNT OF ASSESSABLE BUSINESS PROFITS FOR THE YEAR ENDED 31 DECEMBER 2021

	Total	Mathews	Luke	Abraham
1.1.2021 to 31.12.2021	K	K	K	K
Salaries	150,000	50,000	50,000	50,000
Balance (4:3:1)	302,635	151,318	113,488	37,829
Sub-total (5/12 X K1,086,325)	452,635	201,318	163,488	87,829
1.6.2021 to 31.12.2021				
Salaries	169,167	87,500	81,667	
Balance	464,523	309,682	154,841	

Sub-total (7/12 X K1,086,325)	633,690	397,182	236,508		
Total	1,086,325	598,500	399,996	87,829	
Less:					
Capital allowances					
Mathews (20% X K160,000) X 80%	(25,600)	(25,600)			
Luke (20% X K160,000) X 85%		(27,200)			(27,200)
Abraham (W)	Nil			Nil	
	1,033,525	572,900	372,796	87,829	
Less:					
Loss relief	(115,000)	(60,000)	(40,000)	(15,000)	
Assessable business profits	918,525	512,900	332,796	72,829	

WORKING

Capital allowances for Abraham's motor car

	K
Cost	160,000
Disposal (restricted to cost)	(160,000)
Balancing allowance/(charge)	0

(d) MATHEWS, LUKE AND ABRAHAM

COMPUTATION OF THE FINAL INCOME TAX PAYABLE FOR THE TAX YEAR 2021

	Mathews	Luke	Abraham
	K	K	K
Share of partnership profits	512,900	332,796	72,829
Employment income (W)	0	0	180,000
Taxable income	512,900	332,796	252,829
Income tax			
K48,000 X 0%	0	0	0
K9,600 X 25%	2,400	2,400	2,400
K25,200 X 30%	7,560	7,560	7,560
K430,100 X 37.5%	161,288		
K249,996 X 37.5%		93,749	
K170,029 X 37.5%			63,761
Income tax liability	171,248	103,709	73,721
Less tax already paid:			
Provisional tax	(143,000)	(80,000)	(20,000)
PAYE			(39,600)
Income tax payable	28,248	23,709	14,121

WORKINGS

Employment income

Salary (K90,000 X 2) K180,000

SOLUTION TWO

(a) (i) **Functions of the ZRA**

The functions of the ZRA are to:

(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 forward 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

(ii) **Self-review threat**

A self-review threat may arise in the course of providing tax services in a situation where a member has to review tax work (e.g. preparation of tax returns, tax computations etc.) that they have previously done.

In such situations it may be difficult for that member to re-evaluate their own previous judgments objectively with professional scepticism, or identify any defects in their own work done for a client or employer for fear of receiving a reprimand, ruining their reputation or even losing their job.

Advocacy threat

An advocacy threat may occur in the course of providing taxation services if the member is required to promote or represent their client or employer in some way such as in situations where a member is required to act as an advocate for a client when representing or assisting them before the Tax Appeals tribunal or courts of law.

In this case, the member would likely be biased in favour of the client and therefore his objectivity may be compromised.

(b) An individual is liable to Zambian income tax if that individual is resident and/or ordinary in Zambia; or if the individual has generated income from Zambian sources, or income deemed to be from Zambian source.

Enrique will be required to pay Zambian income because he will be regarded to resident and ordinary resident in the tax year 2021.

This is because, even though Enrique was not physically present in Zambia for a period of at least 183 days, in the tax year 2021, having only stayed in Zambia for 31 days in the charge year, he has intention of staying in Zambia for a period that will exceed a period of 12 months having taking up the position as Chief Executive Officer in Zambian company on a contract that will last for thirty-six months. He will therefore be regarded as resident and ordinary resident in Zambia from the time of his arrival in Zambia and as such liable to Zambian income tax.

(c) ENRIQUE

PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K	K	
Income from Zambian sources			
Director's emoluments (K720,000 x 1/12)		60,000	
Management and Consultancy fees			
(K34,000 x 100/85)		40,000	
		100,000	
Income from foreign sources			
Dividends (US$8,960 x 100/64) x K21.50	301,000		
Savings account interest			
(US$1,800x 100/90) x K21.50	43,000		
		344,000	
		444,000	
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 (K444,000 – K82,800) x 37.5%		135,450	
Zambian income tax charge		145,410	
Less WHT on Management and Consultancy fees			
(K40,000 x 15%)		(6,000)	
Less Double Taxation Relief on:			
- Foreign dividends (W1)	98,578		(W1)
- Foreign savings account interest (W2)	4,300		(W2)
Income tax payable		(102,878)	
		36,532	

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:
K301,000 x 36% = K108,360; and

(ii) The Zambian Tax Charge attributed to the dividends computed as:
$\left(\frac{\text{K301,000}}{\text{K444,000}}\right) \text{x K145,410}$
= K98,578

DTR will therefore be K98,578 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:
K43,000 x 10% = K4,300; and

(ii) The Zambian Tax Charge computed as:
$\left(\frac{\text{K43,000}}{\text{K444,000}}\right) \text{x K145,410}$
= K14,083

DTR will therefore be K4,400 being the lower amount.

SOLUTION THREE

(a) Charles Chiyesu

Provisional income tax for the tax year 2021

	Total	Non-farming	Farming
	K	K	K
Estimated business profit			
Farming	225,000	--	225,000
Non-farming profits	510,000	510,000	-
Total taxable profits	735,000	510,000	225,000
Computation			
Non-farming income			
First K48,000 @0%			0
Next K9,600 @25%			2,400
Next K25,200 @30%			7,560
Balance K427,200 @37.5%			160,200
			170,160
Farming income: K225,000 x 10%			22,500
Provisional income tax paid			192,660

Quarterly installment = K192,660/4 = K48,165

Installment	Quarter ended	amount	payment made not later
		K	than
1st	31 March 2021	48,165	10th April 2021
2nd	30 June 2021	48,165	10th July 2021
3rd	30 September	48,165	10th October 2021
4th	31 December 2021	48,165	10th January 2022

(b) Charles Chiyesu

Income tax payable for the tax year 2021

	Total	Non-farming	Farming
	Income	Income	Income
	K	K	K
Taxable farming profits	820,000	-	820,000
Taxable profit from retail trade	600,000	600,000	-
Royalties (K55,250 x 100/85)	65,000	65,000	-
	1,485,000	665,000	820,000
Less:			
Capital allowances (w)	(187,800)	-	(187,800)
Taxable income	1,297,200	665,000	632,200
Computation			
Non-farming income			
First K48,000 @0%			0
Next K9,600 @25%			2,400

Next K25,200 @30%	7,560
Balance K582,200 @37.5%	218,325
	228,285
Farming income: K632,200 @10%	63,220
Income tax liability	291,505
Less:	
Provisional income tax (a)	(192,660)
WHT- royalties (K65,000 x 15%)	(9,750)
Income tax payable	89,095

Workings

Capital allowances	K
Farm Tractor	
Wear & Tear (K61,200 x 100%)	61,200
Irrigation Pump	
Wear & Tear (K32,600 x 100%)	32,600
Cow shed	
Farm improvement (K40,000 x 100%)	40,000
Farm Dwelling	
Farm improvement (K20,000 x 100%) – restricted	20,000
Water Conservatio	
Farm works (K19,000 x 100%)	19,000
Prevention of soil erosio	
Farm works (K15,000 x 100%)	15,000
Total capital allowances	187,800

SOLUTION FOUR

(a) COMPUTATION OF VAT PAYABLE

	K	K
Output VAT		
Standard rated sales		
(K3,360,000 x 16%)		537,600
Zero rated sales		
(K1,400,000 x 0) x 16%		0
Exempt sales (No VAT chargeable)		-
Pool car (irrecoverable)		-
Delivery van (K126,000 x 16%)		20,160
		557,760
Input VAT		
Standard rated purchases		
(K2,157,600 x 4/29%)	297,600	
Zero rated purchases		
(K899,000 x 0%)	0	
Exempt purchases (No VAT chargeable)	0	
Entertaining customers (irrecoverable)	0	
Entertaining employees (irrecoverable)	0	
Motor vehicle servicing		
(K55,680 x 4/29) x 85%	6,528	
General overheads		
(K675,200 x 4/29) x 85%	79,161	
Delivery truck (K464,000 x4/29) x 85%	54,400	
Toyota Fortuner (irrecoverable)	0	
Office equipment (K60,320 x 4/29) x 60%	4,992	
		(442,681)
VAT payable		115,079

WORKING

The recoverable non-attributable input VAT on the general will be computed by using the partial exemption formula:

$$\frac{\text{Taxable supplies}}{\text{Total supplies}} \text{x}100\%$$

$$\frac{(\text{K}3{,}360{,}00 + \text{K}1{,}400{,}000)}{\text{K}5{,}600{,}000} \text{x}100\%$$

= 85%

(b) The tax point is the time when the supply is deemed to have taken place for VAT purposes.

It is important to establish the tax point in respect of supplies for VAT purposes because:

(1) The tax point is used for determining the tax period in which VAT relating to the supply should be accounted for.

(2) The tax point is also used to decide which scheme or VAT rate will apply to a supply when there is a change in the VAT scheme or VAT rate.

(b) The basic tax point is amended in the following situations:

(1) Where a tax invoice is issued or payment is made before the basic tax point, the date of issue of the invoice or the date when payment is made is the tax point whichever is earlier.

(2) Where a tax invoice is issued within a period of 14 days after the basic tax point, the tax point is the time when the invoice is issued.

SOLUTION FIVE

Chanda Pezo

(a) The following are the conditions to met for the customs officers to use the transaction value method:

(1) There should be no restrictions to the use of the goods.
(2) There should be no conditions to deter the determination of the value for duty purposes
(3) No part of the proceeds on resale would accrue to the seller, included I the value.
(4) No relationship should exist between the seller and the buyer to influence the value.

(b) Customs value

	$
Cost	5,100
Insurance costs	1,020
Freight charges	1,500
Incidental costs	1,100
VDP in $	8,720
Exchange rates	K20.85
VDP in ZMW	181,812

	Value of the vehicle	Import Taxes
	K	K
Customs value	181,812	
Customs duty (specific)	16,545	16,545
Excise duty (specific)	21,508	21,508
	219,865	
VAT @16%	35,178	35,178
Total value of the vehicle	255,043	--
Total import taxes		73,231

(c) The following are property transfer tax implications:

1. Property transfer tax will be paid on the transfer of a piece of land as this constitutes property for PTT purposes.

   The amount of PTT will be computed the rate of 5% of the realized value which is K170,000, being higher than its open market value of K155,000.

   The mount of PTT arising will therefore be:
   K170,000 x 5% = K8,500.

2. When a property is transferred to a member of the immediate family, the realized value is the actual cash received.

   The amount of PTT arising will therefore be:

   PTT = K100,000 x 5% = K5,000.

3. There will be no PTT to be charged on the transfer of the Toyota Prado car as this is a chattel which is outside the scope of property transfer tax.

4. Property transfer tax is chargeable on the transfer of the equity shares that are not listed on the Lusaka Securities Exchange.

   PTT will be charged at a rate of 5% of the realized value which is K11,000 (K11 x 1,000), being higher than both the nominal value of the shares of K1,000 (K1 x 1000) and the actual proceeds received of K10,000(K10 x 1,000)

   The amount of PTT arising will therefore be:

   PTT = K11,000 x 5% = K550.

5. There will be no property transfer tax to be charged on the transfer of shares in SDK Plc because the shares are listed on the Lusaka Securities Exchange.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE - COMPULSORY

The Management of KaKa plc are considering buying a new machine in order to produce a new product called 'BJ' with a life span of three years. The machine will cost K2 million with an estimated scrap value of K0.7 million after the product life. The Management is undecided as to whether to finance the project using retained earnings or issue ordinary shares. The Finance Director thinks that Management should follow the pecking order theory when making the decision. The company expects to produce 90,000 units per annum of BJ which will be sold for K25 per unit in the first year and subsequently increase the price by 8% annually.

Production costs per unit (at current prices) are as follows:

Materials	K9.5
Labour	K7.5

Materials are expected to inflate at 7.5% p.a. and labour is expected to inflate at 6% p.a. Fixed overheads of the company currently amount to K1.1million. The Management Accountant has decided that 20% of these should be absorbed into the new product (BJ). An additional K0.5 million of working capital will be required at the start of the project. Capital allowances are available for the machine at 25% per year on a reducing balance basis.

One of the subsidiary of KaKa plc, JOL Ltd is considering the replacement of a machine which costs K72,000 and has a maximum life of 3 years. Other forecasted financial information is provided below:

Year	1	2	3
Running costs	7,200	9,600	12,000
Disposal value	24,000	16,600	9,600

Corporate tax is 25% payable one year in arrears and both companies use 15% as the cost of capital.

Required:

(a) Calculate the NPV of the proposed investment in the new machine and advise KaKa Plc as to whether or not the investment should be accepted. (18 marks)

(b) Evaluate how often JOL Ltd should replace the machine. (12 marks)

(c) Explain the pecking order theory and discuss the reasons for following it. (10 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any three (3) questions.

QUESTION TWO

The Lusaka City Council in partnership with a Venture Capital Fund is considering investing in a Waste Plastic Treatment Furnace involving a total investment of K148 million on capital expenditure and K2 million on working capital.

The partners plan to finance the project with the following capital structure:

Source	**cost %**	**Market Values (K million)**
Equity	18	100
Preference shares	15	20
Zero coupon bonds (after tax)	10	30

Required:

(a) Compute the project's Weighted Average Cost of Capital (WACC). (4 marks)

(b) Explain the four (4) merits and demerits of using venture capital to finance the project. (8 marks)

(c) Discuss four (4) financial objectives that the Managers of the start-up business could set to manage its performance once it becomes operational. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Mega Pharma Stores Ltd is a wholesaler of medical drugs. The company has the following projected income statement for the 2020 financial year:

	K' million
Sales	100
Cost of Sales	(60)
Other costs	(20)
Net Profit	20

Information related to its performance is as follows:

Operational Plans

Operational Goal	Strategy
To reduce inventory costs	Introduce a Just-In-Time (JIT) inventory management system.
To reduce bad debts	Formulate a credit control policy
To improve liquidity	Reduce the cash operating cycle

Ratios

Liquidity Ratio	Days
Inventory Days	35
Receivable Days	40
Payable Days	45

Inventory Details For Remdesivir (Drug)

Monthly Demand For The Drug Remdesivir	1,000,000 doses
Purchase price	K1, 000/dose
Annual warehouse storage costs	K30 per dose

Ordering and Transport Cost (per box of 100 doses)	K500

Required:

(a) Explain three (3) factors that affect the length of the cash operating cycle and compute the expected values for inventory, receivables, payables and working capital? Assume there are 365 days in a year. (7 marks)

(b) Determine the company's Economic Order Quantity (EOQ). (3 marks)

(c) Explain four (4) objectives of Just–In-Time (JIT) techniques and how they may be achieved. (8 marks)

(d) Discuss two (2) demerits of making sales on credit by Mega Pharma Stores Ltd. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

The Directors of Oriental Plc. group are considering the acquisition of 20% share capital of HG Limited an unquoted company in the same industry.

The following is an extract of the Statements of Financial Position of the two (2) companies as at 31 December 2019:

	ORIENTAL	**HG**
	Km	Km
Ordinary share capital (0.1 million shares)	45	25
Accumulated profits	70	50

Included in HG Limited capital structure are property plant and equipment with a net book value of K24m, inventory of K5m and receivables of K6 m. The inventory would cost K8m to replace while the property, plant and equipment would cost K30m to replace. The accumulated profits of HG Limited consist of K7m net profit before taxation for the year ended 31 December, 2019. It is estimated that 10% of the receivables of HG Limited at 31 December 2019 will be uncollectable. The current price earnings ratio of Oriental Plc. is 8.

Alexir Plc., a quoted company similar to HG Limited has in issue 100,000 ordinary shares with a market value of K900 each. Alexir Plc. capital structure is similar to HG Limited except that Alexir has debentures valued at K16 m. Alexir Plc. current price earnings ratio is 5.

Assume corporation tax of 35% per annum.

Required:

(a) Estimate the value of the 20% share capital of HG limited as on 31 December 2019 using each of the following method:

(i) Net asset (replacement) basis. (5 marks)
(ii) The price earnings ratio. (3 marks)
(iii) Net operating income approach based on the Modigliani and Miller theory. (4 marks)

(b) Explain the challenges of using the PE ratio method of Alexir Plc. a quoted company to value the shares of HG Limited, an unquoted company. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

Ruthem Limited is considering revising its dividend policy. The Management believes that a sound dividend policy is important to the growth and development of the company. During a recent meeting with the Board of Directors of Ruthem Limited, the Managing Director explained that the company's dividend policy has in the recent past been influenced by the signalling effect, the clientele effect and agency considerations. However, one of the Directors believes that dividend policy is irrelevant to the growth and development of a company. He said that he needed further clarification on what the Managing Director referred to as the "clientele effect, signalling effect and agency considerations." The following information relates to the company for the last four (4) years:

Year ended 31 December	**2016**	**2017**	**2018**	**2019**
Return on equity %	10	12	9	14
Dividend pay-out ratio %	15	30	25	70

Required:

(a) Explain the meaning of the following terms as used by the Managing Director with reference to dividends:

(i) Clientele effect
(ii) Signalling effect
(iii) Agency considerations. (14 marks)

(b) Evaluate the company's dividend policy for the last four (4) years. (6 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \text{ x spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1-T))}\beta_e\right] + \left[\frac{V_d(1-T)}{(V_e + V_d(1-T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_0(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1 = S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad f_o = s_0 x \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA2.5 FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

a) FINANCIAL EVALUATION USING NPV

Year	0	1	2	3	4
Selling price	-	25.00	27.00	29.16	-
Material costs	-	10.21	10.98	11.80	-
Labour costs	-	7.95	8.43	8.93	-
Contribution per unit	-	6.84	7.59	8.43	-
Units '000	-	90.00	90.00	90.00	-
Contribution	-	615.38	683.51	758.30	-
Fixed costs(20%)	-	220.00	20.00	220.00	-
Taxable cash flow	-	395.38	463.51	538.30	-
Tax@25%	-	-	-98.84	-115.88	134.58
Initial cost	-2,000.00	-	-	700.00	-
Working capital	-500.00	-	-	500.00	-
Tax relief	-	-	125.00	93.75	106.25
Net Cash flows	-2,500.00	1,230.75	1,393.18	2,694.47	-28.33
Discount@15%	1.00	0.870	0.756	0.658	0.572
Present Values	-2,500.00	1,070.75	1,053.24	1,772.96	-16.20
NPV 1,380.76					

Project should be undertaken because it gives positive NPV which means the wealth of shareholders will be increased.

Capital Allowances

Year	WDA	CA@25%	Tax@25%	Year Available
1	2,000.00	500.00	125.00	2
2	1,500.00	375.00	93.75 3	
3	1,125.00	425.00	106.25	4
Scrap	700			

b)

1 year replacement cycle:

Period	CF	Dis@15%	PV
0	(72,000)	1.000	(72,000)
1	(7,200)	0.870	(6,264)
1	24,000	0.870	20,880
		NPV	(57,384)

Equivalent Annual Cost = 57,384÷0.870 = K65,959 per year

2 year replacement cycle

Period	CF	Dis@15%	PV
0	(72,000)	1.000	(72,000)
1	(7,200)	0.870	(6,264)
2	(9,600)	0.756	(7,258)
2	16,600	0.756	12,550
		NPV	72,972

Equivalent Annual Cost = 72,972÷1.626 = K44,878 per year

3 year replacement cycle

Period	CF	Dis@15%	PV
0	(72,000)	1.000	(72,000)
1	(7,200)	0.870	(6,264)
2	(9,600)	0.756	(7,258)

3	(12,000)	0.658	(7,896)
3	9,600	0.658	6,317
		NPV	87,101

Equivalent Annual Cost = 87,101÷2.283 = K38,152 per year

The machine should be replaced every 3 years.

c) Pecking order theory has been developed as an alternative to traditional theory. It states that firms will prefer retained earnings to any other source of finance, and then will choose debt, and last of all equity.

The order of preference will be:

- Retained earnings
- Straight debt
- Convertible debt
- Preference shares
- Equity shares

Reasons for following pecking order

a) It is easier to use retained earnings than go to the trouble of obtaining external finance and have to live up to the demands of external finance providers.
b) There are no issue costs if retained earnings are used, and the issue costs of debt are lower than those of equity.
c) Investors prefer safer securities that is debt with its guaranteed income and priority on liquidation.
d) Some managers believe that debt issues have a better signalling effect than equity issues because the market believes that managers are better informed about shares' true worth than the market itself is. Their view is the market will interpret debt issues as a sign of confidence, that businesses are confident of making sufficient profits to fulfil their obligations on debt and that they believe that the shares are undervalued.

   By contrast the market will interpret equity issues as a measure of last resort that managers believe that equity is currently overvalued and hence are trying to achieve high proceeds whilst they can.

   However, an issue of debt may imply a similar lack of confidence to an issue of equity; managers may issue debt when they believe that the cost of debt is low due to the market underestimating the risk of default and hence undervaluing the risk premium in the cost of debt.

   If the market recognises this lack of confidence, it is likely to respond by raising the cost of debt.

The main consequence in this situation will to be reinforce a preference for using retained earnings first. However, debt (particularly less risky, secured debt) will be the next source as the market feels more confident about valuing it than more risky debt or equity.

SOLUTION TWO

(a).

WACC = 18[100/150] + 15[20/150] + 10[30/150]

= 12+ 2 + 2 = **16%**

(b).

Demerits of using Venture Capital Finance

1. Venture capitalist require a high degree of risk and return.
2. Equity participation in the complex.
3. Participation in management.
4. Have short payback periods (short – termism) ie require early reported profits.

Merits of using Venture Capital Finance

1. Long – term investment horizon
2. The exit route is normally floatation on the stock exchange.
3. Equity participation by a venture fund is a vote of confidence, since a large percentage of requests for capital financing are rejected.
4. Usually provide start – up and late growth finance to unlisted companies.

(c).

i) Shareholder wealth maximization (share price and dividends received)

The wealth of shareholders comes from dividends received and capital gains from increases in the market value of shares. This measure is called the total shareholder return. However, since the shopping complex would be a start – up, it would not be listed and therefore the increase in share price would not be a valid financial objective. Dividend yield and pay outs could be set as performance measures. Getting the complex to meet listing requirements with the view of providing an exit route for the venture capital fund could be a valid objective.

ii) Profit maximization

Profit targets may be set by the project promoters. However, profits are not a cash based measure. They may be maximized in the short-run by manipulation of accounting profits but this is not sustainable in the long-run. They may therefore not be the best measure of a company's performance, but would be relevant to the shopping complex.

Iii) Growth in EPS

EPS is widely used as a measure of return to equity. Its disadvantage is that it does not represent income of the shareholder.

iv) ROCE

ROCE can also be used. It has the same limitations that usage of profits has as a performance measure. Since it's a percentage it can used to benchmark against alternative investments and peers.

SOLUTION THREE

(a)

Factors affecting length of cash operating cycle

1. Liquidity versus profitability concerns

2. Management efficiency

3. Industry norms ie pharmaceutical versus retail

	K'million
Inventory - $^{35}/_{365}$ x 60 =	5.75
Receivables - $^{40}/_{365}$ X 100 =	10.96
Trade payables - $^{45}/365$ X 60 =	(7.40)
Working capital	9.31

(b).

$C_o = 5$

$D = 1{,}000{,}000 \times 12 = 12{,}000{,}000$

$C_H = 30$

$EOQ = \sqrt{^{2 \times 5 \times 12{,}000{,}000}/_{30}} = \underline{2{,}000}$

(c).

Objectives of JIT

- Reduced manufacturing lead times
- Reduced scrap/rework/warranty costs
- Flexible production process responsive to the customer's requirements.
- Reduction in capital tied up in inventory.
- Improved labour productivity

Measures to achieve JIT

- Elimination of non - value adding activities.
- Reducing batch sizes.

- Delivering materials to point of use.
- Emphasis on total quality.
- Long – term supplier relationships that depend on quality and reliability.
- Making goods to order to reduce inventory of finished goods.

(d)

Demerits of making sales on credit

1. Opportunity costs of funds tied up in receivables

2. Administrative costs of debt collection

3. Collection costs of external debt collectors

4. Costs of bad debts from defaulters

SOLUTION FOUR

(a) **(i)Net asset replacement basis**

HG LIMITED

Statement of financial position extract	**K000**
Ordinary share capital and reserves	
Ordinary share capital	25,000
Accumulated profits	47,550
	72,550

After tax profits computation

7000000* (1-0.35)= K4,550,000

Equity=	72550000
Property, plant & eq (30000-24000)	6000000
Inventory (8000-5000)	3000000
receivables uncollectable 6000000*10%	-600000
Replacement cost value	80950000

Market value per share 8095000/100000

=K809.50 per share

20% share capital =   1000000*0.2

=20000 shares

20000 shares * K809.50 per share

=k16190000

(ii) Price Earnings Ratio basis

Earnings per share=   PAT/No of issued ordinary shares

K4550,000/100000 shares

K45.50/share

Market price=   EPS* PE ratio

227.5

K227.50 per share

20000 shares *   K227.50

=   K4550,000

The EPS of K5 should be adjusted downwards because HG is an unlisted company Perhaps to K3. This will reduce the value of the shareholding by 3/5*4550000 to K2,730,000

(iii) M & M theory

VG=VU+TBc

VG=K1200 *100,000

100,000 * K1200 each   =

K12000,000

The tax shield=

TBc= 0.35 * 16000000

5600000

VU = VG - TBc

K12000,000-
K5600,000 =

K6400,000

Market value per share= K6400,000/100000

K64 per share

The value of 20% shareholding will be
20000*K64
K1280,000

(b) Challenges of using the PE ratio of Alexir to value HG Limited .
(i) Finding a quoted company like Alexir with a similar range of acivities may be difficult. Quoted companies are often diversified.

(ii) A single year's P/E ratio may not be a good basis, if earnings are volatile, or the quoted company's share is at an abnormal level, due for example to the expectation of a takeover bid.

(iii) If a P/E ratio is used, then historical data will be used to value how the unquoted company will do in the future.

(iv) The quoted company may have a different capital structure to the unquoted company.

SOLUTION FIVE

(a)

THE CLIENTELE EFFECT

Sometimes companies may resort to a particular dividend policy because of the type of shareholders they have. Some shareholders might, for example, prefer low dividends because of their tax position. It is worth noting that many shares are today held by pension funds and insurance companies, who would like a steady stream of ready cash inflows to balance their outflows, there may be a requirement from other shareholders for a higher level of dividend, preferably a steady one.

So if different shareholders have different requirements, may be they have bought shares in particular companies because of the observed dividend policies of those companies. In this case, firms should maintain their dividend policies or risk antagonizing their existing shareholders. Research shows that firms are loath to change dividend patterns, particularly downwards. Gentle growth seems to be the target- too rapid growth might not be sustainable.

Some evidence of a clientele effect has been found by various research studies.

SIGNALLING EFFECT

It is possible that when a dividend is announced, particularly if there is a significant rise in its level, the firm is trying to signal its confidence in its future. The stock market will most likely react favorably to this information and cause the share price to rise, assuming that the information available to the management is not already incorporated in the share price.

It is noticeable that, in a hostile takeover bid, the target company often announces a higher dividend level in its efforts to prevent its shareholders from accepting an offer from a predator. Researchers have found evidence that the stock market takes notice of dividend announcements as information on which to base the level of share prices.

AGENCY CONSIDERATIONS

The interests of shareholders, managers and creditors do not necessarily coincide. Managers who are interested in their own careers, which may not necessarily involve one firm for more than a few years, are likely to favor shot-term as opposed to long term growth. Creditors are interested in safeguarding their loan interest and original loans.

If dividends are paid, assets shift from the control of management to that of the individual shareholder. They also move out of the reach of creditors. Sometimes companies repurchase some of their shares. Various reasons are given for this, but an obvious result is to provide a final cash dividend to those shareholders whose shares are repurchased. One of the reasons for repurchases is overcapitalization, hence the reduction in shares. Certainly the funds used to repurchase such shares are no longer available to creditors.

The dividend policy should not disadvantage the other stakeholders such as creditors and managers. Although shareholders have votes, and the proposed final dividend has to be approved at the AGM, most companies have articles of association, which restrict the powers of shareholders to reducing, rather than increasing the dividend. In practice, shareholders will usually accept the dividend that has been proposed. However, directors should know that their overriding objective is to maximize the wealth of shareholders as providers of capital. The maximization of shareholder wealth is reflected in the share price. The dividend policy should therefore be one that a positive impact on the share price because research has shown a link between the dividend policy and share price.

(b)

Year ended 31 December	**2016**	**2017**	**2018**	**2019**
Return on equity %	10%	12%	9%	14%
Dividend payout ratio %	15	30	25	70
Earnings retention rate%	85%	70%	75%	30%
(1-div payout ratio)				
Growth rate in dividends % (return on equity * earnings retention rate)	8.5	8.4	6.75	4.2

There is a general decline in the earnings retention rate from 85% in 2016 to 30% in 2019. This has resulted in a decline in the growth rate in dividend payments from 8.5% in 2016 to 4.2% in 2019. This may not be a good signal to investors, especially those who desire an increasing dividend.

CA ZAMBIA PROGRAMME EXAMINATIONS

CA APPLICATION ADVANCED DIPLOMA IN ACCOUNTANCY

CA 3.3: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 15 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory question.
   Section B: There are four (4) questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

Coca Cola Company 21st Century Business Performance Review

The Coca Cola Company trading as KO is a beverage corporation incorporated and headquartered in Atlanta, Georgia, USA in 1892. The parent brand coca cola was invented in 1886 by an American Biochemist and Pharmacist, John Pemberton. The brand was later sold to an American business tycoon, Asa Candler in 1889. The company deals with manufacturing, retailing and marketing of non-alcoholic beverage concentrates and syrups. These concentrates and syrups are delivered to the company's bottling franchisees who provide the required capital investments for bottling and distribution of the products to wholesalers and retailers within certain territorial boundaries. Coca Cola has its own bottling plants but majority of the bottling operations are carried out by its franchisees across the globe who are licensed to operate independently but must meet the quality standards set by Coca Cola in order to ensure the homogeneity of the products. Apart from supplying the syrups, concentrates and other beverage bases to its franchisees, Coca Cola provides them with management guidance and advice on product quality control, advertising, financing, marketing, technical support and personnel training.

The Sustainable Development Goals (SDGs) were first launched in 2015 and are a core part of the agenda developed by the 193 member states of the United Nations to work toward the future we want, one where all people thrive within a healthy environment. The 17 goals geared toward a 2030 timeframe - and their related 169 targets have become an important framework for companies to rally around as they address an array of complex, interrelated global issues. Being a global company with a wide supply chain and consumer reach, Coca Cola realized the significant role to play in meeting many of these ambitious aims. They took a strategic action to contribute to the SDGs through collaboration with partners and industry peers, supplier engagement, or in other places where they have leverage to amplify positive impacts.

Coca Cola runs an inclusive system in order to carry along its diverse employees across the globe. It sets leadership, passion, integrity, accountability, collaboration, innovation, quality and diversity as its main values. It provides opportunity for growth, development and empowerment of its employees. There are various development programs such as the Coca Cola University (CCU) created to improve the skills of employees. The organization also sets attractive benefits and rewards for its employees which makes it a desirable destination for prospective employees.

The Coca Cola Company is the 88th in recent Fortune 500 list with net operating revenue of $37.27 billion. It is a global organization with 86200 employees. Coca Cola has direct and indirect ownership of more than 500 brands across more than 200 countries due to its acquisition spree strategy of buying and merging rising beverage companies. The company invested in intelligent vending machines which help customers to select the exact product they want and even customize it with different flavors.

The last two (2) decades the Coca Cola Company has been seeing some business challenges in the beverages industry. Apart from its direct competitor Pepsi Cola Company, other indirect competitors like Starbucks of coffee brands, Red Bull of the energy drink brands, None carbonated fruit drinks and so on, have taken a considerable market share.

At international level, Coca Cola has faced many political and trade challenges. For example, Business has been affected in China due to US – China trade war and trade sanctions on Cuba and North Korea. With such a market threat, Coca Cola strategically formulated and implemented some operations and quality management processes in order to enable it to successfully address the challenges.

Adopted from: Business and Sustainability Report 2019 | Coca-Cola Company Reports (coca-colacompany.com)

Required:

(a) Discuss the 'SWOT' analysis for Coca Cola (8 marks)

(b) With the use of the correct model develop a clear understanding of the external environment in which Coca cola operates. (16 marks)

(c) Discuss some of the strategies adopted by Coca Cola to address some of its challenges. (16 marks)

[Total: 40 Marks]

SECTION B

There FOUR (4) questions in this section.

Answer Any Three (3) Questions.

<u>QUESTION TWO</u>

Nosiku supplies Eggs to Metro Supper Market (MSM) and Mpundu Retail Shop at a wholesale price of K50 per tray. Metro Supper Market buys in bulk and receives a 10% trade discount for every order over 100 trays. It costs K1000 to deliver each order. In 2020 MSM had made five orders of 100 eggs. Mpundu Retail Shop receives a 15% discount irrespective of the order size, because Mpundu collects the eggs, thereby saving Nosiku any distribution costs. The cost of administering each order is K50. Mpundu makes ten orders in the year totaling to 420 trays.

Required:

(a) Show which relationship is the most profitable for Nosiku (6 marks)

(b) Discuss how Nosiku can use portfolio planning matrix strategies to achieve corporate strategy (14 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

Multiplex recycles electronic waste including PCs and laptops, printers, servers, cables, and Palm Pilots thrown away by Fortune 500 companies. Launched in 1997, the company picks up the waste, takes it by trucks to a warehouse in Kafue, removes all information and programming from it, then refurbishes and resells over the Internet those products that still have a useful life. It disassembles and recycles those that do not. Companies pay about K300 for each product they no longer want; Multiplex pays as rebate a portion of the proceeds from those products that are sold. "Our goal is to have every client break even or make money," the CEO says.

Required:

(a) How would the environmental protection policy of ZEMA affect this company in terms of pressure on it? (4 marks)

(b) What would increase the bargaining power of the suppliers of this company? (6 marks)

(c) Suppose this company holds its inventory in the warehouse for 14 days on average, its customers take 30 days to pay for what they purchase from it, the company's suppliers give it 20 days to pay for the supplies, and the company takes 7 days to produce the products, calculate its cash operating cycle. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

Muchinga Holdings limited is a company based in Mpika and has businesses not only in Mpika itself but also in many town including Kasama and Chinsali. This company is in its 20 year of operation and was originally family owned. Then (3) years ago, it went public by inviting further capital investment through the Lusaka Stock Exchange. As result, an independent Board of Directors was constituted last year and has since appointed qualified managers and you are one of them.

Required:

(a) At its last meeting, the board requested you as the Group Finance Manager to brief them about the Strategic Plan and the Business Plan. Describe any four (4) uses and purposes for each, that is, a Strategic Plan and the Business Plan in your brief to the Board. (12 marks)

(b) Demonstrate any four (4) considerations that you would take in preparing the Business Plan document that will attract fund managers to pay attention to it. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

In recent years, the airline industry has become increasingly competitive. Since being deregulated during the 1970s in the USA, long established airlines such as Pan Am and Eastern, and Zambia Airways and Zambezi Airlines have gone out of business as new ones like Midwest Express and Southwest, Proflight and Mahogany have successfully entered the market.

All of a sudden it appeared that almost anyone could buy a few used planes to serve the global, urban and the smaller rural towns that the larger airlines no longer wanted to serve. Hence a number of airlines companies seemed to sprout overnight like Zambian Airways, Zambezi Airlines, Proflight, Mahogany and others to enter this now deregulated industry which was previously closed to them. Management at the new Zambia Airways have tabled the strategy to be relaunched in this industry.

Required

(a) Draw and use a suitable analytical tool to determine the competitive forces of this industry and describe them. (10 marks)

(b) Describe the market entry mode which Zambia Airways should use to reenter this industry and the considerations it should take into account. (5 marks)

(c) Suppose Zambia Airways chooses to start business by acquiring another existing airline company. Demonstrate to them the approaches to valuing a company using the free cash flow method. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.3 STRATEGIC BUSINESS ANALYSIS

SUGGESTED SOLUTIONS

SOLUTION ONE

a) **Discuss the 'SWOT' analysis for Coca Cola**

The 'SWOT' analysis is a method used to evaluate the strengths, weaknesses, opportunities and threats involved in an organization (Gürel and Tat, 2017). For an organization to record a high performance, it must capitalize its strengths, improve its weaknesses, monitor its opportunities and eliminate its threats.

Strengths:
- Brand identity
- Global recognition
- Customer loyalty
- Strong distribution network via bottling franchisees
- High market value
- Acquisition of other companies
- High market share
- Good marketing strategies

Weaknesses:
- Water management
- Health concerns for carbonated drinks
- Low product diversification

Opportunities:
- increase presence in developing nations
- Diversification in the health and food business
- High demand for packaged drinking water
- Growth through acquisitions
- Worldwide growing population

Threats:
- Direct competition with Pepsi
- Indirect competition with other competitors like Starbucks of coffee brands, Red Bull of the energy drink brands and so on.
- Water usage controversy
- Packaging controversy – environmental concern for plastic waste.

(b) With the use of the correct model develop a clear understanding of the external environment in which Coca cola operates.

Mitchell and Britt (2019) defined PESTLE analysis as a strategic planning tool that is used to examine various factors that affect the market environment of an organization or business. Rastogi and Trivedi (2016) described it as an analytical tool for strategic business planning.

The purpose of adopting the PESTLE analysis approach is to develop a clear understanding of the external environment in which an organization operates.
PESTLE includes Political, Economic, Sociocultural, Technological, Environmental and Legal factors

Political Factors

- Introduction of soda tax across major US cities
- Business affected in China due to US – China trade war
- Banned in Cuba and North Korea due to trade sanctions
- Changes in government laws and policies affect the business operations worldwide
- Must adhere to local and international health and quality standards

Economic Factors

- The economic impact of COVID-19 lockdown
- Loss of potential markets due to government restrictions and bans
- Foreign exchange rate fluctuations
- Payment of custom duties to various countries while supplying products to bottlers
- Global financial crisis

Sociocultural Factors

- People's preference of healthy drinks over flavoured drinks
- Seasonal behaviors
- Cultural trends in various global locations
- Demographics – ageing population

Technological Factors

- The introduction and impact of Artificial Intelligence in businesses
- Existing in the era of digital transformation
- The impact of social media technologies
- The impact of online marketing

Environmental Factors

- Draining off ground water
- The biggest consumer of fresh water in the world
- Challenges posed by climate change
- Challenges to control ever growing plastic and can wastes
- Climate and weather variations affects the level of customer patronage, peopledrink more in hot and humid times and areas.

b) Discuss some of the strategies adopted by Coca Cola to address so of its challenges.

STRATEGIES ADOPTED BY COCA COLA TO ADDRESS THE CHALLENGES

Coca Cola strategically formulated and implemented some operations and quality management processes in order to enable it to successfully address the identified challenges. Some of the strategies it adopted are highlighted below.

i- Differentiation Strategy- Coca Cola maintains differentiation from other soft drinks by spending more than 20% of their advertisement budget to only differentiate their brands. This strategy has helped the company to fight heavy competition from their immediate rivals like Pepsi since their products are similar and close substitutes with competitive demand in the market.

ii- Water management- In order to mitigate the effects of its excessive water consumption to its host communities, Coca Cola has worked with its partners to create safe and improved water services, sanitation and hygiene.

iii- Packaging Management and Dealing with Environmental Issues- Coca Cola launched the "world without waste" campaign to relief the environmental impact of the waste generated from its packaging materials. Coca Cola must aim to collect back and recycle every bottle they sell by 2030. The organization is currently doing all these by partnering with stakeholders, nonprofits, governments and its industry.

iv- Managing Diverse Employees- Coca Cola runs an inclusive system in order to carry along its diverse employees across the globe. It sets leadership, passion, integrity, accountability, collaboration, innovation, quality and diversity as its main values. To provide opportunity for growth, development and empowerment of its employees.

v- The Strategy of Reducing Sugar Consumption- Following the health concerns of its consumers and media awareness campaign for healthy consumption, Coca Cola has reengineered its operations and quality systems to tackle the challenge. It has started making more reduced and no-sugar versions of its drinks in order to manage the sugar and calories intake of its consumers.

vi- Dealing with Competition – the Acquisition Strategy- Coca Cola has direct and indirect ownership of more than 500 brands across more than 200 countries due to its acquisition spree strategy of buying and merging rising beverage companies. By so doing, the organization has eliminated its potential competitors and gained lead in the beverage industry.

vii- Sponsoring and Supporting Social Activities- Coca Cola is a renowned sponsor of many social events that attract people all over the world ranging from sports, entertainments and festivals among others. Those events have also served as great avenues to advertise the Coca Cola brands.

viii- Application of Artificial Intelligence- Coca Cola was among the first organizations to utilize AI in operations. AI has helped the organization to optimize its production processes with an amazing speed and extremely high margin outputs. Therintelligent vending machines which help customers to select the exact product they want and even customize it with different flavors.

SECTION B

SOLUTION TWO

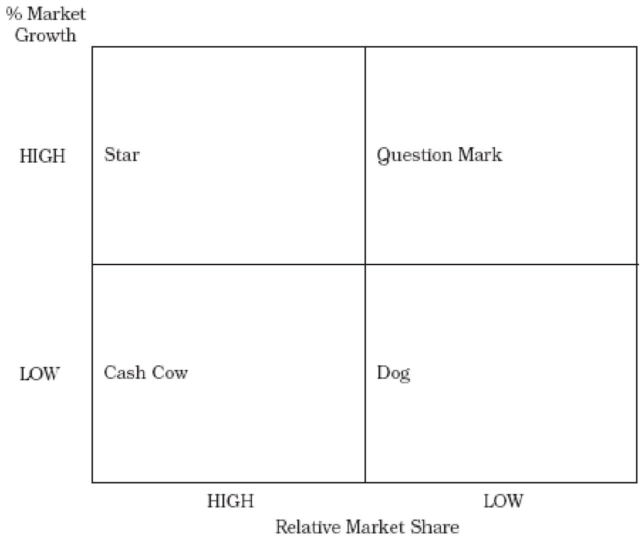
(a) **Show which relationship is the most profitable for Nosiku**

	Metro	Mpundu
Number of Eggs (Trays)	500	420
Revenue (after Discount)	22500	17850
Transport	(5000)	-
Administration	(250	(500)
Net Profit	17250	17350

Nosiku earned more profit in serving Mpundu despite the increase in discount

(b) **Discuss how Nosiku can use marketing matrix strategies to achieve corporate strategy**

The BCG Technique is illustrative of the general approach used in most techniques for portfolio analysis although it is fair to say that successive techniques have added to this basic technique and are probably more sophisticated in their approach. However, a brief outline of the BCG technique will serve to give you an idea of Portfolio Analysis.
The matrix thus formed is shown below:



Based on their relative market share compared to the next largest competitor and the percentage rate of market growth it is possible to ascertain which cell of the matrix an SBU falls into. According to which cells of the matrix the individual SBUs are in, so there are different implications for marketing planning decisions. As is shown in the matrix above the four cells of the matrix comprise different categories of SBU. An SBU with a high market share and a high rate of market growth is designated a 'Star'. An SBU in this category is a heavy user of cash resources but must be supported as they are the profit earners and cash generators of the future. An SBU with a high market share and a low market growth rate is a 'Cash Cow'. As the term implies these are SBUs which generate large positive net cash flows but are coming towards the end of their product life cycle and at some stage will need to be replaced. These SBUs can be used to fund SBUs in other cells of the matrix and in particular Stars and can also be used to develop new products.

An SBU with a high market growth and a low market share is designated a 'Question Mark'. A decision must be made whether to fund these SBUs further or to phase them out. An SBU with a low market share and low market growth rate is designated a 'Dog' and in most cases are candidates for divestment.

SOLUTION THREE

(a)Pressure on businesses for better environmental performance is coming from many quarters.

(i) Green pressure groups have increased their membership and influence dramatically.
(ii) Employees are increasing pressure on the businesses in which they work for a number of reasons – partly for their own safety, partly in order to improve the public image of the company.
(iii) Legislation is increasing almost by the day. Growing pressure from the green or green-influenced vote.
(iv) Environmental risk screening has become increasingly important. Companies in the future will become responsible for the environmental impact of their activities.

(b)What would increase the bargaining power of the suppliers of this company?

(i) Whether there are just one or two dominant suppliers to the industry able to change monopoly or oligopoly prices.

(ii) The threat of new entrants or substitute products to the supplier's industry.

(iii) Whether the suppliers have other customers outside the industry and do not rely on the industry for the majority of their sales.

(iv) The importance of the supplier's product to the customer's business.

(v) Whether the supplier has a differentiated product which buyers need to obtain.

(vi) Whether switching costs for customers would be high.

(c)Suppose this company holds its inventory in the warehouse for 14 days on average, its customers take 30 days to pay for what they purchase from it, the company's suppliers give it 20 days to pay for the supplies, and the company takes 7 days to produce the products, calculate its cash operating cycle.

Cash operating cycle = Average time raw materials are in inventory – Period of credit taken from suppliers + Time taken to produce goods + Time taken by
customers to pay for goods.
= 14 days - 20 days + 7 days + 30 days
= **31 days.**

SOLUTION FOUR

(a) The purposes and use of the strategic plan and of the business plan are follows:

(i) STRATEGIC PLAN

This is a high-level plan that sets the overall strategic direction of the organization

- The strategic plan is used as an internal planning tool. It may be shared externally, but the main purpose is for internal focus.
- The plan may be used to inspire employees and to communicate the future direction of the organization
- The format of a strategic plan is flexible. An organization can use that which best suits their needs.
- The strategic plan provides a basis for detailed planning including business plans.

(ii) BUSINESS PLAN

A business plan aims to demonstrate the feasibility of a business, usually a new business.

- A business plan has a narrower focus than the strategic plan
- A business plan is likely to be shared with external potential investors;
- A business plan includes detailed information on the financial position of the organization, competitor and market analysis and financial forecast including capital requirements.
- A business plan is usually more formal and detailed in its structure and contents than a strategic plan.

(b) To win and keep the fund managers' interest, your document should show:

(i) CLARITY

The person reading your business plan is busy, often has other problems on his mind and judging you by the way in which you express yourself. Keep your language simple, avoid trying to get many ideas into one sentence and Let one sentence follow on logically from the last.

(ii) BREVITY

If the banker or manager gets bored while reading your stuff, you are unlikely going to get a sympathetic hearing you deserve. Reduce it to readable and manageable size. Lush descriptions are out.

(iii) LOGIC

The facts and ideas you present will be easier to take in and make more impact if they follow one another in a logical sequence. Avoid a series of inconsequential paragraphs, however well phrased. Make sure what you say under one heading carries_in with all you have said elsewhere.

(iv) TRUTH

Do not overstate your case. Only say what you want to say nothing more.

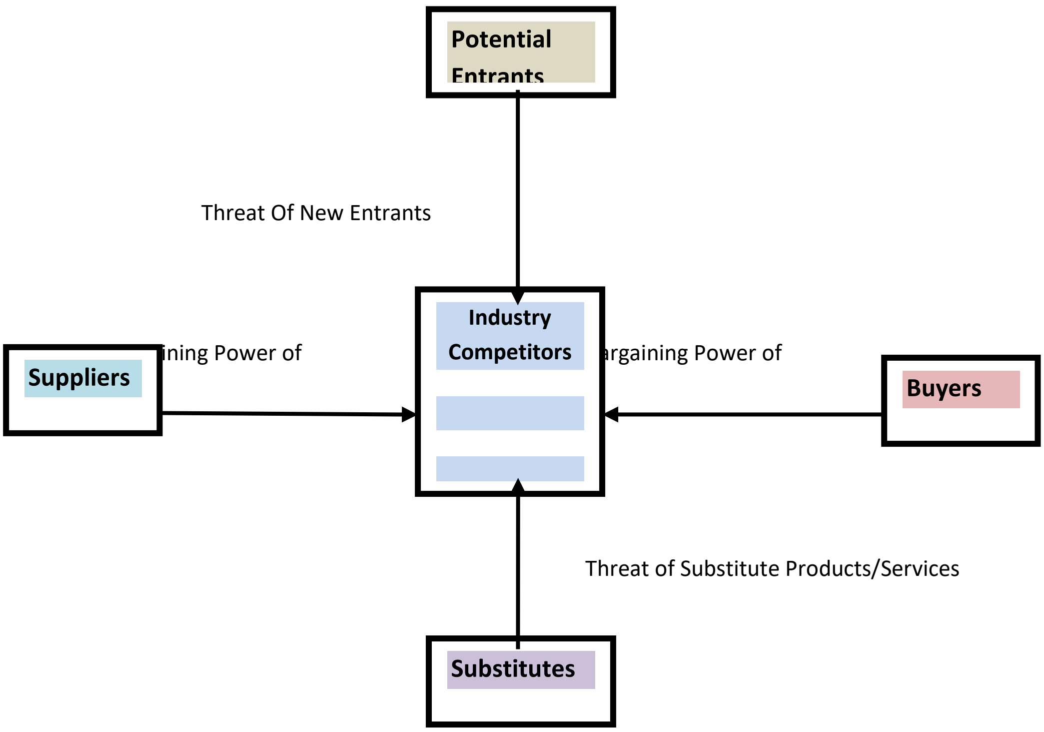
(v) FIGURES

The banker or investor reading your plan is numerate; he thinks in term of numbers. Words will not impress him unless they backed by figures that you have made as precise as possible. So try to qualify whenever you can.

SOLUTION FIVE

a) Draw and use a suitable analytical tool to determine the competitive forces of this industry and describe them.

PORTER'S FIVE FORCES MODEL



Description of Competitive Forces

Threat of New Entrants: High

- Zambian Airways, Zambezi Airlines, Proflight, Mahogany and others.
- Every nation had to have its own airline for national prestige.
- State-owned airlines were expensive, but the governments supported them financially and supporting regulations.

Threat of Substitute Products/Services: Low

- Rail and bus transportation
- Rail and bus transportation nonexistent or undesirable.

Bargaining Power of Suppliers: Low

- almost anyone could buy a few used planes
- every nation had to have its own airline for national prestige.

Bargaining Power of Buyers: High

- almost anyone could buy a few used planes

Rivalry Among Existing Firms: High

- In recent years, the airline industry has become increasingly competitive.

Advice: Weak forces are opportunities to be exploited, Substitutes and Suppliers (Cost advantage and Value Advantage).

b) **Describe the market entry mode which Zambia Airways should use to reenter this industry and the considerations it should take into account.**
Most Suitable market entry mode for Zambia Airways

- Among firms in the same industry

Considerations to consider:

- Firm's marketing objectives in terms of volume, time scale and coverage of market segments.
- Firm's size in terms of resources, capabilities, core competences.
- Mode availability due to restrictions by some countries or regions.
- Mode quality since although all modes may be possible in theory but in practice some may be of questionable quality or practicality.
- Human resources requirements in terms of recruitment and availability.
- Market feedback information availability.
- Learning curve requirements about the product or process.
- Risks in terms of number, frequency and severity.
- Control needs in terms of overseeing the company's operations.

c) **Suppose Zambia Airways chooses to start business by acquiring another existing airline company. Demonstrate to them the approaches to valuing a company using the free cash flow method.**

Approach 1	**Approach 2**
1. Identify the free cash flows of the target company (before interest)	1. Identify the free cash flow to equity of the target company (after interest)
2. Discount FCF at WACC to obtain NPV.	2. Discount FCFE at cost of equity Ke to obtain NPV.
3. NPV of company – debt = value of the target. E	3. NPV = value of target.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

Gabriella Plc is a manufacturing entity whose functional currency is the Zambian Kwacha (K). The draft Statements of Financial Position and Statements of Profit or Loss and other comprehensive income for Gabriella Plc and its investees, Hanna Plc and Ruth Plc, for the year to 31 December 2020 are:

Statement of Profit or Loss and Other Comprehensive Income for year ended 31 December 2020.

	Gabriella K'm	**Hanna K'm**	**Ruth SAR'm**
Revenue	2,100	1,500	1,200
Cost of Sales	(1,400)	(950)	(800)
Gross Profit	700	550	400
Other Operating Costs	(310)	(290)	(250)
Operating Profit	390	260	150
Finance Costs	(90)	(55)	(35)
Profit before taxr	300	205	115
Income tax expense	(210)	(165)	(85)
Profit for the year	90	40	30
Other Comprehensive Income			
Items not reclassified in profit or loss			
Revaluation of property	85	45	25
	85	45	25
Total Comprehensive Income for the year	175	85	55

Statement of Financial Position as at 31 December 2020.

Assets	**Gabriella K'm**	**Hanna K'm**	**Ruth SAR'm**
Non current			
Property Plant and Equipment	800	450	420
Investment in:			
Hanna	274		
Ruth	234		
	1,308	450	420
Current	465	250	190
Total assets	1,773	700	610
Equity and Liabilities			
Equity			
Share Capital	100	50	50
Retained Earnings	695	320	350
Other Reserves	378	110	100
	1,173	480	500
Non current liabilities	350	125	60
Current liabilities	250	95	50
Total equity and liabilities	1,773	700	610

Further information:

(i) Gabriella acquired 80% of Hanna Plc's equity on 1 January 2015 at a cost of K274 million when Hanna's retained earnings and other reserves amounted to K210 million and K25 million respectively. The fair value of Hanna's identifiable net assets on 1 January 2015 was K305 million. The difference between the fair value and carrying amounts of Hanna's net assets at that date was attributable to plant and equipment whose remaining useful economic life on 1 January 2015 was 10 years.

Gabriella Plc has adopted the 'full goodwill' policy in respect of the acquisition of Hanna Plc in accordance with IFRS 3 Business Combinations. A 20% holding in Hanna Plc's equity had a fair value of K68.5 million on 1 January 2015.

(ii) Gabriella acquired 60% of Ruth Plc's equity on 1 January 2019 at a cost of SAR260 million when Ruth's retained earnings and other reserves amounted to SAR280 million and SAR45 million respectively. The fair value of Ruth's identifiable net assets on 1 January 2019 was SAR400 million. The difference between the fair value and carrying amounts of Ruth's net assets at that date was attributable to plant and equipment whose remaining useful economic life on 1 January 2019 was 5 years.

Gabriella Plc has adopted the 'proportionate goodwill' policy in respect of the acquisition of Ruth Plc in accordance with IFRS 3 Business Combinations. A 40% holding in Hanna Plc's equity had a fair value of SAR 180 million on 1 January 2019.

(iii) Gabriella Plc and Hanna Plc have the Zambian Kwacha (K) as the currency of their primary economic environment. The currency of the primary economic environment of Ruth Plc is the South African Rand (SAR).

Exchange rates between the Zambian Kwacha (K) and the South African Rand (SAR) have moved as follows in the recent past:

Date	**Exchange Rate (K per SAR)**
1 January 2019	0.90
31 December 2019	0.95
31 December 2020	1.1
Average for year ended 31 December 2019	0.91
Average for year ended 31 December 2020	0.98

(iv) The Gabriella Plc Group's policy is to present any accumulated exchange differences on retranslation of net assets of foreign operations as a separate item within equity under the heading 'Exchange Differences Reserve'.

(v) Of the 80% holding originally acquired on 1 January 2015, Gabriella Plc disposed of a 10% holding in Hanna Plc on 1 October 2020 for cash proceeds amounting to K50 million. The only entry Gabriella has passed in its books in respect of the disposal was a debit to cash and a credit to revenue in respect of the disposal proceeds.

(vi) Goodwill on acquisition of Ruth Plc amounting to SAR8 million was impaired during the year to 31 December 2019.

(vii) Assume the results of Gabriella, Hanna and Ruth have accrued evenly over the years.

Required:

Prepare the Gabriella Plc Group Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2020 and the Statement of Financial Position as at 31 December 2020. (40 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) QUESTIONS in this section.

QUESTION TWO

You are the Finance Manager of Ubuntu, a listed entity which prepares Financial Statements in accordance with International Financial Reporting Standards (IFRS). Ubuntu Plc, has a number of foreign and local subsidiaries. The Executive Director, who is not an accountant, has recently attended an Annual Business Conference (ABC) in Livingstone at which financial reporting issues were discussed. The conference was jointly organised by ZICA, ACCA and CIMA. Following the conference, she reviewed the financial statements of Ubuntu for the year ended 31 March 2021. Based on this review she has prepared a series of technical queries relating to those statements:

Technical Query One (1)
The Statement of Profit or Loss and other Comprehensive Income has been presented in two sections. The first section entitled 'profit or loss' and the second 'other comprehensive income'. The tax charge is included in the 'profit or loss' section of the statement and there is no tax charge included in the 'other comprehensive income' section of the statement. I am confused and needs explanation on how entities elects where to put a particular item of income or expenditure and where the tax relating to 'other comprehensive income' is shown. (5 marks)

Technical Query Two (2)
The second notes to the Financial Statements states that plant and equipment is held under the 'cost model'. However, property which is owner occupied is revalued regularly to fair value. Changes in fair value are sometimes reported in profit or loss but usually in 'other comprehensive income'. Also, the amount of depreciation charged on plant and equipment as a percentage of its carrying amount is much higher than for owner occupied property. Another note says that property we own but rent out to others is not depreciated at all but is revalued annually to fair value. Changes in value of these properties are always reported in profit or loss. I thought we had to be consistent in our treatment of items in the accounts. Please explain how all these treatments comply with relevant reporting standards. (5 marks)

Technical Query Three (3)
The third notes to the Financial Statements refers to a legal claim made against Ubuntu by Mr Hamusonda the key customer based in Southern province. This relates to losses incurred by Mr Hamusonda due to Ubuntu supplying him with a faulty product. Further investigation revealed that the fault was due to one of Ubuntu's suppliers, Zamcompany. The Supplier, supplied Ubuntu with a faulty component. This component was used to manufacture the product supplied to Mr Hamusonda. Therefore Ubuntu made a legal claim against Zamcompany in respect of that faulty component. The legal advisors guided that both legal claims will probably succeed and have reliably estimated the amount. I don't understand why Ubuntu's fFnancial Statements include a liability in respect of the expected settlement of Mr Hamusonda's legal claim but do not include an asset in respect of the expected settlement of Ubuntu's legal claim against Zamcompany. This seems inconsistent. (5 marks)

Technical Query Four (4)
The disclosure note relating to intangible non-current assets in the consolidated Financial Statements, includes brand names associated with both foreign and local subsidiaries, which we've acquired in recent years.

However, the brand names which are associated directly with products sold by Ubuntu (the parent entity) are not included within the non-current assets figure. This is another inconsistency that I don't understand. Please explain how this practice can be in line with IFRS requirements. One final question: would I be right in thinking that, as with property, plant and equipment, we can use the fair value model to measure intangible assets? (5 marks)

Required:
Provide answers to the four (4) technical queries raised by the Executive Director. Your answers should refer to relevant provisions of International Financial Reporting Standards.

[Total: 20 Marks]

QUESTION THREE

(a) On 15 December 2010, the Zambia Institute of Chartered Accountants (ZICA) adopted a use of three tier financial reporting framework for Zambia. The aim of the new reporting structure is to provide a simplified, self-contained set of accounting principles for smaller non-listed companies.

Zamuzoh a non-listed company adopted IFRS for SMEs on 1 January 2020. One of the reasons why Zamuzoh adopted and prepares its Financial Statements using the SMEs Standard is because of the difficulties involved every time a new IFRS Standard is issued. The Directors believe that the practicalities and Financial Statements implications of regularly implementing new IFRS Standards are overly onerous to an entity the size of Zamuzoh. However, Zamuzoh may have to transition to full IFRS Standards if it continues to grow in size.

Required:

(i) Discuss the key practical considerations and Financial Statements implications that an entity must consider when implementing a new IFRS Standard. (3 marks)

(ii) Briefly explain the principles outlined in IFRS 1 First Time Adoption of IFRS that must be applied when an entity adopts full IFRS Standards for the first time. (2 marks)

(b) IAS 1 Presentation of Financial Statements says that Financial Statements should be classified and aggregated in a manner which makes them understandable and comparable. This will help make the Financial Statements useful to a wide range of users so that they may attempt to assess the future net cash inflows of an entity. However, the International Integrated Reporting Council (IIRC) is calling for a shift in thinking more to the long term, to think beyond what can be measured in quantitative terms and to think about how the entity creates value for its owners. Historical Financial Statements are essential in corporate reporting, particularly for compliance purposes, but it can be argued that they do not provide meaningful information.

Required:

Discuss the principles and key components of the IIRC's Framework, and any concerns which could question the Framework's suitability for assessing the prospects of an entity. (5 marks)

(c) Developing a framework for disclosure is at the forefront of current debate and there are many bodies around the world attempting to establish an overarching framework to make Financial Statement disclosures more effective, coordinated and less redundant. The belief is that excessive disclosure is burdensome and can overwhelm users. However, it could be argued that there is no such thing as too much 'useful' information for users.

Required:

Discuss why it is important to ensure the optimal level of disclosure in annual reports, describing the reasons why users of annual reports may have found disclosure to be excessive in recent years. (4 marks)

(d) The Directors of **Mukatasha plc** believe that some International Financial Reporting Standards are not consistent with the Framework. They have made the following comments:

(i) The recognition of an expense in respect of an equity-settled share-based payment scheme, in accordance with IFRS 2 Share-based Payments, is not in line with the Framework's definition of an expense.

(ii) Internally generated brands meet the definition of an asset, and so the fact that IAS 38 Intangible Assets prohibits their recognition in the financial statements contradicts the Framework.

(iii) The recognition of a liability in respect of non-refundable deposits received from customers, in accordance with IFRS 15 Revenue from Contracts with customers, is not in line with the Framework's definition of a liability.

Required:

Discuss the extent to which each of the Directors' comments is valid. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Leasing provides an important and flexible source of financing for many businesses. IFRS 16 *Leases* establishes principles for the recognition, measurement, presentation and disclosure of leases, with the objective of ensuring that lessees and lessors provide relevant information that faithfully represents those transactions.

Required:

Explain the accounting treatment of leases under IFRS 16'*Leases*' in the financial statements of the lessor. (5 marks)

(b) On 1 January 2020 Zambour Financial Services entered into a contract to lease a Building in Ndola for three (3) years. The building has a useful life of ten (10) years and it has never been revalued. The lessor agrees to maintain the Building during the three year period. Zambour must pay K120,000 per annum on 31 December each year over the lease term. Zambour accounts for non-lease components separately from lease components. If contracted separately, the maintenance of the building would cost K80,000 per annum payable at the end of each year. The interest rate implicit in the lease is not readily determinable. Zambour's incremental rate of borrowing is 5%.

Required:

Explain how the above contract will be accounted for by Zambour in the year ended 31 December 2020. (5 marks)

(c) A sale and leaseback transaction occurs where an entity sells an asset to another entity and leases that asset back from the buyer/lessor. The first step in determining appropriate accounting treatment is to ascertain whether a sale has occurred or not. An entity must apply IFRS 15 *Revenue from Contracts with Customers* to determine whether a performance obligation has been satisfied.

Required:

Explain accounting treatment for the sale and lease back in the books of the seller in accordance with applicable accounting standards. (5 marks)

(d) Lusaka Plc is an internationally successful manufacturer company. The company is preparing the financial statements for the year ending 31 December 2021 but is currently facing liquidity problems due to Covid-19 epidemic.

On 1 January 2021, Lusaka Plc sells an item of machinery to Luapula Plc for its fair value of K12 million. The asset had a carrying amount of K4.8 million prior to the sale. This sale represents the satisfaction of a performance obligation, in accordance with IFRS 15 Revenue from Contracts with Customers. Lusaka Plc enters into a contract with Luapula Plc for the right to use the asset for the next five years. Annual payments of K2 million are due at the end of each year. The interest rate implicit in the lease is 10%. The present value of the annual lease payments is K7.6 million. The remaining useful economic life of the machine is 8 years.

Required:

Explain how the above transaction will be accounted for on 1 January 2019 by Lusaka plc. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

The Zamfarm Group (TZG) operates in the farming industry and has operated a number of wholly owned Zambian subsidiaries for many years. Its Financial Statements for the last two (2) years are shown below.

Consolidated statements of profit or loss for the year ended 30 September.

	2020	2019
	K000	K000
Revenue	47,000	34,250
Cost of Sales	(23,000)	(14,000)
Gross profit	24,000	20,250
Distributions costs	(10,600)	(9,650)
Administrative expenses	(12,800)	(7,700)
Profits from operations	600	2,900
Investment income	-	300
Finance costs	(60)	-
Profit before tax	540	3,200
Taxation	(150)	(960)
Profit for the year	390	2,240
Attributable to:		
Shareholders of Zamfarm	790	2,240
Non-controlling interest	(400)	-
	390	2,240

Consolidated Statements of Financial Position (extracts) as at 30 September

	2020	**2019**
Current assets	**K000**	**K000**
Inventory	3,250	2,285
Trade receivables	8,500	7,800
Bank	305	3,000
Equity		
Share capital	12,500	3,000
Retained earnings	36,750	36,250
Non – controlling interest	255	-
Non-current liabilities		
Loan	10,000	-

Additional information:

(i) TZG has become increasingly worried about two major areas in its business environment. First of all, there are concerns that reliance on large supermarkets (Spar and Shoprite) are putting pressure on cash flow, as the supermarkets demand long payment terms. Secondly, the consistent increases in fuel prices mean that delivering the produce nationally is becoming extremely expensive.

(ii) In order to deal with the above worrying concerns, TZG purchased 80% of Zamtour Ltd on 1 October 2019. This was the first time TZG had purchased a subsidiary without owning 100% of it. Zamtour Ltd operates two luxury hotels in Livingstone, and Zamfarm Ltd purchased Zamtour Ltd with a view to diversification and to provide a long term solution to the cash flow concerns raised above.

(iii) TZG raised finance from multiple sources to finance its activities as it did not have ready finance. Part of this finance came from the disposal of K5.5 million held in investments, making a K2.25 million gain on disposal, which is included in administrative expenses.

(iv) Zamtour Ltd opened a third hotel which is located in Mkushi Farming block in March 2020. After poor initial reviews, Zamtour Ltd appointed an experienced and qualified Marketing Director Mr. Hamusonda in May 2020. Mr. Hamusonda embarked on an extensive marketing campaign.

(v) Zamtour acquired six (6) generators in August 2020 for use when there is power outage due to load shading by Zesco.

TZG issued additional equity shares during the 2020 financial year and intend to issue bonus shares in 2021.

(vi) The functional and presentation currency of TZG is Zambian Kwacha.

(vii) The following ratios have been calculated for the year ended 30 September 2019:

Gross profit margin	59.1%
Operating margin	8.5%
Return on capital employed	7.4%
Inventory turnover period	60 days
Receivables collection period	83 days

Required:

(a) Prepare the equivalent ratios for the year ended 30 September 2020. (5 marks)

(b) Write a report to the Directors that Analyses the ***financial performance*** and ***liquidity*** of TZG for the year ended 30 September 2020, making specific reference to any concerns or expectations regarding future periods. (15 marks)

[Total: 20 marks]

END OF PAPER

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

CA 3.1 ADVANCED FINANCIAL REPORTING

SUGGESTED SOLUTIONS

<u>SOLUTION ONE</u>

Gabriella Group Consolidated Statement of Profit or loss and Other Comprehensive Income for the year ended 31.12.2020.

		K'm
Revenue (2100+1500+1200X0.98-50)		4,726
Cost of Sales (W1)		(3,140.9)
Gross Profit		1,585.1
Other operating Costs (310+290+250X0.98)		(845)
Operating Profit		740.1
Finance Costs (90+55+35X0.98)		(179.3)
Profit Before tax		560.8
Income Tax Expense (210+165+85X0.98)		(458.3)
Profit for the year		102.5
Other Comprehensive Income		
Items not reclassified in profit or loss:		
Revaluation of property (85+45+25X0.98)		154.5
Items reclassified in profit or loss:		
Exchange differences on reclassification of net assets of foreign operations (W)		77.5
Other comprehensive income for the year		232
Total Comprehensive Income for the year		334.5
Profit for the year attributable to:		
NCI (W)		18.3
Owners of parent	(102.5-18.3)	84.2
		102.5
Total Comprehensive year attributable to:		
NCI (W)		68.6
Owners of parent	(334.5-68.6)	265.9
		334.5

Gabriella Group Consolidated Statement of Financial Position as at 31.12.2020.

Assets			**K'm**
Non current			
Property Plant and Equipment		(W)	1,736.5
Goodwill (W)			50.7
			1,787.2
Current	(465+250+190X1.1)		924
Total assets			**2,711.2**
Equity and Liabilities			
Equity			
Share Capital			100
Retained Earnings	(W9)		748.9
Other Reserves	(W11)		475.5
Exchange Differences reserve	(W13)		61.5
Equity attributable to owners of parent			1,385.9
Non controlling Interests (W16)			384.2
Total Equity			1,770.1
Non current liabilities	(350+125+60X1.1)		541
Current liabilities	(250+95+50X1.1)		400
Total equity and liabilities			2,711.1

Workings to the CSPLOCI and CSFP:

W1. Cost of Sales

		SAR,m	Rate	K'm
Given Amounts;				
Gabriella				1,400
Hanna				950
Ruth		800	0.98	784
Adjustments:				
Fair value depreciation on plant:				
Hanna	20(W2)/10			2
Ruth	25(w2)/5	5	0.98	4.9
				3,140.9

W2. Fair Value Gains or losses on acquisition of Hanna and Ruth

	Hanna	Ruth
	K'm	SAR'm
Fair Value of identifiable net assets at acquisition	305	400
Carrying amounts of identifiable net assets at acquisition:		
Share capital	(50)	(50)
Retained earnings	(210)	(280)
Other Reserves	(25)	(45)
Fair Value Gain on acquisition	20	25

W3. Exchange differences for the year on retranslation of net assets of foreign operations

	K'm
Retranslation of Ruth's identifiable net assets (W4)	75.7
Retranslation of Goodwill on acquisition of Ruth (W5)	1.8
	77.5

W4. Exchange differences for the year on retranslation of Ruth's Identifiable net assets

	SAR'm	SAR'm	Rate	K'm
Net assets at 1.1.2020:				
Net Assets at 31.12.2020 per SFP		500		
Less total CI for the year		(55)		
Net FV gain at 1.1.20 (25-25/5X1)		20		
		465	0.95	441.8
Total CI before exchange difference				
Given	55			
FV depreciation (W)	(5)			
		50	0.98	49
Net assets at 31.12.2020 before exch. diff		515		490.8
Exchange difference for the year (balance)		-		75.7
Net Assets at 31.12.2020		515	1.1	566.5

W5. Exchange differences for the year on retranslation of Goodwill on acq. of Ruth

	SAR'm	Rate	K'm
Goodwill at 1.1.2020;			
Cost of acquisition	260		
NCI at acquisition 40%X400	160		
Identifiable net assets	(400)		

Goodwill at acquisition	20		
Impairment prior to 1.1.2020	(8)		
Goodwill at 1.1.2020	12	0.95	11.4
Exchange difference (balance)	-		1.8
Goodwill at 31.12.2020	12	1.1	13.2

W6. Profit and Total Comprehensive Income attributable to NCI

		K'm
NCI's share of:		
Hanna's given profit for the year:		
- First 9 months	9/12X40X20%	6
- Last 3 months	3/12X40X30%	3
Ruth's given profit for the year	30X0.98X40%	11.8
Adjustments to profit the year:		
Hanna's FV depreciation:		
- First 9 months	9/12X2(W1)X20%	(0.3)
- Last 3 months	3/12X2(W1)X30%	(0.2)
Ruth's FV depreciation	4.9X40%	(2.0)
Profit for the year attributable to NCI		18.3
NCI,s share of:		
Hanna's OCI; revaluation of property		
- First 9 months	9/12X45X20%	6.8
- Last 3 months	3/12X45X30%	3.4
Ruth's OCI		
Revaluation of property	25X0.98X40%	9.8
Exchange on retranslation of ident. NA	75.7(W4)X40%	30.3
Total Comprehensive Income attributable to NCI		68.6

W7. Property, Plant and Equipment

		K'm
Given amounts:		
Gabriella		800
Hanna		450
Ruth	420X1.1	462
		1,712
Adjustments;		
Net FV gain on acquisition of Hanna	(20[W2]-20/10X6)	8
Net FV gain on acquisition of Ruth	(25[W2]-25/5X2)X1.1	16.5
		1,736.5

W8. Goodwill

		K'm	K'm
On acquisition of Ruth(W5)			13.2
On acquisition of Hanna:			
Cost of acquisition		274	
NCI at acquisition		68.5	
FV of identifiable NA		(305)	
			37.5
			50.7

W9. Group Retained Earnings

			K'm
Gabriella RE			695
Share of post acq RE of:			
Hanna upto 30.9.2020	80%(310[W10]-210)		80
Hanna from 1.10.2020	70%(320-310[W10])	7	
Ruth y/e31.12.2020	30X0.98X60%	17.6	
Ruth y/e 31.12.2019	(350-280-30)X0.91X60%	21.8	
Adjustments			
Goodwill impairment loss	8X0.91		(7.3)
FV depreciation:			
Hanna upto 30.9.2020	20/10X5.75X80%		(9.2)
Hanna from 1.10.2020	20/10X0.25X70%	(0.4)	
Ruth Y/e 31.12.2020	25/5X0.98X60%		(2.9)
Ruth y/e 31.12.2019	25/5X0.91X60%	(2.7)	
Reversal of disposal proceeds for 10% in Hanna			(50)
			748.9

W10. Hanna Reserves on 1.10.2020

		Retained Earnings K'm	Others K'm
Reserves at 31.12.2020		320	110
Last 3 months:			
- Profit for the year	3/12X40	(10)	-
- OCI	3/12X45	-	(11.3)
		310	98.7

W11. Group other reserves

		K'm	K'm
Gabriella Other Resrves			378
Share of Post Acquisition Other Resesrves of:			
Hanna upto 30.9.2020	80%(98.7[W10]-25)		59.0
Hanna from 1.10.2020	70%(110-98.7[W10])		7.9
Ruth y/e31.12.2020	25X0.98X60%	14.7	
Ruth y/e 31.12.2019	(100-25-45)X0.91X60%	16.4	

Net adjustment on reduction in holding in Hanna		
Disposal Proceeds	50	
Net assets transferred to NCI (W)	(50.5)	
		(0.5)
		475.5

W12. Net assets in Hanna transferred to NCI of disposal of 10% holding by Gabriella

		K'm
Hanna identifiable NA at 1.10.2020:		
- Share capital		50
- Retained earnings (W10)		310
- Other Reserves (W10)		98.7
- Net FV gain	(20[W2]-20/10X5.75)	8.5
		467.2
Hanna Goodwill at 1.10.2020		37.5
Hanna Net Assets at 1.10.2020		504.7

Hanna net assets at 1.10.2020 attributable to the 10% holding disposed of:
10%X504.7 = 50.5

W13. Exchange Differences Reserve

		K'm
Share of accumulated Exchange difference on ident. NA 60%X98.3(W14)		59
Accumulated Exchange difference on goodwill	(W15)	2.5
		61.5

W14 Accumulated Exchange Difference on Ruth identifiable net assets

		SAR'm	Rate	K'm
Identifiable net asset at acquisition		400	0.9	360
Post acquisition Total CI;				
y/e 31.12.2020	(55-25[W2]/5)	50	0.98	49
y/e 31.12.2019	(350+100-280-45-55-25/5)	65	0.91	59.2
Translated NA at 31.12.2020 before exchange differences				468.2
Accumulated Exchange Difference (balance)				98.3
NA at 31.12.2020	(500+25[W2]-25/5X2)	515	1.1	566.5

W15 Accumulated Exchange Difference on Goodwill on Ruth

		SAR'm	Rate	K'm
Goodwill at acquisition	(W5)	20	0.9	18
Goodwill impairment losses:				
y/e 31.12.2019		(8)	0.91	(7.3)

			10.7
Accumulated Exchange Difference (balance)	-		2.5
Goodwill at 31.12.2020	12	1.1	13.2

W16. Non Controlling Interests in equity

		K'm
Hanna (W17)		
Ruth (W18)		157.6
	226.6	
		384.2

W17. NCI in Hanna

			K'm
NCI at acquisition			68.5
Share of post acq RE of:			
Hanna upto 30.9.2020	20%(310[W10]-210)		20
Hanna from 1.10.2020	30%(320-310[W10])		3
Share of Post Acquisition Other Resesrves of:			
Hanna upto 30.9.2020	20%(98.7[W10]-25)		14.7
Hanna from 1.10.2020	30%(110-98.7[W10])		3.4
FV depreciation:			
Hanna upto 30.9.2020	20/10X5.75X20%		(2.3)
Hanna from 1.10.2020	20/10X0.25X30%	(0.2)	
NA transferred from owners of parent		(W12)	50.5
			157.6

W18. NCI in Ruth

	K'm
Ruth NA at 31.12.2020 (W4)	566.5

NCI's share 566.5X40% = 226.6

SOLUTION TWO

Technical Query One – Statement of profit or loss and other comprehensive income

The statement of statement of comprehensive income is newly described as "**statement of financial performance**" in the 2018 IASB's conceptual framework, however, the framework **does not specify** whether this statement should consist of a **single** statement or **two** statements, it only requires that a total or subtotal for profit or loss must be provided. It also notes that the **statement of profit or loss is the primary source** of information about an entity's **financial performance** for the reporting period and that only in **"exceptional circumstances**" the Board may decide that income or expenses are to be included in **other comprehensive income**. Notably, the framework does not define profit or loss, thus the question of what goes into profit or loss or into other comprehensive income is still unanswered.

The principles underpinning the overall presentation of financial statements are set out in IAS 1 – *Presentation of Financial Statements*. IAS 1 requires that all income and expenses are presented in a statement of profit or loss and other comprehensive income.

IAS 1 does not allow entities to choose whether to present income and expenses in the profit or loss or the other comprehensive income section of the statement. IAS 1 states that, unless required or permitted by a specific IFRS standard, all items of income and expense should be presented in the profit or loss section of the statement.

The statement of profit or loss is the primary source of information about the entity's financial performance. As a default, all income and expenses should be appropriately classified and included in the statement of profit or loss, unless doing so does not provide relevant information or a faithful representation of performance. In principle all items of income and expense are classified as profit and loss.

IAS 1 states that the tax relating to items of other comprehensive income is either shown as a separate line in the 'other comprehensive income' section of the statement or netted off against each component of other comprehensive income and disclosed in the notes to the financial statements. The key implication of an item being presented in other comprehensive income rather than profit or loss is that the item would not be taken into account when measuring earnings per share, an important performance indicator for listed entities.

Technical Query Two – IAS 16 and IAS 40

The accounting treatment of the majority of tangible non-current assets is governed by IAS 16 – *Property, Plant and Equipment* (PPE).

IAS 16 states that the accounting treatment of PPE is determined on a class by class basis. For this purpose, property and plant would be regarded as separate classes.

IAS 16 requires that PPE is measured using either the cost model or the revaluation model. The adopted model should be applied on a class by class basis and must be applied consistently within a class. Under the cost model – properties are measured at original cost less accumulated depreciation.

IAS 16 states that when the revaluation model applies, surpluses are recorded in other comprehensive income, unless they are cancelling out a deficit which has previously been reported in profit or loss, in which case it is reported in profit or loss. Where the revaluation results in a deficit, then such deficits are reported in profit or loss, unless they are cancelling out a surplus which has previously been reported in other comprehensive income, in which case they are reported in other comprehensive income.

According to IAS 16, all assets having a finite useful life should be depreciated over that life. Where property is concerned, the only depreciable element of the property is the buildings element, since land normally has an indefinite life. The estimated useful life of a building tends to be much longer than for plant. These two reasons together explain why the depreciation charge of a property as a percentage of its carrying amount tends to be much lower than for plant.

Properties which are held for investment purposes are not accounted for under IAS 16, but under IAS 40 –*Investment Property*. IAS 40 defines investment properties as property held for rental or capital appreciation or both rather than for use in the ordinary course of business. Under the principles of IAS 40, investment properties can be accounted for under a cost or a fair value model. We apply the fair value model and thus our investment properties are revalued annually to fair value, with any changes being reported in profit or loss. Under this method investment properties are not depreciated, but are measured annually at fair value, with gains or losses on re-measurement being recognised in the statement of profit or loss.

Technical Query Three – IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets*.

The objective of IAS 37 is to ensure that appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to the financial statements to enable users to understand their nature, timing and amount. The key principle established by the Standard is that a provision should be recognised only when there is a liability i.e. a present obligation resulting from past events. Provision is a liability of uncertain timing or amount.

Contingent asset is a possible asset that arises from past events, and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

An entity must recognise a provision if, and only if:

- a present obligation (legal or constructive) has arisen as a result of a past event (the obligating event),
- payment is probable ('more likely than not'), and
- the amount can be estimated reliably.

An obligating event is an event that creates a legal or constructive obligation and, therefore, results in an entity having no realistic alternative but to settle the obligation.

The legal claim against Ubuntu is a provision as it is a liability of uncertain timing or amount.

IAS 37 requires provisions to be recognised where there is a probable outflow of economic benefits which can be reliably measured.

The legal claim by Ubuntu against Zamcompany is a contingent asset as it is a possible asset arising from past events. IAS 37 states that contingent assets should not be recognised in the financial statements but should be disclosed where there is a probable inflow of economic benefits.

This explains the distinction between the treatment of the two legal claims, hence the company seems complied with the requirement of IAS 37.

Technical Query Four – IAS 38 intangible assets

The accounting treatment of intangible assets is regulated by IAS 38. The objective of IAS 38 is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another IFRS. IAS 38 requires an entity to recognise an intangible asset, whether purchased or self-created (at cost) if, and only if:

- it is **probable** that the future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be **measured reliably**.

This requirement applies whether an intangible asset is acquired externally or generated internally.

Under IAS 38, the accounting treatment of intangible assets depends on how they arose.

The intangible assets of acquired subsidiaries were acquired as a result of a business combination and the initial recognition requirements are contained in IFRS® 3 – *Business Combinations*. When a new subsidiary is acquired, the purchase consideration needs to be allocated to the identifiable assets and liabilities of the acquired subsidiary.

A brand name (or any other intangible asset for that matter) is regarded as identifiable if it is separable (can be sold without selling the whole business) or arises from contractual or other legal rights (such as legally protecting its use).

Identifiable intangible assets associated with an acquired subsidiary can be recognised separately in the consolidated financial statements provided their fair value can be reliably estimated.

The Ubuntu brand is an internally developed brand. IAS 38 does not allow the recognition of internally developed brands because of the inherent difficulties involved in identifying and measuring them. This explains why the Ubuntu brand is treated differently compared to the brands of acquired subsidiaries.

In contrast, intangible items which relate to an acquired subsidiary which exist at the date of acquisition (acquired are acquired as part of a business combination and for such assets the recognition criteria are different. with business Provided the fair value of such an intangible can be reliably measured at the date of acquisition, it is combination) recognised in the consolidated statement of financial position based on its fair value at the date of (mechanics acquisition. of recognition)

The use of the fair value model for intangible non-current assets is restricted to those assets which are traded in an active market. This is relatively uncommon in the case of intangibles. It is most unlikely that brand names would be traded in such a market, so the fair value model is unlikely to be available here.

SOLUTION THREE

(A)

(i) Practical considerations When implementing a new accounting standard, an entity should prepare an impact assessment and project plan. The entity may need to spend money on training staff, or on updating or replacing its systems. New processes and controls may need to be developed and documented. New accounting standards will most likely contain new recognition, measurement and disclosure requirements. If the impact of these is not communicated then investors' assessments of how management has discharged its stewardship responsibilities may change and this could affect their investment decisions. As such, management should communicate the impact of a new standard to investors and other stakeholders – particularly if it will result in lower profits or increased liabilities. Banking agreements often specify maximum debt levels or financial ratios based on figures reported in the financial statements. New financial reporting requirements can affect those ratios, causing potential covenant breaches.

Dividends could be affected. Many jurisdictions have regulations, which restrict the amount which can be paid out in dividends. This restriction is normally based on accounting profits. The impact of adopting a new IFRS Standard should be communicated to analysts. Some governments use information prepared under IFRS standards for statistical and economic planning purposes. Competitive advantage could be lost if a new financial reporting standard requires extensive disclosures. Bonus schemes may need to be re-assessed because the new standard could affect the calculation of performance-related pay. Financial statement implications Where there is the introduction of a new accounting standard, the financial statements will need to reflect the new recognition, measurement and disclosure requirements which, in turn, will mean that entities will need to consider the requirements of IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. IAS 8 contains a requirement that changes in accounting policies are fully applied retrospectively unless there are specific transitional provisions contained in the new IFRS Standard being implemented. IAS 1 Presentation of Financial Statements requires a third statement of financial position to be presented if the entity retrospectively applies an accounting policy, restates items, or reclassifies items, and those adjustments had a material effect on the information in the statement of financial position at the beginning of the comparative period. IAS 33 Earnings per Share requires basic and diluted EPS to be adjusted for the impacts of adjustments resulting from changes in accounting policies accounted for retrospectively and IAS 8 requires the disclosure of the amount of any such adjustments. A change in an accounting standard can change the carrying amounts of assets and liabilities, which will have deferred tax consequences.

(ii) First time adoption of IFRS Standards IFRS 1 First-time Adoption of IFRS says that an entity must produce an opening statement of financial position in accordance with IFRS Standards as at the date of transition. The date of transition is the beginning of the earliest period for which an entity presents full comparative information under IFRS Standards in its first financial statements produced using IFRS Standards. At the date of transition, the entity must:

- recognise all assets and liabilities required by IFRS Standards.
- derecognise assets and liabilities not permitted by IFRS Standards.

• reclassify assets, liabilities and equity in accordance with IFRS Standards.

• measure assets and liabilities in accordance with IFRS Standards. Gains or losses arising on the adoption of IFRS Standards at the date of transition should be recognised directly in retained earnings.

(b) **Principles and key components of the IIRC's Framework**

The International Integrated Reporting Council (IIRC) has released a framework for integrated reporting. The Framework establishes principles and concepts which govern the overall content of an integrated report. The IIRC has set out a principles based framework rather than specifying a detailed disclosure and measurement standard. This enables each company to set out its own report rather than adopting a checklist approach.

An integrated report sets out how the organisation's strategy, governance, performance and prospects can lead to the creation of value. The integrated report aims to provide an insight into the company's resources and relationships, which are known as the capitals and how the company interacts with the external environment and the capitals to create value. These capitals can be financial, manufactured, intellectual, human, social and relationship, and natural capital but companies need not adopt these classifications. Integrated reporting is built around the following key components:

(i) Organisational overview and the external environment under which it operates.
(ii) Governance structure and how this supports its ability to create value.
(iii) Business model.
(iv) Risks and opportunities and how they are dealing with them and how they affect the company's ability to create value.
(v) Strategy and resource allocation.

Concerns

There are concerns over the ability to assess future disclosures, and there may be a need for confidence intervals to be disclosed. The preparation of an integrated report requires judgement but there is a requirement for the report to describe its basis of preparation and presentation, including the significant frameworks and methods used to quantify or evaluate material matters. Also included is the disclosure of a summary of how the company determined the materiality limits and a description of the reporting boundaries. A company should consider how to describe the disclosures without causing a significant loss of competitive advantage. The entity will consider what advantage a competitor could actually gain from information in the integrated report, and will balance this against the need for disclosure. The report does not contain a statement from those 'charged with governance' acknowledging their responsibility for the integrated report. This may undermine the reliability and credibility of the integrated report.

(c)

Importance of optimal level of disclosure

It is important that financial statements are relevant, reliable and can be understood. Additionally, it is important for the efficient operation of the capital markets that annual reports do not contain unnecessary information. Excessive disclosure can obscure relevant information and make it harder for users to find the key points about the performance of the business and its prospects for long-term success It is equally important that useful information is presented in a coherent way so that users can find what they are looking for and gain an understanding of the company's business and the opportunities, risks and constraints that it faces. The inclusion of 'immaterial' disclosures will usually make this problem worse.

Reasons for excessive disclosure

A significant cause of excessive disclosure in annual reports is the vast array of requirements imposed by laws, regulations and financial reporting standards. A listed company may have to comply with listing rules, company law, International Financial Reporting Standards, corporate governance codes and, if it has an overseas listing, any local requirements, such as those of the SEC in the US. A problem that seems to exist is that disclosures are being made because a disclosure checklist suggests it may need to be made, rather than assessing whether it is really required in a company's particular circumstances. Furthermore, accounting policy disclosures are often generic and provide little specific detail of how companies apply policies to particular transactions. Preparers now have to consider many other stakeholders including employees, unions, environmentalists, suppliers and customers. Meeting the needs of this wider audience has contributed to the increased volume of disclosure.

(d)

Share-based payment

The Framework defines an expense as a decrease in economic benefits that result in decreases in equity (other than those related to distributions to equity participants). In the case of a cash-settled share-based payment, the entity has an obligation to pay cash in the future. This therefore meets the definition of an expense. However, in the case of an equity-settled share-based payment, the entity is providing equity as payment for the good/service. There is therefore no reduction in an asset or increase in a liability in accordance with the definition of an expense. Indeed an equity-settled share-based payment has no net impact on equity (expenses reduce retained earnings, but the other side of the transaction increases other components of equity). Although IFRS 2 Share-based Payment requires the recognition of an expense for equity-settled schemes, it can be argued that this is not in accordance with the definitions in the Framework.

Internally generated brands

The Framework defines an asset as a resource controlled by an entity as a result of a past event that will lead to a probable inflow of economic benefits. Brands, whether internally generated or purchased, do therefore meet the definition of an asset. The Framework says that items are recognised in the financial statements if they meet the definition of an element, and if the cost or value can be measured reliably. The cost of an internally generated brand cannot be measured reliably. This is because the costs of developing a brand cannot be separated from the day-to-day running costs of the business. Therefore, the fact that internally generated brands are not recognised in the financial statements is consistent with the Framework.

Non-refundable deposits.

The Framework defines a liability as a present obligation from a past event which is expected to result in an outflow of economic benefits to settle the obligation. In this example, there is no obligation to repay the cash because the deposit is nonrefundable. Consequently it is sometimes believed that the deposit amount should not be recognised as a liability but, instead, as income. Nonetheless, there is an obligation to transfer the related goods or services to the customer – and these represent economic benefits – thus appearing to meet the definition of a liability. However, it can be argued that this obligation to transfer goods/services should be recognised at the cost to the entity of providing the goods/services rather than the price that was charged to the customer.

SOLUTION FOUR

a) **Accounting by lessor**

Lessors shall classify each lease as an operating lease or a finance lease.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. Otherwise a lease is classified as an operating lease. Upon commencement of the lease, a lessor shall recognise assets held under a finance lease as a receivable at an amount equal to the net investment in the lease.

A lessor recognises finance income over the lease term of a finance lease, based on a pattern reflecting a constant periodic rate of return on the net investment.

At the date of commencement, a manufacturer or dealer lessor recognises selling profit or loss in accordance with its policy for outright sales to which IFRS 15 applies.

A lessor recognises operating lease payments as income on a straight-line basis or, if more representative of the pattern in which benefit from use of the underlying asset is diminished, another systematic basis.

Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17.

(b) The annual payments of K120, 000 should be allocated between the lease and non-lease components of the contract based on their standalone selling prices: Lease of Building: (K320/K320 + K80) × K120, 000 = K96, 000. Maintenance (K80/K320 + K80) × K120, 000 = K24, 000.

The lease liability is calculated as the present value of the lease payments, as follows:

Date	Cash flow (K)	Discount rate 5%	Present value (K)
31st Dec.2020	96,000	0.952	91, 392
31st Dec.2021	96,000	0.907	87, 072
31st Dec.2022	96,000	0.864	82, 944
			261, 408

There are no direct costs so the right-of-use asset is recognised at the same amount:

Dr Right-of-use asset K261, 408 and Cr Lease liability K261, 408.

Interest of K13, 070.40 is charged on the lease liability.

Lease liability liability; Dr Finance costs (P/L) K13, 070.40; Cr Lease liability K13, 070.40. The liability has a carrying amount of K178, 478.40 at the reporting date.

Year ended	Opening balance	Interest (5%)	Payments	Closing
31st Dec.2020	K261, 408	K13, 070.40	(96, 000)	K178, 478.40

The cash payment reduces the liability. Dr Lease liability K96, 000; Cr Cash K96, 000

The right-of-use asset is depreciated over the three year lease term. This gives a charge of K87, 136 (K261, 408/3 years). Dr Depreciation (P/L) K87, 136; Cr Right-of-use asset K K87, 136.

The carrying amount of the right-of-use asset will be reduced to K174, 272 (K261, 408 x (2/3).

Maintenance; the cost of one year's maintenance will be expensed to profit or loss:
Debit profit or loss with K24, 000 and Credit Cash with K24, 000.

(c) If an entity (the seller-lessee) transfers an asset to another entity (the buyer-lessor) and then leases it back, IFRS 16 requires that both entities assess whether the transfer should be accounted for as a sale. For this purpose, entities must apply IFRS 15 Revenue from Contracts with Customers to decide whether a performance obligation has been satisfied. This normally occurs when the customer obtains control of a promised asset. Control of an asset refers to the ability to obtain substantially all of the remaining benefits.

If the transfer is not a sale then IFRS 16 states that: In simple terms, the transfer proceeds are treated as a loan. The seller-lessee continues to recognise the transferred asset and will recognise a financial liability equal to the transfer proceeds.

If the transfer does qualify as a sale then IFRS 16 states that, the seller-lessee must measure the right-of-use asset as the proportion of the previous carrying amount that relates to the rights retained. This means that the seller-lessee will recognise a profit or loss based only on the rights transferred to the buyer-lessor.

If the sales proceeds or lease payments are not at fair value, IFRS 16 requires that:
• below market terms (e.g. when the sales proceeds are less than the asset's fair value) are treated as a prepayment of lease payments
• above market terms (e.g. when the sales proceeds exceed the asset's fair value) are treated as additional financing.

(d) Lusaka plc must remove the carrying amount of the machine from its statement of financial position. It should instead recognise a right-of-use asset. This right-of-use asset will be measured as the proportion of the previous carrying amount that relates to the rights retained by Lusaka:

- (7.6m/12m) × K4.8 million = K3.04 million

The entry required is as follows

Item	Account	DR K'M	CR K'M
1	Cash	12	
2	Right of use	3.04	
3	Machine		4.8
4	Lease liability		7.6

5	Profit or loss (Gain on disposal - bf)		2.64
	Total	**15.04**	**15.04**

SOLUTION FIVE

a) Ratios for the Zamfarm group:

Ratios	**Formula**	**Calculations**	**2020**	**2019**
Gross profit	Gross profit/sales x 100	(24,000/47,000) x 100	51.1%	59.1%
Operating margin	Profits from operations/sales x 100	(600/47,000) x 100	1.3%	8.5%
Return on capital	Profits from operations/total shareholders fund + long-term loan x 100	(600/(49,505 + 10,000) x 100	1.0%	7.4%
Inventory turnover Period	Inventory/cost of sales x 365 days	(3,250/23,000) x 365	52 days	60 days
Receivables Collection period	Receivables/sales x 365 days	(8,500/47,000) x 365	66 days	83 days

b) Analysis of the performance and cash flow of The Zamfarm Group Performance

Revenue and expenses have all increased during the year. Some of this will be due to the acquisition of Zamtour Ltd in the year, but without Zamtour's individual financial statements it is difficult to see how much this has contributed. Zamtour Ltd has been controlled since 1 October 2019 so has contributed full year's results for the year to September 2020 which would not have been included in the year to 30th September 2019.

It is also important to recognize that the new Hotel was only opened in March 2020, so a full year's revenue has not yet been generated by this. Whereas revenue has increased significantly by 37.2%, it can be seen that higher expenses have meant that the Zamfarm Ltd group has made less profit than in the previous period. For example, cost of sales increased exorbitantly by 64.3% from the previous year.

The gross profit margin has fallen in the year from 59.1% to 51.1%. This could be attributable to the increased pressure on prices from supermarkets or difficult trading conditions, but could also be as a result of the addition of Zamtour Ltd into the group.

It may be that the hotel industry generates much lower margins than the farming industry, or it may be that Zamtour Ltd itself generates margins. It may also be that the poor reputation associated with the new hotel resulted in the need to offer lower room rates to attract new customers or to bring customers back. Following the improvement in feedback as indicated in the question, this will hopefully improve profits in future periods. The improvement in feedback should lead to increased future bookings, so it may be that the new hotel generates a significantly improved return in future years. The operating margin has also deteriorated in the year. It is also important to note that there is a significant one-off K 2.25 million gain on disposal in relation to the sale of investments during the year. Without this exceptional item, Zamfarm Ltd group would have made a worrying loss from operations of K1.65 million (2,250 – 600). Further analysis of this loss, the reason for this loss is due to a significant increase in the administrative expenses, which would be K 30.1 million excluding the K 2.25 million profit on disposal. Therefore, the Zamfarm Ltd group would have incurred costs relating to the acquisition of Zamtour Ltd, which will not be incurred in future periods.

There will have been significant expenses associated with the set-up of the new hotel during the year, which again are unlikely to be repeated in future periods unless Zamtour Ltd plans on opening another hotel in the near future. The increased marketing expenses will also have had a significant impact on the profit, though it is unclear whether this is something that may need to be repeated or maintained in future periods.

There will be many costs associated with the new hotel which will be recurring, such as the increase in staff numbers, and the running costs of the hotel. The new marketing director is likely to have demanded a significant salary, as he or she was brought in specifically to address a problem with the hotel's reputation.

The distribution costs have increased marginal by 9.8% during the year. This could suggest that there has been a decline in the underlying farming business, as fuel costs have risen significantly. It could also mean that the hotel business has extremely low distribution costs, which is likely.

Whereas the Zamfarm Ltd group has managed to reduce its exposure to fuel prices through the purchase of Zamtour Ltd not dependent on distribution, it is questionable how wise this has been. Zamtour Ltd appears to have lower margins and will still incur significant costs in terms of cooling and lighting, which may rise in a similar manner to fuel costs. The return on capital employed has also deteriorated in the year from 7.4% to 1%, which is expected due to the reduced operating profits. Removing the gain on disposal of the investments would make The Zamfarm Group loss-making, meaning that it would make a negative return on capital employed.

It thus appears that Zamtour Ltd is a loss-making entity, as the non-controlling share of the group's profit is negative. As Zamtour Ltd is the only partially(owned 80%) controlled subsidiary, the non-controlling interest will relate solely to Zamtour's performance.

This may also suggest that there is goodwill impairment following the purchase of Zamtour Ltd. This could have arisen from the poor reputation associated with the new hotel. If the non-controlling interest is valued at fair value, 20% of the impairment would be allocated to the non-controlling interest's share.

In addition to the reduced operating profits, the capital employed by the Zamfarm Ltd group has increased significantly. A total of K9.5 million of new shares have been issued during the year, probably to fund the purchase of Zamtour Ltd. There has also been a K10 million long-term loan contracted, although it is possible that Zamtour Ltd already had this loan and this has resulted from the consolidation of Zamtour's assets and liabilities.

The sale of investments and share issue and potentially the contracted loan suggest that the Zamfarm Ltd group paid a very high price for Zamtour Ltd. This may not have been wise if Zamtour Ltd has low margins, or is loss making. If Zamtour Ltd owns the hotel premises, then this may have explained the high price as the land is likely to hold its value, even if Zamtour performs poorly as demonstrated.

Cash flow position

The cash balance has fallen to K 0.3 million as at 30 September 2020. It is important to note that the Zamfarm Ltd group has raised significant funds during the year through a share issue, sale of investments and the potential receipt of a long-term loan. This means that significant amount of the cash raised is likely to have been spent on the purchase of Zamtour Ltd and the new hotel.

However, the decrease in receivable collection period will have a positive effect on the cash flow of the Zamfarm Ltd group. As a hotel will largely be cash based rather than offering credit, this will aid the cash flow of the Zamfarm Ltd group. This means that the purchase of Zamtour Ltd may help offset its problems caused in the farming sector with the longer terms demanded by the supermarkets.

Another positive sign on cash flow is the reduction in the inventory turnover period. This will be as a result of the fact that Zamtour Ltd will not carry much inventory, as this is likely to relate to food and drink served in the hotels.

Conclusion

The success of the Zamfarm Ltd group in the current year is difficult to judge; it has been a transitional year. There are concerns over the performance of Zamtour Ltd, although there are reasons to believe this may improve in the instant future periods. For a more meaningful comparison, individual financial statements of companies within the Zamfarm Ltd group would need to be accessed.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

Kaleni Mining Corporation is a Zambian multinational mining enterprise with mining interests in Zambia, the Democratic Republic of Congo, Zimbabwe and South Sudan. The foreign operations are managed through wholly owned subsidiaries incorporated in the respective foreign countries.

You are an Audit Manager in Charles & Pinkie Chartered Accountants, a large firm registered with the Zambia Institute of Chartered Accountants (ZICA). Kaleni Mining Corporation and all the subsidiaries are audited by Charles & Pinkie Chartered Accountants, since the firm has offices in all the countries in which it operates.

You are planning the audit of the group financial statements for Kaleni Mining Corporation for the year ended 31 March 2020. The Engagement Partner recently held separate planning meetings with the Group Audit Committee Chairperson and the Group Finance Director at which a number of issues were discussed, including the following:

1. The Group Finance Director stated that the subsidiary in South Sudan was acquired on 1 April 2019. The financial statements are not prepared using International Financial Reporting Standards (IFRS) and the draft consolidated financial statements do not include the financial statements for the subsidiary in South Sudan. Kaleni Mining Corporation and the other subsidiaries use IFRS. South Sudan got its independence recently and is still in its early stages of development. Most of the institutions responsible for ensuring accountability and transparency in both the private and public sector are still being established.

   He has requested Charles & Pinkie Chartered Accountants to suggest the way forward so that the consolidated financial statements could be finalized. The subsidiary in South Sudan is considered to be a significant component.

2. The Group Audit Committee Chairperson informed the Engagement Partner that significant instances of fraudulent financial reporting involving revenue were uncovered by the Group Internal Auditors when auditing the sales figures for the quarter ended 31 March 2020 for the subsidiary in the Democratic Republic of Congo. The Directors are generally disappointed that the external auditors from Charles & Pinkie Chartered Accountants failed to detect this fraud. The Engagement Partner strongly thinks the computation of unrealized profits in inventory is incorrect and should be audited with great caution, since there are significant intra-group sales involving copper concentrates.

3. The subsidiary in Zimbabwe incurred capital costs of K700 million to open a new mine which is likely to be abandoned in fifteen (15) years' time. Opening of the new mine has caused significant damage to the environment, including:

   (i) Eliminating vegetation (deforestation). However, the local people have used this as an opportunity to engage in charcoal burning, which is seemingly a lucrative business.

(ii) Changing soil profiles, making it less fertile for agricultural use. All farmers were compensated and relocated to rural areas of their choice.
(iii) Damaging wildlife, resulting in some rare species of animals being extinct. Some animals were taken to a nearby National Park.
(iv) Air pollution through increased carbon dioxide emissions and this is associated with climate change. Chest infections have been on the increase and the local clinic is failing to cope.

Zimbabwe is currently struggling economically and in an effort to attract foreign investors the Country abolished all environmental legislation obliging companies to rectify environmental damage and minimize emission of harmful toxins which destroy the atmosphere. The Government has indicated that this may only be reviewed after twenty (20) years and this is supported by a statutory instrument (SI) which was issued by the Minister responsible for Mining and Natural Resources.

4. The mining interests in Zambia have been affected by erratic power supply coupled with frequent tax changes which have adversely affected the reliability of strategic planning in the company.

   Kaleni Mining Corporation is respected globally for its excellent policies on social and environmental issues. It has set targets of social and environmental performance for the group which it evaluates and reports to shareholders on an annual basis.

   The targets include:

   (i) Reduce emissions of harmful toxins which destroy the atmosphere.
   (ii) Zero employee fatalities in work-related incidents.
   (iii) Pursue equal opportunities for men and women in all countries where this is legally possible.

As a cost saving measure, the Directors want to use the Group Internal Auditors to review the social and environmental report for the year ended 31 March 2020.

Required:

(a) Explain the meaning of a significant component in group audits. (3 marks)

(b) (i) Advise the Group Finance Director on the consolidation of the South Sudan subsidiary in the consolidated financial statements. (3 marks)

(ii) Explain what will be required of Charles & Pinkie Chartered Accountants after consolidation of the South Sudan subsidiary. (1 marks)

(c) Explain the way in which Charles & Pinkie Chartered Accountants should deal with fraud when auditing revenue. (4 marks)

(d) Describe five (5) audit procedures that should be performed on the computation of unrealized profits in inventory in the consolidated financial statements for Kaleni Mining Corporation. (10 marks)

(e) (i) Discuss six (6) reasons why social and environmental audits may be required by a client company. (6 marks)

(ii) Discuss the matters to consider when reviewing the environmental matters in the subsidiary in Zimbabwe. (10 marks)

(f) Evaluate the proposed use of the Group Internal Auditors in the review of the social and environmental report for Kaleni Mining Corporation for the year ended 31 March 2020. (3 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

(a) Mbanji Ltd is a family owned Company owned by the Patel family. The Company was founded by the father who has been running the business until his death three (3) years ago.

One (1) of the children was appointed to run the Company on behalf of the others and he left his employment to run the business full time. The Company employed professionals including a Risk Manager to help run the Company. The other children who are not involved in running the business are concerned that the Company had not been doing well since the death of their father and despite the fact that one of them is full time managing the Company and the benefits of employing a Risk Manager are not visible.

You are an Audit Manager in Cox & Co. You have been approached by the Manager of Mbanji Ltd requesting your firm to carry out an evaluation of its risk assessment systems and report on the findings. The Company is planning to borrow from a financial institution in order to recapitalize.

Required:

(i) Distinguish risk assessment conducted in an audit of financial statements from an engagement to provide assurance on the risk systems of Mbanji Ltd. (4 marks)

(ii) Discuss three (3) classes of stakeholders who are interested in assurance on the risk management system of a company. (6 marks)

(b) You are the Engagement Partner for four (4) of your firm's audit clients. The audits for these four (4) clients are at different stages of the auditing process.

The following information relates to the five audit clients:

Kudu Ltd:
The audit of the financial statements of Kudu Ltd is almost complete. During the review of the working papers you establish that the audit work performed on the payroll only related to the payroll for the rest of Staff except Management. The payroll for the workforce except Management represents 60% of the total wages bill meaning that no audit work has been performed on 40% of the wages bill.

In response to your observation and query, the Audit Manager responded that efforts to obtain the Management payroll failed because the Finance Director indicated to the Audit Senior that the Management payroll, is confidential and he could not provide it. Efforts to seek the intervention of the Chief Executive Officer (CEO) failed and he instead indicated that if the firm insists on auditing the Management payroll, the Company will have no alternative but to put next year's audit on tender.

Mazembe Road Construction Co:
This is a client in the road construction business. The audit of the financial statements of Mazembe Road Construction Co is due in the next two months.

The Client called you for a meeting at which you were informed that the Financial Director who is key in the preparation of financial statements was involved in a fatal road traffic accident. The Company requested your firm to second Sitali who was Audit Manager the previous year to Mazembe Road Construction Co so that he helps with the preparations of the current year financial statements.

Sitali is the only one qualified to carry out the audit of the financial statements of this Client and you wish to assign him to this audit again. As an alternative, Management of Mazembe Road Construction Co has requested your firm to urgently recruit a qualified person to fill up the vacant position as soon as possible.

Supa Chain Stores Plc.
This has been your firm's audit Client from inception ten (10) years ago. The Company obtained stock exchange listing four (4) years ago and up until the date of listing you were the Engagement Partner.

Having gained experience in the audit of Supa Chain Store Plc., you have continued as Engagement Partner after listing and this is your eighth year as Engagement Partner of Supa Chain Stores Plc. There has not been a change in the top Management of Supa Chain Stores Plc. from inception of the company.

Muzovu Consultancy:
The audit for the financial statements of this Client in in progress. During the course of the audit, the Audit Senior came across a deposit in the Company Account of a large sum of money which was subsequently transferred to another company with the narration that it was for consultancy services.

Efforts to get the details of this payment failed and the only explanation given by Management was that the firm should not be concerned about this transaction because the money was received and paid out in full and it does not affect the financial statements. The Audit Senior suspects that the payment could be part of the money laundering activities that the Company is involved in. He has brought this matter to your attention and wants your direction on what should be done especially with regards to reporting to the Anti-Money Laundering Unit of the Drug Enforcement Commission.

Required:

Describe the ethical issues in each of the four (4) clients and suggest possible action that should be taken by the firm. (10 marks)

[Total: 20 Marks]

QUESTION THREE

(a) You are the Engagement Partner in your firm of Chartered Accountants. In response to an advertisement by Talltrees Private School, you attended a meeting with the School Board as part of the School's evaluation to select an audit firm to audit the financial statements.

The School is not legally required to have statutory audits its financial statements. The School Board is of the view that an external audit would be beneficial to the School because the School Management would be held accountable on how they use the money.

When you indicated the level of audit fees that you would charge, the amount was far in excess of what the School Board had anticipated. The Chairperson of the School Board asked you if there was an alternative to an audit which should still give the Board the required level of assurance at a lower cost. You suggested that a review of the financial statements would be the alternative and the Board requested that you furnish it with more information regarding the suggested review.

Required:

(i) Distinguish between an assurance engagement and the suggested review engagement. (4 marks)

(ii) Explain the level of assurance that is given in a review engagement and a reasonable assurance engagement. (4 marks)

(b) Your firm is auditor of a Machipisa Stores Ltd, a Company with three outlets in Lusaka. The main line of business of Machipisa Stores Ltd is retailing consumable and non-consumable merchandise. The Company owns a large ware house and rents several satellite warehouses in Lusaka. The bulk of the merchandise is consumable and in line with local and international regulations, the manufacturers indicate the expiry dates on the merchandise.

The audit for the financial statements of Machipisa Stores Ltd, for the year ended 30 September 2019 is in progress. Machipisa Stores Ltd conducted physical inventory count on 25 September 2019 at the main warehouse which the audit team attended. No inventory count was conducted at the satellite warehouses and reliance was placed on perpetual inventory count records to determine the inventory values. A review of the final inventory valuation sheets revealed that the entire inventory was valued at cost.

You are Engagement Partner on the audit of Machipisa Stores Ltd. Subsequent to the period end as the audit was progressing, you came across advertisements in leading newspapers that there were showing massive discounts on a wide range of merchandise. When you told your wife about the discounts, she decided to buy her requirements in order to benefit from the discounts. She confirmed that the discounts were largely on the edible lines of merchandise most of which were nearing expiry.

Two (2) weeks before signing the audit report a fire at one of the warehouses of Machipisa Stores Ltd destroyed inventory worth K25 million. Management of Machipisa Ltd revised the inventory value at the period end to the extent of the inventory destroyed. The amount involved is material to the financial statements.

Required:

(i) Identify and explain four (4) audit risks in the audit of the financial statements of Machipisa Ltd for the year ended 30 September 2019. (8 marks)

(ii) Describe the work that will be done on inventory valuation considering the fire that destroyed inventory worth K25 million, including any possible impact on the auditor's report. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

You are an Audit Manager in Viyela Associates, an audit firm registered with ZiCA. The audit of the financial statements for Chiwala Ltd for the year ended 31 December 2019 is nearing completion. The Company is one of Zambia's leading providers of air conditioners with installation, service and maintenance. The Company also provides other engineering services but Management is focusing on air conditioners even if the economy is currently in a recession.

Much of the success of the Company is attributed to the employee commitment and sustainable high quality customer service. The Board of Directors consistently recognises good performance and awards bonuses to deserving employees. The Director of Engineering recently resigned and joined the Company's main competitor. He is yet to be replaced.

The Company is experiencing erratic supply of critical spare parts for air conditioners since foreigner suppliers are demanding advance payments. The inventory holding period has significantly reduced from 45 days to 15 days. The Company is now contemplating introducing Just in Time (JIT) system on selected spares as a cost saving measure. In addition, advances in technology have meant that some of the spare parts are no longer produced by foreign suppliers.

The Engagement Partner instructed you to quickly carry out the final review on the appropriateness of the use of the going concern basis of accounting in the preparation of the financial statements for the year ended 31 December 2019. The company banks with Lupiya Commercial Bank (LCB) for the past ten (10) years and it enjoys various borrowing facilities, including overdrafts. The recent correspondence with Lupiya Commercial Bank indicates that the Directors of Chiwala Ltd have started negotiations with their banker for the renewal of the borrowing facilities. To support this request the bank asked Chiwala Ltd to provide a clean audit report on the financial statements for the year ended 31 December 2019 and a business plan for the next 18 months consisting of a cash flow forecast supported by a forecast statement of profit or loss and other comprehensive income and statement of financial position.

The probability of the facilities being renewed is high, although this also depends on the Banker's ability to mobilize enough financial resources for onward lending. If the facilities are not renewed, Chiwala Ltd will be unable to continue operating and is likely to be liquidated.

You have obtained the business plan for the next 18 months and you have obtained representations from Management regarding the business plan and the feasibility of the business plan. However, no additional procedures have been carried on.

The Managing Director has sent the following e-mail to the Engagement Partner:

To: Engagement Partner – Viyela Associates

From: Managing Director – Chiwala Ltd

Subject: Audit report and endorsement of the business plan

Hello

Kindly urgently issue a clean audit report and endorse the business plan. I have been informed by the Finance Director that these are required by our Bankers.

Best regards.

Required:

(a) Identify and explain four (4) operating indicators which may cast doubt over going concern in Chiwala Ltd. (6 marks)

(b) Discuss what factors could possibly make the representations from Management of Chiwala Ltd regarding the business plan and the feasibility of the business plan unreliable, clearly stating what action Viyela Associates will take. (4 marks)

(c) Recommend five (5) audit procedures which should be carried out on the business plan. (5 marks)

(d) Evaluate the contents of the e-mail from the Managing Director. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Njamba Ltd was incorporated in 2008 by Christine Mwanja who owns 80% of the ordinary shares and is the Managing Director. The principal business of the Company involves selling computer equipment and consumables and no credit sales are allowed. The Company has a reputation for quality and excellent customer service. It has managed to record increased profitability and liquidity over the years. However, profitability and liquidity is now threatened as a result of the COVID-19 pandemic which may make the Company fail to meet the financial targets agreed with its Lenders.

The Company employs fifteen (15) permanent employees and sixty-two (62) casual workers. The Cashier is a casual worker and she is a holder of the ZiCA Diploma in Accountancy. She has a positive attitude towards her work even though her salary is too low to enable her meet even the basic requirements, such food, rent, transport etc.

The permanent employees have short term loans with micro-financing institutions who charge exorbitant interests per day on overdue amounts. The Company does not provide loans and advances to employees. Reference letters are written to micro-financing institutions to support the permanent employees' applications but no guarantees are provided.

You recently joined Bibi Chartered Accountants as an Audit Manager. Your job mainly involves administration matters but at times you are assigned to audit engagements. Bibi Chartered Accountants was formed last year and is in the process of organizing relevant insurance covers. The Managing Partner has requested you to provide appropriate advice on insurance covers.

Bibi Chartered Accountants performed the audit of Njamba Ltd last year but Christine Mwanja is unhappy that the auditors were unable to discover teeming and lading fraud by the Cashier. This was only discovered recently when the Cashier failed to report for work due to a family bereavement. The disciplinary process for the Cashier has just commenced. Christine Mwanja is contemplating suing Bibi Chartered Accountants for professional negligence in the performance of the previous year audit.

The Auditors noticed increased outstanding lodgments when reviewing bank reconciliation statements for the previous year but these were simply ignored. Christine Mwanja is currently consulting the company lawyers and is considering claiming any financial loss from Bibi Chartered Accountants or sue Bibi Chartered Accountants if the issue is not resolved amicably.

During the initial planning meeting for this year's audit, it came to the attention of the Engagement Partner that Christine Mwanja instructed the Chief Accountant that all figures involving Management judgement should be authorized by her before inclusion in the financial statements. The Engagement Partner is concerned about the resulting risk of fraudulent financial reporting.

Required:

(a) Advise Christine Mwanja on her intended litigation against Bibi Chartered Accountants.

(5 marks)

(b) Advise the Managing Partner on the current legal and professional guidance regarding insurance covers for auditors. (3 marks)

(c) Identify and explain six (6) fraud risk factors in Njamba Ltd. (9 marks)

(d) Recommend three (3) audit procedures which the audit team should perform, if the conclusion is that there is a high risk of fraudulent financial reporting in Njamba Ltd.

(3 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.2 ADVANCED AUDIT AND ASSURANCE

SUGGESTED SOLUTIONS

<u>SOLUTION ONE</u>

(a) Significant component

ISA 600 *Special considerations – audits of group financial statements (including the work of component auditors)* defines a significant component as a component identified by the group engagement team:

- That is of individual significance to the group, or
- That due to its specific nature or circumstances,

is likely to include significant risks of material misstatement of the group financial statements.

(b) (i) Finalizing consolidated financial statements

It is not possible to consolidate financial statements prepared using different standards. Even if it were possible, auditors will find it very difficult to state whether the financial statements given a true and fair given the subsidiary in South Sudan is a significant component.

Since the subsidiary in South Sudan is a significant component, the directors of Kaleni Mining Corporation must restate the financial statements under international financial reporting standards (IFRS) and then proceed with the consolidation process.

(ii) Charles & Pinkie Chartered Accountants will be required to audit the restatement process to ensure that it is accurate.

(c) ISA 240 *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*

ISA 240 states that the auditor should presume that there is a risk of fraud in relation to revenue recognition, and should obtain an understanding of the controls related to these risks. This presumption is 'rebuttable' if the auditor concludes that there is no risk of material misstatement due to fraud but, unless this is the case, the auditor must presume that there is a possibility of revenue recognition fraud, and that the entity should have put in place controls to mitigate this risk.

(d) Audit procedures on unrealized profits:

- Confirm the group's procedures for identification of such inventory and their notification to the Kaleni Mining Corporation who will be responsible for making the required provision
- Obtain and review schedule of intra-group inventory from group companies and confirm that the same categories of inventory have been included as in the previous years
- Select a sample of invoices for goods purchased from group companies and check to see that, where necessary, these have been included in year-end intra-group inventory. Obtain confirmation from component auditors that they have satisfactorily completed a similar exercise

- Check the calculation of the provision for unrealized profit and confirm that this has been arrived at on a consistent basis with that used in earlier years, after making due allowance for any known changes in the profit margins operated by various group companies
- Check the schedules of intra-group inventory against the various inventory sheets and consider whether the level of intra-group inventory appears to be reasonable in comparison with previous years, ensuring that satisfactory explanations are obtained for any material differences

(e) (i) Reasons for conducting social and environmental audits in a company

- The directors may want a social and environment audit to confirm that their social and environmental report show true and fair view
- Shareholders may demand a social and environmental audit
- As social and environmental issues are a source of risk due to unforeseen liabilities or reputation damage, a social and environmental audit may be organised as part of the risk audit
- Potential investors may be influenced by social and environmental factors when making investment decisions
- Potential stakeholders (customers, employees) may decide whether to engage with organisation on the basis of its environmental records
- So that less time and cost are spent when dealing with regulatory and enforcement agencies

(ii) Matters to consider when reviewing the environmental matters

- Initial cost of K700 million incurred on the mine – Matters to consider include:
    - Whether this has been capitalized in accordance with IAS 16
    - Materiality of the figure in relation to the consolidated financial statements
    - Possible impact on the audit opinion depending on the materiality and pervasiveness of the matter, if the accounting treatment is wrong.
- Rectification of damage – Matters to consider include:
    - The guidance given by IAS 37 *Provisions, contingent liabilities and contingent assets* in view of the fact that currently there is no legal obligation to rectify the damage
    - However, through its published policies, Kaleni Mining Corporation has created expectations on the part of those affected that it will take action to do so
    - There is therefore a constructive obligation to rectify the damage and a transfer of economic benefits is probable
    - According to IAS 37, the company must recognise a provision for the best estimate of the cost, if it has not done so
    - Since the expenditure will take place sometime in the future, the provision should be discounted at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability
    - The financial statements should disclose the carrying amount of the provision at the reporting date, a description of the nature of the obligation and the expected timing of the expenditure. The financial statements should also

give an indication of the uncertainties about the amount and timing of the expenditure.

- Possible impact on the audit opinion depending on the materiality and pervasiveness of the matter, if the accounting treatment is incorrect.

(f) Use of internal auditors

The independence of Group Internal Auditors is questionable. These are employees and they may act to protect their employer and employment interests. Hence, they could be faced with a serious conflict of interest.

In addition, they may not have the required competence in social and environmental matters as they are unlikely to be specialists in social and environmental matters.
It is therefore not advisable to use them in the review of the social and environmental report.

SOLUTION TWO

(a) (i) Distinction between risk assessment in an audit and a risk assessment engagement:

The risk assessment that is conducted in an audit of financial statements is carried out at the planning of the audit in accordance with ISA 315(Revised) *Assessing the Risk of Material Misstatement Through Understanding the Entity and its Environment.*

The objective of the risk assessment done in an audit is to enable the auditors identify risk which could result in the financial statements being misstated and to enable to auditor respond by designing suitable procedures to be carried out. The risk assessment is part of the assurance engagement entered into with the client company.

In the case of the work that is required by Mbanji Ltd this is a separate engagement that will need to be entered into and it is not part of an audit. The objective of the auditor is to assess the risk assessment processes by the company and to report on the findings.

(ii) Stakeholders interested in good risk management by the company:

- The owners of the company especially those not involved in running the business may wish to know that their investment will not be lost due to management not managing risks.
- Lenders of money such as banks may be interested in how the management manages risks because they would not want to lose in the event that the business fails.
- Stakeholders such as suppliers and employees are interested in the manner the company manages risk because ultimately the business may fail and this will impact adversely on them.

(b) Ethical issues in the audit clients:

Kudu Ltd:

The duty of the auditor is to obtain sufficient appropriate audit evidence on all material amounts which will form the basis for the audit opinion. In the audit of Kudu Ltd the auditor has not obtained all the evidence required on payroll. This can be taken as limitation of scope and the auditor will not have obtained all evidence required.

Audit response:

The auditor may wish to inform those charged with governance about the limitation in scope in trying to perform audit procedures on senior staff payroll. The auditor should make it clear that they are entitled as a matter of right to whatever information they require to perform audit procedures.

If those charged with governance fail to resolve this matter, the auditors will determine the impact this lack of evidence will have on the audit report and may consider modifying the audit opinion.

Mazembe Road Construction Co.:
The Financial Director is key in the preparation of the financial statements of Mazembe Road Construction Co. The request that the firm seconds Sitali to assist in the preparation and finalization of the financial statements will result in a self-review threat on Sitali in view of the fact there no one else in the firm can perform the work of Audit manager.

Audit response
Sitali should not be assigned to assist the company in finalizing the preparation of the financial statements. Someone else who will not be part of the audit team should take that role.

Supa Chain Stores Plc.
Ten years as engagement partner of Supa Chain Stores Plc. gives rise to a familiarity threat on the partner. Guidance states that engagement partners should not remain on one audit for a period of more than 7 years after which they should be rotated. This is compounded by the fact that the management of Supa Chain Stores Plc. has remained the same over this period.

Audit response
There should be a change in the engagement partner so that a different person should take the role of engagement partner. Alternatively, the audit committee of Supa Chain Stores Plc. should be informed of the situation and there should be quality reviews of the work done by another partner who was not involved on this audit.

Muzovu Ltd:
The audit senior on this audit suspects money laundering on the part of Muzovu Ltd. If indeed the company is involved in money laundering this is a criminal act.
The ethical issue in this case is about the fundamental principle of confidentiality. Generally, the auditor should not bring to the attention of third parties matters that come to their attention by virtue of the client auditor relationship.
In this case the auditors could use one of the exceptions to this principle to deal with this situation.

Audit response
The auditors should investigate this matter further and establish the truth. If it is proved that Muzovu Ltd is involved in money laundering, the auditors should consider reporting to the responsible authority in this case the Drug Enforcement Commission. If in doubt the auditors may seek legal advice on how to deal with this.

SOLUTION THREE

(a) (i) Review engagements could be an alternative to assurance engagements such as the audit of financial statements.

The main features that distinguish these two types of engagements are as follows:

An assurance engagement such as an audit of financial statements, the auditor performs detailed substantive procedures in obtaining evidence which is used to arrive at an opinion. There is a substantial amount of testing that is done to the extent that the auditor can conclude positively on the outcome of the procedures performed.
In the case of a review engagement, the auditor does less work and relies largely on inquiry and analytical procedures in performing the work. The risk of misstatement going undetected in a review is higher than that found in an audit of financial statements.

(ii) Levels of assurance in a reasonable assurance and review engagements:

In a reasonable assurance engagement:
This is a higher but not absolute level of assurance. It arises from lower audit risk and a greater amount of audit work that is performed.

The assurance is a positive form with the auditor stating that based on work done and evidence obtained the financial statements do or do not show a true and fair view.

In the case of a review engagement, there is a lower level of assurance. This is because the auditor does not do as much work as he does during an audit. The work performed in a review engagement is largely through inquiry and analytical procedures.

The assurance given is in a negative form whereby the auditor statements that nothing has come to their attention that financial statements have not been prepared in accordance with the relevant framework.

(b)(i) Audit risks in the audit of Machipisa Stores Ltd:

1. **Selling expired merchandise:**
   There is a risk that the company may sell expired merchandise against the legal requirements. This could result in the company being penalized and made to pay the penalties stipulated in legislation. There is a risk that provisions arising from any such penalties at the period end may be misstated.

2. **No inventory count at other warehouses:**
   Machipisa Ltd conducted inventory only at the main warehouse and relied on perpetual inventory records to determine inventory at the satellite warehouses. There is a risk that the inventory at the warehouses could be misstated due to unreliability of the perpetual inventory records or fraud.

3. **Discounts and the valuation of inventory:**
   The huge discounts on lines relate to inventory nearing expiry. The discounted prices are the net realizable value for the inventory and there is a risk that at the period end this inventory is valued at cost which is higher than the net realizable value. There is a risk that any provision or write down of near expiring lines of products may be misstated resulting in an overvaluation of inventory at the period end.

4. **Inventory count conducted earlier than year end:**
   The physical count of inventory was conducted on the 25 September 2019 which is five days before the period end. The inventory value that is in the financial statements is that of the inventory on hand on 30 September 2019.

   This requires that adjustments should be made for the movements representing receipts and sales of inventory during the intervening period. This may not be done correctly resulting in a misstatements of the inventory value at the period end.

(ii) Audit work regarding inventory destroyed by fire:

The fire that destroyed inventory happened after the period end in the subsequent period. The inventory existed at the period end and so this is a non- adjusting event that does not require that the figures at the period end be adjusted.

The matter will be discussed with management and management will be requested to reverse the adjustment that was made and restate the inventory value to the amount at the period end.

Management may wish to make disclosure of the fire and the destruction of the inventory in the notes to the financial statements for the benefit of the users of the financial statements.

Impact on the auditor's report:

If management agrees to reverse the adjustment to the inventory value, there is need to confirm that this has been correctly done. The audit opinion will be unmodified because of the correction.

If, however, management refuses to make the reversal and in view of the fact that the amount involved in material this will result in the modification of the audit opinion and form of modification will depend on the materiality and pervasiveness of the amount involved.

SOLUTION FOUR

(a) Operating indicators

Operating indicators	Explanations
(1) Management focusing on air conditioners	Excessive dependence on only one product, air conditioners is dangerous for a business especially in a recession. The emergence of a powerful competitor could have an immediate negative impact on the going concern status of Chiwala Ltd.
(2) The Director of Engineering recently resigned and joined the company's main competitor and is yet to be replaced	The loss of key staff without replacement could result in loss of key customers to the company's main competitor. It is possible that if there are no legally enforceable restraints, the former Director of Engineering could encourage customers to switch their business to the main competitor.
(3) Erratic supply of critical spare parts for air conditioners since foreigner suppliers are demanding advance payments	Non-availability of critical spare parts will mean that Chiwala Ltd will be unable to satisfy customer orders. Customers will therefore decide to take their business to other reliable suppliers.
(4) Advances in technology has meant that some of the spare parts are no longer produced by foreigner suppliers	If alternative local suppliers for the spare parts cannot be found, then this simply means the air conditioners using such spare parts will be considered obsolete. This will result in Chiwala Ltd losing out, especially on service and maintenance contracts.

(b) Factors that could make representations from management unreliable:
The factors that could possibly make representations from management unreliable include the following:

- Concerns over the competence, integrity, ethical values or diligence of management
- Inconsistency of written representations with other evidence obtained.

Viyela Associates will seek to resolve the latter by performing audit procedures. However, if it remains unresolved, particularly in addition to the first point, Viyela Associates will have to take appropriate actions, which may include modifying the auditor's report in accordance with ISA 705 (Revised) *Modifications to the opinion in the independent auditor's report.*

(c) Audit procedures:

- Analysing and discussing the business plan with management
- Agreeing the figures to supporting documentation (e.g. quotations, price list etc.)
- Analysing and discussing Chiwala Ltd's latest available management accounts

- Comparing the figures in the business plan to the latest available management accounts
- Reading minutes of the meetings of shareholders, those charged with governance and relevant committees for reference to financing difficulties
- Evaluating Chiwala Ltd's plans for dealing with unfilled customer orders
- Performing audit procedures regarding subsequent events to identify those that either mitigate or otherwise affect Chiwala Ltd's ability to continue as a going concern according to the business plan
- Enquiring of Chiwala Ltd's legal counsel regarding litigation and claims which could have been omitted in the business plan.

(d) Evaluation of the contents of the e-mail from the Managing Director:

Auditors expect management in general and the Managing Director in particular to have reasonable understanding of an audit. The Managing Director's use of the following either means that he does not understand an audit or lacks integrity:

- Urgently – Auditors have to make sure that before issuing an audit report, all evidence reasonably expected to be available have been obtained and evaluated. They cannot be requested to cut corners in order to satisfy management's needs
- Issuance of a clean audit report – This is not automatic. It will depend on the audit evidence available and the auditor's professional judgement.
- Endorsement of the business plan – Auditors are responsible for auditing financial statements and the endorsement of the business plan could be a separate assurance engagement.

If there are indications that the Managing Director lacks integrity, then Viyela Associates should discuss this matter with those charged with governance and seriously reconsider its continued relationship with Chiwala Ltd.

SOLUTION FIVE

(a) Advise to Christine Mwanje on intended litigation:

Guidance on who can and cannot sue the auditors for professional negligence is based on precedence and decisions of the courts. In order to succeed in suing the auditors the following matters should be **proved** to the court:

1. That the auditors owed the litigant a duty of care in performing the audit.
2. That the auditor was negligent in the performance of the audit and
3. The litigant suffered loss as a result of the negligence of the auditor.

In the case of an audit client, the courts held that the auditors owe them a duty of care. Shareholders in this case mean all shareholders and not an individual shareholder. It is assumed that the auditor owes the shareholders as a whole a duty of care and they do not need to prove this to a court. The shareholders will be required to prove breach of duty of care and suffering of loss as a result of the breach of duty of care.

An individual shareholder intending to sue the auditors will be treated in a similar manner like a third party and are required to prove all three elements above.

Advise:

Christine could seek the support of the remaining shareholders to sue so that the element of duty of care is waived by the court and only the remaining two elements required to be proved. If on the other hand she does not get the support of the minority shareholders, she will be required to prove all three elements which becomes more difficult to obtain compensation.

(b) The Accountant Act 2008 requires chartered accountants to have the prescribed professional indemnity and fidelity guarantee insurance section 28(e). They must not practice without this insurance.

The Accountants Act 2008 section 389 (5) and 389 (28) (e) gives specific guidance on insurance to be taken out by auditors. The auditor is required to obtain relevant insurance to cover any liability which may be incurred as a result of the negligence or recklessness in the conduct of the practice by the partners of the firm.

ZiCA requires that firms holding practicing certificates and auditing certificates have professional indemnity insurance with reputable insurance company. If the firm has employees, it must also have fidelity guarantee insurance.

The insurance must cover 'all civil liability incurred in connection with the conduct of the firm's business by the partners, directors or employees.'

The cover must continue to exist for six years after a member ceases to engage in public practice.

(c) Fraud risk factors:

Fraud risks	Explanations
(1) Principal business involves providing computer equipment and consumables	Some of the computer equipment and consumables are small in size, of high value, or in high demand. This increases the risk that employees may steal the products.
(2) Christine Mwanja who owns 80% of the ordinary shares and is the Managing Director	The company is basically controlled by one person and this provides an opportunity for her to dominate decision making and possibly engage in fraudulent activities which is likely to include fraudulent financial reporting.
(3) No credit sales are allowed	This could imply that large amounts of cash are held or processed. This provides an opportunity for employees to engage misappropriation of cash e.g. misuse of cash, theft etc.
(4) Profitability and liquidity is now threatened as a result of the COVID-19 pandemic	This could put pressure on senior management to overstate the profitability and liquidity of the company through fraudulent financial reporting so that performance and position of the company remains satisfactory.
(5) Cashier is a casual worker	The position of Cashier is very sensitive and a casual worker may not be very loyal since her employment can be terminated at any time. This therefore provides an incentive for her to engage in fraudulent activities e.g. teeming and lading fraud.
(6) The Cashier is a holder of the ZiCA Diploma in Accountancy but her salary is too low to enable her meet even the basic requirements, such food, rent, transport etc.	The Cashier feels unappreciated and she can use this to justify fraudulent activities e.g. embezzling receipts by diverting these into her bank account or even bank accounts for relatives, close friends etc.
(7) The permanent employees have short term loans with micro-financing institutions who charge exorbitant interests per day on overdue amounts	These personal obligation could put pressure on the permanent employees to commit fraud so that they are able to service the loans and avoid the huge interests. Permanent employees could be stealing physical assets or intellectual property such small inventory items and selling valuable customer data to competitors.

(d) Audit procedures – fraudulent financial reporting

If Bibi Chartered Accountants conclude that there is a high risk of fraudulent financial reporting by management they will concentrate on techniques such as:

- Analytical procedures – this will include computation of appropriate financial ratios (e.g. profit margin) and comparing these with last year's financial ratios
- Scrutiny of unusual transactions and all journal entries – the auditor should review the transactions and journal vouchers especially for the last month of the this year
- Review of events after the reporting period (including going concern evaluation)
- Review of the financial statements and accounting policies for any changes or material distortions

END OF SUGGETSED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.4: ADVANCED TAXATION

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading and planning time. Use it to study the examination paper carefully so that you understand what to do in each question. DO NOT write in your answer booklet during this TIME.

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

   Section A: ONE Compulsory Question.
   Section B: FOUR (4) Optional Questions. Attempt any THREE (3) questions from Section B.

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

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

5. **Cell 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 K	Tax per day K
From 64 passengers and over	10,800	29.60
From 50 to 63 passengers	9,000	24.70
From 36 to 49 passengers	7,200	19.70
From 22 to 35 passengers	5,400	14.80
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.90
Less than 12 passengers and taxis	900	2.40

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%
Rate of Tax on Realised Value on a transfer of Intellectual Property	5%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

	Aged 2 years but below 5 years		Aged 5 years and over	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 years but below 5 years		Aged 5 years and over	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463

SUVs				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463

	Aged 2 years but below 5 years		**Aged 5 years and over**	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, **with spark ignition internal combustion piston engine**	30,697	13,302	24,119	10,452
Panel Vans				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, **with spark ignition internal combustion piston engine**	37,086	28,432	13,907	10,662

Surtax

On all motor vehicles aged more than five (5) years from year of manufacture	K2,000

Customs and Excise on New Motor vehicles

Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:

Customs Duty:	
Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:

Customs Duty	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

3. Buses/coaches for the transport of more than ten persons

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%

4. **Trucks/lorries with gross weight exceeding 20 tonnes**

Customs Duty:	
Percentage of Value for Duty Purposes	15%
Excise Duty:	
Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE - COMPULSORY

Background

Luapula Plc is a Zambian resident company engaged in farming. The company listed its shares on Lusaka Securities' Exchange (LuSE) in 2018 when it issued 3 million shares to indigenous Zambians out of its total issued share capital of 5.5 million shares. The shareholding of the company has not changed since 2018. Luapula Plc owns 80% of Mweru Plc a company incorporated in a country known as Jona. Mweru Plc is a food processing company and it gets most of its production inputs from Zambia.

The following information relates to the year ended 31 December 2021:

Bangwewuru Limited

On 1 June 2021, Luapula Plc acquired 60% of the issued share capital of Bangwewuru Limited a newly incorporated company. Bangwewuru Limited is a Zambian resident company which was incorporated on 1 June 2021 and commenced its operations on 1 August 2021. For the purposes of taxation, Bangwewuru Plc is classified as an agro-processing company. The following information is relevant.

(1) Statement of profit or loss for the first five (5) months of trading up to 31 December 2021

	K
Revenue	1,800,000
Cost of sales	(950,000)
Gross profit	850,000
Operating expenses	(500,000)
Profit before tax	350,000

Included in cost of sales is depreciation charge amounting to K89,700. Operating expenses include share issue costs amounting to K56,000. All other expenses are allowable for taxation purposes.

(2) The assets owned by the company are as follows:

Property

This property was acquired on 1 July 2021 as a second hand building at a cost of K2,000,000. This property is made up of; Land K200,000, Administrative offices K250,000, Staff canteen K300,000 and Factory K1,250,000.

Implements, plant & Machinery

Date of Purchase	Asset	Cost
20 June 2021	Manufacturing Equipment	K210,000
22 July 2021	Mitsubishi Light trucks	K200,000
20 August 2021	Pool cars	K300,000

Transactions between Luapula Plc and Mweru Plc

Luapula Plc's profit for the year ended 31 December 2021 was K2,340,000. This profit was arrived at after all the necessary tax adjustments but before taking into account the following:

(1) On 1 January 2021 Luapula Plc borrowed K12,000,000 from its subsidiary Mweru Plc. Luapula Plc was charged interest at 31% per annum. If this loan was obtained from Zambian Commercial banks, Luapula Plc could have paid interest at a rate of 24% per annum. Luapula Plc paid the interest to Mweru Plc and charged it in the statement of profit or loss for the year ended 31 December 2021.

(2) During the year ended 31 December 2021 Luapula Plc sold goods (agricultural produce) to Mweru Plc for K6,400,000. These goods had an open market value of K7,800,000 if they were to be sold in Zambia. Luapula Plc included K6,400,000 in its revenue.

(3) Mweru Plc paid total dividends amounting to K650,000 to its shareholders. These dividends were net of withholding tax deducted in Jona at a rate of 35%. Luapula Plc has not included its share of dividends received from Mweru Plc in its profit for the year.

Chief Finance Officer

Grace Mwanza, a Zambian resident, is the Chief Finance Officer of Luapula Plc. She earns a salary of K540,000 per annum. She is also entitled to housing allowance of 21% of the basic salary and transport allowance of 10% of the basic salary.

She uses her personal motor car in the performance of her duties of employment. She acquired the car in the year 2020 at a cost of K400,000. During the tax year 2021 she drove a total of 10,000 kilometers out of which 6,000 Kilometers were for business purposes. In addition to the transport allowance, Luapula Plc has agreed to pay Grace fuel allowance of K17.62 per Kilometer. She incurred motor car running expenses amounting to K78,000 during the tax year 2021.

Grace contributes NAPSA at a rate of 5% of her basic salary. During the year 2021 she paid tuition fees for her children amounting to K28,000 and professional subscription amounting to K5,400. Pay as you earn deducted from her emoluments during the tax year 2021 amounted to K121,340.

Grace has a shareholding of 5% in Mweru Plc. During the tax year 2021 she received dividends from Mweru Plc amounting to K32,500. This figure is net of withholding tax deducted in Jona at a rate of 35%.

The only other Zambian income received by Grace during the tax year 2021 include Bank deposit interest of K10,000 (gross) and dividends from GTC Limited, a company not related to Luapula Plc, amounting to K27,200 (net).

Double taxation Convention

There is no double taxation convention between Zambia and Jona. A double taxation relief is given to Zambian residents unilaterally by way of credit against the Zambian income tax paid on foreign income.

Required:

(a) Explain the taxation implications for Luapula Plc of:

(i) Borrowing K12,000,000 from Mweru Limited at an interest rate of 31% per annum. (3 marks)

(ii) Sales of goods to Mweru Limited for K6,400,000. (2 marks)

(b) Explain the tax issues arising from the acquisition of Bangwewuru Limited. Your answer should include a computation of income tax payable by Bangwewuru Limited for the tax year 2021.

(14 marks)

(c) Calculate the amount of income tax payable by Luapula Plc for the tax year 2021.

(8 marks)

(d) Calculate the amount of income tax payable by Grace Mwanza for the tax year 2021.

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions in this section.

QUESTION TWO

Lundazi Mining Corporation (LMC) Plc is a Zambian resident company engaged in mining on the Eastern province of Zambia. The statement of profit or loss for the year ended 31 December 2021 was as follows:

	Notes	K
Revenue	1	81,340,100
Cost of sales	2	(48,804,060)
Gross profit		32,536,040
Operating expenses	3	(8,230,400)
Profit before interest & tax		24,305,640
Interest expenses	4	(8,000,480)
Other income	5	1,000,000
Profit before tax		17,305,160
Income tax expenses	6	(5,191,548)
Profit for the year		12,113,612

The following additional information is relevant:

(1) Lundazi Mining Corporation (LMC) extracts copper and precious metals. 80% of the revenue represents revenue from sale of copper while the balance represents revenue from sale of precious metals. The average prices during the year ended 31 December 2021 amounted to US$9,500 and US$15,100 per tonne of copper and precious metals respectively. The amount of revenue shown in the statement of profit or loss is the norm value for the purposes of mineral royalty tax.

(2) Included within cost of sales is mineral royalty tax paid by the company during the year which was computed correctly and paid on the relevant due dates. Also included in the cost of sales is depreciation K1,700,800 and amortization of intangible assets K640,500. The balance of the cost of sales represents the revenue expenses incurred in extracting the minerals.

(3) Included in operating expenses is Directors emoluments amounting to K2,000,000, donation to political parties K300,000, donation to approved public benefit organisations K270,000, entertaining major customers K600,000 and penalty for late payment of income tax K170,000. The balance are all revenue expenses incurred wholly and exclusively for mining and administration purposes. The Directors are accommodated in company owned houses for which they pay no rent.

(4) Interest expenses were incurred on loans in issue from financial institutions not related to Lundazi Mining Corporation (LMC).

(5) Other income include bank interest K150,000, dividends K400,000, rental income K280,000, royalties K110,000 and profit on disposal of mining plant K60,000. The amounts of investment income are gross amounts. The mining plant was acquired in 2015 at a cost of K2,000,000. It was sold for K200,000.

(6) The income tax expense shown in the statement of profit or loss represents the provisional income tax paid during the tax year 2021.

(7) At 1 January 2021 the company had no implements, plant and machinery on which capital allowances could be claimed. During the year ended 31 December 2021, the company incurred the following capital expenditure:

Expenditure on construction of Clinic in the mining township	K1,200,000
Expenditure on construction of school in the mining township	K2,500,000
Mining equipment	K3,000,000
Heavy duty trucks	K2,800,000
Toyota Land cruiser car (3,000 cc)	K600,000
Toyota Prado car (2,700 cc)	K400,000

The Toyota Land cruiser and Toyota Prado car are used by the Chief Executive Officer and Operations Director on personal to holder basis. It has been agreed with the commissioner general that the private use in each car is 40%.

Required:

(a) Compute the tax adjusted mining profit for the year ended 31 December 2021. You should include an explanation of your treatment of interest expense.

(15 marks)

(b) Compute the income tax payable for the tax year 2021. (5 marks)

[Total: 20 Marks]

QUESTION THREE

You should assume that today's date is 1 October 2022

GDE Limited is a Zambian resident company in the manufacturing industry. The company commenced business on 1 January 2021, manufacturing electric cables.

The company Chief Executive Officer Simon Thomas would like to know if there are any tax incentives for companies Like GDE Limited. Simon has also heard that the ZRA randomly performs tax audits of the affairs of different tax payers and a wide range of tax defaults are discovered during such audits which results in penalties and interest being imposed.

The company estimated its taxable profits for the year 2021 to be K1,850,000. At the end of the year 2021, the company's actual taxable profits were K2,360,000. The company submitted its provisional income tax return for the tax year 2021 on 30 June 2021. The quarterly payments of income tax were made on the following dates:

There first instalment of provisional income tax was paid on 10 June 2021, the second instalment relating to the second quarter was paid on 10 August 2021, the third instalment relating to the third quarter was paid on 10 November 2021 and the fourth instalment relating to the fourth quarter was paid on 10 March 2022.

The Bank of Zambia Discount rate is should be taken to be 11.5%.

Required:

(a) Advice the Directors of any four (4) incentives available to companies such as GDE Ltd engaged in manufacturing. (4 marks)

(b) Advise Thomas of the main types of tax defaults which may be uncovered during a tax audit. (6 marks)

(c) Advise GDE Limited of:

(i) The provisional income tax payable for the tax year 2021. (2 marks)

(ii) The amounts of penalties and interest chargeable on overdue taxes for the tax year 2021. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

You are employed at a firm of Chartered Accountants. You are provided with the information relating to the following clients:

Marvelous Hasonde

Hasonde, a sole trader, has been running a retail business for many years preparing his financial statements annually to 31 December. He attended a workshop where personal financial protection products were discussed. However, he did not fully understand the tax implications of each of the financial protection products. He has, therefore, come to you for advice.

Mundia Sibeso

Mundia is employed by GXT Limited as a Marketing Manager. She has decided to go for early retirement in 2022 as she intends to commence a farming business. She is considering investing part of her retirement benefits into profitable investments. She has heard that collective investments are profitable but she does not understand what they are. She has asked you for advice on what collective investments are and whether it is more beneficial to invest in collective investments compared to investment in equity shares of Zambian companies.

FGT limited

FGT Limited is a Zambian resident company engaged in manufacturing and it is registered for Value Added Tax. The company is considering acquiring a Toyota Hilux (Double cab) car on 1 January 2021. The vehicle will be used by the Finance Director on personal to holder basis. The Toyota Hilux will cost K709,920 (VAT inclusive) and will have a cylinder capacity of 2,900 cc. It is estimated that the private use in the car will be 40%. The company has no cash to acquire the motor vehicle outright. The following options are being considered:

(1) The company will borrow K709,920 from the bank at an interest rate of 22% per annum. The borrowed money will then be used to purchase the Toyota Hilux. The loan will be expected to be repaid in five (5) years' time.

(2) The company will enter into the contract with Toyota Zambia to buy the vehicle under a hire purchase agreement. Under the terms of the contract, the company will be expected to make a deposit of K129,920 on 1 January 2021 followed by twelve (12) monthly instalments amounting to K65,000 commencing 31 January 2021.

Required:

(a) Advise Hasonde on the nature and income tax implications of each of the following personal financial protection products:

(i) Whole of life assurance

(ii) Term life assurance

(iii) Critical illness insurance (6 marks)

(b) Advise Mundia of:

(i) The nature and income tax implications of the collective investments. (3 marks)

(ii) The tax implications of investing in equity shares of companies listed on the Lusaka Securities Exchange (LuSE). (2 marks)

(iii) The tax implications of investing in equity shares of companies not listed on the Lusaka Securities Exchange (LuSE). (2 marks)

(c) Advise the Directors of FGT Limited of the income tax and VAT implications of acquiring the Toyota Hilux car under each the options being considered. Your answer should be supported by calculations where appropriate. (7 marks)

[Total: 20 Marks]

<u>QUESTION FIVE</u>

For the purpose of this question the earnings threshold for the purposes of NAPSA contributions should be taken to be K278,256 per annum.

Lubinda graduated from the Institute of Chartered Accountants (ICA) on 10 September 2020. Three months later on 10 December 2020 she applied for two different finance positions which were advertised in the print media. Lubinda received offers of employment as an Accountant from both firms. Her contract of employment is expected to commence on 1 January 2021 under each offer.

LW LTD OFFER

Lubinda's basic salary will be K20,000 per month. She will be entitled to 30 days annual leave (including 30 days travel leave benefit equivalent to her monthly basic salary). She will be paid education allowance of 20% of her basic salary. The company will be paying rentals of K2,500 per month on behalf of Lubinda in respect of the house she is currently renting. In addition the company will be paying her DSTV subscriptions of K1,500 per month and Institute of Chartered Accountants subscriptions of K3,000 per annum.

Lubinda owns a vehicle which she will use partly for business purposes. This vehicle is a Toyota corolla which she acquired in 2019 at a cost of K130,000 and has a cylinder capacity of 1500cc. The business use of Lubinda's vehicle is expected to be 60%. Motor car running expenses will amount to K6,200 per month which will be paid for by the company in respect of Lubinda's vehicle. Lubinda will be required to travel to one of the firm's offices outside town once a month. Lubinda will be required to stay for two nights in that town. The company will pay the lodge K3,260 per night for accommodation and K600 per night for food and beverages. NAPSA contributions will be paid at 5% of her emoluments by the company. Lubinda will also pay 5% of her emoluments as employee's NAPSA contributions.

CX LTD OFFER

Lubinda's basic salary will be K25,000 per month. She will be paid a medical allowance of 5% of her basic salary and the company will take on the responsibility of paying school fees for Lubinda's son. The school fees are K9,000 per annum. Lubinda will be accommodated in a company owned house free of charge. The house would normally be rented at K5,000 per month based on market values. The company will pay a security firm K1,200 per month to provide security services for Lubinda's private residence. Lubinda will again be required to use her own vehicle. This vehicle is a Toyota corolla which she acquired in 2019 at a cost of K130,000 and has a cylinder capacity of 1500cc. The business use of Lubinda's vehicle is expected to be 70%. Motor car running expenses will amount to K6,000 per month which will be paid for by the company in respect of Lubinda's vehicle. Lubinda will be entitled to free meals from the canteen. The cost of meals to the firm is K1,600 per month per employee. NAPSA contributions will be paid at 5% of her emoluments by the company. Lubinda will also pay 5% of her emoluments as employee's NAPSA contributions.

Required:

(a) Compute the amount of income tax payable by Lubinda in the tax year 2021 if she accepts the offer of employment from:

(i) LW Limited (7 marks)

(ii) CX Limited (7 marks)

(b) Advise Lubinda as to which offer is more beneficial from a taxation point of view. Your advice should be supported by a computation of the amount of net income arising under each offer.

(6 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4 ADVANCED TAXATION

SUGGESTED SOLUTIONS

<u>SOLUTION ONE</u>

(a) Taxation implications

(i) When a Zambian resident company borrows from a foreign related company, the interest charged on the loan should be the commercial rate of interest.

Therefore in the case of the loan from Mweru Limited, the interest rate charged will be deemed to be 24% for tax purposes. The excess interest paid by Luapula Plc will be disallowed when computing the taxable business profit.

The interest to be disallowed will be as follows:

	K
Interest paid (K12,000,000 x 31%)	3,720,000
Interest at commercial rate (K12,000,000 x 24%)	(2,880,000)
Interest to be disallowed	840,000

(ii) When goods are sold by a Zambian resident company to a related foreign company at a price lower than the arm's length price, the difference between the open market value of the goods and the actual transfer price is added to the taxable business profit.

(1 mark)

Therefore, Luapula Plc will be required to add to the accounting profit the difference between K7,800,000 and K6,400,000. i.e K7,800,000 – K6,400,000 = K1,400,000.

(b) When a new company is acquired and joins the group, that company is assessed separately for company income tax. Bangwewuru Limited will, therefore, be required to complete its income tax returns for the tax year 2021.

Bangwewuru Limited will be assessed to income tax using the commencement rules. In determining the basis period, the normal rules will be used since the first period after acquisition is less than twelve (12) months.

The first accounts were prepared for a period of five (5) months to 31 December 2021. Therefore, the current year basis of assessment will be used which is the tax year 2021.

No VAT will arise on the acquisition of Bangwewuru Limited. Bangwewuru Limited will be required to register for VAT individually and will be severally liable to account for VAT.

(1 mark per valid point up to 4 marks)

The income tax payable by Bangwewuru Limited for the tax year 2021 will be as follows:

	K	K
Profit before tax		350,000
Add:		
Depreciation	89,700	
Share issue costs	56,000	
		145,700
		495,700
Less:		
Capital allowances		
Administrative offices		
(K250,000 x 2%)	5,000	
Staff canteen		
(K300,000 x 5%)	15,000	
Factory		
(K1,250,000 x 5%0	62,500	
Manufacturing equipment		
(K210,000 x 100%)	210,000	
Mitsubishi light truck		
(K200,000 x 25%)	50,000	
Pool cars		
(K300,000 x 20%)	60,000	
		(402,500)
Taxable business profit		93,200
Income tax @10%		9,320

Workings

Buildings

Qualifying expenditure: K2,000,000 – K200,000 = K1,800,000

K1,800,000 x 10% = K180,000.

The Administrative offices will not qualify as an industrial building because its cost is more than 10% of the qualifying expenditure.

(c) Income tax payable by Luapula Plc for the tax year 2021

	K	K
Profit before tax		2,340,000
Add:		
Intra-group sale of goods	1,400,000	
Intra-group loan	840,000	
		2,240,000
Adjusted farming profit		4,580,000
Foreign income		
(K650,000 x 100/65 x 80%)		800,000
Taxable business profit		5,380,000

Income tax:

Non-farming income (800,000 x (35% - 5%))		240,000
Farming income (K4,580,000 x (10% - 5%))		229,000
Income tax liability		469,000
Less:		
Double taxation relief (w)		(240,000)
Income tax payable		229,000

Workings

Double taxation relief on foreign dividends

Foreign tax paid: K800,000 x 35% K280,000

Zambian income tax: K800,000 x 30% K240,000

The double taxation relief is K240,000 which is the lower of the foreign tax paid.

Luapula Plc has issued more than 30% of its shares to indigenous Zambians, therefore, the income tax rate should be reduced by 5%.

(d) Grace Mwanza

Income tax payable for the tax year 2021

		K
Salary		540,000
Housing allowance (540,000 x 21%)		113,400
Transport allowance (K540,000 x 10%)		54,000
Fuel allowance (K17.62 x 10,000)		176,200
		883,600
Foreign income		
Dividends: (K32,500 x 100/65)		50,000
		933,600
Less:		
Professional subscription	5,400	
Capital allowance:		
(K400,000 x 20% x 6,000/10,000)	48,000	
Motor car running expense		
(K78,000 x 6,000/10,000)	46,800	
		(100,200)
Taxable income		833,400
Computation		
First K82,800		9,960
Balance K750,600 @37.5%		281,475
Income tax liability		291,435
Less:		
PAYE	121,340	
Double taxation (W)	17,115	
		(138,455)
Income tax payable		152,980

Workings

Double taxation

Taxable income	833,400
Dividends (K27,200 x 100/85)	32,000
Total assessable income	865,400

Zambian tax charge

Income tax liability	291,435
WHT on Zambian dividends (K32,000 x 15%)	4,800
Total Zambian tax charge	296,235

Foreign tax paid: K50,000 x 35% = K17,500

Equivalent Zambian tax:

$$\frac{\text{Gross foreign income}}{\text{Total assessable income}} \times \text{Zambian tax charge}$$

$$\frac{K50{,}000}{K865{,}400} \times K296{,}235$$

= K17,115

The double taxation relief is K17,115 because it is the lower of the foreign tax paid.

SOLUTION TWO

(a) Lundazi Mining Corporation (LMC)
Adjusted mining profit for the tax year 2021

	K	K
Marks		
Profit before tax		17,305,160
Add:		
Mineral royalty tax:		
Copper: K81,340,100 x 80% x 10%	6,507,208	
Precious metals: K81,340,100 x 20% x 6%	976,081	
Depreciation	1,700,800	
Amortization	640,500	
Donation to political parties	300,000	
Entertaining customers	600,000	
Penalty for late payment of income tax	170,000	
Free-accommodation benefit (K2,000,000 x 30%)	600,000	
Personal-to-holder car benefit:		
Chief Executive Officer's car	40,000	
½		
Operations Director's car	30,000	
		11,564,589
		28,869,749
Less:		
Bank interest	150,000	
Dividends	400,000	
Rental income	280,000	
Royalties	110,000	
½ Profit on disposal	60,000	
½		
Capital allowances (w)	2,040,000	
		(3,040,000)
Adjusted business profit		25,829,749
Add:		
Disallowed interest (w)		Nil
Taxable business profit		25,829,749

Workings

	K
(1) Capital allowances	
Old mining plant	
Balancing charge (0 – K200,000)	(200,000)
Clinic	
(K1,200,000 x 20%)	240,000

School	
(K2,500,000 x 20%)	500,000
Mining equipment	
(K3,000,000 x 20%)	600,000
Heavy duty trucks	
(K2,800,000 x 25%)	700,000
Toyota Land Cruiser Car	
(K600,000 x 20%)	120,000
Toyota Prado car	
(K400,000 x 20%)	80,000
Total capital allowances	2,040,000

(2) Computation of tax EBITDA

	K
Taxable mining profit before interest adjustment	25,829,749
Add:	
Bank interest	150,000
Royalties	110,000
	26,089,749
Add:	
Interest expense	8,000,480
Depreciation	1,700,800
Amortization	640,500
Tax EBITDA	36,431,529

Tax allowable interest is restricted to 30% of Tax EBITDA which is;
K36,431,529 x 30% = K10,929,459.

The whole amount of interest expense of K8,000,480 is tax allowed because it is less than 30% of the Tax EBITDA of K10,929,459.

(b) Income tax payable for the tax year 2021

	K	K
Taxable business profit		25,829,749
Add:		
Bank interest	150,000	
Royalties	110,000	
		260,000
Total taxable income		26,089,749
Computation		
Mining income: K25,829,749 x 30%		7,748,925
Non-mining income: K260,000 x 35%		91,000
Income tax liability		7,839,925
Less:		
Provisional income tax paid		(5,191,548)

WHT- bank interest (K150,000 x 15%)	(22,500)
WHT – Royalties (K110,000 x 15%)	(16,500)
Income tax payable	2,609,377

SOLUTION THREE

(a) The tax incentives available to investors in the manufacturing Sector include the following:

(1) Exemptions from customs duty on the importation of most capital machinery and equipment used for manufacturing.

(2) Guaranteed input tax claim for two years prior to commencement of production.

(3) Capital allowances on implements, plant and machinery that are used in manufacturing are available at an accelerated rate of 50% on cost.

(4) Capital allowances on industrial buildings are available at a rate of; 10% in case of low cost housing and 5% for other industrial buildings inform of wear & tear.

(5) Persons who incur capital expenditure on an industrial building are entitled to claim a deduction called initial allowance at 10% in the first year it is brought into use.

(6) Any person who incurs capital expenditure on an industrial building is entitled to an investment allowance at 10% of such expenditure in the fist year of use.

(7) Refund of Zambian VAT on exports of Zambian products by non- resident businesses under the commercial exporters scheme.

(8) Income from chemical manufacturing of fertilisers and manufacture of products made out of copper cathodes is taxed at a reduced rate of 10% and 15% respectively.

(9) Reduced import duty on selected raw materials and inputs used in manufacturing.

(b) Types of Defaults

Deliberate behaviour

In general, deliberate behaviour involves a breach of a tax obligation where there is intent on the part of the taxpayer and so does not qualify as careless behaviour.

Examples of deliberate behaviour include failure to maintain books and records, omission of transactions from the books and records, providing false or misleading information.

Careless behaviour with significant consequences

Careless may be defined as a failure to take reasonable care. Significant consequences applies where the tax underpaid is significant with reference to the correct tax payable for the relevant period.

Examples of careless behaviour include failure to take advice, neglecting to categorise expenditure into allowable and disallowable categories for tax purposes, insufficient standard of record keeping in the business and so on.

Careless behaviour without significant consequences

This category relates to defaults of a minor nature that are discovered during a tax audit, for example, computational errors and inadequate adjustments for personal expenditure in the statement of profit or loss and other comprehensive income. This category arises where the tax underpaid is not significant with reference to the amount of tax liability ultimately due

(c) Advice to GDE Limited

(i) Provisional income tax

Provisional income tax is payable based on the estimate of the taxable income for the tax year. Which is K1,850,000 and it is paid in four (4) quarterly instalments of 31 March, 30 June, 30 September, and 31 December. The due dates are shown in the table below. GDE limited will have to pay a total of K647,500 (K1,850,000 x 35%) provisional tax in four quarterly instalments (see table below) .

Quarter ended		31/03/2021	30/06/2021	30/09/2021	31/12/2021	Total
Quarter		QTR 1	QTR2	QTR3	QTR 4	
Estimated Profits	K1,850,000					
Due date		10/4/2021	10/7/2021	10/10/2021	10/1/2022	
Tax due		K161,875	K161,875	K161,875	K161,875	K647,500
Actual profits	K2,360,000					
Balance of profits	K510,000					
Balance of tax	K178,500					

(ii) PENALTIES FOR LATE PAYMENT AND INTEREST ON OVERDUE TAX

The provisional income tax for the quarter ended 31 March 2021 was due on 10 April 2021 but was paid on 10 June 2021 and therefore will attract Late payment penalty of 5% x K161,875= K8,094 x 2 months = K16,188.

In addition Interest on overdue tax of 13.5% x 2/12 X 161,875 = K3,642 will also be payable

The provisional income tax for the quarter ended 30 June 2021 was due on 10 July 2021 but was paid on 10 August 2021 and will therefore attract a Late payment penalty of 5% x K161,875= K8,094 x 1 month = K8,094.

In addition Interest on overdue tax of 13.5% x 1/12 X 161,875 = K1,821 will also be payable.

The provisional income tax for the quarter ended 30 September 2021 was due on 10 October 2021 but was paid on 10 November 2021 and will therefore attract a penalty for late payment of 5% x K161,875= K8,094 x 1 months = K8,094.

In addition interest on overdue tax of 13.5% x 1/12 X 161,875 = K1,821 will also be payable.

The provisional income tax for the quarter ended 31 December 2021 was due on 10 January 2022 but was paid on 10 March 2022 and therefore will attract a late payment penalty of 5% x 161,875= K8,094 x 2 months = K16,188.

In addition, interest on overdue tax of 13.5% x 2/12 X 161,875 = K3,642 will also be payable .

SOLUTION FOUR

(a) Marvelous Hasonde

(i) Whole of life assurance

This policy pays out the sum assured as a lump sum on the death of the life/lives assured to the grantee, who need not necessarily be the life assured or their beneficiaries, whenever death occurs. This policy may be written on single or joint lives and on first death or last survivor basis.

There is no tax relief on the premiums and the policy proceeds are tax free if the policy is qualifying. This policy might be used on a last survivor basis to provide funds to meet the tax liability of the deceased's estate.

(1 mark per valid point up to 2 marks)

(ii) Term life assurance

This policy pays out the lump sum death benefit where the life/lives assured die within the policy term. This 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.

Where the policy is taken by the employer to insure the life of a key employee in respect of loss of profits, the premiums paid will be tax allowable expense but the proceeds would be taxed as trading receipts. If the policy is taken by an individual the premiums are not allowable and the proceeds received are exempt from tax.

(1 mark per valid point up to 2 marks)

(iii) Critical illness insurance

This policy provides a lump sum benefit, payable on the diagnosis of one from a list of life threatening conditions. Critical illness cover is sometimes referred to as dread disease cover. The seven core conditions are; cancer, coronary artery bypass surgery, heart attack, kidney failure, major organ transplant, multiple sclerosis and stroke.

When paid personally premiums receive no tax relief and the benefits received are not taxable. Where the employer insures the cost of their employee's salaries, the premium would be tax allowable but the policy proceeds would be taxable trading receipts.

(1 mark per valid point up to 2 marks)

(b) Mundia Sibeso

(i) The Securities Act (2016) defines a Collective Investment Scheme as a scheme in whatever for, including an open-ended investment company, where members of the public are invited or permitted to invest money or other assets in a portifolio and interms of which:

1. Two or more investors contributes money or other assets to, and hold a participatory interest in, a portifolio of the scheme through shares, units or other form of participatory interest, and
2. The investors share the risk and the benefit of investment in proportion to their participatory interest in the portfolio of the scheme or as determined in the trust deed.

For taxation purposes income of a collective investment scheme is exempt from income tax to the extent to which the income is distributed to participants. 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.

The participating investors are however liable to pay tax on the income received on distribution and is subjected to withholding tax at the applicable rates since the funds contributed are invested into various types of investments such as deposits, equity, bonds etc.

(ii) The following are the tax implications of investing in shares of companies listed on the LuSE:
1. Dividends received are subjected to withholding tax at a rate of 0% which is the final tax.
2. On disposal of the shares, there is no property transfer tax as the shares listed on LuSE are exempted from PTT.

(iii) The following are the tax implications of investing in shares of companies not listed on the LuSE:
1. Dividends received are subjected to withholding tax at a rate of 15% which is the final tax
2. On disposal of the shares, property transfer tax is chargeable at a rate of 5% on the realized value of the shares.

(1 mark per valid point up to 2 marks)

(c) FGT Limited

(1) The following are the tax implications of borrowing K709,920 to purchase the Toyota Hilux:
1. The interest payable on the loan will not be allowable for tax purposes because the loan will be obtained to finance the purchase of the non-current asset.
2. Capital allowance will be claimed on the VAT inclusive cost at a rate of 20% per annum. i.e K709,920 x 20% = K141,984.
3. The input VAT incurred on the purchase of the motor vehicle will be irrecoverable
4. The company will be disallowed a personal-to-holder car benefit amounting to K40,000 per annum as the vehicle will be used on personal-to-holder basis.

(1 mark per valid point up to 4 marks)

(2) The following are the tax implications of acquiring the vehicle under hire purchase:
1. The interest payable on hire purchase arrangement will be tax allowable. I.e (K129,920 + (K65,000 x 12)) – K709,920 = K200,000.
2. Capital allowances will be claimed at a rate of 20% per annum on the VAT inclusive cost. i.e K709,920 x 20% = K141,984

3. The company will be disallowed a personal-to-holder car benefit amounting to K40,000 per annum as the vehicle will be used on personal-to-holder basis.
4. The input VAT incurred on the purchase of the motor vehicle will not be recovered.

SOLUTION FIVE

(a) (i) **LW LIMITED'S OFFER**

LUBINDA

	K	K
Basic salary K20,000 x 12	240,000	
Travel leave benefit	20,000	
Education allowance 20% x K240,000	48,000	
DSTV Subscriptions K1,500 x 12	18,000	
Motor expenses K6,200 x 12	74,400	
Rentals K2,500 x 12	30,000	
		430,400
Less tax allowable expenses		
Motor car expenses		
(60% x K74,400)	44,640	
Capital allowances		
(K130,000 x 20% x 60%)	15,600	
Total allowable expenses		(60,240)
Taxable income		370,160
Income tax		
First K82,800		9,960
Excess K287360@ 37.5%		107,760
Income tax payable		117,720

(ii) CX LIMITED'S OFFER

LUBINDA

	K	K
Basic salary K25,000 x 12		300,000
Medical allowance K300,000 x 5%		15,000
School fees		9,000
Security fees K1,200 x 12		14,400
Motor car expenses K6,000 x 12		72,000
		410,400
Less: Tax allowable expenses		
Motor car expenses K6,000 x 12 x 70%	50,400	
Capital allowances		
(K130,000 x 20% x 70%)	18,200	
		(68,600)
Taxable income		341,800

Income tax

On first K82,800	9,960
On excess K259,000@ 37.5%	97,125
Income tax payable	107,085

(b) LW LTD OFFER

COMPUTATION OF NET INCOME	K	K
Gross emoluments		430,400
Less :income tax payable	117,720	
Employee's NAPSA contributions		
(K278,256 x 5%)	13,913	
Motor car expenses	74,400	
		(206,033)
Net Income		224,367

CX OFFER

COMPUTATION OF NET INCOME	K	K
Gross emoluments		410,400
Less :income tax payable	107,085	
Employees NAPSA contributions		
(K278,256 x 5%)	13,913	
Motor car expenses	72,000	
		(192,998)
Net Income		217,402

Lubinda should accept the first offer as his net income will be higher by (K224,367 – K217,402) = K6,965 per annum.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This Question is compulsory and must be attempted

<u>QUESTION ONE</u> – (COMPULSORY)

Munsanza Power Company (MPC) is a multination company. It manufacturers solar powered products. It has recently expanded into Tezed which is a developing country where incomes have risen to the point where demand is increasing for MPC's goods among the growing middle-class population.

MPC believes in the economies of scale of large manufacturing sites with dispersed selling branches in the markets in which it operates. Therefore, it has entered the Tezed market by setting up a local sales force and supporting them with a national marketing campaign. The company is currently selling only two products in Tezed (both are types of television sets):

- a basic product (called Basic) with functions which are comparable with the existing local competitors' output and
- a premium product (called Unique) which has functions and features similar to MPC's products in other developed countries.

Both products are manufactured and imported from its regional manufacturing hub, which is in the neighbouring country of Buntuland.

The competitive environment in Tezed is changing rapidly. The television sets market used to be dominated by two large local manufacturers who make simple, cheap and reliable television sets. There are two other major international manufacturers apart from MPC. One of these has already opened a factory in Tezed and is producing television sets similar to Basic to compete directly with the existing local producers. The government of Tezed has supported this new entrant with tax holidays, as it is keen to encourage inward investment by foreign companies and the resulting expertise and employment which they provide. The other international competitor is now considering entering the Tezed market with more highly specified television sets similar to MPC's Unique brand.

MPC's stated mission is to be the 'most successful manufacturer of its type of products in the world'. The board has set the following critical success factors (CSFs) for MPC's Tezed operations:

1 Obtain a dominant market presence
2 Maximise profits within acceptable risk
3 Maintain the brand image of MPC for above average quality products.

The board is considering using the following key performance indicators (KPIs) for each product: total profit, average sales price per unit, contribution per unit, market share, margin of safety, return on capital employed (ROCE) and total quality costs.

(**Note:** Margin of safety has been defined as [actual sales units – breakeven sales units]/actual sales units.)

The board has asked you as a consultant to assess its current performance measurement systems. They want you to calculate the various indicators suggested above and then assess how the key performance indicators address issues in the external environment. The board has asked you assess the balance between planning and controlling represented by the KPIs as they want to ensure that these match what they should be doing at the strategic level in MPC. Some the board members have suggested the use of economic value added (EVA) as a key performance indicator in place of return on capital employed (ROCE). You should also evaluate how the KPIs fit with the CSFs which have been selected. The data given in Appendix 1 has been collated for your use.

Required:

(a) Calculate the key performance indicators (KPIs) suggested by the board for the assessment of performance of the Tezed operations. (9 marks)

(b) Identifies issues in the company's external environment using PEST analysis and then evaluates the effectiveness of the suggested KPIs in addressing these issues. (11 marks)

(c) Evaluates how the suggested KPIs fit to the critical success factors given. (10 marks)

(d) Assesses the extent to which the suggested KPIs would be suitable for use in planning rather than controlling. (10 marks)

[Total: 40 Marks]

Appendix 1: Tezed's operational information for the most recent financial year

Type of television set:	**Basic**	**Unique**
Variable costs	**K per unit**	**K per unit**
Materials	135	150
Labour	90	120
Overheads	60	75
Distribution costs	68	68
Quality costs	30	45
Total Fixed costs	**Km**	**Km**
Administration costs	108	108
Distribution costs	96	96
Quality costs	36	36
Marketing costs	480	480
Other data	**Km**	**Km**
Revenue	1,344	974
Capital employed @ start of the year	978	750
Capital employed @ end of the year	953	699
	Units	**Units**
Total market size (millions)	11.27	3.30
Tezed's operational sales (millions)	1.22	0.43

SECTION B

Attempt any THREE (3) questions in this section

QUESTION TWO

The Gwelo Auto Motors Plc (GAM Plc) is a large divisionalised company having interests in motor car spares and sub-assemblies. Two of its divisions are Division A and Division M. Division A makes a sub-assembly, X, which it sells to Division M only. Division M sells spare parts internally and on the open market. It buys X from Division A and uses it to manufacture one of the spare parts which it sells solely on the open market.

The following data relates to Division M for the year 2020:

Selling Price (K)	25	20	17.50	15	12.50	10
Sales units (spare parts)	500	1,000	1,500	2,000	3,000	4,000

Division M manager asked for a quote for the subassembly X from Division A. A price of K8 was then quoted analysed as follows:

Direct material	K1
Direct labour	K2
Production overheads	K3
Production cost per unit	K6
Profit(one third of production cost)	K2
Selling Price quote	K8

It should be noted that production overheads are fixed but the rest of the costs are variable.

Division M manager went ahead to place an order from Division A at this price. This is inspite of the fact that in his view the price was high. But he accepted the price because his own marginal costs were only K2 (i.e. Material of K0.50 and Direct labour of K1.50) on each unit of spare part manufactured and, therefore, could still make a profit on each spare part sold.

The Finance Director of GAM Plc noted that the sales above of Division M were lower than that of 2019. He was quite disappointed considering that the divisions were working below capacity. He sought explanations from the two divisional managers. Division M manager defended himself by saying that it was possible for him to reduce the price thereby increasing the production/sales units which in turn will utilize spare capacity. But he said this price reduction will still depress the profit further. He reiterated that the flat profit level is due to the high transfer price charged by Division A. Division A manager replied that the high price is charged so that he can meet the divisional target profit margin for the year under review, and that any reduction in the transfer price would affect the pricing policy.

Required:

(a) Prepare tabulations for Division A, Division M and for the company as a whole, i.e. the GAM Plc. The tables should indicate the effect of Division M selling the spare part at each of the possible prices in the data above. (8 marks)

(b) (i) State the selling price and number of spares which Division M would choose to maximize its divisional profit. (2 marks)

(ii) State the selling price and number of spares which the GAM plc would choose to maximize group profit. (2 marks)

(iii) Explain why the price in (b) (ii) above would not be accepted by Division M. (1 mark)

(c) (i) Explain what changes to the transfer pricing system that you would advise making so that divisional managers would be motivated to make better decisions in future. (4 marks)

(ii) Determine what transfer price will ensure overall optimality in this situation. (3 marks)

[Total: 20 Marks]

QUESTION THREE

Vic Falls (VF) Ltd, a divisionalised organization, manufactures gifts and souvenirs for tourists visiting the Victoria Falls and other heritage sites in the lower Zambezi. The products are also made available for the commercial promotions market. Many of the items are similar except that they are overprinted with different slogans, logos and colours for different customers and markets. For many years it has been the policy of VF Ltd to produce the basic items in bulk and then overprint them as required. However, this policy has been questioned by the new Managing Director, Clementina Mwale.

She has also questioned the current policy of purchasing raw materials in bulk from suppliers whenever inventories fell to the re-order level. She further said that it is most important in this modern environment to be as efficient as possible, and that bulk purchasing and production strategies are not necessarily the most efficient strategies to be adopted. Consequently she has suggested that VF Ltd should consider moving to a Just-In-Time (JIT) production philosophy.

But some Divisional Managers are concerned about the JIT process after hearing of the problems that arose in Tongabezi Safari Tours Ltd which had introduced the JIT technique several years ago.

Required:

(a) Discuss several actions that VF Ltd can take to ease the transition to a JIT production system. (8 marks)

(b) Explain the relationships that VF Ltd must establish with its suppliers, employees, and customers, in order for the JIT production system to be successful. (6 marks)

(c) Some Divisional Managers are concerned about the JIT process after hearing of the problems at another company in the same industry. Change is inevitable but can be resisted. The way the Performance Management System is implemented is a very important factor.

Explain why the manner in which a Performance Management System is implemented is important. Refer to VF Ltd's Divisional Managers' concerns/fears. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

There is much debate as to whether traditional budgeting models are suitable in modern organizations and as to whether they can operate effectively in a changing environment. Current developments in management accounting techniques include techniques such as Kaizen Costing, Targeting Costing and Activity Based Management. Some of these techniques aim at cost reduction so that an organization can become competitive.

The Managing Director of Mushota Engineering Ltd (ME Ltd), a manufacturing company, wishes to adopt some of the current developments in Management Accounting mentioned above.

He has asked you as their Management Accountant to write a report to him explaining these techniques before the meeting of the board of directors.

Required:

Write a report which discusses and evaluates the following:

(a) Beyond Budgeting (5 marks)

(b) Kaizen Costing (5 marks)

(c) Target Costing (5 marks)

(d) Activity Based Management (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Eco-Bulbs Ltd (EB) designs, manufactures and sells a variety of light bulbs directly to the general public from their production facility. The company was founded ten years ago by two friends. The founders are passionate about environmental sustainability. With increased demand for bulbs, EB has experienced growth every year since its establishment. However, this has also led to increased competition from both national and international rivals in recent times. EB currently employs 35 full-time staff members.

As neither of the founders have financial backgrounds, dealing with this side of the business has always proven to be a challenge for them. However, they have taken the view that as long as total sales revenue is increasing annually, coupled with a low quantity of product returns, then the business must be "doing well". Following long-standing advice from their accountants, EB have recently appointed Sipeso Mudenda their first Financial Controller.

Sipeso previously worked in a wide variety of financial roles, mainly in the hotel industry. Prior to joining EB, he attended a Continuing Professional Development (CPD) seminar on the potential benefits of using non-financial performance metrics and external benchmarking as elements of a comprehensive performance measurement system. Having discussed their vision and ethos for EB, the founders agreed that Sipeso will develop a series of non-financial performance measures in the area of "environmental sustainability", as they believe this represents a unique way for EB to differentiate themselves from their rivals. It was further agreed that Sipeso will benchmark EB"s performance externally against the last hotel that he worked for, which was an award winning 5 star hotel situated in a major African capital city.

Required:

(a) Explain three (3) weaknesses of the current approach to evaluating the annual trading performance of EB. For each weakness, suggest an improvement to the current system. (9 marks)

(b) Suggest three (3) non-financial performance measures in the area of "environmental sustainability" that EB could include in any future performance measurement system. You should **explain** the rationale for **each** of your choices. (6 marks)

(c) Explain two (2) limitations of EB using a single external benchmark reference site, as proposed by Sipeso. (5 marks)

[Total: 20 Marks]

END OF PAPER

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2)e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Key performance Indicators

	Basic	**Unique**
Profit for each product (Km)	156.74	57.06
Average price per unit (K)	1,101.64	2,265.12
Contribution per unit (K)	718.63	1,807.12
Market share	10.8%	13%
Margin of safety	17.9%	7.35%
ROCE	16.03%	7.61%
Total quality costs(Km)	72.6	55.35

Workings:

1. Profit for each product
   Total variable costs = VC per unit X number of units
   Basic = K383 x 1.22m = K467.26m
   Unique = K458 x 0.43m = K196.94m

Contribution = sales – variable costs
   Basic = K1, 344m – 467.26m = K 876.74m
   Unique = K974m – 196.94m = K 777.06m

Total profit = contribution – Fixed costs
   Basic = K 876.74m – K720m = K156.74m
Unique = K 777.06m – K720m = K57.06m

2. Average selling price
   Total sales / number of units
   Basic = K1, 344m / 1.22m = K 1,101.64
   Unique = K974m / 0.43m = K 2,265.12

3. Contribution per unit
   Total contribution / number of units
   Basic = K 876.74m/ 1.22m = K718.63
   Unique =K 777.06m/ 0.43m = K1, 807.12

4. Market share
   (Tezed operation's sales/Total market size) x 100%
   Basic = (1.22/ 11.27) x 100% = 10.8%
   Unique = (0.43 / 3.3) x 100% = 13%

5. Margin of safety
   [Actual sales units – breakeven sales units] / Actual sales units.
   Basic = [1,220,000 - 1,001,906]/1,220,000 = 17.9%
   Unique = [430,000 - 398,406]/430,000 = 7.35%

Breakeven units = Fixed costs/ contribution per unit

Basic = K720m/ 0.00071863 = 1,001,906 units
Unique =K 720m/ 0.00180712 = 398,424 units

6. ROCE
PBIT/Capital employed

Basic = [K156.74m/ K978m] x 100% = 16.03%
Unique = [K57.06m/K750m] x 100% = 7.61%

7. Total quality costs
Basic = [K30 x 1.22m] + K36m = 72.60m
Unique = [K45 x 0.43m] + K36m = 55.35m

(b) Issues in the external environment

The issues in the external environment can be identified using the PEST acronym, which stands for political, economic, socio-cultural and technological.

Political factors:

Government tax holidays
The political environment is characterised by government actions which here included the giving of tax holidays to a competitor to set up manufacturing operations in Tezed. This is not MPC's mode of operation which is to manufacture outside Tezed and only create a selling operation within the country. None of the KPIs directly address this issue which could lead to increased profit available to develop the competitor's products or government action against MPC by, say, increasing import tariffs.
It will be difficult for the KPIs to measure the impact of the government tax holidays directly. However, monitoring average sales price per unit of MPC's machines (compared to the competitors' television sets) could indicate whether the government tax holidays have enabled the competitor to sell its machines more cheaply than MPC can. Equally, if the government imposes any import tariffs on MPC's machines this could adversely affect their average price compared to the price of the competitors' products.
Similarly, the market share KPI could also help MPC assess whether the government's actions areinfluencing MPC's market share (as a result of the competitor's television sets machines becoming relativelycheaper than MPC's products.)

Economic factors:

Market growth – The growth of the middle-class, and rising incomes in Tezed, is leading to an increase in demand for MPC's products.
The KPIs do not directly include any measure of sales growth rates (for example, by measuring annual sales increase compared to the prior year). However, measuring market share does provide an indicator of the rate at which sales of MPC's television sets are increasing relative to its competitors' sales.

Foreign exchange risk – MPC's reported financial performance from its operations in Tezed could alsobe affected by movements in currency exchange rates between Tezed, Buntuland and MPC's own country.
However, the KPIs do not reflect this foreign exchange risk.

Social factors:

Customer tastes – As national income in Tezed continues to increase, it is likely that there will beincreasing demand for premium products (such as Unique) relative to more basic products (such as Basic).
Again, a measure of the sales growth rates for the two products which would be useful for identifyingchanges in demand, but the KPIs do not currently provide this. However, the market share KPI could beuseful for identifying how successful MPC is in selling products – particularly Unique.

Technological factors:

Developments in technology could affect MPC in two ways:

New features – Technological developments could mean that MPC needs to develop new features for its television sets (for example, if competitors introduce new features into their TVs.) However, thiscould be less of an issue in Tezed than developed countries, because Tezed's customers may not yet beas demanding as customers in more developed countries.
Moreover, as MPC manufactures its products at a regional hub, and only sells them locally, it seemsunlikely that the Tezed operation will have any impact on product development for the company as awhole. Therefore, although none of the KPIs address new product development, this seems to be reasonable.
Reduced costs – New technologies could also improve the efficiency of the manufacturing process forMPC's existing products; for example, by increasing the levels of automation in the manufacturingprocess.
As such, this should help to reduce the cost of producing MPC's television sets. While any such costreductions will be reflected in the contribution per unit KPI, the contribution figure is also affected by selling price.
Therefore, a more effective indicator to use in order to measure the impact which technological
developments have had on the manufacturing process would be 'Manufacturing cost per unit'.

(c) **Links between CSFs and KPIs**

Dominant market presence
Market share – The market share KPI provides an indication of MPC's presence in the market, but in order to gauge whether or not it dominates the market, MPC's market share also needs to be measured relative to its competitors. In this respect, a KPI of 'relative market share' (comparing MPC's market share to that of the market leader) could be more suitable.
Growth strategies – One way in which MPC could seek to increase market share is by reducing the price of its products in order to increase demand for them. However, this will also affect KPIs for average price per product.
It is important that MPC doesn't discount the price of its television sets too aggressively, to the extent that they no longer generate a contribution to profit. In this respect, the contribution per unit KPI will be valuable in ensuring that a balance is maintained between profitability and increasing market share.

Maximise profits within acceptable risk
Profit for each product – The amount of profit earned for each product is one of MPC's KPIs, so thisshould encourage a focus on profits. Although the KPI only show profit for a

single period, monitoring thisprofit figure over a number of periods will highlight trends in the level of profit being earned.
Contribution per unit – The contribution per unit KPI can also be used to monitor how effectively MPC is controlling its variable costs relative to the price of its products. A focus on cost control in this way should also help to increase profits.
Return on capital employed (ROCE) – ROCE indicates how efficiently MPC is using its capital in order to generate profits. As such, this KPI should also encourage profit maximisation, although there could beconcerns that using ROCE as a profit measure encourages short-termist behaviour (for example, notinvesting in new capital projects even though such investment would be beneficial in the future).
Risk – The margin of safety provides an indication of the extent to which sales would have to fall beforeMPC reaches a breakeven profit situation. In this way, the margin of safety could provide an indication ofthe level of risk relating to the marketing and pricing strategies of both types of television sets.

Maintaining brand image for above average quality

Quality costs – The 'quality cost' KPI gives an indication of how much MPC has spent on qualitymanagement, but, by itself, it doesn't given any insight into whether the quality of MPC's products is'above average.' For example, are there are customer reviews which could be used to rate the quality ofMPC's products against rival products?
In this respect, the KPIs might be improved by including a more specifically customer-focused indicator (for example, customer satisfaction ratings, or numbers of complaints) which could potentially also bebenchmarked against competitors' products.
Finally, the need to 'maintain brand image' suggests a need for marketing activity. However, there are noKPIs which monitor the level or effectiveness of MPC's marketing activities in Tezed.

(d) **KPIs and planning**

Forward looking – KPIs which are to be used for planning (rather than control) need to be forward-looking.

Control indicators – In general, financial performance measures tend to be backward-looking rather than forward-looking, in the sense that they are used to compare the actual performance achieved against some kind of budget or target. For example, KPIs for 'Contribution per unit' and 'ROCE' are more likely to be useful for controlling performance.
In order to monitor its control indicators effectively, though, MPC should look to measure actualperformance against budget or forecast. Currently, it appears to monitor actual performance only, with noreference to either a budget or to prior years. However, having some kind of benchmark against which tomeasure actual performance will help the Board to identify those areas where corrective action may berequired to improve performance.

Planning indicators – By contrast to financial indicators, non-financial indicators can often be moreappropriate as planning indicators.

Margin of safety – In MPC's case, the margin of safety could be useful as a planning indicator. Themargin of safety addresses the risk of making a loss going forward; although, at the moment, the size of the margin should reassure the Board that they can afford to take a reasonable degree of strategic risks without jeopardising the survival of the Tezed operation. For example, even if sales of both types of television sets fell by 25%, MPC would still make a contribution to profit from its operations in Tezed.

Planning vs control – In general terms, planning activities tend to be high level, strategic activities, whereas control measures tends to be more appropriate at an operational level. In this respect, the mix of MPC's KPIs seems rather unusual – because, although the KPIs are presented to the Board, there appears to be a greater focus on control indicators rather than planning indicators.
However, this issue could be address by modifying the indicators to include market share growth, forexample, rather than simply market share. In this way, the Board could look use growth trends to helpestablish financial projections, rather than solely looking at their market share percentage at a given point in time.

SOLUTION TWO

(a) Division A

Price	Output (units)	Total Revenues(K)	Variable Costs(K)	Total Contribution(K)
K8	500	4,000	1,500	2,500
K8	1,000	8,000	3,000	5,000
K8	1,500	12,000	4,500	7,500
K8	2,000	16,000	6,000	10,000
K8	3,000	24,000	9,000	15,000
K8	4,000	32,000	12,000	20,000

Division M

Price	Output (units)	Total Revenues(K)	Variable Costs(K) Div M	Variable Costs(K) Div A	Total Contribution(K)
K25.00	500	12,500	1,000	4,000	7,500
K20.00	1,000	20,000	2,000	8,000	10,000
K17.50	1,500	26,250	3,000	12,000	11,250
K15.00	2,000	30,000	4,000	16,000	10,000
K12.50	3,000	37,500	6,000	24,000	7,500
K10.00	4,000	40,000	8,000	32,000	0

GAM Plc

Price	Output (units)	Total Revenues(K)	Variable Costs(K) Div M	Variable Costs(K) Div A	Total Contribution(K)
K25.00	500	12,500	1,000	1,500	10,000
K20.00	1,000	20,000	2,000	3,000	15,000
K17.50	1,500	26,250	3,000	4,500	18,750
K15.00	2,000	30,000	4,000	6,000	20,000
K12.50	3,000	37,500	6,000	9,000	22,500
K10.00	4,000	40,000	8,000	12,000	20,000

The above schedules indicate that Division A maximizes its profits at an output level of 4,000 units whereas Division M maximizes its profits at an output level of 1,500 units. Profits are maximized for the company as a whole at an output level of 3,000 units.

(b)(i) Division M should choose a selling price of K17.50. This selling price produces a maximum company contribution of K11,250 as a result of selling 1,500 spares.

(b)(ii) The GAM Plc group should choose a selling price of K12.50 per unit. This selling price produces a maximum contribution of K22,500. At this price, 3,000 units would be sold.

(b)(iii) If Division M selects a selling price of K12.50 per unit instead of K17.50 per unit, its overall marginal revenue would increase by K11,250 only but its marginal cost would increase by K15,000. It follows then that it would not be in the interest of Division M to lower the price from K17.50 to K12.50 when the transfer price of X is K8.

(c)(i) Profit centres are generally operated to provide a profit incentive for each division and to enable divisional managers to exercise a high degree of autonomy. The maintenance of divisional autonomy and the profitability incentive can lead to suboptimal decision making. The costs of suboptimisation may be acceptable to a certain degree in order to preserve the motivational disadvantages which arise with divisional autonomy.

Within the GAM plc Group, Division A has the decision making autonomy with respect to the setting of transfer prices. Division A sets transfer prices on a full cost plus basis in order to earn a target profit. The resulting transfer price causes Division M to restrict output to 1,500 spares. But this output is less than the group optimum output level of 3,000 spares. The cost of this suboptimal decision is K3,750(i.e. K22,500 – K18,750). A solution to this problem is to set the transfer price at the variable cost per unit of the supplying division, Division A. This transfer price would result in Division M selecting the optimum output level , but will destroy the profit incentive of Division A. It is worth noting that the fixed costs will not be covered if transfers are at the variable cost and there is no external market for the intermediate product, X.

Possible solutions to achieve the motivational and optimality objectives include:

- Operating a dual transfer pricing system
- Lump sum payments.

(c)(ii) The general transfer pricing rule is that where there is no market for the intermediate product and the supplying division has no capacity constraints, the correct transfer price is the variable cost of the supplying division for that output at which the variable cost equals the receiving division's net marginal revenue(NMR) for converting the intermediate product. When the unit variable cost is constant and fixed costs remain unchanged, this rule will result in a transfer price which is equal to the supplying division's unit variable cost. Therefore, the transfer price will be set at K3 per spare part when the variable cost transfer pricing rule is applied. Division M will then be faced with the following variable cost and NMR (or Net Variable Cost) schedule:

Output level(units)	**Variable Cost of transfers(K)**	**NMR of Div M**
1,000	1,500	6,500
2,000	1,500	5,250
6,000	3,000	5.500
8,000	3,000	500

Division M will choose an output level of 3,000 units and will not go beyond this because NMR is less than the marginal cost. This is the optimal output for the group, but the profits from the sale of the spare part will accrue entirely to Division M, and Division A will make a loss equal to the fixed costs.

SOLUTION THREE

(a) VF Ltd can take the following actions to ensure a smooth transition to a JIT production system.

(i) communicate to employees, customers, and vendors the corporate objectives and plans for implementing the JIT production system

(ii) elicit employees participation in implementing the JIT system and train employees on the necessary tools(i.e. computers)

(iii) chart the production-process flows through the factory and develop statistical measurement and control procedures. Simplify processing and identify and alleviate cost drivers, non-value added activities, and waste.

(iv) obtain competitive bids and JIT proposals from several suppliers for each material, selecting the few who will reduce lead times, increase the quality of the raw materials, and comply with strict delivery schedules.

(b) (i) Suppliers

Reduce the number of suppliers to those who will be highly dependable are liable, commit the supplier to high quality standards by shifting responsibility for production problems to the suppliers(i.e. defective parts)

(ii) Employees

Develop trust and communication with the employees to obtain a team participation in the initial plan and elicit feedback in the future; increase the employees' responsibility to assist in improving operations and quality while reducing cost drivers; trust employees as partners in the process and elicit their commitment.

(iii) Customers

Develop trust and communication for including the customers' participation in theinitial plans and elicit feedback in the future; ensure that VF Ltd is fulfilling thecustomers' needs and demands; build a team spirit through assurances that the company will meet the customers' demand at a competitive price; employ thecustomer as a partner in the process(i.e. wait together for delayed deliveries in order to keep costs at a minimum.

(c) The manner in which implementation is put across, i.e. communicated, is very important. The need for change must be made clear, fears diffused and , if possible, the individuals concerned positively motivated to embrace the changes as their own

(i) Welcome Resistance and Confrontation
Talking through areas of conflict may lead to useful insights and the adoption ofthe programme of change to the VF's advantage. Repressing resistance will only make change difficult.

(ii) Encourage Free Circulation of Information

VF Ltd should ensure free circulation of information about reasons for change, its expected results and likely consequences. The information content should beclear,consistent and realistic.

(iii) Sell Change to People Concerned

VF Ltd should overcome objections, but it is also possible to get people behindthe change in a welcome manner. If those involved understand that there is a real problem which poses a threat to VF Ltd and themselves as workers, there will be firm rational basis for implementing change. Where possible, offerrewards and incentives to VF Ltd staff to bring them on board.

(iv) Help Individuals to Learn

VF Ltd should strive to change their attitudes and behaviours. In order to put across the overall objective, VF Ltd should make use of visual aids. Learningprogrammes or any new skills should be tailored to the abilities of the individuals in question.

(iv) Involve People at Inception to Avoid Insecurity and Resentment

The effect of insecurity and resentment may be lessened if VF Ltd involve employees in the planning and implementation of the change. In this way they will not think that the change has been imposed on them.

SOLUTION FIVE

Report

To: Managing Director

From: Management Accountant

Date: Date of Exam

Subject: Modern Budgeting and Management Accounting Techniques

1.0 Introduction

Further to your request, I consider in this report one modern budgeting technique and three modern management accounting techniques.

2.1 Beyond Budgeting

The main idea behind 'Beyond Budgeting' is that many companies spend considerable amounts on the budgeting process and that the benefits that they receive do not justify the expenditure.

In today's world with rapid technological change, global competition and global markets it is very difficult to make forecasts with any degree of accuracy. The problem is that once the budget has been set it is then used as a straitjacket, with managers being constrained by the (unrealistic) budget.

The criticisms of traditional budgeting include the following.

- Budgets are a commitment which act as a constraint on doing anything different. In a rapidly changing business environment the budgets are usually based on out of date assumptions.
- Traditional budgets are seen as a mechanism for top-down control by senior management, but instead organisations should be empowering front-line managers.
- Traditional budgets restrict flexibility because individuals feel they are committed to achieving the budget targets. This is a deterrent to continual improvement and so is inconsistent with Total Quality Management (TQM).
- Budgeting reinforces the barriers between departments, instead of encouraging an organisation-wide sharing of knowledge.
- Budgets are internally focused, bureaucratic and time consuming to prepare.

The features of a beyond budgeting system of planning and control might be as follows.

- Managers should prepare rolling plans, usually on a quarterly basis. Forecasts would then be more up to date in a changing environment and they can be revised more frequently, without censure, if necessary. However the purpose of these plans is for cash forecasting, not for cost control
- Instead of a comparison of actual with budget, performance measures should be based on:
  - achieving strategic milestones rather than detailed short term targets
  - using relative measures of performance, for example by comparing actual results against a benchmark, in particular using external comparisons to avoid being too inward looking
  - An emphasis on maximising value, rather than on minimising costs.
  - It shifts the focus from beating other managers to beating the competition by creating a climate based on competitive success.
  - It motivates individuals by giving clear responsibilities and challenges.
  - It eliminates some behavioural issues by making rewards team-based.
  - Authority is devolved to operational managers who are closer to the action and so can react quickly.

2.2 Kaizen Costing

Kaizen is a Japanese term for the philosophy of continuous improvement in performance via small, incremental steps.

Key Kaizen characteristics are:

(i). Kaizen involves setting standards and then continually improving these standards to achieve long-term sustainable improvements. Continuous improvement is the continual examination and improvement of existing processes and is very different from approaches such as business process re-engineering (BPR), which seeks to make radical one-off changes to improve an organisation's operations and processes. The concepts underlying continuous improvement are:

- The organisation should always seek perfection. Since perfection is never achieved, there must always be scope for improving on the current methods.

- The search for perfection should be ingrained into the culture and mindset of all employees. Improvements should be sought all the time.

- Individual improvements identified by the work force will be small rather than far-reaching.

(ii). The focus is on eliminating waste, improving processes and systems and improving productivity. **Kaizen costing** has been developed to support the continued cost reduction of existing components and products. Cost reduction targets are set on a regular, e.g. monthly basis and variance analysis is carried out at the end of each period to compare the target cost reduction with the actual cost.

One of the main ways to reduce costs is through the elimination of waste such**Over-production**(produce more than customers have ordered);**Inventory** (holding or purchasing unnecessary inventory); **Waiting** (production delays/idle time when value is not added to the product).

(iii). Involves all employees and all areas of the business.

2.3 Targeting Costing

Target costing is an activity which is aimed at reducing the life-cycle costs of new products, while ensuring quality, reliability, and other consumer requirements, by examining all possible ideas for cost reduction at the product planning, research and development, and the prototyping phases of production. But it is not just a cost reduction technique; it is part of a comprehensive strategic profit management system.

Target costing is an important tool in strengthening an organisation's competitive positionby

- promoting cost consciousness
- focusing on profit margins.

It is not a technique that attempts to slash costs by trimming functions or closing departments; it is a steady and never-ending pressure to make sure that costs are always kept to a minimum.

Traditional standard costing starts as the product goes into production; the organisa-tionis going to make a new product, it will be designed this particular way and as a consequence the costs will be so much - this in turn influences the selling price. Mangers are expected to keep within predetermined standard costs, and variances are calculated to determine whether they have done so.

Target costing starts with a product design concept. From this a selling price is determined for the product and a profit requirement is set. The selling price less the required profit = the target cost and this cost must be met if profit is going to be achieved. The difference between the estimated cost and the target cost is called the cost gap. Finally the productis designed to achieve the target cost. If this is not possible aspects of the product would be redesigned until the target is met or not produced at all. Target costing continues over the product's life and the pressure to reduce costs is continuous as costs are reduced monthly. The target profit requirement should be driven by strategic profit planning rather than standard mark-up. Ideally, this is done after consideration of the medium-term profit plans. The procedures for achieving it once it is set the target profit is a commitment agreed by all the people who have any part in achieving it.

The target costing approach is a vital total cost control tool because research has shown that up to 90 per cent of costs are 'built in' at the product's design stage.

2.4 Activity Based Management

ABC has mostly been used for more accurate costing of products and services, but its use may be extended to other applications as well, such as activity-based management. Activity-based management makes use of the following steps generally associated with activity based costing.

• Identify the major activities that take place in the organisation

• Determine the cost driver for each major activity

• Create a cost centre for each major activity (quantify the cost of each activity).

In ABM the business is seen as a set of linked activities that ultimately add value to the customer. It focuses on managing the business on the basis of the activities that make up the organisation (and as activities are managed, so are the costs they incur). ABM therefore attempts to meet customer needs whilst making use of fewer of the organisation's resources, i.e.: by eliminating non-value adding activities such as storing, inspection and moving raw materials. Non-value adding activities do not add to the usefulness of a product or service.

ABM therefore analyses costs by activities, not type of expense or department. ABM supplies more meaningful information to the organisation, as it highlights the relationship between the output achieved and the activities entered into in order to achieve this output (and the cost thereof). Whilst non-value adding activities may be cut, more-emphasis may be placed on those activities that are considered essential to the survival and competitiveness of the organisation.

I hope this explanation has been satisfactory. However, should you need further clarification, please do not hesitate to contact me.

Signed:

Management Accountant

SOLUTION FIVE

a) Evaluating annual trading performance

Although increases in total sales revenue are an indicator that EB is either selling more bulbs and/or selling them at a higher unit price, this measure alone does not provide as much information about the financial health of the business as for example, measuring profitability would. By focusing on increases in revenue, EB is paying no attention to whether their cost base is increasing at a higher rate. If this was the position, it would mean that EB could potentially be operating at a trading loss, which if not corrected, may mean that the firm is no longer viable as a going concern into the future.

Suggestion for improvement – for the reasons outlined above, EB should also focus on their costs, which in tandem with their revenue results would allow them to determine if they made a profit or loss for a particular accounting period.

Similarly, the other measure currently focused on by the founders (i.e. the number of product returns) although providing useful information as to the quality of their bulbs, is not sufficient information to determine whether the retailers that they supply to, and/or those who buy bulbs from these retailers are happy with them.

Suggestion for improvement – to fully comprehend whether EB's customers are happy with the product, the firm needs to consider a wide variety of customer-related performance measures such as customer satisfaction, number of new customers attracted, % of market share, et.

With the founders only focusing their attention on two narrow measures, it will invariably mean that others in the firm will do exactly the same, which may result in other areas of firm performance (e.g. operational efficiency, employee satisfaction, etc…) being neglected, which would not be good for the firm in the medium to long-term. This is especially true in the context of the increased competition being faced by EB, both from national and international competitors.

Suggestion for improvement - the founders need to decide upon a range of performance metrics (both financial and non-financial) linked to their strategic objectives (similar to a Balanced Scorecard) that they want to focus on for the next period of time. By doing so, this will also influence their staff as to what is important for EB, and what they need to be concentrating on in the pursuit of their daily duties.

b) Non-financial performance measures

Potential measures may include:

1. Quantity of CO_2 emissions.
This is a key variable for all firms as CO_2 emissions are harmful for the environment. By focusing on it, the founders can try and find ways of reducing EB's emissions, thereby creating a cleaner environment in the area in which their production facility is located.

2. The percentage (%) of staff who engage in training programs in the area of environmental sustainability.

Many of EB's staff members may not know a huge amount about environmental sustainability. However, by attending training programs in this area, it should allow them to learn more about the topic and possibly suggest ways in which their particular daily tasks can be performed in a more environmentally sustainable manner.

3. The number of air miles travelled to deliver component parts used in the production of bulbs to EB's production facility.

Determining that certain component parts are travelling thousands of miles from different countries and possibly, continents to be used in the production of bulbs in EB, should allow the founders to try and source similar high-quality parts from suppliers located nearer their facility, thereby reducing the number of air miles attributable to EB. Reducing this metric would improve the environmental sustainability of EB as air travel is considered to pollute the air/environment via carbon emissions.

4. % of power used within EB from renewable sources.

By investing in renewable energy sources such as solar energy, EB will be able to reduce their carbon footprint by using less oil and/or gas which would be better for the environment. Furthermore, by doing so, it may also save them money in the medium to long-term once their investment has reached its payback period.

c) Three limitations of external benchmarking

The firm that Sipeso wishes to benchmark EB's performance against is a 5 star hotel located in a major Africa capital city. This hotel operates in the completely different industry to EB and in the services sector. This comparison doesn't seem logical or indeed practical, as what separates this hotel from the rest of their competitors will not be the same as that for EB. To properly benchmark EB's performance, Sipeso needs to find a similar-sized producer of bulbs that is regarded as a leader in its field;

By adopting external benchmarking, it often promotes the suggestion that there is only "one" correct way to achieve the firm's (i.e. EB's) objectives – i.e. the approach/strategy adopted by the benchmarked firm. Therefore, in using this approach the founders need to be aware that the firm(s) that they are benchmarking against may have their own unique characteristics and way of doing things, which may not necessarily be appropriate for EB at this time;

By engaging in external benchmarking, the temptation for EB might be to simply try and "match" the performance of their benchmarked rival. However, by doing so, they are effectively only maintaining the current status quo, and adopting this particular approach to benchmarking will not allow them to develop and/or exceed the performance of their industry rivals;

As it stands, it appears that Sipeso is planning to benchmark EB"s performance against a single firm. It would be better for her to do so against a small number of similar but high-performing bulb producers, as each may do certain things differently, which would allow her to pick and choose the best bits (in terms of delivering excellent performance) from each of these rival firms and not just being restricted to a single one. The adoption of this approach, if implemented correctly, should be beneficial for EB's future trading performance.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Formulae, Present Value, Annuity and normal distribution tables are attached at the end of the question paper.

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

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE – (COMPULSORY)

Zambia Copper Mines (ZCM) is a mining company in Zambia, involved in processing minerals. ZCM is considering a joint venture with Lubumbashi Copper Mines (LCM), a large mining company in Democratic Republic of Congo (DRC).The joint venture requires LCM to export its copper to ZCM for processing and selling.

The proposed joint venture with LCM would be for an initial period of five (5) years. At the end of five (5) years, ZCM would be given the option to either end the venture or negotiate for another five (5) years on different terms. If the venture is not renegotiated, the machinery will be dismantled and taken back to Zambia at a total cost of K3 million after tax. Copper would be mined using a new technique developed by Engineering Department of ZCM. The immediate machinery required costs $60 million which would be supplied by ZCM. In additional, ZCM would be required to pay salaries for 30 technical staff to operate the machinery and half of the local labour costs. The current prices of salary for technical staff amount to K40 million per year and half of local labour costs 950 million Congolese franc (CDF) per year. The salaries for technical staff and labour costs are expected to increase in line with inflation in Zambia and DRC respectively.

ZCM is expected to get 60% of the share of LCM's copper production, with a current market price at $3,500 per tonne. The expected annual production is 10,000 tonnes per year and copper prices at the global market are expected to increase by 10% per year.

Other Information

The current inflation in Zambia and DRC is 9% and 25% respectively. The inflation in Zambia is expected to remain stable for the foreseeable future while in DRC it is expected to reduce by 3% of the previous year's rate. The inflation rate in the USA is expected to be 2% per year for the foreseeable future. The current exchange rates are 30 CDF/ZMW and 14 ZMW/USD.

ZCM pay annual corporate tax at the rate of 30% a year in arrears. The capital expenditure attracts a 25% per year capital allowance (WDA) on a reducing balance basis. The Company has sufficient profits to utilize all capital allowances from the project. ZCM has no foreign mining operations. Companies in the mining industry with foreign operations have an equity beta of 1.31, with average gearing of 70% equity and 30% debt by market values. If ZCM proceeds with the Joint venture, the gearing level will change to 65% equity and 35% debt. The after-tax cost of debt is estimated at 12%. The yield on the Government bonds is 10% and the return on the market is 15.8%.

The Management of ZCM are worried that the Government of DRC might impose some form of barriers to block the free movement of funds which would put the ZCM at a competitive disadvantage. Even if the joint venture does not pull through, ZCM would still need to import copper from DRC for processing. ZCM has been offered a tax holiday for a period of five (5) years by DRC Government. However, the Company is required to pay all the applicable taxes in Zambia.

Required:

(a) Prepare a report that evaluates whether ZCM should agree to the proposed joint venture or not. Relevant calculations must form part of your report as an appendix. (32 marks)

(b) Discuss the ways which ZCM might use in an attempt to repatriate possible blocked funds from DRC. (8 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

QUESTION TWO

VGATE Holdings Plc is a large company involved in cement manufacturing with subsidiaries across the global. The following transactions relates to VGATE Holdings Plc and one of its subsidiaries:

(1) VGATE Plc will need a fixed interest rate loan of K3 million for nine (9) months starting on 15 November. The Bank quotes a rate of 10% per year to apply to the loan.

(2) One (1) of the subsidiaries based in UK, GYP Ltd intends to borrow £4.5 m for eight (8) months starting in September, and wishes to protect herself against LIBOR rising above 6.15%. LIBOR is currently 5% and GYP Ltd can borrow at 7.4%. Interest rate options are available at the following prices on 15 August:

Short Sterling Options. £500,000. Points of 100%

	Calls			Puts		
Strike price	Sep	Dec	Mar	Sep	Dec	Mar
95.25	0.19	0.09	0.06	0.19	0.85	1.43
95.50	0.10	0.05	0.02	0.22	1.26	1.68
95.75	0.04	0.02	0.03	0.49	1.49	1.94

Futures prices on 15 August are:

September	95.30
December	95.20
March	95.10

Required:

Assuming now it is 15 August:

(a) State what the Forward Rate Agreement (FRA) is required by VGATE Holdings Plc and calculate the result of the FRA and the effective interest rate if the actual interest rate for nine (9) month loans on 15 November is:

(i) 14%
(ii) 9%

(6 marks)

(b) Show how the options can be used to hedge against the interest rate risk by GYP Ltd. (6 marks)

(c) Show the outcome of the hedge if the loan is negotiated on 20 September and LIBOR is 7.5% on that date and calculate the effective interest rate. (8 marks)

[Total: 20 Marks]

QUESTION THREE

G-SING Ltd is a large private retail super market chain store that has for some time wanted to expand into the agriculture sector and a number of companies have been examined as potential take-over targets. Recently, HP Inc. a small unquoted company that supply majority of the agriculture products to G-SING Ltd has been identified for take-over.

The directors of G-SINGS believe that once the acquisition is successful, the capacity to pay dividends will be increased and hence achieved the sole objective of the company. Some directors have argued that the current financial objective is not holistic and therefore, accounting ratios such as return on investment should be considered. However, the new Chief Financial Officer believes maximisation of shareholder wealth should be the sole objective.

Required:

(a) Discuss the merits and demerits of making a take-over bid for HP Inc. by G-SING Ltd. (8 marks)

(b) Evaluate the appropriateness of G-SING's current financial objective and of the new objectives suggested by the directors. (12 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) Bradly Ltd and Mallo Ltd both assemble and sell motor engines. Extracts from the profit or loss accounts of the two companies for 2019 are as follows:

	Bradly Ltd	**Mallo Ltd**
	K000	**K000**
Sale revenue	1,500	800
Operating expenses	(800)	(620)
Profit	700	180

The two (2) companies have earned a constant level of profit for a number of years, and are expected to both continue to do so in the future. The policy of the companies is to distribute all profits as dividends to ordinary shareholders as they are earned. Neither company has any fixed interest capital. Details of the share capital of the two companies are as follows:

Share capital	**Bradly Ltd**	**Mallo Ltd**
	K'000	**K'000**
Ordinary shares of K1 each		
Authorised	2,500	2,000
Issued	2,000	1,000

The ordinary shares of Bradly Ltd have a current market value of K3.50 each ex div, and those of Mallo Ltd, a current market value of K1.50 each ex div.

The Directors of Bradly Ltd are considering submitting a bid for the entire share capital of Mallo Ltd. They believe that, if the bid succeeds, the combined sales revenue of the two (2) companies will increase by K60,000 per annum and savings in operating expenses, amounting to K50,000 per annum, will be possible. Part of the machinery presently owned by Mallo Ltd would no longer be required and could be sold for K100,000. Furthermore, the Directors of Bradly Ltd believe that the takeover would reduce to 10%, the annual return required by the ordinary shareholders of Mallo Ltd, in line with that of Bradly Ltd.

Required:

(a) Given the above information, determine:

(i) The maximum price that Bradly Ltd should pay for the entire share capital of Mallo Limited. (8 marks)

(ii) The minimum price that the ordinary shareholders in Mallo Ltd should accept for their shares. (2 marks)

(b) Assuming that the takeover price is agreed at the figure calculated in (a) (ii) above, and that the purchase consideration will be settled by an exchange of ordinary shares in Mallo Ltd for the ordinary shares of Bradly Ltd, show how the entire benefit from the takeover will accrue the present shareholders of Bradly Ltd. (6 marks)

(c) Discuss any other factors that the Directors and Shareholders of both companies should consider in evaluating whether the proposed takeover will benefit them. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

TRUNK Plc is a European company that produces goods that are sold within Europe, with a larger proportion of the goods being exported to developing countries. Most of the raw materials used in production are imported from Africa and others from Asia. These raw materials are not available in Europe.

There is skilled labour in Africa and in Asia to enable the goods to be produced from either of these two locations. Demand for the products is also available in both of these locations.

The Board of Directors of TRUNK Plc has information published in several European magazines that African countries are governed by systems that are characterized by corruption and deceit. However, most of the political systems are stable and there are no possibilities of nationalization in the near future. There is little information available about the political systems in the Asian countries although Management at TRUNK Plc is aware that Asia would be suitable for locating production facilities of the company as well.

The Board of Directors of TRUNK Plc is now considering opening manufacturing bases in African countries and eventually transferring all of the manufacturing business from Europe to Africa.

Required:

(a) Explain the strategic reasons why the Board of Directors of TRUNK Plc is planning to open up manufacturing bases in Africa. (5 marks)

(b) Discuss the advantages and disadvantages of the proposal to open manufacturing bases in Africa from the point of view of TRUNK Plc. (7 marks)

(c) Advise on the potential risks that TRUNK Plc would face as a result of opening up manufacturing bases in Africa and how these risks may be mitigated. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + \left(\frac{1}{3} \times \text{spread}\right)$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_0(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1 = S_0 \times \frac{(1+h_c)}{(1+h_b)} \qquad f_0 = s_0 \times \frac{(1+i_c)}{(1+i_b)}$$

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

CA3.6 ADVANCED FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

To: ZCM Board
From: Financial Consultant
Date: xxxxxx
Subject: Evaluation of Proposed Joint Venture

This report provides the financial evaluation results of the proposed joint venture. The financial evaluation show a positive net present value (NPV) of K216 million. Therefore, the investment is financially viable because it would increase the shareholders wealth by K216 million.
However, before the project is undertaken, it is important to consider other factors such possible blocking of funds by DRC Government. The following are some of the ways ZCM might use in an attempt to repatriate blocked funds from DRC.

i. ZCM could sell goods or services to the venture and obtain payment. The amount of this payment will depend on the volume of sales and also on the transfer price for the sales.
ii. ZCM can patent the new engineering technique which it can grant the venture the right to produce protected by patents of which ZCM can charge a royalty on any goods that the venture sells. The size of any royalty can be adjusted to suit the wishes of the ZCM’s Management.
iii. ZCM can make a loan to a venture and set the interest rate high or low, thereby affecting the profits of both companies. A high rate of interest on a loan, for example, would improve ZCM's profits to the detriment of the venture's profits.
iv. ZCM can levy management charges for costs incurred in the Management of international operations.

SIGN

FINANCIAL CONSULTANT

Appendix: Financial Evaluation Using NPV Method						
Year	1	2	3	4	5	6
	K'000	K'000	K'000	K'000	K'000	K'000
Share of Sales	345,594.12	406,242.50	477,534.07	561,336.62	659,845.69	-
Local labour costs	(34,514.59)	(37,621.66)	(41,012.15)	(44,704.97)	(48,717.69)	-
Technical staff salary	(43,600.00)	(47,524.00)	(51,801.16)	(56,463.26)	(61,544.96)	-
Taxable Cash flows	267,194.53	321,786.94	384,720.76	460,168.39	549,583.04	-
Tax@30%	-	(80,243.86)	(96,329.05)	(115,416.23)	(138,050.52)	(164,874.91)
Tax savings on CA	-	63,000.00	47,250.00	35,437.50	26,578.13	79,734.38
Cost of dismantle & transport	-	-	-	-	3,000.00	-
Net Cash Flows	267,479.53	303,852.98	335,641.71	380,189.66	441,110.65	(85,140.53)
Discount@16%	0.862	0.743	0.641	0.552	0.476	0.410
Present Values	**230,567.35**	**225,576.76**	**215,146.34**	**209,864.69**	**206,968.67**	**(34,907.62)**
Total PVs	1,056,402.19					
Less: Initial Cost	(840,000.00)					
NPV	**216,402.19**					
Workings						
1.Sales	1	2	3	4	5	
Production ('000)	10.00	10.00	10.00	10.00	10.00	
Price per tonne	3,850.00	4,235.00	4,658.50	5,124.35	5,636.75	
Sales ($)						

	38,500.00	42,350.00	46,585.00	51,243.50	56,367.85	
ZCM Share 60%	23,100.00	25,410.00	27,951.00	30,746.10	33,820.71	
Ex.rate	14.96	15.99	17.08	18.26	19.51	
Sales(ZMW)	345,594.12	406,242.50	477,534.07	561,336.62	659,845.69	
2. Local labour costs (CDF' 000)	950,000.00	1,159.000	1,379.210	1,599,884	1,807,869	
Inflation rate	22%	19%	16%	13%	10%	
	1,159,000.00	1,379,210	1,599,884	1,807,869	1,988,656	
Ex.rate	33.58	36.66	39.01	40.44	40.82	
Labour costs (ZMW'000)	34,514.59	37,621.66	41,012.15	44,704.97	48,717.69	
Technical Staff Salary (ZMW'000) by 9%	43,600.00	47,524.00	51,801.16	56,463.26	61,544.96	
1. Exchange Rate						
Year	ZMW/USD			CDF/ZMW		
0	Spot	14.00		Spot	30.00	
1	1.09/1.02 x 14=	14.96078		1.22/ 1.09 x 30=	33.58	
2	1.09/1.02 x 14.96=	15.9875		1.19/ 1.09 x 33.58 =	36.66	
3	1.09/1.02 x 15.99=	17.0847		1.16/ 1.09 x 36.66 =	39.01	

4	1.09/1.02 x 17.08=	18.572		1.13/ 1.09 x 39.01 =	40.44	
5	1.09/1.02 x 18.26=	19.51011		1.10/ 1.09 x 40.44 =	40.82	
Capital Allowances						
	WDV(K'000)	CA@25%	Tax Savings@30%	Year Available		
1	840,000.00	210,000.00	63,000.00	2		
2	630,000.00	157,500.00	47,250.00	3		
3	472,500.00	118,125.00	35,437.50	4		
4	354,375.00	88,593.75	26,578.13	5		
5	265,781.25	265,781.25	79,734.38	6		
Cost of Capital						
Ba = Be x Ve/Ve+Vd(1-t)						
Ba = 1.31 x 0.7/0.7+0.3(1-0.3)						
Ba= 1.01						
1.01= Be x 0.65/0.65+0.35(1-0.3)						
Be=1.39						
Cost of Equity = 10% + 1.39(15.8% - 10%) = 18.1%						

Cost of Capital = (18.1% x0.65) + (12% x 0.35) = 16%				

SOLUTION TWO

a) FRA 3–12 K3,000,000

i) Interest : K3,000,000 x 9/12 x 14% = K315,000

FRA: K3,000,000 x 9/12 x (14%-10%) = K90,000

Net interest K225, 000

Effective interest rate = $\frac{225{,}000}{3{,}000{,}000}$ x 12/9 = 10%

i) Interest : K3,000,000 x 9/12 x 9% = K202,500

FRA: K3,000,000 x 9/12 x (10%-9%) = K22,500

Net interest K225, 000

Effective interest rate = $\frac{225{,}000}{3{,}000{,}000}$ x 12/9 = 10%

b)
- PUT
- September
- Strike price 95.25
- Contracts: £4.5M × 8/3 ÷ 0.5M = 24
- Premium 24 x 0.5Mx $\frac{0.19}{400}$ = **£**5,700

c) On 20th September

	15 August September		20th September	30th
Interest	95.00		92.5	
Futures	94.30		92.35	_
Difference	0.70	10/46	0.15	0

Interest on Loan: **£**4.5m x 8.4% x 8/12	252,000
Profit on options: 24 x 0.5m x 95.25-92.35/400	87,000
Premium	5,700
Net payment	170,700

$$\text{Effective interest rate} = \frac{170{,}700}{£4.5m} \times \frac{12}{8} \times 100\% = 5.69\%$$

SOLUTION THREE

a)

Advantages of growth by acquisition

Acquiring an existing company is a speedier method of entering a new business than setting up a project using internal resources, because an acquired business will already have customers and, hopefully, goodwill. An acquisition may also effectively eliminate a competitor and may allow higher profitability. Other advantages may come from the combination of complementary resources of the acquiring and acquired companies.

Also, because HP Ltd is a major supplier to G-SING, the acquisition will help to secure

G-SING' supply chain and could help reduce costs, which can be important in a competitive industry such as telecommunications. The acquisition could also mean that competitors are forced to seek alternative and perhaps lower quality suppliers.

Problems of growth by acquisition

Frequently, a significant premium must be paid in order to encourage existing shareholders to sell, or to outbid, a rival. This may make it difficult to show a respectable return on the cost of the acquisition.

The acquired company may not produce the exact product or service that the acquirer needs, or may need significant investment before it conforms to quality requirements.

Management problems are also quite common, particularly when the acquiring and acquired companies have different organisational cultures. Disputes may cause the loss of key staff members, resulting in reduced quality or even in the establishment of competing businesses.

b)

Maximisation of shareholder wealth is the theoretically ideal corporate objective. However most organisations now recognise that having this as their sole objective is unrealistic. Whilst there is still the philosophy that shareholders' wealth should be improved as much as possible, this is usually within the constraints of other objectives, such as legal obligations relating to the environment, ethical considerations (not using 'sweat-shop' labour for example) and health and safety issues.

G-SING has the additional problem of trying to value shareholder wealth. It is not listed on the stock exchange and thus has no quoted share price set by market forces. If there are problems valuing wealth, how can the entity determine how to maximise it?

Increasing dividends v maximising shareholder wealth

The objective of increasing dividends each year does not necessarily support the maximisation of shareholder wealth. If there are profitable investments available that would increase future wealth, then the entity should ideally be using its funds to finance such investments. By increasing dividends each year, the entity is restricting the funds available for profitable investments and thus its ability to improve shareholder wealth. Most organisations have a target payout ratio (dividends as a percentage of profit available to shareholders) which means that dividends will move in relation to fluctuations in profit. This makes more sense than a situation where dividends are increasing whilst profits are actually falling!

Accounting ratios

Some of the directors have suggested accounting ratios such as Return on Investment (ROI) as more suitable objectives. One of the main benefits of such accounting ratios is that they are easy to understand and are comparable across time and between other similar entities in the same industry. However there are several issues with using accounting ratios as objectives, including:

(i) The numbers are easy to manipulate, even when governed by accounting standards.

(ii) The ratios are based on historic numbers rather than future cash flows, which can cause problems with comparisons if the entity is about to undergo, or has just undergone, a substantial change in structure.

(iii) Lack of consideration for non-financial objectives.

<u>SOLUTION FOUR</u>

		Bradly Ltd	Mallo Ltd
Total market value of equity		K7m	K1.5m
Cost of capital	Dividend/ Market value	10%	12%
		(0.35/3.5)	(0.18/1.5)

Value of Bradly Ltd after the acquisition:

	K000
Sales = 1,500 + 800 + 60	2,360
Operating expenses = 800 + 620 – 50	1,370
Profit (dividends)	990

Present value of future earnings

			K
1)	<u>PV (Dividends) = Earnings</u>	<u>990,000</u>	9,900,000
	r	0.1	
2)	Add cash flows from sale of machines of K100,000		100,000
	Total value of Bradly Ltd after acquisition		10,000,000
	Market Value of Bradly Ltd before acquisition (3.5 * 2 million)		(7,000,000)
	The **maximum price** Bradly Ltd should pay to acquire Mallo Ltd		**3,000,000**

i) The **minimum price** that ordinary shareholders of Mallo Ltd should accept for their shares is the market value = K<u>1.5m</u>

b) Take – over price agreed at K 1.5m

Let X represent the number of new shares to be issued to Mallo Ltd.

Total number of shares in issue will become 2m + x shares

Total value of Bradly Ltd after acquisition = 10m.

For the entire benefit from the acquisition to accrue to all the present shareholders of Bradly Ltd, value of Bradly shares issued to Mallo's shareholders must equal the agreed take-over price.

X	x	10m =	1.5m
2m + X			
10X		=	1.5(2m + X)
10,000,000X	×	=	[(1.5) × (2,000,000)] + 1,500,000 X
10X		=	3m + 1.5X
8.5X		=	3,000,000
X		=	352,941 shares

The take-over ratio (352,941/1,000,000) is 35.2941 shares in Bradly Ltd for each 100 shares held in Mallo Ltd.

The market value per share after the acquisition or take-over

K10,000,000	K4.25
2,352,941	

Bradly Ltd shareholders will see an increase in the market value of their shares from K3.50 to K4.25 = K0.75 per share. The 2m shares would have increased by 2m × K0.75= K1,500,000

Market value of Bradly shareholders after acquisition	=	2m × 4.25	K8.5m
Market value of Bradly shareholders before acquisition	=	2m × 3.50	K(7)m
		Gain	K1.5m

Mallo shareholders have 352,941 shares at K4.25 each = K1.5m (same as their previous value).

Thus the entire benefit of the take-over will accrue to the present shareholders of Bradly Ltd.

b) Factors that the directors and shareholders of both companies should consider in assessing the usefulness of the proposed takeover.

ii) The shareholders in Mallo Ltd should try to get a take-over price higher than the K1.5m agreed in (b) above since this is their value and they would not benefit at all from the take-over at that price. In practice, they would have to be offered an amount in excess of their market value to induce them to sell.

iii) The directors of Mallo Ltd might believe from the proposal that the increase in profits after the acquisition and the sale of assets are indications that they are not effectively utilizing their assets hence may decide to put them (the assets) to better usage rather than sell them.

iv) The directors of Bradly Ltd will have to reassess their estimates. How realistic is the increase in sales revenue of K60,000 p.a. and at the same time a reduction in expenses of K50,000. Will reduction in expenses involve retrenchment of staff and what effect will this have in morale of the remaining staff? An increase in value of K3m from an investment of K1.5m seems rather too high.

v) What of the transaction costs of the acquisition? They have not been considered. If the take-over is resisted by the directors of Mallo Ltd or other interested buyers, then the cost of the acquisition could be quite high. Also the position of the shareholders of Mallo Ltd should be considered since their control will be greatly reduced, eg. A holder of 51% interest in Mallo Ltd will find himself owning only 7.6% in Bradly Ltd after the acquisition.

iii) Whether there would be increased market power and economies of scale and scope.

iv) Furthermore, Bradly and Mallo both manufacture and sell autoparts; the attitude of the government or trade unions to forestall a monopoly situation has not been considered. Finally, in as much as the acquisition looks attractive a lot more detailed information to answer the questions raised must be obtained before a final decision is taken.

v) Attitude of government and trade unions must be considered.

vi) Elimination of inefficiencies, use of surplus cash and increased debt capacity must be considered.

SOLUTION FIVE

(a) The strategic reasons why companies undertake foreign direct investment are as follows:

(1) Multinational Enterprises wish to gain access to foreign markets to satisfy local demand. This allows multinational enterprises to overcome any external trade barriers that would serve to keep their exports out if they exported them from their own domestic countries.

(2) Access to inputs and raw materials that may be located in overseas markets. This is normally the case for extractive industries where companies involved in extraction are located in countries where the minerals they extract are discovered.

(3) The motive of production efficiency which occurs by locating where costs of production are minimised. This occurs when at least one factor of production, usually labour, is under priced in relation to its productivity. Alternatively, since this is also available to local firms, the advantage for the multinational enterprise may stem from ownership of superior manufacturing technology and managerial experience which when used with the cheap factor in the host country gives a multinational enterprise cost advantage over the local firms.

(4) Multinational enterprises may possess some knowledge which they would wish to keep as a secret. If other forms of entering the international market such as licensing were used, it would not be possible for the multinational enterprises to keep the secret. To ensure that this knowledge is kept a secret, multinational enterprises decide to go for foreign direct investment. This therefore is a strategic reason why multinational enterprises wish to go for foreign direct investment.

(5) Multinational enterprises seek political safety and establish in countries where the government is unlikely to expropriate or interfere in private sector firms. A Multinational would therefore seek to expand abroad when it has confidence that foreign governments would not interfere with their operations. The governments should be politically stable to guarantee the non-interference in private sector operations.

B) Advantages:

The main advantage of opening up operations in Africa is that there will be lower production costs due to cheaper manufacturing resources. There is readily available skilled labour which may be utilised cheaply compared with the labour that is available that is available in Europe and other parts of the world.

Barriers which may be imposed on imports from TRUNK by African governments would be avoided if the company opened up operations in Africa. Barriers would not be used by African countries to discriminate against TRUNK when TRUNK produces its products within Africa.

There is a readily available market for the products of TRUNK in Africa and there is a possibility of expanding that market further. This would result if accelerated corporate growth of the company.

Since this will be a diversification, there is a possibility of establishing a better balance between risk and return and most likely, there should be an improvement in financial and operational performance of the company.

Disadvantages:

The main disadvantage of expanding into Africa is that there will be new business risks to be managed. This will result in increased administrative costs for the company because of the need to put risk management systems specifically for Africa in place.

The other disadvantage is that shareholders may not support such a strategy as they will not believe that it will result in risk reduction. The shareholders will consider the strategy as a costly one. Shareholders will have reduced the risk at their individual level through diversification at a personal level.

C.

Risks and mitigation

	RISK	**MITIGATION**
1.	Political risk: Currently, there may be political stability in the African countries being considered. Changes in governments in later years may result in political instability as a result of which the company may lose its assets.	There is a need to assess the likelihood of changes in governments of the countries being considered and determine whether potential future leaders may govern the countries to acceptable standards.
2.	Economic risks: There is a possibility that some of the countries being considered may not continue to be economically viable. Loss of economic viability would result in failure of the company's projects in Africa	Obtaining information about the viability of African countries and the likelihood of deterioration in the economic stability would assist the company in making the right decision now.
3.	Legal risks: There may not be strong laws related to patents in some African countries. As a result, some of the production methods used by the company may be copied and as a result, the company may lose its market share to African competitors who will produce similar products.	The company needs to obtain information about the legal structures in Africa before deciding to move its production facilities into Africa.
4.	Product reputation risks: The company may lose its reputation if the production facilities in Africa fail in some way to match the quality of products made in Europe.	The company needs to obtain assurance that there will be quality control procedures that will enable the product quality not to be compromised.
5.	Reputation risk: due to exiting high levels of corruption in some African countries, there is a possibility that the company may be asked to	The company needs to be assured that there is no massive corruption in the countries it is conspiring locating the manufacturing bases in, or avoid migrating into Africa if there is

	bribe some government officials for it to be granted any benefits such as rights to construct manufacturing premises in preferred locations. If the international community heard of the company paying bribes, the company will lose its reputation.	massive corruption in all the countries.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

CA ADVISORY PROFESSIONAL IN ACCOUNTANCY

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

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

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

You are a Principal Auditor in the Office of the Auditor General (OAG). You have been assigned to carry out an audit of the financial records of Chikanta City Council.

The Auditor General (AG) expressed concern on the quality of audits that have been performed in the recent past. After the issue of the last report, there were many instances where Controlling Officers with their Support Staff disputed observations made in the Auditor General's Report when they appeared before the Public Accounts Committee (PAC).

The Office of the Auditor General (OAG) operates autonomously and on a regular basis publishes the reports arising from audits conducted. Funds are appropriately allocated in the country's budget. The Office of the Auditor General (OAG) maintains financial records of how funds are spent but there are no variance reports that are prepared comparing actual expenditure versus approved budgets. Recently, the Office of the Auditor General (OAG) set up a website on which it posts its objectives and activities that are carried out and paid for airtime on television to sensitize the public on its mandate.

From inception, there has been no oversight by independent bodies on the activities of the Office of the Auditor General (OAG) and only recently was it agreed that the office should engage private auditors to carry out an independent audit of its activities. The objective of the expected external audits will include an examination of how the funds appropriated to the Office of the Auditor General (OAG) have been used in line with the principle of value for money.

You have been assigned to lead the audit of Chikanta City Council for the year 2020. The audit team has completed the risk assessment as part of the planning the audit.

The following information relates to the findings arising from the risk assessment.

The Finance Function of city council is under the Council Secretary and it is headed by the Chief Accountant. The position of the Council Secretary has been vacant for the last three (3) years and it is hoped that the vacancy will be filled soon. The Chief Accountant who has been acting in place of the Council Secretary was unable to answer most of the questions from the audit team because he is relatively new in the job having joined the Council from the private sector one (1) year ago.

A review of internal controls was carried out and the control environment was assessed as poor. The City Council has procedural financial manuals which have not been updated since the council accounting systems were computerized ten (10) years ago. The City Council receives a monthly equalization fund from Central Government. It has other sources of income mainly from rates charged and rentals from the lease of Market stands at its five (5) markets in the city. On a daily basis the Market Supervisor goes around the markets and collects cash received which he later banks the following day. The owners of the stands pay cash on a daily basis to the Market Managers who record the receipt of the money in a book with details of all those who have stands in the markets.

In the last three (3) years, the City Council has experienced liquidity problems largely because of delays in receiving the equalization fund from the Central Government. This resulted in the Council failing to pay the workers on time and at the moment salaries are three (3) months in arrears.

Most of the money received from letting market stands is spent on receipt instead of being banked in accordance with Government regulations. The District Commissioner (DC) of Chikanta City Council is influential in deciding on the use of the money collected and whenever there is a political meeting, he requests for money which he does not sign for. It is clear that the control environment in Chikanta City Council is poor compounded by an increase in control override by those in charge.

At the end of the risk assessment carried out on the operations of Chikanta City Council, it was concluded that the Management of the City cCuncil lacked integrity and overall that the audit risk in carrying out this audit is above the acceptable levels by the Public Sector Auditors. The Audit Senior on the audit suggested to you that the audit should not go ahead until Management puts in place measures that will reduce audit risk to acceptable levels.

Before the commencement of the audit of Chikanta City Council the Auditor General (AG) released the findings of the Consultants who were engaged to evaluate the quality control systems in the Office of the Auditor General (OAG). He informed all Principal Auditors that quality of audits should be taken seriously and discussed during the pre-audit meetings.

The findings of the consultants included the following:

1. The Director of Audits is responsible for quality control. From the time that the former Director retired there has been no formal appointment of someone to take responsibility for quality control.

2. Due to staff shortages, the Director of Audits supervises a number of audit assignments at the same time and there was no evidence to show that he gets involved in the audit or reviewing of the working papers. When the Consultants questioned this, they were told that the Director of Audits simply goes through summaries of the main findings. To a large extent, the auditors perform audits with minimum supervision.

3. The Office of the Auditor General (OAG) claimed that it put in place a code of ethics and a policies and procedure manual required to be followed by all staff. When requested to provide copies by the Consultants, an old copy of the policies and procedure manual which was last updated in 2012 was provided. Further enquiries revealed that the person who was tasked to revise the manual resigned before completing the task.

4. The Office of the Auditor General (OAG) is grossly understaffed. It is common for staff to be transferred to the Office of the Auditor General (OAG) by Cabinet Office without any consultation from the Management of the Office of the Auditor General (OAG).

5. The Office of the Auditor General (OAG) has documented policies with regards to ethical values in line with ISSAI 30 *Code of Ethics* and on recruitment staff undergo induction at which ethics and ethical behavior are considered.

Required:

(a) Identify and explain five (5) fraud risk factors in operations of Chikanta City Council. (10 marks)

(b) (i) Contrast transparency and accountability in the use of public funds and transparency and accountability of the Office of the Auditor General (OAG). (4 marks)

(ii) Using the information in the scenario, discuss two (2) principles each for transparency and accountability of the Supreme Audit Institution (SAI) under ISSAI 20 *Principles of Transparency and Accountability.* (6 marks)

(c) Evaluate the quality control system in the Office of the Auditor General (OAG) and suggest improvements where necessary. (10 marks)

(d) Describe audit risk in the audit of Chikanta City Council using the information in the scenario. (5 marks)

(e) Discuss the suggestion by the Audit Senior on the audit of Chikanta City Council that the audit should not proceed until measures to reduce audit risk are put in place by the management of Chikanta City Council. (5 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any THREE (3) questions.

<u>QUESTION TWO</u>

The quality of medical services in most Public Health Facilities has been falling over the last few years. The main contributing factor is lack of funds due to low budgetary allocations to the Ministry of Health.

The Minister of Health moved a motion in parliament for the introduction of user fees in all public health facilities. Two (2) years ago, an Act of parliament was passed which allows all health facilities to charge user fees for all clients below the age of sixty (60) years.

The following were the conditions relating to the administration of user fees:

1. All patients above the age of sixty (60) years are exempt from paying the user fees.

2. All money raised should be banked in designated bank accounts by the facility and financial records of all funds received and how they have been spent should be maintained. The objective is to benefit the communities who contribute towards this fund.

   All Health Facilities receiving user fees are required to prepare records showing all funds received on a daily basis and supported by bank deposit slips. A record of all money spent should also be maintained and these should be sent to the Provincial Permanent Secretaries who will verify the reports for correctness.

3. The Provincial Permanent Secretaries will be responsible for management of the user fees and auditors will be sent to verify accountability and transparency.

An evaluation of the use of the user fees in two (2) Provinces revealed the following:

1. One (1) year ago the Minister of Health ordered that all user funds collected should be deposited in a Central Ministry of Health Account and that funds will be appropriated to the Provinces on a monthly basis based on the requirements.

2. In the current year, the Minister of Health requested the Ministry Permanent Secretary to advance K1.2 million of user fees to the Ministry to be used for workshops planned to be held for Ministry officials this year. The Ministry has not received any funding from Ministry of Finance in the current year.

3. In order to beef up the user fee fund, the Minister of Health allowed the health facilities to charge those above sixty (60) years half the normal user fees.

You work for the Office of the Auditor General (OAG) Headquarters. You have been assigned to carry out an audit of the receipt and use of user fees in all the Provinces.

In the first two (2) Provinces that you visited, you establish that they have adequate records of receipts of user fees and how they have been spent supporting the monthly reports to the Provincial Permanent Secretaries. In two (2) other Provinces you establish that there is poor record keeping and no reports of funds received and how they were spent are available. All funds received have been receipted on official Government receipts. To facilitate the audit, you decided to prepare the reports from the source documents available to enable you form a conclusion. You are of the view that where no reports are available, you will only be able to give a limited assurance.

Required:

(a) Explain the meaning of regularity and propriety audits using the information in the scenario. (4 marks)

(b) Distinguish between direct reporting engagements and attestation engagements in the compliance audit of Ministry of Health user fees. (6 marks)

(c) Distinguish *reasonable assurance* from *limited assurance* in compliance auditing.

(4 marks)

(d) Explain three (3) matters you will consider in the compliance audit of the use of user fees by health institutions, suggesting suitable procedures for each matter.

(6 marks)

[Total: 20 Marks]

QUESTION THREE

You have been assigned by the Auditor General (AG) of the Supreme Audit Institution (SAI) in Zambia, to carry out a cold review on the performance audit which was conducted by the SAI at the Ministry of Defence for the audit of the expenditure for various infrastructures.

A review of the performance audit working papers revealed the following:

1. Audit criteria – the audit team established suitable audit criteria, which corresponded to the audit objective(s) and audit questions and are related to the principles of economy, efficiency and/or effectiveness. This was discussed with Permanent Secretary at the Ministry of Defence.
2. Materiality – the audit team determined materiality using the financial data contained in the management accounts which were provided by the Chief Accountant.
3. Supervision – this involved the Audit Supervisor ensuring that audit procedures were adequate and properly carried out.
4. Communication – the audit team maintained an effective and proper two-way communication of key aspects of the audit with Management and Those Charged with Governance throughout the audit process.

The Ministry of Defence wrote a letter complaining about the disclosure of a serious security issue in the audit report under the "Key Audit Matters Paragraph (KAMs)" for the financial statements for the year ended 31 December 2019. The Auditor General (AG) qualified as a

Professional Accountant in 2000 and has little working knowledge on Key Audit Matters (KAMs). He has requested you for your guidance on this issue.

Required:

(a) Explain the objectives of public sector auditing according to ISSAI 100 *Principles of public sector auditing*. (3 marks)

(b) Evaluate the findings regarding the performance audit which was conducted by the Supreme Audit Institution (SAI) at the Ministry of Defence for the audit of the expenditure for various infrastructures. (12 marks)

(c) Explain the meaning of Key Audit Matters (KAMs) and advice whether it was appropriate to report the security issue. (5 marks)

[Total: 20 marks]

QUESTION FOUR

(a) The audit of the financial statements of Zambezi Ltd a company under the Industrial Development Corporation (IDC) is almost complete.

You are the Principal Auditor in the Office of the Auditor General (OAG) and in reviewing the working papers, you establish that there is a material matter of concern with regards to the provision made in the financial statements relating to a legal case that is not yet determined at the period end.

You have disagreed with Management on the amount provided for and in your view the provision should be much higher that the amount that has been provided. Management of Zambezi Ltd has refused to increase the provision because this will turn the profit made into a loss a matter that will not go well with the Industrial Development Corporation (IDC) Board.

You intend to issue a modified audit opinion as a result of this disagreement.

Required:

Discuss the three (3) forms of modifications of the opinion and suggest a suitable form of modification in the audit of the financial statements of Zambezi Ltd.

(6 marks)

(b) You are the Head of Audits in the Office of the Auditor General (OAG). You are planning a financial and performance audit of the National Registration Agency under the Ministry of Home Affairs. This will be the first time that the Agency will be subject to audit by the Office of the Auditor General (OAG) since it was established three (3) years ago.

In a meeting with the Director General of the Agency, you were informed that the Agency is understaffed and as such the financial records are not yet ready for audit. He indicated that he was not aware that the Agency was subject to audits by your office. The Director General requested that your office should second staff to assist in finalizing the preparation of the financial records.

A review of the financial records maintained by the Agency revealed that the financial information is not kept in accordance with accepted Government guidelines. The internal control environment in the Agency is poor indicative of the fact that Senior Management does not know its responsibilities for putting in place suitable internal controls. Management hopes that after the intended financial and performance audits, you will make suitable recommendations on the controls that the Agency should put in place.

You informed the Director General of the National Registration Agency that you will return with a letter of engagement for the planned audit.

Required:

(i) Discuss the need for an engagement letter to be provided to the National Registration Agency before commencement of the audit. (4 marks)

(ii) Explain the preconditions for the audit of the National Registration Agency and explain the impact on the audit when they do not exist. (4 marks)

(iii) State six (6) matters that should be included in the letter of engagement to the National Registration Agency. (6 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Precious Mining is a wholly owned Government company involved in the mining of emeralds. The Company mines among the best quality emeralds in the world and the emeralds are sold in London by way of auctioning.

The revenue of the Company has been declining for the last four (4) years although production has remained stable over the same period. This has resulted in the Company failing to pay dividends to the shareholders, the Government.

The Chairperson of the Board of Directors of Precious Mining has requested for an audit of the operations of the mine with particular emphasis on production, processing and sales of the emeralds.

Required:

(i) Discuss the need for risk assessment at the planning stage of the audit of Precious Mining. (4 marks)

(ii) Discuss three (3) inherent audit risks in the audit of the financial statements of Precious Mining and suggest suitable audit responses. (6 marks)

(b) You are an Auditor in the Office of the Auditor (OAG). The Director of Audits called you to inform you about a fraud that has been going on at the National Oil Company. Fraud involves falsification of quantities of petroleum products received at the main terminal. The people involved have not been identified but there are two (2) suspects who both work in the inventory section responsible for inventory movements.

The Company is computerized and most of the work is done electronically with correspondence between the source of products and the receiving depots by way of emails and daily inventory reconciliations are shared electronically.

The volumes recorded as received are much less than the loaded quantities shown on the delivery documents and the explanation for the differences is recorded as transit losses. There were many cases of products paid for but with no evidence of the products received.

A reconciliation of the quantities of product purchased and paid for in a period of three (3) months shows that a total of $1.2million worth of products were not accounted for. A check on a sample of fuel tankers loaded at the port for delivery to the facility revealed more than normal transit losses of petroleum products in transit. These losses are not charged to the transporters hired and are borne by the National Oil Company.

Required:

(i) Describe the type of fraud involving the loss of products at the National Oil Company. (4 marks)

(ii) Describe the work that will be performed during the stages of *understanding the fraud* and securing *and safeguarding information* necessary in the investigation at the National Oil Company. (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.7 PUBLIC SECTOR AUDIT AND ASSURANCE

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Fraud risk factors in Chikanta City Council:

Fraud risk factors are matters that may motivate employees or management to commit fraud. In the evaluation of the information arising from the risk assessment the following risk factors have been observed:

1. **Vacancy position – Council Secretary**
   The fact that the office of the supervising officer that of the Council Secretary has remained vacant for a long time is a fraud risk factor. Staff and management may be motivated to commit fraud knowing that there is no close supervision with regards to the financial matters in the Council. The Council Secretary has a pivotal role on how the financial matters of the Council are managed.

2. **Capacity of the Chief Accountant**
   The Chief Accountant who is the most senior person in the Council in charge of Financial Management is new and he is from the private sector. It is likely that he is still learning how the public sector operates and staff may take advantage of this fact to commit fraud.

3. **Poor internal controls**
   The audit team has assessed the internal control environment in Chikanta City Council as poor. Poor internal controls are a fraud risk factor in that errors and fraud are more difficult to prevent and detect in an environment where internal controls are poor.

4. **The lack of updated financial regulations**
   The lack of up-to-date financial regulations may motivate employees to commit fraud knowing that they could claim that they did not know the correct procedure to follow. The financial procedure manual was last updated ten (10) years ago rendering it of no use.

5. **Cash from other sources**
   Poor accounting for cash collected at the markets suggests that at any point in time there is a substantial sum of cash held. The lack of proper accountability such as that through the issue of official receipts is a fraud risk factor on those handling cash.

6. **Council failing to pay salaries**
   The fact that the Council is in arrears in paying salaries to employees can demoralize the employees and bring dissatisfaction on the part of the employees. This is compounded by the fact that due to low salaries and not paying salaries on time, this may motivate the employees to commit fraud.

7. **Political influence**

Political influence by those in Management and others is a fraud risk factor in that they could put pressure on junior Staff to do things that are clearly wrong. For example, the actions of the DC of demanding that money should be spent irregularly but not willing to authorize such expenditure in writing.

(b)(i) Transparency in the use of public funds and in the SAI:

Those who receive and spend public funds are required to be transparent and accountable to the citizens on how they have administered the funds.

Transparency relates to the openness and disclosure on how the public funds are spent. **Accountability** on the other hand relates to the fact that those who receive public funds are held accountable on how they have use those funds. Public funds are required to be spent in line with the laid down regulations that govern the institutions and the public have a right to know how such funds are used.

A distinction should be made between these principles as they relate to all recipients of public funds and the Supreme Audit Institution (SAI).

Those who receive and spend public funds are required to prepare accountability reports which can be audited to establish whether or not the funds have been spent the funds prudently. The Supreme Audit Institution (SAI) is conferred with the responsibility of auditing the recipients of public funds on behalf of parliament which appropriates funds to Ministries and other Government Agencies. Transparency and accountability applies to **ALL** recipients of public funds without exception.

The Supreme Audit Institution (SAI) also receives public funds which it uses for its own operations. ISSAI 20 *Principles of Transparency and Accountability* deals with transparency and accountability in the Supreme Audit Institution.

As a recipient of public funds the Supreme Audit Institution (SAI) is required to lead by example in terms of the two principles. The ISSAI contains a number of principles which must be followed by the Supreme Audit Institution (SAI) in order to meet the requirements for transparency and accountability in the Supreme Audit Institution (SAI)

(ii) Transparency and accountability in the Supreme Audit Institution:

ISSAI 20 *Principles of Transparency and Accountability* deals with these principles as they relate to the Supreme Audit Institution (SAI).

The standard contains a number of principles under each of the two headings of transparency and accountability.

In relation to the information for the Office of the Auditor General (OAG) given in the scenario the following principles are discussed under each heading:

Transparency:

1. The fact that the Office of the Auditor General (OAG) publishes the reports arising from the audits conducted suggests that it is compliant with the principle of transparency.
2. The Office of the Auditor General (OAG) in the scenario has a website on which its mandate and the activities carried out are posted for the information of the public. Further, by sponsoring programs of its mandate and activities on radio and television is an adherence with one of the principles of transparency under ISAAI 20.

Accountability:

1. The fact that the Office of the Auditor General (OAG) has not been subject to external scrutiny of its activities suggests that it has not been held accountable for how it uses public funds. This is contrary to one of the principles of ISSAI 20 which requires that the SAI should be subject to independent scrutiny on how public funds appropriated to it have been spent.
   The agreement that the activities and financial statements of the Office of the Auditor General (OAG) should be audited by independent auditors will satisfy the requirement for accountability in this respect.

2. One of the principles that the Supreme Audit Institution (SAI) should report on is how the funds appropriated for its use and operations have been spent. The objective is to ascertain whether there has been value for money in the way the SAI is spending public funds.
   In the case at hand, there have been no reports of actual use of funds by the SAI compared with the budget allocation, let alone any value for money reports on its website or other means. This is contrary to the requirement of the principle of accountability in ISSAI 20.

(c) Evaluation of quality control in the SAI:

ISSAI 40 *Quality Control for SAIs* gives guidance on quality control in the Supreme Audit Institution. The following observations are made regarding the quality controls in the Supreme Audit Institution (SAI) in the scenario:

1. The standard requires that quality control should be coordinated and managed from the highest level in the organization.

   The fact that the current holder of the office of Director of Audits has not been formally appointed to be responsible for quality control suggests that there is currently nobody championing quality on the Office of the Auditor General (AG) contrary to the provisions of ISSAI 40.

   Improvement:

   Unless the Auditor General (AG) has assumed the quality control responsibilities at the time the Director of Audits retired, he should delegate this responsibility formally to another person or communicate to all staff whoever he feels should take that role.

2. It is clear that there is insufficient review of work that is performed by the audit team. The Director of Audits clearly is not involved in the audit work and there is no evidence of work being reviewed by someone else. This compromises on the quality of audits that are performed and is contrary to the provisions of ISSAI 40 which state that the office should have sufficient resources including human resources to carry out audits.

   Improvement:
   The Director of Audits should only supervise audits that he will be able to review evidencing the reviews in writing. The Office of the Auditor General (AG) should endeavor to recruit more staff to so that quality through reviews at the individual audit level is achieved.

3. It is a requirement of ISSAI 40 that the Office of the Auditor General (AG) should have in place policies and procedures dealing with adherence with ethical guidelines set and also those to follow in performing audits.

   In the case at hand, although the office has policies and procedural manuals it is likely that they have outdated information having last been revised in 2012. There have been many changes in risks and possibly systems have changed invalidating the use of the manuals. ISSAI 40 requires that the SAI should have policies and regulations that all staff are aware of and follow during the performance of audits.

   Improvement:
   There is need to finalize the revision of the manual of policies and procedures and this should be done on a regular basis as need arises. The task should be assigned to a different person in view of the resignation of the person who was assigned to do this.

4. In order to meet the expected quality standards, the Office of the Auditor General (OAG) should have enough staff to fulfill its mandate to audit users of public funds and the staff should have the competences to carry out the work. Having suitably qualified staff impacts on the quality of the audits performed.

   The shortage of staff resulting in a high level of vacancies in the Office of the Auditor General (OAG) impacts on the quality of work that is carried out. It is likely that most of the staff who are transferred from other government agencies may not have the necessary skills and competences to carry out audits and therefore impacting on the quality of audit work carried out.

   Improvement:
   The Office of the Auditor General (OAG) should seek for more funding in order to fill the vacancies that currently exist. In the event that staff are

transferred from other agencies, Cabinet Office should do this in conjunction with the Office of the Auditor General (OAG) so that only qualified and suitable staff are transferred there.

5. One of the elements of a quality control in accordance with ISSAI 40 is that the Supreme Audit Institution (SAI) should have ethical values which meet the standard of the ethics in ISSAI 30 *Code of Ethics* and which should be followed by staff of the Supreme Audit Institution.

   The Office of the Auditor General (OAG) has in place a code of ethics that is in line with the provisions of ISSAI 30. Further, adherence to the ethical values of the OAG is a matter that is considered during Induction which is a good practice.

   Improvement:
   The Office of the Auditor General (OAG) should maintain the status quo and ensure that ethics are considered important and followed by all staff. Sanctions should be applied to those who do not adhere to the ethical values.

(d) Audit risk in the audit of Chikanta City Council:

Audit risk in the audit of the financial statements of Chikanta City Council is the risk that the Public Sector Auditors may give an inappropriate audit opinion or conclusion.

Audit risk in the audit of Chikanta City Council has the following elements:

Inherent risk:
This is the risk that arises by the nature of the entity being audited and specific elements in the business. In this case this is a public institution that receives Government grants and also collects substantial sums of money through levies and market stand revenue.

Most of the money collected is paid in cash to council staff that in turn issue receipts. The handling large sums of cash has an inherent risk and revenue may be misstated as a result. Further, public institutions that are subject to political interference pose a risk from the point of view of auditing in that there is a high incidence of pressure being exerted by those wielding political power. This is the case here where the District Commissioner (DC) requests funds for use for political purposes without any documentation and contrary to financial guidelines.

Control risk:
This element of audit risk arises from poor internal controls or override of controls which will fail to detect material misstatements in the financial statements.

It is clear that there is poor corporate governance in the running of Chikanta City Council and the internal controls have been found to be poor and overridden by Management in some cases. This could cause the financial statements to be materially misstated and the Public Sector Auditor may not wish to rely on the internal controls in designing further audit procedures to be done.

Detection risk:
This is the risk that the Public Sector Auditor will not detect material misstatements even having performed audit procedures.

In the case at hand, detection risk appear to be high in view of the fact that there appears to be little or no reviews of work carried out given that the Director of Audits is responsible for a number of audits at the same time with no evidence that the working papers are reviewed. Further, the staff vacancies and the transfer of staff from other organs of Government without the involvement of the Office of the Auditor General (OAG) could result in the use of staff with no skills and competences to perform the audits and hence increase detection risk.

(e) Suggestion by the audit senior not to go ahead with the audit:

The Audit Senior's suggestion that the audit of Chikanta City Council should not go ahead in view of the high audit risk should be evaluated in the context of public sector auditing.

In the case of private sector audits, it is a requirement that if audit risk cannot be reduced to acceptable levels, then the appointment should be declined in the case of first audits or the auditor should consider resigning in the case of continuing audits.

ISSAI 40 *Quality control for SAIs* gives guidance to the Public Sector Auditor with regards to acceptance and continuance of audits. Notwithstanding that the conclusion of the risk assessment suggests that the Management of Chikanta City Council lacks integrity and that audit risk is considered high, the Public Sector Auditor cannot decline from carrying out the audit.
In a situation, the office of the Office of the Auditor General (OAG) has no discretion about whether or not it should carry out the audit. It is obliged by law to carry out audits of all recipients of public funds.

Conclusion:

The suggestion by the Senior Auditor is therefore not valid and the audit of Chikanta City Council will have to be performed despite Management lacking integrity and audit risk being considered high.

The public sector auditor is mandated and required to perform audits of public sector institutions regardless of the risk levels assessed by the Public Sector Auditor.

SOLUTION TWO

(a) Regularity and propriety audits in compliance audit if user fees:

The Public Sector Auditor may carry out regularity or propriety audits in the audit of user fees collected by health institutions.

Regularity refers to the audit of activities to establish whether they have been done in accordance with legislation or agreements.

In the compliance audit of the collection and use of user fees, a regulatory audit could be performed to establish whether the fees are collected and spent in accordance with the conditions that were set such as:

- That persons above sixty (60) years of age are exempt.
- All funds collected banked in separate bank accounts and used by the collecting facility.
- Accountability reports sent to the Provincial Permanent Secretaries for review.

Propriety refers to the general principles of sound Public Sector Financial Management and the conduct of Public Sector Officers.

In the case of the compliance audit of the collection of user fees and expenditure this could be the audit to establish the use of funds for the intended purpose. Further, it could be an audit of the conduct of officials involved including the Minister of Supply who has clearly usurped the powers of the Permanent Secretaries are mandated to oversee these funds. Further, his conduct in requiring funds to be sent to the Ministry and even its use for other activities could be subject to a propriety audit of the conduct of the Minister.

(b) Distinction between direct reporting engagements and attestation engagements:

Direct reporting engagements are those engagements where the Public Sector Auditor prepares the subject information and performs audit procedures the results of which will form the basis for the conclusion.

In the case at hand, in the two (2) Provinces where no reports have been prepared but the source documents are available, the Public Sector Auditor will produce the subject matter information and evaluate the information against the suitable criteria.

In **attestation engagements** the responsible party prepares the subject matter information which the Public Sector Auditor evaluates and compares with a suitable criteria. In the case of the collection of user fees the facilities prepare the subject matter information in the reports and the Public Sector Auditors evaluates against the criteria and concludes.

(c) Distinction between reasonable and limited assurance:

In carrying out audits in the public sector, the auditor chooses the level of assurance that they wishe to give based on the needs of the intended users.

Reasonable assurance is a high level of assurance whereby audit risk is reduced to acceptable levels. Usually this requires more audit evidence than that required for a limited assurance. The conclusion made by the Public Sector Auditor is typically expressed positively stating that, in the auditor's opinion, the subject matter is or is not compliant.

Limited assurance is a lower level of assurance with audit risk higher than in a reasonable assurance. The amount of work carried out is less and the main methods of gathering evidence are enquiries and analytical procedures.

The form of conclusion is negative with the public sector auditor stating that nothing has come to the auditor's attention that causes the auditor to believe that the subject matter is not complaint with the audit criteria.

(d) Matters to consider and suitable audit procedure:

1. Persons above sixty (60) years of age exempt – in line with the conditions set in the Act that only persons below 60 years of age need pay user fees.

   Audit procedure:
   Review samples of user fees collected and examine age on the receipt and confirm that only those below sixty (60) years are charged.

2. Banking of user fees collected – to confirm that all funds received were promptly banked before being spent as required by the conditions in the act.

   Audit procedure:
   For samples of daily collection of user fees confirm that they were banked promptly by examining related bank deposit slips.

3. Monthly returns- that require to be completed and sent to the Permanent Secretaries for review and control purposes.

   Audit procedure:
   Review the copies of returns prepared by the health facilities and ensure regularly prepared on a monthly basis. For some facilities enquire from the permanent secretary for confirmation of receipt of monthly returns.

SOLUTION THREE

(a) Objectives of public sector auditing:

ISSAI 100 states that 'in general public sector auditing can be described as a systematic process of objectively obtaining and evaluating evidence to determine whether information or actual conditions conform to established criteria.'

Objectives of public sector auditing include:

- Helping to create conditions in which public sector entities will perform their functions effectively, efficiently, ethically and in accordance with the law and regulations.
- Providing oversight bodies with information and independent assessments about the stewardship and performance of public entities.

(b) Evaluation of findings:

- **Audit criteria** – according to professional guidance, the auditor should establish suitable audit criteria, which correspond to the audit objective(s) and audit questions and are related to the principles of economy, efficiency and/or effectiveness and this should be discussed with the audited entity. This was appropriately done in the performance audit which was conducted by the SAI at the Ministry of Defence for the audit of the expenditure for various infrastructure. However, although the audit criteria must be discussed with the audited entity, it is ultimately the auditor's responsibility to select suitable audit criteria.

- **Materiality** – according to professional guidance, the auditor shall consider materiality, including the financial, social and political aspects of the subject matter, with the goal of delivering as much added value as possible. In addition to monetary value, materiality includes issues of social and political significance, compliance, transparency, governance and accountability. This was inappropriately done in the performance audit which was conducted by the SAI at the Ministry of Defence for the audit of the expenditure for various infrastructure. The focus was only on the financial data which is not advisable in the public sector.
- **Supervision** – according to the professional guidance, the SAI shall ensure that the work of the audit staff at each level and audit phase is properly supervised during the audit process. Supervision of performance audit team, by senior members of the audit staff, involves directing, supporting and monitoring their work to ensure that the audit objectives are met. Supervision involves ensuring that:
    - All team members fully understand the audit objectives
    - Audit procedures are adequate and properly carried out
    - Where appropriate, international and national auditing standards are followed
    - Audit evidence is relevant, reliable, sufficient and documented, and supports the audit findings and conclusions
    - Audit budgets, timetables and schedules are met

The audit team only complied with the second bullet point but was non-compliant on the others. This simply means supervision was generally poor.

- **Communication** – according to professional guidance, the auditor shall maintain effective and proper communication of key aspects of the audit with the audited entity and relevant stakeholders throughout the audit process. Establishing good two-way communication with the audited entity and stakeholders can help improve the auditor's access to information, and may help the auditor to gain better insights into the perspectives of the audited entity. The communication in the performance audit which was conducted by the SAI at the Ministry of Defence for the audit of the expenditure for various infrastructure was appropriate.

(c) Key Audit Matters (KAMs):

ISSAI 1701 *Communication key audit matters in the independent auditor's report,* gives detailed guidance in this area.

KAMs are those matters that, in the auditor's professional judgement, were of most significance in the audit of the financial statements of the current period. KAMs are selected from matters communicated with those charged with governance.

The auditor should use judgement in deciding which matters, taken from matters communicated to those charged with governance, should be reported as KAMs. Matters which the auditor may determine to be KAMs include:

- Areas of higher risk of material misstatement, or 'significant risks' that were identified
- Significant judgments in relation to areas where management made judgements
- The effect of significant events or transactions

Other factors to consider when deciding which matters should be reported as

KAMs include:

- The importance of the matter to intended user' understanding, including materiality
- Any misstatements relating to the matter
- The nature and severity of difficulties in applying audit procedures, obtaining evidence or forming conclusions
- The severity of any control deficiencies.

The Practice Note for ISSAI 1701 comments on confidentiality issues, and how these May affect the selection of KAMs by a public sector auditor. When communicating KAMs, Auditors in the public sector should consider laws and regulations that restrict the reporting of such information by imposing confidentiality requirements in matters relating to official secretes or privacy, such as audits of defence, health, social service and tax agencies. Public sector auditors should identify such laws and regulations and should consider confidentiality requirements when determining which KAMs to communicate.

If there are laws and regulations which were not taken into account by the audit team, then the Ministry of Defence is in order to complain and the SAI member ought to very careful when auditing such sensitive institutions in future.

SOLUTION FOUR

(a) Possible forms of opinion modifications in the audit of Zambezi Ltd:

There is a disagreement between the Public Sector Auditor and the Management of Zambezi Ltd on the amount of provisions that should be made in the financial statements. The fact that this is causing the auditor to want to modify the opinion suggested that the matter is considered material.

ISSAI 1705 *Modifications to the opinion in the independent auditor's report* gives guidance on the modifications of the opinion of the auditors.

The standard gives three forms of modification of the opinion namely:

- The qualified opinion.
- The adverse opinion and
- The disclaimer of opinion.

In the case at hand the Public Sector Auditor may give either a qualified or adverse opinion as explained below.

A disclaimer of opinion can only be issued when there is a limitation of scope and the matter of concern is both material and pervasive to the financial statements. In the case of the audit of Zambezi Ltd, there is no limitation of scope and so the Public Sector Auditor will not issue a disclaimer of opinion.

The form of modification of the opinion that will be given depends on the materiality and pervasiveness of the matter to the financial statements. In this case the public sector auditors have obtained sufficient appropriate audit evidence. The following is the criteria that will be used to determine the form of modification.

1. Since the matter is material, the Public Sector Auditor needs to decide on the pervasiveness of the matter to the financial statements. If the matter is not considered pervasive, then the form of modification of the opinion will be a qualified opinion where the Auditor states that 'except for the disagreement on the provision' the financial statements show a true and fair view.

2. If the matter of concern for the Public Sector Auditor is considered material and pervasive to the financial statements, the Public Sector Auditor will issue an adverse opinion where he concludes that 'the financial statements do not show a true and fair view'.

(b) (i) Need for an engagement letter:

ISSAI 1210 *Agreeing the Terms of Audit Engagements* gives guidance to the Public Sector Auditor regarding agreeing terms of the engagement.

The standard requires that the Public Sector Auditor should agree the terms of the engagement with the audited entity and these should be contained in a letter of engagement.

The need for an engagement letter is paramount in the case of the audit of the National Registration Agency because:

- There should be a common understating on the objective of the audit by Management of the Agency.
- The fact that this will be the first time the agency will be subject to a Public Sector audit reinforces the need to have an engagement letter.
- It is clear from the facts in the question that the Director General does not understand the responsibilities of Management with regards to the preparation of financial statements and the responsibility for internal control systems in the Agency.

The engagement letter will contain details of the nature of the audit and the responsibilities of the Management of the Agency and the Public Sector Auditor.

(ii) The preconditions that should exist in the audit of the National Registration Agency:

The objective of the auditor is to accept an audit engagement only when the basis upon which it is to be performed has been agreed and the preconditions to an audit exist.

The preconditions are:

- The use by management of an acceptable financial reporting framework and
- Acknowledgement by management of its responsibilities for the preparation of financial statements.

Ordinarily when the preconditions for an audit do not exist, the auditor should not accept appointment. It is important to observe that the Practice Note for ISSAI 1210 clarifies that in public sector auditing, the terms of the audit engagement are mandated by law and so are not subject to agreement with Management. This means that the Public Sector Auditor may not decline to perform an audit on the grounds that the preconditions have not been agreed upon.

(iii) Matters that should be included in the engagement letter:

1. The objectives of the audit for the financial statements and the performance audit.
2. The scope of the intended financial and performance audits that will be performed.
3. The responsibility of Management for the preparation of the financial statements.
4. The responsibility of Management for establishing internal controls to help prevent and detect fraud and error.
5. An identification of the relevant accounting framework for the preparation of the financial statements.
6. The expected and content of the report for both the financial audit and the performance audit.

SOLUTION FIVE

(a)(i) Need for risk assessment in the audit of Precious Auditors Mining:

Risk assessment is carried out by the Public Sector as part of planning the audit. Risk assessment is required to be carried out by ISSAI 1315 *Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and its environment.*

Risk assessment is required:

- Because the Public Sector Auditor uses a risk based approach to auditing whereby that concentrates the audit efforts to those areas where the greatest risk of misstatement is likely to happen.
- To enable the Auditor identify potential problems early during the audit.
- To enable the Auditors, to identify the risks in the client to enable the auditor plan the nature of audit procedures to be performed.

(ii) Risks in Precious Mining and audit responses:

Risk of fraud – the nature of the products is such that it is susceptible to fraud.
This is because even small quantities which can be concealed have a substantial value.

Response:
Plan to review the controls over the raw materials and the polished emeralds. During the audit, maintain professional skepticism and look out for the risk of fraud arising from theft.

Valuation of work in progress – this is the risk that the valuation of work in progress could be wrong resulting in the misstatement of inventory and profit.

Response:
Will need to carry out analytical procedures on the levels of inventory over the last few years. Evaluate the qualifications and objectivity of the expert engaged by Management to value work in progress. There will be need to consider engaging an Auditor Expert to carry out independent valuation of closing work in progress.

Valuation of processed emeralds – the valuation of polished emeralds could be wrong resulting in the misstatement of closing inventory at the period end. The company is relying on the Management Expert to value inventory.

Response:
There will be need to evaluate the competence of the person valuing polished emeralds and consider engaging an Auditor Expert at the period end to value the closing inventory of polished emeralds.

The determination of the selling prices through auctioning – there is a risk that the way that the auction is conducted could result in lower prices being paid for the emeralds. This could be part of the reason that despite production remaining constant over the last few years' revenue has not increased substantially.

Response
For samples of polished emeralds, seek the opinion of independent people to value the stones and compare with the prices at the auction.

(b) (i) Fraud in the National Oil Company:
Fraud is in two categories namely fraudulent financial reporting and misappropriation of assets.

Fraudulent financial reporting involves falsifying financial records including altering information on documents. The altering of the monthly reports by the Inventory Accountant amounts to fraudulent financial reporting and results in the company paying for products not received.

Misappropriation of assets is the other type of fraud. This involves the theft of assets of the organization. In the case of the imports of petroleum products the fact that the losses recorded at the receiving point are far in excess of the normal losses suggests that the drivers steal products in transit and this type of fraud is misappropriation of assets.

(ii) Work in gaining an understanding of the fraud:
During this stage of the forensic investigation of the fraud that has taken place at the National Oil Company, the Forensic Auditors will wish to have a clear understanding of what the fraud involved.

The following will be performed:

- Enquire from the Management of the National Oil Company, details of the nature of the fraud and the people who are involved if they are known or suspects if not known.
- Find out from Management the period within which the fraud took place.
- Obtain and review any documentation regarding the procedures for inventory control and specifically the accounting for working losses and transit losses.

Work in securing & safeguarding information in the forensic investigation:
In any fraud that takes place, it is likely that the fraudsters will try to conceal any evidence that may incriminate them. It is therefore important that the forensic auditor should secure and safeguard information that may be useful in the investigation.

To that effect the following will be done:

- If the suspects are know the possibility of requiring that they stay at home should be considered and should only be available when requested by the Forensic Auditor. This will prevent them from tempering with any useful information for the investigation.
- A visit at the premises where the fraud is alleged to have taken place and secure all documents relevant to inventory control and ensure they are not accessed by the fraudsters.
- In the case of electronic information such as correspondence through e mail, obtain copies of back-ups which can be referred to during the investigations.

END OF SUGGESTED SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO (2) sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

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

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE – (COMPULSORY)</u>

The Government of Alpha desires to improve its transport sector to accommodate persons with physical disabilities in the country. During budget hearings, the Ministry of Community Development presented a proposal for acquiring a new line of vehicles to accommodate persons with physical disabilities which will be managed by the Road Transport Safety Board. The cost of the vehicle is at K500,000 with an estimated life of ten (10) years and no residual value. It is expected to provide yearly net cash flow of K90,500 every year commencing in year 1. The policy of the Road Transport Safety Board is to discount its projects at 12%.

During the budget hearings, the Ministry was encouraged to ensure the budget is monitored on a quarterly basis in order to obtain value for money for services rendered. Further, the Ministry was urged to come up with a list of principal inputs and outcomes which should be measured from time to time.

In response, the Ministry indicated that supervising of staff in the public service and ensuring that services are delivered efficiently was a challenge. It was therefore important to ensure that ethical conduct is encouraged in the public service in order to ensure adherence to the budget. The hearing resolved that the Ministry should appraise the investment they intend to embark on with the Road Transport Safety Board, conduct an induction on ethics for its staff and provide feedback to the Ministry of Finance on the principal inputs and outcomes that the Ministry has agreed upon.

You are the Director of Finance in the Ministry of Community Development, and the Permanent Secretary has requested for the following:

Required:

(a) Evaluate the Net Present Value of the Road Transport Safety Board investment in the new line of vehicles explaining the decision that you have recommended. (7 marks)

(b) Explain six (6) advantages and three (3) disadvantages of using Net Present Value as opposed to using Pay Back Period or Accounting Rate of Return. (9 marks)

(c) Explain the financial factors that must be considered when making an investment decision in the public sector. (6 marks)

(d) Identify the key programs and Output indicators that are critical for the Ministry of Community Development. (9 marks)

(e) Explain the difference between budget control and management control. (2 marks)

(f) Explain how the Ministry would determine whether or not the public is getting value for its money. (3 marks)

(g) Explain the mechanism, strategies and approaches that could encourage ethical conduct in the public service. (4 marks)

[Total: 40 Marks]

SECTION B

There are FOUR (4) questions in this section.

Attempt any three (3) questions.

QUESTION TWO

The Ministry of Tourism owns a holiday resort which operates a clift top cable car to the beach during holiday season. During the year 2020, the Ministry was presented with three investment options of surplus funds. The amount of the funds proposed for investment was K500m. The table highlights the expected return of each investment. Three options were presented namely investing in a startup company, Investing in a developed market and retaining the funds in the account.

Option	**High Growth (K)**	**Low growth (K)**	**Recession (K)**
Start up	100M	5M	-30M
Developed Market	40M	24M	1M
Retain in Bank	16M	16M	16M

Required:

(a) You are the Director of Finance in the Ministry of Tourism, explain how you would assist Senior Management approach its risk attitude towards this investment. (8 marks)

(b) Explain ways of determining probability for a situation or event. (3 marks)

(c) State the difference between Private Sector Financial Risk Management and Public Sector Financial Risk Management. (9 marks)

[Total: 20 Marks]

QUESTION THREE

A newly appointed Medical Director of a University Teaching Hospital of Country Y was addressing the Management Committee meeting of the Hospital where he briefed the Committee on his policies regarding the need for the Hospital to start preparing a cash flow forecast and ensuring that funds generated by the Hospital are invested in Government securities such as Treasury bills and bonds.

However, one of the Management Committee members, indicated that as a public sector entity they felt it was not necessary for them to prepare cash flow forecast and invest

Government resources in Treasury bills and bonds. He further indicated that as an institution, they would rather wait for Government to disburse funds to facilitate implementation of programs.

Required:

(a) Identify areas where cash flow forecasting can be applied in the public sector to improve decision making. (10 marks)

(b) Suggest other techniques in the public sector that could be used to improve decision making. (4 marks)

(c) State the advantages and disadvantages of investing in Government securities. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) The current Strategic Plan of a Municipality has the overall objective of improving the performance of the council. One critical strategy towards attainment of this goal is adoption of a new public management strategy to increase participation of the private sector in the provision of public services such as refuse collection without necessarily losing sight of the differences in objectives between public sector and private sector.

The Mayor of the Municipality has suggested outsourcing as a key strategy in improving the delivery of public services in the city through the private sector. Service delivery by the council is currently hampered by poor revenue mobilization, lack of proper data on the council's activities, and poor infrastructure provision. Other supporting activities like cleaning and security are not well performed or performed at very high cost. These issues have been tabled at the first council meeting convened by the Mayor.

Required:

(i) Describe three (3) fundamental differences between public sector and private sector entities that the Municipality should take into consideration as it pursues its public financial management strategy. (3 marks)

(ii) Explain the term ***'outsourcing'*** in public sector context and advance two (2) arguments for the use of outsourcing by the Municipality in its operations. (4 marks)

(iii) Explain three (3) factors that the Management of the Municipality should consider in making the decision to outsource some of its functions. (3 marks)

(b) MKP District Council was established 20 years ago. During a Finance Committee meeting held in the Council Chamber, there was an argument from the Councilors that commitment accounting strengthens public financial management and therefore Government Departments must ensure that every expenditure is committed in accordance with the appropriation prior to spending.

During the same meeting, the Council Treasurer emphasized that migration from cash basis to accrual basis is necessary to improve financial reporting and transparency in the public sector.

Required:

(i) As the Financial Adviser, explain to the Councillors three (3) differences between accrual accounting and cash accounting. (3 marks)

(ii) Identify three (3) justifications for adopting accrual accounting in the public sector. (3 marks)

(iii) Explain the term *commitment accounting* and illustrate how it could strengthen public financial management. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) Some Government stakeholders believe that the poor performance of State Owned Enterprises and Entities can be attributed to poor governance and inadequate disclosure of public performance information. They argue that dissemination of Government financial information would enable the Zambian public to assess the impact of these entities on the economy as well as for advocacy where the need arises.

Required:

Identify four (4) stakeholders who use public sector financial information and their information needs. (4 marks)

(b) To assist the Controller and Accountant-General or the Minister of Finance to make informed financing or investment decisions, cash-flow forecasts are prepared as part of their budgetary control system. Revenue agencies also prepare revenue projections, as well as schedules of payments and non- tax revenues.

You are the Accountant at the Ministry of Finance and the newly appointed Director has asked you for some notes on objectives of cash management for his presentation at an upcoming workshop.

Required:

Briefly explain four (4) objectives of cash management in the public financial management. (6 marks)

(c) Governments all over the World have seen the need to have Government businesses automated and integrated for efficiency and effectiveness. This has led to the adoption of Integrated Financial Management Information Systems (IFMIS) by most Governments in managing public finances.

At a recent workshop on IFMIS held at Ziwali Hotel in the capital city, it was discussed that there are two preconditions required for successful implementation of IFMIS in the management of public funds.

Required:

(i) Identify four (4) benefits Zambia stands to gain by adopting an Integrated Financial Management Information Systems (IFMIS) in the Management of Public funds. (4 marks)

(ii) Explain two (2) preconditions required for the successful implementation of Government business through the IFMIS. (2 marks)

(d) Audit reports of public sector entities often reveal waste and misuse of public funds.

Required:

Explain four (4) mechanisms established by Government to ensure that public organizations practice value for money in public financial management. (4 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \text{ x spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \text{ x transaction cost x variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$E(r_i)=R_f+\beta_i(E(r_m)\text{-}R_f)$$

The asset beta formula

$$\beta_a=\left[\frac{V_e}{(V_e+V_d(1-T))}\beta_e\right]+\left[\frac{V_d(1-T)}{(V_e+V_d(1-T))}\beta_d\right]$$

The Growth Model

$$P_o=\frac{D_o(1+g)}{(r_e\text{-}g)}$$

Gordon's growth approximation

$$g=br_e$$

The weighted average cost of capital

$$WACC=\left[\frac{V_e}{V_e+V_d}\right]k_e+\left[\frac{V_d}{V_e+V_d}\right]k_d(1\text{-}T)$$

The Fisher formula

$$(1+i)=(1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1=S_0 x \frac{(1+h_c)}{(1+h_b)} \qquad f_0=s_0 x \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

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

CA3.8 PUBLIC SECTOR FINANCIAL MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

(a)

Year	Cost of the vehicles	Cash inflows	Net	DF 12%	DCF
Y0	(500,000)		(500,000)	1	(500,000)
Y1		90,500		0.893	80,816.50
Y2		90,500		0.797	72,128.50
Y3		90,500		0.712	64,436.00
Y4		90,500		0.636	57,558.00
Y5		90,500		0.567	51,313.50
Y6		90,500		0.507	45,883.50
Y7		90,500		0.452	40,906.00
Y8		90,500		0.404	36,562.00
Y9		90,500		0.361	32,670.50
Y10		90,500		0.322	29,141.00
					11,415.50

The investment yields positive NPV, therefore the Ministry should proceed to invest in the project.

(b)

Advantages

- It estimates wealth creation from the potential investment , given the applied discount rate.
- NPV accounts for investment size. It works for comparing marginal investments to multi-billion projects or acquisitions.
- NPV is straightforward to calculate (especially with a spreadsheet).
- NPV uses cash flows rather than net earnings (which includes non-cash items such as depreciation).
- NPV recognizes the time value of money (unlike cash-on-cash returns or simple payback period). For investments, which tend to be long-term, this is critically and entirely appropriate.
- NPVs are additive. If you have multiple projects and excess capital, you can add up projects to get a sense of aggregate wealth creation from all investable projects.

Disadvantages

- A discount rate must be selected. NPV also assumes the discount rate is the same over the life of the investment or project. Discount rates, like interest rates, can and do change year-to-year.

- NPV assumes you can accurately assess and predict future cash flows.
- For some, it is an intuitively difficult concept to grasp.

(c)

- **Availability of funding**

The availability of financing would be an important factor influencing the level of investment regardless of cost of capital.

- **Public investment**

When the public sector investment focuses primarily on infrastructure, public and private investment are complementary and the relationship between them is positive, ie, that public investment could stimulate and complement private investment to generate positive externalities, stimulating aggregate demand and opening new markets for goods and services and thus increasing the productivity of private investment.

- **Real exchange rate**

This variable can influence the desired level of investment; however, its effect could be positive or negative. A depreciation would reduce real income and wealth of the private sector by lowering the aggregate and postponing plans for future investment demand. In short, the depreciation of the exchange rate can have a negative effect on investment, increasing the cost of imported capital goods. On the other hand, a devaluation or depreciation of the exchange rate can increase investment in tradable sectors of an economy, improving the competitiveness of their goods in terms of prices in the world.

- **Cost of Capital**

Another variable that neoclassical theory considers relevant in investment decisions is the real interest rate, which in this case would be the cost of capital or the cost of credit to the company. Since an increase in the interest rates helps to discourage investment, we should expect a negative relationship between the two variables.

- **Terms of trade**

Usually this variable is used as a proxy for external shocks in developing economies. Adverse terms of trade imply that require more exported units per unit of import, which affects the current account deficit with a negative effect on private investment.

- **Uncertainty**

Uncertainty can be a factor influencing the level of desired investment. The investment complies with the principle of irreversibility, ie activity involves costs of input and output that are not negligible.

(d)

Programmes

- Social Assistance - to give support to incapacitated individuals and households in form of cash, goods or in-kind support. The main target groups for this programme are the female-headed households, aged-headed households, orphans and neglected children, chronically ill as well as minor disaster victims.
- Social Welfare - is aimed at reducing extreme poverty and the intergenerational transfer of poverty, mainly through supporting incapacitated individuals and households with Social Cash Transfers, In-kind support towards items such as education, health care and repatriation of stranded persons.
- Community Development - the Food Security Pack as well as other grants aimed at empowering vulnerable households with financial and agricultural inputs, as well as lifesaving and development skills.
- Non – Governmental organization regulations and standards - providing effective co-ordination and registration of Non-Governmental Organisations and facilitating the work of the Non-Governmental Organisations

Output Indicators:

- Number of Beneficiaries empowered with agricultural inputs
- Number of Beneficiaries empowered with lifesaving and development skills
- Number of on-going Community Self-Help Initiatives.
- Number of juveniles in conflict with the Law rehabilitated
- Number of households receiving social cash transfers
- Number of incapacitate households assisted with In Kind Support
- Number of NGOs Inspected
- Number of NGOs Registered

(e)

- Budgetary control is managing to utilize budgets, monitor and control costs and operations in a given accounting period. It means to set financial and performance goals with budgets, compare the actual results and adjust performance when required.
- Management control gathers and uses information to evaluate the performance of different organizational resources like human, physical, financial and organizational strategies.

(f)

Value for money for the Ministry can be demonstrated in the following ways:

- When the Ministry takes into consideration the contribution to be made to advancing Government policies and priorities while achieving the best return and performance for the money being spent

- When the Ministry achieves the lowest initial price, but the optimum combination of whole life costs and quality .
- When there is transparency and accountability in spending Public Funds, and for obtaining the maximum benefit from the resources available.

(g)

- Be active in the ethics program. For example, introduce the ethics training or be the person to speak.
- Encourage employees to raise issues.
- Address ethics issues.
- Enforce the ethics program, such as by punishing violators.

SOLUTION TWO

a) **You are, the Director of Finance in the Ministry of Tourism, explain how you would assist Senior Management approach its risk attitude towards this investment.**

- Maximax – a risk seeker would look for the highest possible outcome. They would invest the K500m in the shares in a start-up company as this provides the highest possible return of K100m.
- Maximin – a risk averse investor would look for the best outcome in the worst possible situation. As the minimum outcomes are a loss of K30m if investing in the start-up, K1m if developing own markets, and K16m if retaining the funds as cash in the bank, then the risk averse investor would retain the cash in the bank.
- Minimax regret – more complex as it requires an examination of opportunity cost and understanding what the level of regret would be in the event that the choice providing the highest return was not made. Requires the development of a regret matrix which shows the best possible outcome depending on whether the economy has high growth, low growth or recession.
- Finally, we have expected value, which provides a probability weighted average of all possible values. This is determined by multiplying the probability by the return in each case provide a weighted amount and summing these together.

b) **Explain ways of determining probability for a situation or event**

- Priori probabilities – 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 past but rather subjective judgment, which will depend on the expertise and knowledge of the individual who is making this judgement.

(c) State the difference between Private Sector Financial Risk Management and Public Sector Financial Risk Management

Financial risk management for individual **public sector** entities is primarily focused on risks associated with approved budgets and associated cash flows. This includes:

- **Demand forecasting** – entities forecast expenditure on the basis of expected levels of demand for goods and services. If demand is higher than forecast, entities may need to either restrict provision, with subsequent impact on the delivery of wider Government objectives, or seek emergency financing which may carry significant costs and have wider implications for financial sustainability. Demand forecasting risk may be associated with fiscal risks, for example increased unemployment leading to higher demand for cash transfers to individuals and households.

- **Cost forecasting** – expenditure forecasts are impacted by factors over which entities may not have control. While generally areas such as staff emoluments will be fixed in the short-term, other costs may be impacted by changes in inflation, exchange rate, interest rates and other factors.
- **Approved financial resources are not provided** – delivery of public goods and services requires those financial resources that have been approved and appropriated by the legislature to be provided to the entities that deliver them. In many countries, entities either do not receive their full resource allocations or receive the funds too late in the financial year to be able to utilise them.
- **Wider revenues used to finance operations** – where entities are permitted to fund themselves through fees and charges for goods and services, shortfalls on forecasts can often have a significant impact on their financial position and ability to deliver wider public goods and services.
- **Regularity** – where resources are approved by a legislature, public sector entities are usually required to demonstrate that they have been applied for the purpose for which they were appropriated and raised. This requires public sector entities to ensure that spend is consistent with specific legislation providing for activities or services and with the legislature's intentions as to the purpose of the expenditure. It may also require them to demonstrate specific conformity with other rules and regulations.
- **Propriety** – the manner in which public sector officials conduct themselves, with an expectation that financial resources will be managed to promote accountability, transparency and the public interest.
- **Value for money** – public sector entities are often required to ensure that resources are spent in a manner that promotes economy, efficiency and effectiveness.

Private Sector Risk Management:

- Financial risk management in the private sector is therefore primarily focussed on risks to the cash flows of the firm. These can include changes in exchange rates which may affect future selling prices, purchase prices and volumes, influencing the company's market position and value. It can also include changes in interest rates which may influence the cost of funding or the return earned on financial assets. Financial risks regarding investment decisions which can have significant impacts on a firm.
- In the short-term, financial risk for a company is mainly connected to working capital. These are the short-term assets and liabilities that need to be managed to ensure that the organisation can meet its financing needs without having a level of liquidity that prevents it making profitable investments essential for long-term growth.
- In the long-term, value is created from investment in profitable ventures, and to create shareholder value, these investments need to exceed the company's weighted average cost of capital. Otherwise the cost of financing the investment will exceed the returns generated from it and shareholder value will be destroyed

SOLUTION THREE

(a)

- Set borrowing limits and minimize cost of funds. The knowledge that funds are required in advance gives the Cash Manager time to ensure funds and borrowing limits are available to look for surplus from other sources.
- Maximise Interest Earning – Minimise cost of funds , knowing that a surplus will occur in advance enables the government look for effective ways to invest funds.
- Liquidity Management – Cashflow forecasting enables Government assess potential surplus and deficits and also the periods for which surpluses and shortages will arise.
- Foreign Exchange Risk Management – Cashflow forecasting helps Treasury to identify the size and timings of currency flows and against opposite flows or hedge them in the currency markets.
- Settling and Monitoring longer term investment and funding strategies – Help in identifying structural shortages and surpluses.
- Financial Control – Cashflow forecasting can be used to model payables and recoverables against known revenues and expenditure.
- Monitoring and Settling Strategic objectives – Various Strategies and Objectives can be planned using cashflow forecasting and reviewed or monitored by the institution cashflows relating to specific budgets against those planned.
- Monitoring various lendors and investor ratios- It can be used by government to monitor and even plan certain types of ratios.
- Capital Budgeting – Carried out to ascertain whether government has sufficient funds not only to finance normal operations but also finance the acquisition of new capital goods.
- As a tool of managing delivery of goods and services and linked with just in time payments and cash management.

(b)

Decision making for programmed decision;

- Standard Procedures and rules – Government have standard procedures and rules for taking routine and repetitive decisions. Whenever needed a manager refers to the standard procedure and rules before taking decisions. An effort is made to have consistency in routine decision.
- Organisation Structure – A relationship is established between superior and subordinate. This relationship comes out of organization structure . Persons at different organization structures are assigned work to be done by them. For taking up this work , managers need authority to take decisions. The authority to take decisions needs proper information back up. All managers or decision making centres are linked to information system for supplying the information when needed.

Decision making for non - programmed decisions

- Linear Programming – Technique used to determine the best use of limited resources for achieving a given objective.
- Network Techniques – Network technique is used for preparing an controlling activities , Project Evaluation and Review Techniques (PERT) and critical path method are used for planning and implementing time bound projects.

(c)

Advantages

- Guaranteed rate of return
- No value loss
- Good investment for retirees

Disadvantages

- Long term Investment
- Restrictions and Penalties
- Buying Limits

SOLUTION FOUR

a)

(i) Differences between the public sector and the private sector:

- **Objectives are different.** Objective of public sector entities is to deliver public goods and services to all citizens in order to maximize welfare of the citizenry. However, the principal objective of the private sector entities is to make profit on the goods and services they produce and sold in the market.

- **Means of funding is different**. Public sector entities are financed largely from the public resources resulting from taxes, levies and other public moneys whereas private sector is financed through capital contribution of owners such as shares. Therefore, public entities are collectively owned by the citizens without equity interest but equity interest is the basis of private ownership.

- **Accountability structures are different**. Public sector entities are accountable to citizens through parliament but private entities are accountable to the shareholders through the board of directors.

- **The nature of goods and services they offer is different**. Public sector is engaged in the provision of public goods and services which are non-excludable and non-divisible. Private sector is involved in the provision of private goods that are rivalry, divisible and discriminatory. Thus, public sector operates in a monopolistic market while private sector operates in a competitive market.

- **The regulatory environment is different**. Public sector entities are established by a specific enactment of Parliament whereas private sector entities are governed by general commercial enactments and other industry specific enactments.

(ii) Outsourcing refers to the practice where a public sector entity contracts out some of its supporting or non-essential services to the private vendor to perform for an agreed consideration. In outsourcing arrangement, the risk is retained by the contracting entity, which is the public sector entity.

<u>Arguments of outsourcing are that:</u>

- Outsourcing leads to improvement in the delivery of public services through the private sector due to assumed greater efficiency and effectiveness in private sector.
- Outsourcing will enable the Municipality to focus on its core functions and activities since the supporting services will be taken over by a private vendor.
- Outsourcing serves as a medium through which the Municipality could involve private sector in the delivery of public services.
- Outsourcing will help Municipality to serve cost as it is often cheaper to outsource a service than to provide it internally

iii) Factors that the Management of the Municipality should consider in making the decision to outsource some of its functions.

Legal requirement and government policy. The Municipality must consider the enabling law and Government policy carefully to determine whether outsourcing is permitted.

Cost savings. The Municipality will evaluate the decision to outsource in terms of cost by comparing the cost of internal provision of the service to the cost of outsourcing. Most often, outsourcing is supported in terms of cost advantage.

Internal capabilities. The internal expertise and capabilities of Municipalities should be considered to determine whether the existing capabilities are adequate to perform the service internally. For example, it will be unacceptable for an organisation with very strong human resource function to outsource recruitment and related function.

Availability of vendors. The availability and willingness of private vendors to execute the function is an important determinant of successful outsourcing.

Avoidance of conflict of interest. Management should ensure that all issues of conflict of interest is considered in the award of outsourcing contract.

(b)

(i) There are differences in accrual accounting and cash accounting and some of the differences are that:

- In accrual accounting comprehensive set of financial statement are prepared to measure financial performance, position and cash condition of the entity. However, cash accounting reports mainly on cash condition of the entity by emplacing receipt and payment information.
- Under accrual accounting, non-financial assets are capitalised and depreciated over their useful life span but under cash accounting cost of non-financial assets are written off in the year of acquisition or construction, hence no depreciation is charged.
- Under cash accounting all obligations of government are disclosed on the statement of financial position but in the cash accounting system such information is not disclosed on the financial statement until they are paid.
- Under accrual accounting allowances are permitted for receivables but no such allowances are accounted for under cash accounting.
- Under accrual accounting revenues are reported when they are earned and expenditures when incurred but under cash accounting revenues are recognised only when received and expenditures when actually paid for.

(ii) Justifications for adopting accrual accounting are that:

- It provides superior measure of performance in terms of cost of service, efficiency and effectiveness in service delivery.
- It promotes accountability and transparency in public financial management through increasing disclosure of all assets and liabilities.

- It provides comprehensive financial information that support decision making and control.
- It ensures general improvement in the quality of financial reporting in the public sector.

(iii) Commitment accounting is a technique of accounting in which expenditures are recorded when decision is made by management to spend on an activity or item. It is a process by which appropriations are encumbered against future expenditure decisions of management.

Commitment accounting strengthens public financial management in the following ways:

- It ensures that departments do not over spend their appropriation without further authorizations.
- It also ensures that spending is done within the ambit of a vote hence misapplication funds may be reduced or curtailed.
- It promotes effective planning of expenditure within the available resources and ensure that disbursements are synchronised with commitment.

SOLUTION FIVE

(a) Other stakeholders or users of public sector financial statements and their information needs are as follows:

Stakeholder/Users	Information needs
Parliament	It needs the information for: ▪ Assessing accountability and stewardship of public managers and agencies ▪ Assessing compliance with the legally adopted budget and other enactments ▪ Assessing the economy, efficiency and effectiveness of the operations public sector entity ▪ Monitoring and evaluating public financial performance of Government
Citizens (tax payers and voters)	They need information for: ▪ Assessing the cost of public services ▪ Assessing accountability and stewardship of Government. ▪ Making voting decision to some extent.
Loan creditors (IMF, World Bank etc)	They provide credit to government and they need information to: ▪ assess credit worthiness of the country and ▪ determine the extent of compliance to debt conditions and terms.
Investors in Government securities	They need the information to assess coupons and the ability of Government honour repayments and coupons.
Donors and sponsors	They seek accountability for donor funds and compliance to donor terms and conditions.
Auditor General	AG needs the information for auditing purposes and accountability in general.
Financial analysts/Rating agencies	For financial advisory purposes for their clients
Employee groups/trade unions	For wage negotiations and security of jobs.
Government statistician	For national accounting purposes
Pressure groups/Civil society groups	To demand accountability, performance and compliance to rules from government,

(b)
Cash management is a very important aspect of public financial management that ensures availability of funds to support intended government activities whilst controlling and safeguarding the cash resources of the entity. **The objectives of cash management in public financial management include:**

- <u>To eliminate idle cash balances.</u> Every Kwacha held as cash rather than used to augment revenues or decrease expenditures represents a lost opportunity. Funds that are not needed to cover expected transactions can be used to buy back outstanding debt (and cease a flow of funds out of the Treasury for interest payments) or can be invested to generate a flow of funds into the Treasury's account. Minimizing idle cash balances requires accurate information about expected receipts and likely disbursements.

- <u>To deposit collections timely.</u> Having funds in-hand is better than having accounts receivable. The cash is easier to convert immediately into value or goods. A receivable, an item to be converted in the future, often is subject to a transaction delay or a depreciation of value. Once funds are due to the Government, they should be converted to cash-in-hand immediately and deposited in the Treasury's account as soon as possible.

- <u>To ensure timely disbursements.</u> Some payments must be made on a specified or legal date, such as Social Security payments. For such payments, there is no cash management decision. For other payments, such as vendor payments, discretion in timing is possible. Government vendors face the same cash management needs as the Government. They want to accelerate collections. One way vendors can do this is to offer discount terms for timely payment for goods sold.

- <u>To promote efficient and effective management of cash resources in order to demonstrate accountability for cash resources</u>**.** Cash management seeks to ensure that cash of Government are used wisely to achieve the intended purposes and at the same time showing accountability of cash use.

- <u>To enhance financing decisions relating to when to borrow</u>**.** Effective cash management will help to forecast cash deficiencies and crises so as to take proactive steps in address the problem ahead of danger.

(c) (i)<u>The benefits of IFMIS in managing public funds in Zambia include:</u>

- Improved budgetary, financial management (record Keeping) and reporting processes
- Provide accurate, timely and reliable financial information to Central Government and Decentralized Institutions and Organizations
- Uniformity in accounting and reporting with the introduction of a common Chart of Account and Database

- Improvement in accountability, control, monitoring and auditing of Governmental finances.
- Ensure that Ministries, Department and Agencies spend within their

budgetary allocation due to budgetary control

- Reduce manual processes, duplication of effort and errors
- Match disbursements with availability of revenues thus Improve efficiency in cash management and treasury Management System
- Improve interaction between and among other financial management players such as Bank of Zambia (BOZ), Zambia Public Procurement Authority (ZPPA) and Zambia Revenue Authority (ZRA), among others.
- Enhance enforcement of financial legislation
- Complete and timely exchange of data and information among/between agencies and central government for producing complete, timely and accurate reports (Improve Record Keeping) etc.
- Enhance and re-enforce the internal control systems in public financial management for accountability.
- Provide documentation of business processes, workflows and approval levels to ensure consistent and timely compliance across all agencies and statutory bodies.
- An effective and efficient budget preparation, execution, monitoring and evaluation mechanism
- Provide for the ability to budget for, track and monitor projects and grants through the chart of accounts.

i) **The preconditions for IFMIS to function effectively include:**

- Effective information technology infrastructure such as internet connectivity is required to make the automation successful.
- Strong political commitment is necessary for setting the tone for an effective IFMIS. Political will is needed for resource allocation.
- Expertise to administer the system effectively is required. The availability of human resources with right expertise in MIS is necessary for effective implementation of IFMIS.

d) Mechanisms for Value for Money

There are several mechanisms to ensure Government entities practice value for money in public financial management including:

i) Laws and Regulations
ii) Regulatory Bodies
iii) Price Commissions/Commissions of Enquiry
iv) The Budget

- **<u>Laws and Regulations</u>**

To ensure economic use of resources and value for money various laws and regulations have been established by Government to serve as productivity factors, related efficiency yardsticks and prescriptions to prevent misuse of public funds and ensure value for money. Among these are the Accountants Act, and The Public Procurement Act.

- **Regulatory Bodies**

As an integral part of Government financial operations, regulatory institutions have been established to ensure efficient management, use of public moneys and resources, safety of public property, cost of services provided to the general public and quality of services provided by the private sector to the public and to state entities. These regulatory bodies include the Ministry of Finance, Controller of Audit and Accountant General's Departments, The President and Cabinet, Parliament, and a host of others.

- **Commissions of Enquiry**

Sometimes Price Commissions and Commissions of Equiry are appointed by the President to frequently review some public entities and state financial transactions to ascertain the use of public economic resources and value for money in public contracts.

- **The Budget**

Budgetary principles of financial control, transparency, public participation, and public accountability provide checks and procedures to prevent misuse of state resources and ensure value for money.

END OF SOLUTIONS