QUESTION AND ANSWER

FOR

JUNE 2018

CA ZAMBIA

PAPERS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.1: FINANCIAL ACCOUNTING

MONDAY 11 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: 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.

Section A - (COMPULSORY)

Attempt all ten (10) multiple choice questions

1.1 The statement of cash flows starts with cash flows from operating activities.

Which of the following statements (using the indirect method) are correct?

(i) Loss on sale of operating non-current assets should be deducted from net profit before taxation.
(ii) Increase in inventory should be deducted from operating profits.
(iii) Increase in payables should be added to operating profits.
(iv) Depreciation charges should be added to net profit before taxation.

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

1.2 Zambezi Co made the following transactions in the period;

Sales (including sales tax) of K1,160,000

Purchases (excluding sales tax) of K800,000.

What is the balance on the sales tax account, assuming all items are subject to sales tax at 16% and the balance brought forward on the sales tax account was nil?

A. K32, 000 debit
B. K32, 000 credit
C. K75, 255 debit
D. K75, 255 credit (2 marks)

1.3 Zam-Milk Co purchased a patent on 31 December 2016 for K375, 000. The company expects to use the patent for five years, after which it will be valueless.

What amount will be charged in Zam-Milk Co's statement of profit or loss and other comprehensive incomes for the year ended 31 December 2017?

A. K75, 000
B. K37, 500
C. K57, 000
D. K73, 500 (2 marks)

1.4 Which of the following statements is/are true?

(i) The IFRS Foundation produces IFRSs. The IFRS Foundation is overseen by the IASB.
(ii) One of the objectives of the IFRS Foundation is to bring about convergence of national accounting standards and IFRSs.
(iii) The IFRS Interpretations Committee is a forum for the IASB to consult with the outside world.

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

1.5 What is the correct double entry for the issue of 2,000,000 K1 shares at a premium of 30 Ngwee, and paid for in full.

A. Dr Ordinary share capital K2, 000, 000
Cr Share premium account K600, 000
Cr Cash K1, 400, 000
B. Dr Cash K2, 600,000
Cr Ordinary share capital K2, 000, 000
Cr Share premium account K600, 000
C. Dr Ordinary share capital K2, 600, 000
Cr Share premium account K600, 000
Cr Cash K2, 000, 000

D. Dr Cash K2, 000, 000
Dr Share premium account K600, 000
Cr Ordinary share capital K2, 600, 000

(2 marks)

1.6 When preparing the financial statements for the current year, Zam-Eggs closing inventory was understated by K650, 000.

What will be the effect of this error if it remains uncorrected?

A. The current year's profit will be understated and next year's profit will be overstated.
B. The current year's profit will be overstated and next year's profit will be understated.
C. The current year's profit will be understated but there will be no effect on next year's profit.
D. The current year's profit will be overstated but there will be no effect on next year's profit. (2 marks)

1.7 The net assets of a trader, at 1 January 2017 amounted to K256, 000. During the year to 31 December 2017, the owner introduced a further K100, 000 of capital and made drawings of K96, 000. At 31 December 2017 the net assets totaled K368, 000.

What is the total profit or loss for the year ended 31 December 2017?

A. K108, 000 profit
B. K108, 000 loss
C. K156, 000 loss
D. K112, 000 profit (2 marks)

1.8 The financial year of Melisa Co ended on 31 December 2017. An inventory count on January 5, 2018 gave a total inventory value of K900, 000. The only transactions that occurred between January 1 and January 5 2018 were as follows:

	K
Purchases of goods	80, 000
Sales of goods (mark up 20%)	120, 000
Goods returned to a supplier	30, 000

What inventory value should be included in Melisa Co's financial statements at 31 December 2017?

A. K830, 000
B. K910, 000
C. K950, 000
D. K850, 000 (2 marks)

1.9 Buseko Co has a tax liability relating to 2016 brought forward in 2017 of K185, 000. This liability is finally agreed at K160, 000, which is paid in 2017. Management estimates their tax liability for profits earned in 2017 will be K200, 000.

What should the charge for taxation be in Buseko's statement of profit or loss for the year ended 31 December 2017?

A. 225, 000
B. 150, 000
C. 175, 000
D. 200, 000 (2 marks)

1.10 When preparing a company's statement of cash flows complying with IAS 7 *Statements of Cash Flows*, which of the following items could form part of the calculation of cash flow from financing activities?

(i) Proceeds of sale of premises
(ii) Rights issue
(iii) Dividends received
(iv) Bonus issue of shares

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

(2 marks)

[Total: 20 Marks]

SECTION B

Question Two 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)

Singani is Treasurer of Fairway Golf Club whose sources of income are members' donations, subscriptions and fundraising activities of different types including running a bar on a small scale to raise funds of operational needs. The following is a summary of the Cash Book that has been presented to you by the Treasurer:

Receipts	**K**
Cash at Bank and in hand at 1 April, 2017	2,370
Members' subscriptions	14,860
Entrance fees	1,600
Bar receipts	28,400
Competitions receipts	6,820
	54,050

Payments	**K**
Wages – Outdoor staff	6,690
Bar purchases	20,200
Rent 1½ years to June 30, 2017	3,750
Rates	1,100
Secretary's salary	1,560
Lighting, heating and cleaning	3,850
Competition prizes	2,000
Printing, Postages and sundries	3,000
Deposited with Building Society	4,000
Balance at Bank and in hand 31 March 2018	7,900
	54,050

Additional Information

1. You are informed that the Club's assets on 1 April, 2017 were:- furniture and equipment K24,000, bar stocks K1,300, stock of prizes – K400, and that K2,600 was owing for supplies to the bar.

2. You find that on 31 March 2018, the bar stocks were K1,500 and prizes in hand were K250, while the club owed K7,800 for bar supplies. On examining the members' register, you find that subscriptions unpaid at 31 March 2018 amounted to K500 and that the figure of K14,860 shown in the cash book included K350 in respect of the previous year and K200 paid in advance for the following year.

3. Furniture and equipment must be depreciated at 10% of the carrying amount at the beginning of the year.

Required:

(a) Prepare the Opening Statement of Affairs and a Subscription Account as at 1st April 2017. (5 marks)

(b) Prepare a bar trading account for the year ended 31 March 2018. (3 marks)

(c) Prepare the Income and Expenditure Account for the year to 31 March 2018; (5 marks)

(d) Prepare a Statement of financial position as at 31 March 2018. (7 marks)

[Total: 20 Marks]

QUESTION THREE

(a) While in a company of fellow trainee accountants, at a coffee café, Moonga inquired from his colleagues whether his understanding of depreciation was correct. He shared his belief of depreciation at which he alleged that it was a way to provide a business with a reserve of funds that could be used to replace assets in the future.

Required:

Explain to Moonga the meaning of depreciation to remove the confusing belief that he has about depreciation. (3 marks)

(b) Another fellow trainee narrated a series of events that took place at a company he was attached to for internship. The Finance Manager had requested him to draw up accounts up to the reporting date of 30 June 2017. The events which took place in the year to 30 June 2017 were as follows:

1 October 2016	Bought Building for a cost of K159,520.
1 February 2017	Bought motor vehicle for K48,000
1 April 2017	Sold the building that was part of the opening balance at start of the year for disposal proceeds of K85,000. The building had been bought on 1 April 2012 for K155,000,

At 1 July 2016 the position was as follows:

Item	**total cost**	**accumulated depreciation**
	'K'	**'K'**
Buildings	635,400	308,040
Motor Vehicles	143,000	74,500

Other information provided:

Depreciation is charged on straight line basis at 10% per annum on buildings and 5% reducing balance on motor vehicles. A policy of accounting for depreciation on prorata basis is in use.

Required:

Draw up the following accounts for your fellow trainee as they would appear for the year ended 30 June 2017:

(i) Buildings cost account (2 marks)
(ii) Motor Vehicles cost account (2 marks)
(iii) Buildings accumulated depreciation account (3 marks)
(iv) Motor Vehicles accumulated depreciation account (2 marks)
(v) Buildings disposal account (2 marks)
(vi) Profit and loss extract and statement of financial position as at 30 June 2017. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

Mika, a sole trader, has extracted the following list of balances as at 30 September 2017 from his accounts prior to the preparation of the year-end financial statements.

	K
Drawings	43,650
Capital	135,000
Purchases	356,400
Furniture	22,500
Inventories 1 October 2016	54,000
Motor vehicles	18,000
Sales	594,000
Selling expenses	150,750
Administrative expenses	53,100
Trade receivables	32,400
Trade payables	31,050
Bank balance (asset)	7,650

The following errors have been discovered after the extraction of the above list of balances.

(i) Mika made credit sales in September 2017 for K22,500 which were correctly recorded in the sales account but were recorded in receivables account as K25,200.

(ii) The total of discounts received of K6,500 in the cheque payments day book had been posted to the payables control account correctly, but no entry was made to complete the double entry.

(iii) The purchases account had been under cast by K11,500.

(iv) Mika introduced further capital into the business of K30,500 which was recorded correctly in the cash book but posted to capital account as K50,300.

(v) Mika made drawings of goods costing K500 during the year. These were recorded in the drawings account and no other entry was made for them.

Required:

(a) Prepare Mika's trial balance from the list of balances **before** the correction of errors (i) to (v) above and clearly showing the suspense account balance (4 marks)

(b) Prepare journal entries for the correction of the errors (i) to (v) above. (8 marks)

(c) Prepare a suspense account that shows the clearance of the balance on it. (3 marks)

(d) Extract an adjusted trial balance after correcting the above errors. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Jack is a sole trader who sells hair accessories both locally and abroad. Having just completed the second year of his trading, he has presented to you a trial balance that gives details of his account balances as at 30 June 2018.

Jack's trial balance as at 30 June 2018

	DR K	CR K
Sales		1,370,000
Bank balance	88,234	
Loan interest paid	30,000	
Drawings	269,202	
General expenses	58,414	
Inventory 1 July 2017	86,500	
10% loan repayable in 2026		400,000
Capital 1 July 2017		200,000
Plant and machinery at cost	195,200	
Motor vehicles at cost	86,800	
Accumulated depreciation:		
Plant and machinery		28,560
Motor vehicles		27,000
Allowance for receivables		956
Rent	143,796	
Wages and salaries	260,000	
Purchases	655,000	
Carriage inwards	6,912	
Carriage outwards	20,000	
Stationery	23,784	
Insurance	18,624	
Irrecoverable debts written off during the year	9,650	
Trade payables		56,000
Trade receivables	130,400	-
	2,082,516	2,082,516

The following additional information is relevant:

(1) Closing inventory on 30 June 2018 was valued at K65,800.

(2) Irrecoverable debts of K400 are to be written off at 30 June 2018 and an allowance of 1% of the remaining receivables is to be created.

(3) Plant and machinery is to be depreciated at 10% per annum on straight line basis, while motor vehicles are to be depreciated at 25% per annum on reducing balance basis.

(4) A full year's interest is required to be charged to profit and loss.

(5) Insurance in the trial balance includes K7,008 for a three month period ending 31 August 2018.

(6) Just before the year end, Jack paid the landlord rent bills from which an overpayment of K8,900 was discovered. Jack does not wish to request for a refund but to ask if the payment can go towards the next quarter's bill.

Required:

(a) Prepare Jack's statement of profit or loss for the year ended 30 June 2018.
(11 marks)

(b) Prepare for Jack, a statement of financial position as at 30 June 2018.
(9 marks)
[Total: 20 Marks]

QUESTION SIX

Chiseche and Chikondi were both lecturers at a reputable institution in Kitwe, but decided to break away on agreement that they would form their own tuition centre and operate it as a partnership business.

Prior to commencement, they drew up a partnership agreement in which the following were agreed upon:

(i) Capital contribution:	Chiseche	K150,000
	Chikondi	K225,000
(ii) Interest on capital account balances		5% per annum
(iii) Interest on drawings		6% per annum
(iv) Profit and loss sharing ratio:	Chiseche	40%
	Chikondi	60%

(v) Chikondi would be entitled to a salary from inception of their trading, of K55,000 per annum.

Besides implementing the above five items, Chiseche and Chikondi had the following balances at the end of their first year of trading ending 31 December 2017:

	'K'
Invoices for tuitions (Sales revenue)	1, 652,250
Purchases of textbooks for students	875,490
Students' refund claims	2,400
Returns of text books to suppliers	990
Staff salaries	432,900
Rent and insurance of buildings for classrooms	15,000
Electricity	58,500
Bad debts written off during the year	3,450
Trade receivables	412,500
Trade payables	70,200
Furniture and fittings @ cost on 1 January 2017	186,000
Cash at bank (asset)	1,200
Drawings: Chiseche	51,000
Chikondi	60,000

The following further information is relevant:

(i) Rent and insurance balance above includes a three months' insurance invoice paid to 28 February 2018 of K600 and rent covering a three months period to 31 January 2018 of K2,250.
(ii) Furniture and fittings are to be depreciated at 15% per annum straight line.
(iii) Receivable allowance of K4,500 is required at 31 December 2017.
(iv) Inventory of books at 31 December 2017 was K4,500.
(v) All drawings were taken on 1 July 2017.

Required:

(a) Prepare a partnership statement of profit or loss and appropriation account for the year ended 31 December 2017. (10 marks)

(b) Prepare a partnership statement of financial position as at 31 December 2017. (10 marks)

[Total: 20 Marks]

END OF PAPER

CA1.1 FINANCIAL ACCOUNTING SOLUTIONS

SOLUTION ONE

1.1 **D**

1.2 **B** (1,160,000 X 16/116) – (800,000X16/100) = 32,000

1.3 **A** 375,000/5 = 75,000

1.4 **C**

1.5 **B** Share capital = 2,000,000@K1 = K2, 000,000 Premium = 2,000,000@K0.30 =K600,000. Cash K2,600,000

1.6 **A**

1.7 **A** Profit/(loss) : 368,000+96,000-256,000-100,000 = K108,000

1.8 **C** 900, 000 +100,000(120,000 X20/120)+30,000-80,000 = K950,000

1.9 **C** 200,000-(185,000-160,000). Over provision of tax liability by 25,000

1.10 **B**

SOLUTION TWO

a) Opening Statement of Affairs

ASSETS		LIABILITIES AND ACCUM. FUND	
Furniture & Equipment	24,000	Creditors for bar supplies	2,600
Bar stocks	1,300	Rent accrued (3750X15/18)	3,125
Stocks of prizes	400	Accumulated Fund (Bal)	22,695
Subscriptions outstanding	350		
Cash at Bank	2,370		
	28,420		28,420

Subscriptions Account

Bal b/d 1.4.2017	350

b) Bar Trading account

Bar Receipts		28,400
Bar Cost of Sales		
Op Inventory	1,300	
Purchases	25,400 (W)	
Closing Inventory	(1,500)	
		(25,200)
Bar Trading Profit		3,200

Working – Bar Purchases

Cash paid to suppliers of bar supplies	20,200
Opening payables for bar supplies	(2,600)
Closing payables for bar supplies	7,800
Bar Purchases for the period	25,400

c) Income and Expenditure Account

Income:		
Subscriptions (w)		14,810
Entrance fees		1,600
Bar Profit (see part b)		3,200
Competitions – Receipts	6,820	
Less: Prizes	(2,150) (W)	4,670
		24,280
Expenditure:		
Wages	6,690	
Rent	2,500	
Rates	1,100	
Secretary's Salary	1,560	
Lighting, heating & cleaning	3,850	
Printing, Postage and Sundries	3,000	
Depreciation 10%X24000	2,400	
		(21,100)
Excess of Income over Expenditure		3,180

Workings

1. Subscription Income

Subscription Account

	K		K
Bal b/d	350	Cash	14,860
Subscription in advance c/d	200	Subscription owing c/d	500
I & E. A/c (balance)	14,810		
	15,360		15,360

2. Rent Expense

Rent accrued 1.4.2017 3750/18X15	(3,125)
Rent Paid	3,750
Rent accrued at 31.3.2018 3750/18X9	1,875
Expense for the year	2,500

3. Competition Prizes

Opening inventory	400
Purchases	2,000
Less closing inventory	(250)
	2,150

d) Statement of Financial position at 31 March 2018

	K	K
Non-Current Assets		
Furniture and Equipment	24,000	
Less: Depreciation	(2,400)	21,600
Current Assets		
Bar stocks	1,500	
Prizes in stocks	250	
Subscriptions outstanding	500	
Building Society deposit	4,000	
Cash at Bank	7,900	
		14,150
		35,750
Accumulated Fund at 1 April 2017		22,695
Add: Excess of Income over Expenditure		3,180
Accumulated Fund at 31 March 2018		25,875
Current Liabilities		
Payables for bar supplies	7,800	
Subscriptions in advance	200	
Accrued Rent	1,875	
		9,875
		35,750

SOLUTION THREE

a) Depreciation is the systematic allocation of the cost of a non current asset over its estimated useful life in which the entity utilizes the asset. This is done to reflect the reduction in the value of the asset year after year.

   In other words, it is a reflection of the portion of the cost of the asset deemed to have been used up during an accounting period. It is matched with the economic benefits brought about by the asset in order to calculate profit. It is an adherence to matching as well as prudence concept.

b)

i) **Buildings cost account**

	K		K
1.7.16 Balance b/f	635,400	1.4.17 Disposal	155,000
1.10.16 Bank	159,520	30.6.17 Balance c/d	639,920
	794,920		794,920
1.7.17 Balance c/f	639,920		

ii) **Motor Vehicles cost account**

	K		K
1.7.16 Balance b/f	143,000	30.6.17 Balance c/d	191,000
1.2.17 bank	48,000		----------
	191,000		191,000
Balance c/f	191,000		

iii) **Buildings accumulated depreciation account**

	K		K
1.4.17 disposal	77,500	1.7.16 Balance b/f	308,040
30.6.17 Balance c/d	302,169	30.6.17 profit/loss	71,629
	379,669		379,669
		1.7.17 Balance b/d	302,169

Motor Vehicles accumulated depreciation account

	K		K
Balance c/d	78,925	1.7.16 Balance b/f	74,500
	---------	30.6.17 profit/loss	4,425
	78,925		78,925
		1.7.17 Balance c/f	78,925

iv) **Buildings Disposal account**

	K		K
Buildings cost	155,000	accumulated depreciation	77,500
Profit on disposal	7,500	Bank	85,000
	162,500		162,500

v) Statement of profit or loss extract for the year ended 30 June 2017

Expenses	
Depreciation expense (71,629 + 4,425)	76,054
Profit on disposal	(7,500)

Statement of financial position extract as at 30 June 2017

	Cost	accumulated depreciation	carrying amount
Non current assets	K	K	K
Buildings	639,920	302,169	337,751
Motor vehicles	191,000	78,925	112,075
	830,920	381,094	449,826

Workings:

Buildings depreciation: new Building – 10% x K159,520 x 9/12 = 11,964
Old building – 10% x K635,400 = 63,540
Total =75,504
Less 3 months depreciation of
Disposed off asset
(10% x 155,000 x 3/12) = (3,875)
71,629

Note

1. The 3 months' worth depreciation on the disposed asset is being subtracted because initially, it was charged in full, i.e. over twelve months and yet disposed of three months before the year end.

2. **Total depreciation of disposed of asset:**
   Date acquired 1 April 2012
   Date disposed 1 April 2017 giving rise to 5 years of depreciation before disposal. 10% x 155,000 x 5 years = 77,500

3. Motor vehicles depreciation

	K
Original cost of old motor vehicle	143,000
Less accumulated depreciation	(74,500)
Carrying amounts	68,500
Depreciation expense (5% x 68,500)	3,425
Depreciation of new motor vehicles	
(5% x 48,000 x 5/12)	1,000
Total expense	4,425

SOLUTION FOUR

(a)The uncorrected trial balance as at 31 October 2017

	DR	CR
	K	K
Drawings	43,650	
Capital		135,000
Purchases	356,400	
Furniture	22,500	
Inventories	54,000	
Motor vehicles	18,000	
Sales		594,000
Selling expenses	150,750	
Administrative expenses	53,100	
Trade receivables	32,400	
Trade payables		31,050
Bank balance (asset)	7,650	
Suspense (Balance)	21,600	-
	760,050	760,050

(b)Journal entries

		DR	CR
i)	Suspense Receivables	2,700	 2,700
ii)	Suspense Discounts received	6,500	 6,500
iii)	Purchases Suspense	11,500	 11,500
iv)	Capital Suspense	19,800	 19,800
v)	Suspense Purchases	500	 500

(c) **Suspense account**

	K		K
Balance b/f	21,600	Purchases	11,500
Receivables	2,700	Capital	19,800
Discounts Recvd.	6,500		
Purchases	500		--------
	31,300		31,300

(d) **Corrected trial balance**

	Dr	Cr
	K	K
Drawings	43,650	
Capital (135,000-19,800)		115,200
Purchases (356,400 + 11,500 – 500)	367,400	
Furniture	22,500	
Inventories	54,000	
Motor vehicles	18,000	
Sales		594,000
Selling expenses	150,750	
Administrative expenses	53,100	
Trade receivables (32,400 – 2,700)	29,700	
Trade payables		31,050
Bank balance (asset)	7,650	
Discounts received		6,500
	746,750	746,750

SOLUTION FIVE

a) Jack's statement of profit or loss for the year ended 30 June 2018.

	K	K
Sales		1,370,000
Less cost of sales:		
Opening inventory	86,500	
Purchases	655,000	
Carriage inwards	6,912	
Closing inventory	(65,800)	(682,612)
Gross profit		687,388
Less: expenses		
Carriage outwards	20,000	
Stationery	23,784	
Depreciation: plant and machinery (10% x 195,200)		19,520
Motor vehicles (25% x [86,800 – 27,000])	14,950	
Irrecoverable debts (W2)	10,394	

Insurance (18,624 – 4,672) W1		13,952
Rent (143,796 – 8,900)		134,896
General expenses	58,414	
Loan interest (10% x 400,000)		40,000
Wages and salaries	260,000	
Total expenses		(595,910)
Net profit		91,478

c) Jack's statement of financial position as at 30 June 2018

Non current assets	cost	accumulated depreciation	carrying amount
	K	K	K
Plant and machinery	195,200	48,080	147,120
Motor vehicles	86,800	41,950	44,850
	282,000	90,030	191,970
Current assets			
Inventory		65,800	
Receivables (130,400 -400-1,300)		128,700	
Bank		88,234	
Prepaid expenses (8,900 + 4,672)		13,572	
Total current assets			296,306
Total assets			488,276
Capital and liabilities			
Capital @ 1 July 2017			200,000
Add net profit			91,478
Less drawings			(269,202)
Capital @ 30 June 2018			22,276
Non current liabilities			
10% Loan			400,000
Current liabilities			
Trade payables		56,000	
Accrued loan interest (40,000 – 30,000)		10,000	66,000
Total capital and liabilities			488,276

Workings

Insurance included an amount of K7,008 for a quarter ending 31 August 2018. This means it was for three (3) months from June 1 2018. As year end was 30 June, it means two months equivalent, were prepaid, that is July and August. As such, the amount prepaid to be subtracted from the total that was paid. The prepaid amount is K4,672 (2/3 x K7,008). Only K2,336 belongs to the current accounting period.

Therefore, the trial balance figure to be reduced by the prepayment.

irrecoverable debt expense will comprise of:

Irrecoverable debt written off during the year in the trial balance	9,650
Irrecoverable debt to be written off at the end of the year	400
An increase in allowance for receivables (K1,300 [i.e. 130,400 -400] x 1% - 956)	344
	10,394

Rent overpayment is basically a prepayment of rent. Reduce the trial balance figure by it and recognize the prepayment as a current asset of K8,900 in the statement of financial position.

SOLUTION SIX

(a) Chiseche and Chikondi's Statement of profit or loss and appropriation account for the year ended 31 December 2017

	'K'	'K'
Sales (invoiced for tuition)		1,652,250
Less returns (students' refund claims)		(2,400)
Net sales		1,649,850
Less cost of sales:		
Purchases of books	875,490	
Returns of books	(990)	
Net purchases	874,500	
Less closing inventory	(4,500)	(870,000)
Gross profit		779,850
LESS EXPENSES		
Staff salaries	432,900	
Rent and insurance (15,000 – 400 – 750)	13,850	
Electricity	58,500	
Irrecoverable debt expense (3,450 + 4,500)	7,950	
Depreciation: furniture and fittings (15% x 186,000)	27,900	
Total expenses		(541,100)
Net profit before appropriation		238,750
Less appropriation:		
Add interest on drawings:		
Chiseche (6% x 51,000)X6/12	1,530	
Chikondi (6% x 60,000)X6/12	1,800	3,330
		242,080
Less interest on capital:		
Chiseche (5% x 150,000)	7,500	
Chikondi (5% x 225,000)	11,250	
Salary – Chikondi	55,000	(73,750)
		168,330
Share of residual profit:		
Chiseche (40% x 168330)	67,332	
Chikondi (60% x 168,330)	100,998	
	171,660	168,330

Working

Partners current accounts

	Chiseche	Chikondi		Chiseche	Chikondi
Interest on drawings	1,530	1,800	salary	-	55,000
Drawings	51,000	60,000	Interest on cap.	7,500	11,250
			Share of profit	67,332	100,998
Balances c/f	22,302	105,448		---------	---------
	76,164	169,246		74,832	167,240

b) Chiseche and Chikondi

Partnership statement of financial position as at 31 December 2017

	Cost	Accumulated Dep		Carrying amount
	K	K		K
Non current assets				
Furniture and fittings	186,000	27,900		158,100
Current assets				
Inventory				4,500
Trade receivables (412,500 -4,500)				408,000
Bank balance				1,200
Rent and insurance prepaid ((400 + 750)				1,150
Total current assets				414,850
Total assets				572,950
Capital and liabilities				
Partners capital accounts: Chiseche				150,000
Chikondi				225,000
				375,000
Partners current accounts: Chiseche			22,302	
Chikondi			105,448	127,750
				502,750
Current liabilities				
Trade payables				70,200
Total capital and liabilities				572,950

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.2: BUSINESS STATISTICS

WEDNESDAY 13 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: 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.

SECTION A – (COMPULSORY)

Attempt all ten (10) multiple choice questions.

QUESTION ONE

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

1.1 Arithmetic mean of 100 items was found to be 50.8. It was later discovered, one item 47 was wrongly taken as 67.

Find the correct mean.

A. 60
B. 97.8
C. 50.6
D. 20

(2 marks)

1.2 The mean and standard deviation of the ages of a group of children are 7 and 1.31 respectively. If a child of age 7 joins the group, what are the effects on the mean and the standard deviation of the ages of the group of children?

	Mean	Standard deviation
A.	Unchanged	Increased
B.	Unchanged	Decreased
C.	Increased	Increased
D.	Decreased	Decreased

(2 marks)

1.3 Increase in the number of patients in the hospital due to heat stroke is:

A. Secular trend
B. Irregular variation
C. Seasonal variation
D. Cyclical variation

(2 marks)

1.4 The measure of dispersion which ignores signs of the deviations from central value is

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

(2 marks)

1.5 If $Z-$score of the normal distribution is 2.5, mean of distribution is 45 and the standard deviation of normal distribution is 3 then the value of X for the normal distribution is:

A. 97.5
B. 47.5
C. 52.5
D. 67.5

(2 marks)

1.6 A financial institution record the following number of clients getting loans on a particular day from four (4) different branches; 3, 5, 12, 2.

The standard deviation of this data is:

A. 5.5
B. 4.5
C. 22
D. 20.25

(2 marks)

1.7 The table shows a frequency distribution for measurement number of goods and their price range.

price Class limits	Number of goods FREQUENCY (f)
K20 - K22	4
K23 - K25	6
K26 - K28	3

The average price of goods from this data is:

A. K23.77
B. K13
C. K309
D. K28 (2 marks)

1.8 Mr. Banda wants to study daily stocks prices at Lusaka Stock Exchange for the past 20 years. Which of the following is the time series component which is most useful in analyzing long term forecasting?

A. cyclical
B. seasonal
C. trend
D. irregular (2 marks)

1.9 A review of performance of candidates in a statistical examination showed that the mean, mode and median all had the same value.

The associated histogram from the data was:

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

(2 marks)

1.10 The Meteorological department gave the probability of having a drought in the previous rainy season. Which of the following is the correct value of limits (range) of probability the meteorological department would have given?

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

(2 marks)
[Total: 20 Marks]

SECTION B

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

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

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

(a) A sample of 30 students who graduated in 2015 with a bachelor's degree in accounting resulted in the following starting salaries. The data are in thousands of kwacha.

36.5	34.9	35.2	37.2	36.2
35.8	36.8	36.1	36.7	36.6
37.3	38.2	36.3	36.4	39.0
38.3	36.0	35.0	36.7	37.9
38.3	36.4	36.5	38.4	39.4
38.8	35.4	36.4	37.0	36.4

Compute:

(i) the mean starting salary. (3 marks)
(ii) the median starting salary (3 marks)
(iii) the modal salary (2 marks)
(iv) lower quartile salary (3 marks)
(v) the upper quartile salary (3 marks)
(vi) 65^{th} percentile and interpret. (2 marks)

(b) A factory manager is considering whether to replace an old machine with a new one. A review of past records indicates the following probability distribution for the number of breakdowns of this machine in a week.

Number of Breakdowns	Probability
0	0.10
1	0.26
2	0.42
3	0.16
4	0.06

Required:

(i) Find the mean number of weekly breakdowns. (2 marks)

(ii) Find the standard deviation of weekly breakdowns? (2 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Amazing Décor an African fresh flower delivery company recently reviewed its account for the year ended 2016. The sales director outlined the following;

Our total sales for the year were K1,672,000 of which K787,000 was made in Botswana, K219,000 in Zimbabwe, K285,000 in Zambia and K92,000 in Congo. Sales in Egypt amounted to K189,000 while the rest of Africa collectively had sales of K100,000 for the same period.

Required:

(i) Calculate each country's sales as a percentage of total sales that was made in all the above mentioned countries and rest of Africa. (4 marks)

(ii) Construct a pie chart clearly stating the degrees of each country. (7 marks)

(b) The company mentioned in part A (Amazing Décor) delivers fresh flowers in a range of time that may take up to six weeks from the time the order is placed. The probability of various delivery times are as follows:

Delivery time (week)	Probability
1	0.10
2	0.25
3	0.20
4	0.20
5	0.15
6	0.1

Required:

(i) Find the expected value of delivery time. (3 marks)

(ii) Calculate the standard deviation of this data. (4 marks)

(iii) Calculate the probability that the delivery will take less than 4 weeks. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

(a) A sample of twenty-five local companies had the following percentage change in output over the past three months.

Percentage change	**Number of companies**
0 =< 2	3
2 =< 4	4
4 =< 6	8
6 =< 8	7
8 =< 10	3

Required:

(i) Estimate the mean percentage change in the output. (4 marks)

(ii) Calculate the standard deviation of the above data. (4 marks)

(iii) Explain how you can calculate the median from this data. (4 marks)

(iv) State the modal class. (1 mark)

(b) It was observed that a manufacturing industry had annual salaries of employees which were normally distributed with an average of K14,000 and a standard deviation of K2,700.

Required:

(i) Calculate the proportion of employees who earn less than K12,000. (3 marks)

(ii) Calculate the proportion of employees who earn more than K11,000 and less than K19,000. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

(a) A new established financial firm reviewed the income (in thousand kwacha) made in the years 2014, 2015, and 2016 as follows:

S**ource**	**Income per year**		
	2014	**2015**	**2016**
Interest	K350	K300	K220
Commission income	K850	K900	K500
Other income	K600	K450	K600

Required:

(i) Present this data in a multiple bar chart. (6 marks)

(ii) What was the total amount obtained in the year 2015? (3 marks)

(iii) What percentage of the total income was obtained from commission?

(3 marks)

(b) The sales distribution of an item for one week is given below:

DAY	1	2	3	4	5	6	7
SALE	8	7	10	6	5	9	7

Calculate, correct to 1 decimal place the four (4) day moving average trend sales values. (8 marks)

[Total: 20 Marks]

QUESTION SIX

(a) Time series analysis involves the study of data collected over a given period of time.

Required:

State the four components of time series. (4 marks)

(b) The components of a time series combine to produce a variable in two ways, Additive and Multiplicative models. The table below shows the output at a factory which appears to vary with the day of the week. The past three weeks output (thousand units) was as follows:

	Week 1	Week 2	Week 3
Monday	80	82	84
Tuesday	104	110	116
Wednesday	94	97	100
Thursday	120	125	130
Friday	62	64	66

Required:

(i) Find the seasonal variation by 5 day moving average trend method. (8 marks)

(ii) A population is Normal with mean of 40 and standard deviation of 8. If one item is taken randomly from this population find the probability that it is:

(1) greater than 55 (4 marks)

(2) less than 32 (4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.2 SOLUTIONS

SOLUTION ONE

1.1 The correct answer is C

$$\bar{x} = \frac{\sum x}{n}$$

$$50.8 = \frac{\sum x}{100}$$

$$\therefore \sum x = 5080$$

We know that $67 - 47 = 20$

i.e. $\sum x = 5080 - 20 = 5060$

$$\therefore \bar{x} = \frac{\sum x}{n} = \frac{5060}{100} = 50.6$$

1.2 The correct answer is B

The mean will remain unchanged and the standard deviation will be decreased.

1.3 The correct answer is C

Seasonal variations are the regular periodic changes which take place within a period of less than a year and may take place daily, weekly, monthly or quarterly.

1.4 The correct answer is D

The mean deviation makes use of all the observations. The mean deviation of a set of n numbers, $(x_1, x_2, ..., x_n)$ is given by

$$M.D. \equiv \frac{\sum_{i=1}^{n} |x_i - x|}{} \quad M.D. = \frac{\sum_{i=1}^{n} |x_i - \bar{x}|}{n}$$

Where $\bar{x}$ is the mean of the set of numbers.

NOTE: $|x_i - \bar{x}|$ is the positive difference between x_i and $\bar{x}$

1.5 The correct answer is C

We have

$$Z = \frac{X - \overline{X}}{\sigma}$$

$$2.5 = \frac{X - 45}{3}$$

$$X - 45 = 7.5$$

$$X = 7.5 + 45$$

$$\therefore X = 52.5$$

1.6 The correct answer is B

$$\sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}} = \sqrt{\frac{182 - \frac{22^2}{4}}{4-1}} = \sqrt{\frac{61}{3}} = 4.5$$

1.7 $\frac{21\times4+24\times6+27\times3}{4+6+3} = \frac{309}{13} = 23.77$

The correct answer is A

1.8 correct answer is C

1.9 correct answer is D

1.10 correct answer is A

SOLUTION TWO

(a)

i. $\bar{x} = \frac{\sum x}{n} = \frac{1106.4}{30} = 36.88 = \text{K}36,880$

ii. Rearranging the data in numerical order we have:

$34.9, 35.0, 35.2, 35.4, 35.8, 36.0, 36.1, 36.2, 36.3, 36.4, 36.4, 36.4, 36.4, 36.5, 36.6,$
$36.7, 36.7, 36.7, 36.8, 36.9, 37.0, 37.2, 37.3, 37.9, 38.2, 38.3, 38.4, 38.8, 39.0, 39.4$

$\therefore Median = \frac{36.6+36.7}{2} = \frac{73.3}{2} = 36.65 = \text{K}36,650$

iii. Mode $= 36.4$

$\therefore Modal \quad salary = \text{K}36,400$

iv. Lower quartile $= \frac{1}{4}(n+1)^{th}\ value = \frac{1}{4} \times 31 = 8^{th}\ value$

$\therefore Q_1 = 36.2$

i.e. $Q_1 = \text{K}36,200$

v. Upper quartile $= \frac{3}{4}(n+1)^{th}\ value = \frac{3}{4} \times 31 = 23^{rd}\ value$

$\therefore Q_3 = 37.3$

i.e. $Q_3 = \text{K}37,300$

vi. $65^{th}\ percentile = \frac{65}{100}(n+1)^{th}\ value = \frac{65}{100} \times 31 = 20^{th}\ value$

$\therefore \text{P}_{65} = 36.9$

i.e. $\text{P}_{65} = \text{K}36,900$

This means 65% of accounts graduates with bachelor's degree have a starting salary of $\text{K}36,900$.

(b)

i. $\mathrm{E}(X)=\sum x\mathrm{P}(X=x)$

$$=0(0.10)+1(0.26)+2(0.42)+3(0.16)+4(0.06)$$
$$=0+0.26+0.84+0.48+0.24$$
$$=1.82$$

ii. $Var(X)=\mathrm{E}(X^2)-[\mathrm{E}(X)]^2$

$$\mathrm{E}(X^2)=\sum x^2\mathrm{P}(X=x)$$
$$=0^2(0.10)+1^2(0.26)+2^2(0.42)+3^2(0.16)+4^2(0.06)$$
$$=0+0.26+1.68+1.44+0.96$$
$$=4.34$$

$$\therefore Var(X)=4.34-1.82^2$$
$$=1.0276$$

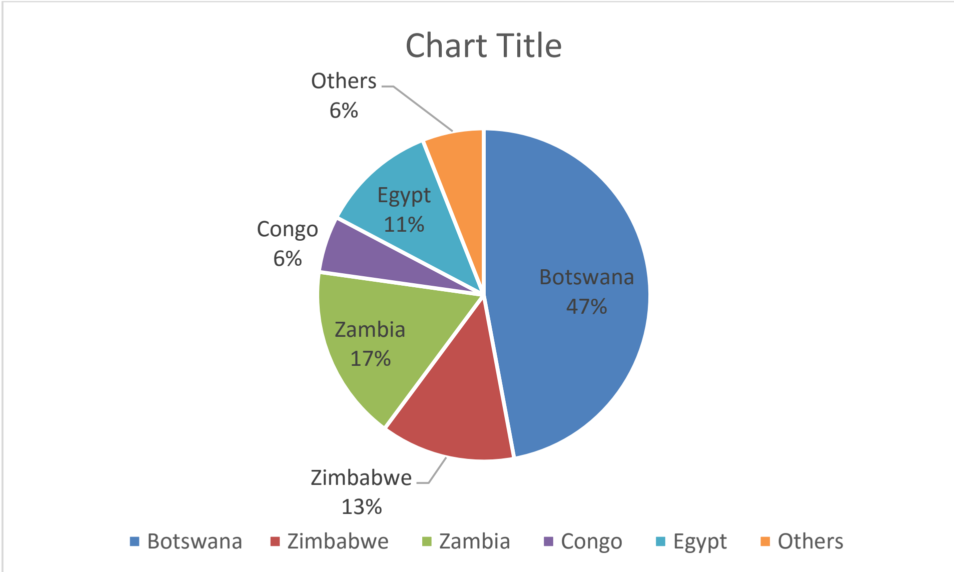
Sd = $\sqrt{1.0276}$ = 1.0137

SOLUTION THREE

a)

COUNTRY	**X**	**Percentage %=X/TOTAL*100**	**Degree %/100 *360**
Botswana	K787,000	**47.07**	169.4^0
Zimbabwe	K219,000	**13.09**	47.2^0
Zambia	K285,000	**17.05**	61.4^0
Congo	K92,000	**5.50**	19.8^0
Egypt	K189,000	**11.30**	40.7^0
Others	K100,000	**5.98**	21.5^0
TOTAL	1,672,000		

ii.



b)

i. Expected value

E(x)= $\sum np(x) = 1(0.1) + 2(0.25) + 3(0.20) + 4(0.20) + 5(0.15) + 6(0.1)$

$= 3.35$

ii. Standard deviation =root of [$\sum \boldsymbol{x^2 p(x)} - [\boldsymbol{E(x)}]^2$ **]**

$= [\mathbf{1^2(0.1) + 2^2(0.25) + 3^2(0.20) + 4^2(0.20) + 5^2(0.15) + 6^2(0.1)}] - [\mathbf{3.35}]^2$

$= \mathbf{13.45 - 11.22}$

$= \mathbf{2.23}$

$\boldsymbol{SD} = \sqrt{\mathbf{2.23}} = \mathbf{1.49}$

iii. p(X<4) = 0.1 + 0.25 + 0.2 = 0.55

SOLUTION FOUR

a)

Percent age change	**Mid-point x**	**Number of companies f**	**Cumulative**	**(n)(x)**	fx^2
0 - 2	1	3	3	3	3
2 – 4	3	4	7	12	36
4 – 6	5	8	15	40	200
6 - 8	7	7	22	49	343
8 - 10	9	3	25	27	243
total		25		131	825

The mean: $\frac{1}{n}\sum nf = \frac{1}{25}(131) = 5.25$

i. **Standard deviations** $s = \sqrt{\frac{\sum fx^2 - f\bar{x}^2}{n-1}}$ $s = \sqrt{\frac{825-25(5.25)^2}{25-1}}$

$s = \sqrt{\frac{135.9375}{24}} = \sqrt{5.664} = 2.38$

ii. To find the median, first locate the median class which is the class that fall on the mid of the values of cumulative frequency, then find the lower limit of the median class and the class width, and calculate using the formula
$median = l_k + n/w(\frac{n}{2} - cf_{k-1})$.

Alternatively, construct the cumulative frequency polygon and locate the value on the 50th percentile

iii. The modal class is the class with the highest frequency = the class (4 – 6)

b) **i.** $Z = \frac{X-14000}{2700}$

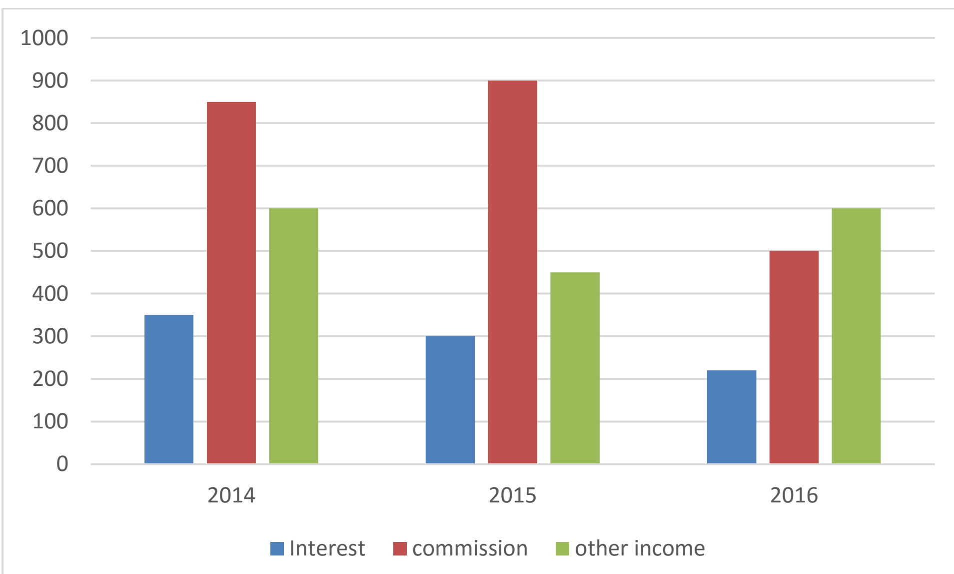
$$P\left[\frac{X-14000}{2700} < \frac{12000-14000}{2700}\right]$$
$$= P[Z < -0.74]$$
$$= 0.2296$$

ii.

$$P\left[\frac{X-14000}{2700} < \frac{X-14000}{2700} < \frac{12000-14000}{2700}\right]$$
$$= P\left[\frac{11000-14000}{2700} < \frac{X-14000}{2700} < \frac{19000-14000}{2700}\right]$$
$$P[-1.11 < Z < 1.85]$$
$$P[Z > -1.11) - P[Z > 1.85]$$
$$= (1 - 0.1335) - 0.0322$$
$$= 0.8343$$

SOLUTION FIVE

a) i. bar chart



ii. Total for 2015 $300 + 900 + 450 = K1650$

iii. Total income was

$350 + 850 + 600 + 300 + 900 + 450 + 220 + 500 + 600 = K4770$

Total for commission: $850 + 900 + 500 = 2250$

Percentage $= \frac{2250}{4770} \times 100 = \mathbf{47.17}\%$

DAY	SALE	MAT	MA	CA(T)
1	8			
2	7			
		31	7.75	
3	10			7.4
		28	7.0	
4	6			7.3
		30	7.5	
5	5			7.2
		27	6.8	
6	9			
7	7			

SOLUTION SIX

a) Components of time series:

Trend

Seasonal variation

Cyclical variation

Random variation

b) Variation may be found using the additive model or the multiplicative model

The multiplicative model is $Y = T \times S \times R$

SEASONAL VARIATION $S = Y/T$

		Actual (Y)	Moving totals Of five days' output	Trend (T)	Seasonal Variation S=(Y/T)
Week 1	Monday	80			
	Tuesday	108			
	Wednesday	94	460	92.0	1.022
	Thursday	120	462	92.4	1.299
	Friday	62	468	93.6	0.662
Week 2	Monday	82	471	94.2	0.870
	Tuesday	110	476	95.2	1.155
	Wednesday	97	478	95.6	1.015
	Thursday	125	480	96.0	1.302
	Friday	64	486	97.2	0.658
Week 3	Monday	84	489	97.8	0.859
	Tuesday	116	494	98.8	1.174
	Wednesday	100	496	99.2	1.008
	Thursday	130			
	Friday	66			

Use of additive model to find seasonal variation the $S = Y - T$ **should be considered.**

c) Normal distribution. **i.** P(X>55) $Z = \frac{X-40}{8}$

$$P\left[\frac{X-40}{8} > \frac{55-40}{8}\right]$$
$$= P[Z > 1.88]$$
$$= 0.0301$$

ii. P(X<32) $Z = \frac{X-40}{8}$

$$P\left[\frac{X-40}{8} < \frac{32-40}{8}\right]$$
$$= P[Z > -1] = 0.5 - 0.3413 = 0.1587$$

END OF CA 1.2 SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.3: BUSINESS ECONOMICS

TUESDAY 12 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
Section A: 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.

SECTION A – (COMPULSORY)

Attempt all ten (10) multiple choice questions.

<u>QUESTION ONE</u>

1.1 Which of the following is **NOT** part of the factors of production?

A. Choice
B. Labor
C. Land
D. Capital

(2 marks)

1.2 Which of the following will cause a movement along a demand curve for good **X**?

A. A change in the price of good **X**
B. A change in the price of close substitutes to good **X**
C. A change in consumer tastes and preferences for good **X**
D. A change in consumer income

(2 marks)

1.3 Under both perfect competition and monopoly, a firm:

A. Is a price taker
B. Is a price maker
C. Always earns a pure economic profit
D. Sets marginal cost = marginal revenue

(2 marks)

1.4 The value of the monetary or credit multiplier is given by………………

A. 1/MPS
B. 1/MPC
C. 1/Excess reserves
D. 1/Required reserve ratio

(2 marks)

1.5 The following are features of a free market economic system **EXCEPT**:

A. Main aim of production is the pursuit of profits
B. State ownership of productive resources
C. Prices are set by market forces of demand and supply
D. Private ownership of productive resources (2 marks)

1.6 Cost push inflation is caused by………………………..

A. Excess total spending
B. Too much money chasing too few goods
C. Resource cost increases
D. The economy operating at full employment

(2 marks)

1.7 Which of the following **CORRECTLY** describes the SUPPLY SIDE POLICIES?

A. Policies calculated to influence the aggregate demand in the economy
B. Government policies on taxation, public borrowing and public spending
C. Government policies aimed at shifting the aggregate supply in an economy
D. Government policies calculated to influence money supply in the economy

(2 marks)

1.8 Opportunity cost is the …………….

A. Purchase price of a good or service
B. Value of leisure plus out-of-pocket costs
C. Best option given up as a result of choosing an alternative
D. Undesirable sacrifice required to purchase a good

(2 marks)

1.9 An improvement in technology causes a (an)…………………………….

A. Leftward shift in the supply curve
B. Upward movement along a supply curve
C. Firms to supply a larger quantity at any given price
D. Rightward shift in the demand curve

(2 marks)

1.10 Which of the following constitutes the canons or qualities of a good tax system?

A. Efficiency, Economy, Convenience and Certainty
B. Certainty, Equity, Profitability, Convenience
C. Economy, Equity, Certainty, Timeliness
D. Certainty, Convenience, Equity , Economy

(2 marks)

SECTION B

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

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

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

Due to current shortage of salaried employment in Zambia, Jacob has decided to be self-employed. His grandfather has allowed him to use his smallholding to earn a living. Given the scarcity of resources, Jacob can either use the land to grow crops, rear pigs or rear free range village chickens. He has decided to go for free-range chicken village chicken rearing. Suppose during his first two months of operation, his ripe chickens can be sold at K150 per live chicken and the cost structure is as tabulated below:

Output Q	Total Fixed Costs (TFC)	Total Variable Cost (TVC)	Total Costs (TC)	Total Revenue (TR)	Profit
1	100	120			
2	100	200			
3	100	290			
4	100	430			
5	100	590			

Required:

(a) Complete the columns for TC, TR and Profit (7½ marks)

(b) How many chickens must Jacob sell in order to maximize profits in the short-run? (2 marks)

(c) How much would be his maximum economic profit. (2 marks)

(d) At how many chickens does Jacob need to sell in order to breakeven? (2½ marks)

(e) Explain how his decision to rear free range chickens represents the three (3) fundamental economic problems of Scarcity, Choice and Opportunity Cost.
(6 marks)

[Total: 20 Marks]

QUESTION THREE

According to Rostow, development requires substantial investment in capital and less developed countries to grow, the right conditions must be created. The government of Zambia under the vision 2030, seeks to develop the Zambian economy towards the status of a prosperous middle income country by 2030. As industrialisation increases, externalities of production and consumption also increase and the socially efficient level of output and price would be at a level where external costs were taken into account.

Required:

(a) Describe the five stages of development of industrialised economies according to Rostow. (10 marks)

(b) Distinguish the term negative externality from positive in consumption. (4 marks)

(c) Outline any **three (3**) policies the government can put in place to deal with externalities.
(6 marks)

[Total: 20 Marks]

QUESTION FOUR

Inflation is an economic condition in which the aggregate prices are always increasing in the country. The value of money is falling. Inflation is nothing but too much money chasing too few goods. For example in Zimbabwe the inflationary rate a few years ago was too high at more than 1000% and in turn required a bag full of money to buy a loaf of bread and the value of the Zimbabwean dollar was very low in the market and money supply in circulation was too much. Inflation, if not properly managed can be dangerous to the economy of any Country and the business community in that country.

Required:

(a) Explain any **three (3)** causes of inflation in general. (6 marks)

(b) Briefly explain how Commercial Banks also play a role in creating money supply to the economy in a Country like Zambia that may cause inflation. (4 marks)

(c) Explain any **three (3)** measures that a Central Bank in any Country can put in place to control the money supply that may cause inflation. (6 marks)

(d) Explain any **four (4)** limitations of monetary policy in reducing inflation. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Globalization is a much talked about concept by people in different spheres of life. Globalization is a process by which the world is becoming increasingly inter-connected as a result of massively increased trade and cultural exchange and markets have become more competitive. Therefore the need for regional integration cannot be over emphasized. One such integration is the European Union which has since attained the status of an economic union. In 2002, the European Union adopted a single currency system, the success of which depends on the convergence of the economies of the member states.

Required:

(a) Outline any **three (3)** advantages and any **three (3)** disadvantages of free trade. (6 marks)

(b) State any two (2) benefits of belonging to a regional grouping such as the European Union. (4 marks)

(c) Outline any five (5) benefits of globalisation. (5 marks)

(d) List any three (3) advantages of adopting a single currency. (3 marks)

(e) Outline the function of the world trade organization. (2 marks)

[Total: 20 Marks]

QUESTION SIX

Keynesian economics comprises various macro-economic theories about how in the short-run economic output is strongly influenced by aggregate demand. The Keynesians view is that aggregate demand does not necessarily equal the productive capacity of the economy, but that it is influenced by a number of factors that may affect inflation and employment.

Required:

(a) Define the terms aggregate demand and aggregate supply. (4 marks)

(b) Describe the three (3) main macroeconomic goals (6 marks)

(c) Use an aggregate demand and aggregate supply diagram to illustrate and explain how each of the following will affect the equilibrium price level and real GDP:

(i) Consumers expect a recession (5 marks)

(ii) Workers expect high future inflation and negotiate higher wages now. (5 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.3 BUSINESS STATISTICS SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a)

Output Q	Total Fixed Costs (TFC)	Total Variable Cost (TVC)	Total Costs (TC)	Total Revenue (TR)	Profit
1	100	120	220	150	(70)
2	100	200	300	300	0
3	100	290	390	450	60
4	100	430	530	600	70
5	100	590	690	750	60

b) 4 chickens
c) K70
d) 2 chickens.
e) **Opportunity cost** is defined as the second best alternative foregone. It is that which is sacrificed or given up in order to have another. It occurs when one cannot have enough of both mainly due to scarcity of means. Opportunity cost of his decision is the crop production and pig rearing foregone.

Scarcity is represented by the fact that the funds are scarce or not available to carry out all the three business ventures simultaneously.

Choice is represented by the expenditure project accepted among the three options available. This is done by ranking the ventures in a scale of preferences.

Thus rearing free-range chickens will ranked as number one of the three hence chosen.

SOLUTION THREE

a) Rostow's stages of development

Traditional Society: the economy is dominated by subsistence activity where output is consumed by producers rather traded. Any trade is carried out by barter where goods are exchanged directly for other goods. Agriculture is the most important industry and production is labour intensive using only limited quantities of capital. Resource allocation is determined very much by traditional methods of production.

Traditional Stage (precondition for take-off): increased specialisation generates surplus for trading. There is an emergence of a transport infrastructure to support trade. As incomes, savings and investment grow, entrepreneurs emerge. External trade also occurs concentrating on primary products.

Take Off: industrialisation increases, with workers switching from the agricultural sector to the manufacturing sector. Growth is concentrated in a few regions of the country and in one or two manufacturing industries. The level of investment reaches over 10% of GNP. The economic transitions are accompanied by the evolution of new political and social institutions that support industrialisation.

Drive to Maturity: the economy is diversifying into new areas. Technological innovation is providing a diverse range of investment opportunities. The economy is producing a wide range of goods and services and there is less reliance on imports.

High Mass Consumption: the economy is geared towards mass consumption. The consumer durable industries flourish. The service sector becomes increasingly dominant.

b) **Positive and Negative externality**

A **negative externality** in consumption occurs when the marginal social benefit (MSB) of consuming something is less than the marginal private benefit (MB). An example would be when people use their cars other people suffer from the exhaust fumes, someone playing their radio loud in a public place can lead to disruption for others, smokers can similarly upset others because of the smoke they generate.

A **positive externality** in consumption occurs when the marginal social benefit (MSB) is greater than the marginal private benefit. An example is when an individual pays for private health care treatment of a contagious disease which prevents the spread of the disease to others, or when one gets an education, it's a private benefit, but the wider community also gets to benefit in many ways.

c) **Policies for Externalities Regulation:** Regulation is a mandated level of performance that is enforced in law. Regulations can specify either (1) the maximum rate of emissions that is legally allowed or (2) the technologies or practices potential polluters must adopt (for example, chemical truck drivers must obtain a commercial drivers' license and be drug tested). Regulations are typically applied uniformly to all situations but this cannot be efficient or cost effective

Taxes/subsidies: A corrective tax is a market based policy option used by the government to address negative externalities. Taxes increase the cost of producing goods and services generating the externality, thus encouraging firms to reduce output. The tax should be set equal to the value of the negative externality. A subsidy may be granted to generators of positive externalities to ensure a higher level of consumption or production than would arise through the completely free interaction of markets

Pollution permits: Each permit entitles the holder to emit one unit of the pollutant specified during some specified period of time. Permits can be bought and sold at whatever price the participants agree on. The advantage of pollution permits over simple regulation is that we get the same overall level of environmental quality at a lower cost since those power plants that find it inexpensive to reduce emissions will do so and sell permits to power plants that have high abatement costs.

Assign property rights: Giving someone ownership of a resource gives them an incentive to manage it in a way that maximizes its value.

SOLUTION FOUR

a) The causes of inflation in general are:
   - Demand pull: Demand exceeding supply
   - Cost push: Increase in costs of production pushing prices up
   - Too much money in circulation
   - Speculation

b) In the normal course of their operations, banks create money. When a bank makes a loan, it creates deposits and the money supply increases by the amount of the loan because the money supply includes current accounts. This comes about as a result of the use of cheques.

c) The measures that the Bank of Zambia can use to reduce inflation are:
   - Open Market Operations: This involves the buying or selling of government securities by the bank of Zambia. To reduce inflation the Bank of Zambia sells government securities which reduces bank reserves and loans thereby contracting money supply
   - Discount Rate Policy: The discount rate is the interest rate that the Bank of Zambia charges on loan reserves to banks. To reduce inflation, the Bank of Zambia raises the discount rate which discourages banks from borrowing from the Bank of Zambia and contracts money supply
   - Required Reserve Ratio Policy: The required reserves are reserves which each deposit accepting institution must deposit with the bank of Zambia to meet its legal requirements. To reduce inflation, the bank of Zambia increases the required reserves ratio and the money multiplier and money supply decrease

d) The limitations of monetary policy include the following:
   - The money multiplier can vary
   - Non-banks such as insurance companies and finance companies can offer loans and other financial services not directly under the bank of Zambia's control
   - Time lags occur
   - The Bank of Zambia might control M1, but the public can shift funds to M2, M3 or another money supply definition
   - Unorganized money market does not support monetary policy
   - Existence of non-monetized sector also defies the bank of Zambia's regulations

- It has institutional restrictions
- Success or failure depends on the banking system of the country
- Operates in a broad front
- Not very effective in overcoming depression

SOLUTION FIVE

a) Advantages and Disadvantages of free trade

Advantages of Free Trade

- **The theory of comparative advantage**; this explains that by specialising in goods where countries have a lower opportunity cost, there can be an increase in economic welfare for all countries. Free trade enables countries to specialise in those goods where they have a comparative advantage.
- **Sale of surplus products;** Countries have products which are surplus to their requirements.
- **Imports are possible** – Without international trade, many countries would have to go without certain products.
- **Economies of Scale.** If countries can specialise in certain goods they can benefit from economies of scale and lower average costs, this is especially true in industries with high fixed costs or that require high levels of investment. The benefits of economies of scale will ultimately lead to lower prices for consumers.
- **Increased Competition.** With more trade domestic firms will face more competition from abroad therefore there will be more incentives to cut costs and increase efficiency. It may prevent domestic monopolies from charging too high prices.

Arguments against free trade

- **To protect home industries particularly infant industries** – new industries may need protection in their early years against foreign firms already for many years in production and enjoying economies of scale.
- **Countries seek to maintain home employment in a period of depression** – This is done by placing restrictions on imports to promote employment in the manufacture of home – produced goods.

- **To prevent dumping** - goods may be sold abroad at a cheaper price than in the home market.
- **Raise revenue for the government**; Import taxes can be used to raise money for the government however this will only be a relatively small amount of money
- **Environmental;** It is argued that free trade can harm the environment because LDC may use up natural reserves of raw materials to export. Also countries with strict pollution controls may find consumers import the goods from other countries where legislation is lax and pollution allowed.

b) Benefits of belonging to a regional grouping

- *Economies of scale* develop because the member countries now have a much larger "home" market.
- *Consumer welfare* is increased as people have more, better quality and cheaper goods, with more variety, to choose from.
- There is more *political cooperation* as the member countries develop common policies and become more dependent on each other.

c) Benefits of globalisation

- Emergence of new growth markets.
- Enhanced competiveness as more producers and consumers make up the global market place
- Growth of previously poor economies.
- World economic equalisation
- International support for poorer nations
- Cross-national business alliances and mergers

d) Advantages of single currency

- The removal of exchange rate risk makes cross-border trade and investment easier and less risky.

- Financial markets are opened up across the region and are more flexible than when they are many different currencies.
- The removal of conversion fees by banks makes transactions within the currency zone cheaper for businesses and individuals.
- Economic stability within the zone is thought to benefit not just the member countries, but also the world economy.

e) The world trade organisation

The main function of the WTO is to ensure that trade flows as smoothly, predictably and freely as possible.

SOLUTION SIX

a) Aggregate demand and supply

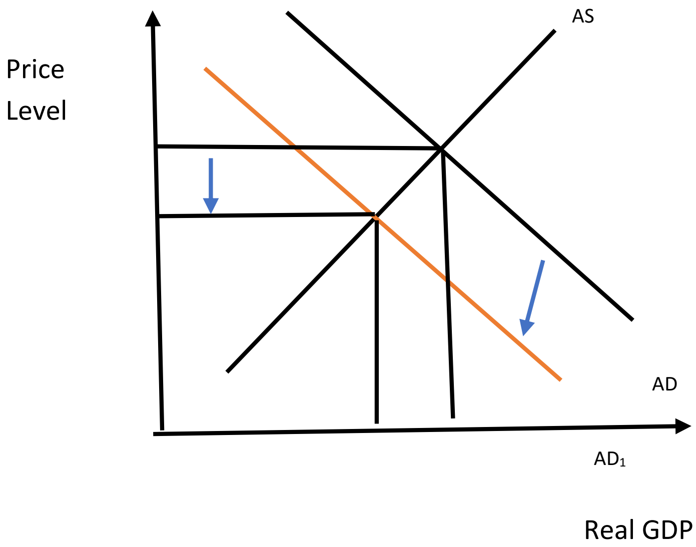
- **Aggregate Demand:** this is the total planned demand in the economy for goods and services form households, firms or government.
- **Aggregate supply**: this is the total supply of goods and services produced within an economy at a given overall price level in a given period.

b) Macro-economic objectives

- To achieve economic growth**:** growth implies an increase in national income in real terms.
- To control price level: the aim is to achieve stable prices in an effort to control inflation
- To achieve full employment: to ensure that all productive resources are in use and are used efficiently.
- To achieve a balance between exports and imports: to ensure that the value of exports and imports are in balance.

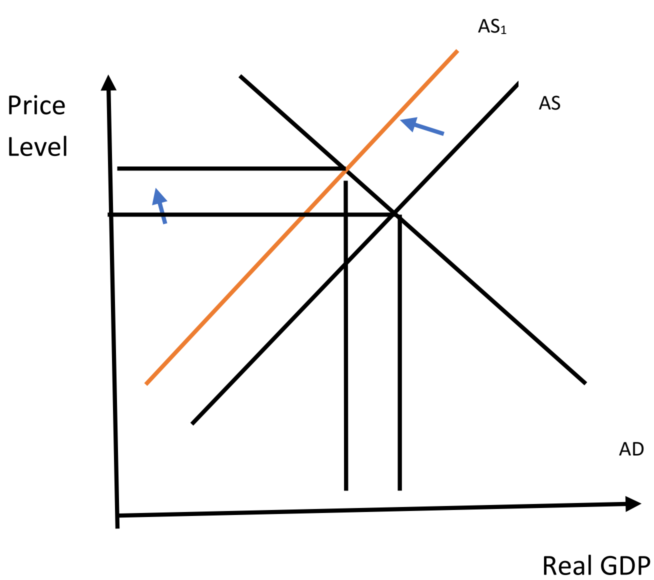
Consumers Expect a Recession

If the consumer expects a recession then they will not spend as much money today as to "save for a rainy day". Thus if spending has decreased, then our aggregate demand must decrease. An aggregate demand decrease is shown as a shift to the left of the aggregate demand curve, as shown below. Note that this has caused both Real GDP to decrease as well as the price level. Thus expectations of future recessions act to lower economic growth and are deflationary in nature.



Workers Expect High Future Inflation and Negotiate Higher Wages Now

If the cost of hiring workers has gone up, then companies will not want to hire as many workers. Thus we should expect to see the aggregate supply shrink, which is shown as a shift to the left. When the aggregate supply gets smaller, we see a reduction in Real GDP as well as an increase in the price level. Note that the expectation of future inflation has caused the price level to increase today. Thus if consumers expect inflation tomorrow, they will end up seeing it today.



END OF CA 1.3 SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.4: COMMERCIAL AND CORPORATE LAW

FRIDAY 15 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: 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.

SECTION A

Attempt all ten (10) multiple choice questions

QUESTION ONE

1.1. Which of the following companies represents a set of private companies?

A. Limited by shares, limited by guarantee, limited by number of shareholders

B. Limited by guarantee, limited by capital, limited by shares

C. Unlimited companies, public limited companies (PLCs), limited by liability

D. Limited by shares, unlimited companies, limited by guarantee (2 marks)

1.2. Kachasu Brew Ltd manufactures a highly alcoholic beverage with a 75% alcohol content, called Senkisa. The company has entered into a contract with Seven Days Distributors Ltd for the distribution of Senkisa to all its customers on the Copperbelt Province of Zambia. The government has passed a law banning the supply and distribution of alcoholic beverages with over 40% alcohol content. The government's decision has made the performance of the contract signed by the two companies impossible.

This type of frustration is as a result of………

A. Physical impossibility

B. Failure to perform the contract

C. Supervening illegality

D. Destruction of subject matter (2 marks)

1.3. Which one correctly describes a valid contract?

A. An agreement, Consideration and Intention to enter legal relations

B. Invitation to treat, Acceptance and Consideration

C. Offer, Consideration and Intention to create legal relations

D. Offer, Acceptance and Consideration (2 marks)

1.4. Which of the following is **not** a right of an unpaid seller?

A. Right to lien on good, if they are still in his possession

B. Right of stoppage in transit, if the buyer becomes insolvent

C. Right to reject the goods, if undelivered to the buyer

D. Right of resale in certain circumstances (2 marks)

1.5 Which of the following makes a contract void?

A. Illegality of contract

B. Incapacity of parties to contract

C. Unfair terms of contract

D. None of the above (2 marks)

1.6. The …………. rule of statutory interpretation which prevents the wrong from being done and advances the remedy to the gaps in the law.

A. Context

B. Golden

C. Literal

D. Mischief (2 marks)

1.7. The creation of agency by estoppel creates a form of authority known as ……

A. Authority by necessity

B. Ostensible authority

C. Authority by ratification

D. Implied authority

1.8. When bankruptcy occurs, which of these has first priority?

A. Secured creditors

B. Preferred creditors

C. General unsecured creditors

D. Employees owed wages (2 marks)

1.9. Which of these is a distinguishing feature of a negotiable instrument?

A. Notice of any assignment has to be given to the original promisor.

B. An innocent party who acquires possession of a negotiable instrument has the right to collect on it, even when original contractual obligations have not been met.

C. A holder may sue only if all remaining parties join in the suit.

D. It must have a date for it to be valid. (2 marks)

1.10. Which of the following is not a feature of floating charges?

A. It is a charge on a class of a company's assets, present and future

B. The assets on which it is charged changes from time to time

C. Floating charges rank first in order of priority in liquidation

D. Floating charges allow the company to carry on business and deal with the assets charged until the holders enforce the charge. (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)

In a meeting to elect directors of a company, the shareholders would like to have a clarification on what the term director entails, fiduciary duties which directors owe to the company, and ways by which directors can be removed from office. Five minutes before lunch time, the Company Secretary goes on the stage to clarify the issues raised by the shareholders. His presentation is as follows:

'The term director has different meanings depending on a number of factors such as how one assumes the position of director expressly or impliedly. In ***Re Forest of Dean Coal Mining Company 1878,*** Lord Jessel MR said the following about directors:

'*It does not matter much what you call them so long as you understand what their true position is, which is that they are really commercial men managing a trading concern for the benefit of themselves and all other shareholders in it*'.

As the Company Secretary was still on the floor, the timekeeper announced that it was lunch time and the meeting was adjourned to 14:00 hours.

Required:

During lunch, two shareholders share a table with you and would like you to explain:

(a) Ways by which a director may vacate her office (10 marks)

(b) Fiduciary duties of directors (10 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

Litwayi Kakoma has been running his business first on his own. Recently, he met his friend Milimo Chilufya and the duo would like to work together to form a limited liability company or any other form of business.

Required:

Differentiate between the following:

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

(b) Sole proprietorship and partnership (6 marks)

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

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

[Total 20 Marks]

QUESTION FOUR

Makaba Moyo has been running a business selling chickens and chicken feed. John Katebe, a manager for Chicken Michopo Ltd, a big well-known customer of 'Makaba Moyo, passed by and requested him to set aside two hundred and fifty chickens, which Makaba did. John Katebe promised to collect them when he brought the money sometime later that day. When it was about 17:00 hours and the chickens had not been collected, Makaba Moyo called the Chicken Michopo's office to find out when the chickens would be collected as he was about to knock off. The person he spoke to on the phone, said they had no such orders in their books and that, there were no such instructions from the company to anyone. As Makaba Moyo was still trying to recover from the shock, John Katebe called him saying his principal (Chicken Michopo Ltd) had changed their mind and that Makaba Moyo could go ahead and sell to another. Makaba Moyo is upset because he lost three other customers on account of the John Katebe's order.

Required:

(a) Was there a binding agency relationship between John Katebe and Chicken Michopo Ltd? Explain your answer. (10 marks)

(b) Did property in the chickens pass to the customer (Chicken Michopo Ltd)? Justify your answer. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

Mulungu Adalise Orphanage is a company limited by guarantee which deals in procurement and distribution of baby clothes and blankets to churches and orphanages around the country. The company at its 8th annual general meeting passed a resolution to change the company either to a public limited company or a private limited company, limited by shares. The company directors believe it will make a lot of profit for its members by selling secondhand baby clothes and blankets to mothers at maternity wards across the country.

Mulungu Adalise Orphanage has started selling baby clothes and blankets before applying to the Registrar of Companies for change of company form from one limited by guarantee to either public or private company limited by shares.

One of the customers, Lulu's Mama bought a blanket three days ago from Mulungu Adalise Orphanage and her daughter has contracted an incurable rash. Lulu's Mama went to seek help from the company, but was told by its public relations manager that she was supposed to follow the principle of *caveat emptor* as the company cannot help at this stage. She left without any help, feeling very sad.

Required:

(a) Explain two (2) distinctions between a company limited by guarantee and a company limited by shares. (4 marks)

(b) Can Mulungu Adalise Orphanage Company convert to a public limited company? Explain your answer. (4 marks)

(c) Do you think the company directors are right in wanting to make a lot of profits before converting the company to one limited by shares? Explain your answer. (4 marks)

(d) (i) What is meant by the maxim '*caveat emptor*'? (2 marks)

(ii) State **four** (4) implied exceptions to the maxim '*Caveat Emptor*'. (4 marks)

(iii) State **two** (2) remedies available to Lulu's Mama under contract. (2 marks)

[Total 20 Marks]

QUESTION SIX

(a) Thomas a businessman is traumatized with his horrifying birthday experiences and is wondering about what he can do about them. His ordeal unfolded in this manner, Albert, a practicing accountant, advised Thomas, upon which advice he made an investment which proved to be worthless. He retained Bernard, an advocate of the High Court for Zambia, who represented him in the same case and conducted the case badly. On his way from the Courtyard, Charles, a car driver, skidded and crossed on to the wrong side of the road where his car collided with Thomas's car. He gets home and the Lusaka City Council worker David, a demolition worker, carelessly injured a fellow worker thereby causing Thomas, who was passing at the time to suffer nervous shock. He is really devastated and hears that you are a good student of Commercial and Corporate Law who can help. Thomas comes to you seeking help as to whether an action for negligence is likely to succeed against each of the parties in the above matter.

Required:

Advise Thomas on what action he can take arising from the above torts. (12 marks)

(b) Thomas' daughter Chanda is 16, and is an ice skater and has signed a contract with a company that organises dance shows and performances on ice. This will involve her travelling to various parts of the world on tour. She will be paid a reasonable amount and the contract stated that she will be supervised at all times by her manager and not allowed to socialise outside the dance group.

Thomas has again sought your advice as to whether the daughter's contract with the company is enforceable.

Required:

Advise Thomas as to whether the daughter's contact with the company is enforceable.

(8 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.4 BUSINESS & CORPORATE LAW SOLUTIONS

SOLUTION ONE

1.1. D

1.2. C

1.3. A

1.4. C

1.5. A

1.6. D

1.7. B

1.8. A

1.9. B

1.10. C

SOLUTION TWO

(a) (a) A director may vacate her office in any of the following ways:

(i) *Resignation* – He can resign from his position giving written notice to the company.

(ii) *Disqualification* – A director can be disqualified from office if she:

- is absent from meetings for more than 6 months without consent of the other directors,
- uses her office for secret profits,
- fails to disclose her interest in a contract, etc.

(iii) *Retirement* – A director may retire due to old age or as provided for in the company's articles of association.

(iv) *Removal* – Can be removed by the shareholders when he does something wrong, contrary to the ethics of a company.

(v) *Expiry of Contract or term of office* – A director can vacate office when her contract comes to an end or expiry of the time during which she is to work as a director.

(b) *Fiduciary Duties* – These are duties of utmost good faith, duties of trust that directors are conferred with and are supposed to act for the best interest of the company. These duties include:

(i) *Duty not to have conflict of interest* – A director must always act for the best interest of the company. Personal interest must not take precedence. In *Regal (Hastings) Ltd v. Gulliver (1942)* it was held that directors must account for any secret profit they must have made whilst standing in a fiduciary relationship.

(ii) *Duty to exercise power for the benefit of the company* – A director must act for the benefit of the company at all times. Their interest must not collide with those of a company as seen in *Coronation Syndicate Ltd v. Lilienfield and New Fortuna (1903).*

(iii) *Duty to act honestly, Legally and within powers* – Directors are not supposed to do anything detrimental to the interests of shareholders (company). This was the decision in *Coronation Syndicate Ltd v. Lilienfield and New Fortuna (1903).* They must act within their powers, legally and with all honesty required of the office of director.

(iv) *Duty not to make secret profit* – Directors are under a duty not to make secret profit using their position in the company – *Boston Deep Sea Fishing Co. v. Answell (1888); and Regal (Hastings) Ltd v. Gulliver (1942)*

(v) *Duty to act with care and skill* – Directors need to act with care and skill. However, they do not need to exhibit greater skill than may reasonably be expected from a person of his knowledge and experience and must act with care, not recklessly Re City Equitable Fire and Insurance Co. Ltd (1925).

(vi) *Duty to account for any Secret Profit and duty to declare interest* – A direct has a duty to account to the company any secret profits made in the course of his position as director. In an event that he has interest in a particular matter, he must delay his interest beforehand and failure to do is a ground for disqualification. *Boston Deep Sea Fishing Co. v. Answell (1888); and Regal (Hastings) Ltd v. Gulliver (1942)*

SOLUTION THREE

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

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

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

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

SOLUTION FOUR

(a)The Manager for Chicken Michopo Ltd, John Katebe, was an agent both impliedly and by express authority. Impliedly in that he has been making orders on behalf of the company in the past and Mr. Makaba Moyo took him at his word based on past dealings, thus his company will be bound.

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

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

a. By consent

b. By operation of the law

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

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

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

(b). Yes, it passed as the chickens were appropriated to Makaba's company. Section 1 (3) of SOGA 1893 state that, "where under a contract of sale the property in the goods is transferred from the seller to the buyer the contract is called a sale; but where there is a condition thereafter to be fulfilled, the contract is called an agreement to sell". The case of ***Dennant v Skinner*** and collom applies. The contrary intention must be shown at or before the making of the contract. Section 16 of the Act provides that where there is a contract for the sale of unascertained goods no property in the goods is transferred to the buyer unless and until the goods are ascertained. In the case of ***Kressman & Co. v Lekhain & Another (1964) EALR*** 49 Supreme Court of Kenya, the second respondent bought goods from the plaintiff which were in a warehouse awaiting collection. He instructed the warehouse to redeliver the goods to the appellant. The appellants agreed to take delivery of the goods but before they could do so the first respondent obtained an attachment order against the second respondent. It was held that property in the goods had passed to the appellant since what had transpired amounted to an agreement to resale. The attachment order was ineffective. Property can pass only after the goods have been ascertained i.e. appropriated to the contract with the consent of both parties, express or implied. ***The property in the goods passed as the chickens were appropriated to the contract.***

Section 18 of SOGA states that:

"*Unless a different intention appears, the following are rules for the sale of ascertaining the intention of the parties as to the buyer".*

Rule 1.- where there is an unconditional contract for the sale of specific goods, in a deliverable state, the property in the goods passes to the buyer when the contract is made, and it is immaterial whether the time of payment or the time of delivery, or both, be postponed.

Hence the property in the goods moved.

SOLUTION FIVE

(a) A *company limited by guarantee* is one where the liability of members is limited to the amount they have guaranteed (pledged) to pay for the debts of the company should it fail to settle its debts or be wound up. It does not have share capital. These are mainly charitable in nature and are not meant for making profit for their members or management. Companies limited by guarantee can never be converted into public limited companies. Whilst a *company limited by shares* is one which has share capital and the liability of members is limited to the unpaid amount (if any) on the shares held by them. These are meant for profit and can be private or public limited companies.

(b) Mulungu Adalise Orphanage company cannot convert to a public limited company because Section 19 of the Companies Act CAP 388 of the laws of Zambia prohibits a company limited by guarantee from converting to a public limited company.

(c) Section 19 (5) of the Companies Act does not allow a company limited by guarantee to make profit for its members or those involved in its management, but can make profit to enhance its activities. In this case, Mulungu Adalise Orphanage is wrong in wanting to make profit for its members.

(d) (i) Caveat emptor is the principle under the sale of goods that the buyer must be ware as he is buying the goods. He needs to take caution and be ware as to the quality and fitness of the goods.

(ii) Implied exceptions to caveat emptor are:

- An implied condition as to merchantable (satisfactory) quality
- An implied condition of fitness for purpose
- Conditions and warranties implied by usage
- A condition of freedom from latent defects on a sale by sample

(iii) Remedies available to her under contract include:

- She can sue for damages including treatment of the baby
- Rescind the contract and ask for her money back
- Injunction to stop them from selling any more of the clothes and blankets
- Ask to be an uncontaminated blanket, etc

SOLUTION SIX

(a) In the English law of tort, professional negligence is a subset of the general rules on negligence to cover the situation in which the defendant has represented him or herself as having more than average skills and abilities. The usual rules rely on establishing that a duty of care is owed by the defendant to the claimant, and that the defendant is in breach of that duty. The standard test of breach is whether the defendant has matched the abilities of a reasonable person. But, by virtue of the services they offer and supply, professional people hold themselves out as having more than average abilities. This specialized set of rules determines the standards against which to measure the legal quality of the services actually delivered by those who claim to be among the best in their fields of expertise.

In view of the above, Thomas can succeed against Albert a practicing accountant. Professionals owe a duty of care to their clients. Thomas relied on the information from a professional which was misleading and as such he can succeed in an negligence action against Albert. In Thake v Maurice [1984] 2 All ER 513, the court made it clear that the plaintiff had relied on the professional guidance from an expert in the field, hence he was liable.

Further, **Thomas can succeed against Bernard an advocate.** Thomas relied heavily on the expertise of Bernard the advocate who owed him a duty of care professionally. In, **Hedley Byrne & Co Ltd v Heller & Partners Ltd** (1964) AC 465 created the rule of "reasonable reliance" by the claimant on the skills of the defendant. "Where a person is so placed that others could reasonably rely upon his judgment or his skill or upon his ability to make careful inquiry, and a person takes it upon himself to give information or advice to, or allows his information or advice to be passed on to, another person who, as he knows or should know, will place reliance upon it, then a duty of care will arise." This means that Thomas will succeed against Bernard. **Solicitors/ Advocates**

As to solicitors, *Ross v. Caunters* [1979] 3 AER 580, holds that lawyers can owe a duty of care both to their clients and to third parties who suffer loss or damage. In that case, the solicitors failed to prevent a beneficiary from attesting the will. They admitted negligence but denied that they were liable to the claimant, contending (i) that a solicitor was liable only to his client and then only in contract and not in tort and could not, therefore, be liable in tort to a third party, (ii) that for reasons of policy, a solicitor ought not to be liable in negligence to anyone except his client, and (iii) that in any event, the Plaintiff had no cause of action in negligence because the damage suffered was purely financial. Applying the principles in *Hedley Byrne & Co Ltd v Heller & Partners Ltd* and *Donoghue v Stevenson* [1932] AC 562, a solicitor who is instructed by a client to carry out a transaction that will confer a benefit on a third party owes a duty of care towards the third party in carrying out that transaction, in that the third party is a person within his direct contemplation as someone who is likely to be so closely and directly affected by his acts or omissions that he can reasonably foresee that the third party is likely to be injured by those acts or omissions. This was confirmed in *White v Jones* [1995] 1 AER 691 which applied *Caparo*

Industries plc v Dickman [1990] 1 AER 568 holding that there is a close and direct relationship characterized by the law as proximity or neighbourhood; and the situation is one where it is fair, just and reasonable that the law should impose the duty of the given scope upon the one party for the benefit of the other. But in *Carr-Glynn v Frearsons* [1997] 2 AER 614 the solicitor admitted uncertainty as to whether the will as drawn would be effective. The testatrix undertook to seek out the information needed to clarify the issue. She died more than three years later without verifying the will. *White v Jones* was distinguished because the testatrix had assumed the duty of care, but the court was critical of the failure of the solicitors to send a letter of reminder. The case law also indicates the necessity for firms of solicitors to keep detailed attendance notes.

Thomas can also succeed against Charles a car driver who skidded and crossed his lane and collided with Thoma's car. Charlse owed a duty of care to Thomas .Actions nominally based on *Hedley Byrne* by definition include negligent acts or omissions like what Charlse did and as such he is liable, even though the *ratio decidendi* of *Hedley Byrne* was cast in terms of liability for statements. In *Caparo Industries plc. v Dickman* (1990) 2 AC 605 the criteria for a duty of care in giving advice were stated in more restricted terms:

"What can be deduced from the Hedley Byrne case, therefore, is that the necessary relationship between the maker of a statement or giver of advice (the adviser) and the recipient who acts in reliance on it (the advisee) may typically be held to exist where (1) the advice is required for a purpose, whether particularly specified or generally described, which is made known, either actually or inferentially, to the adviser at the time when the advice is given, (2) the adviser knows, either actually or inferentially, that his advice will be communicated to the advisee, either specifically or as a member of an ascertainable class, in order that it should be used by the advisee for that purpose, 3 it is known, either actually or inferentially, that the advice so communicated is likely to be acted on by the advisee for that purpose without independent inquiry and (4) it is so acted on by the advisee to his detriment."

Finally, Thomas can recover for nervous shock occasioned to him. Nervous shock is the onset of a psychiatric illness caused by witnessing the negligent action, or the result thereof. This means that Thomas can succeed in his action for nervous shock which was occasioned him.

(b) The terms "minor" and "infant" are used in law to describe a person who is under the legal age of an adult. In nearly all cases, an "adult" is a person who is 18 or older. Contracts of necessities are binding as was highlighted in Robert v Grey. Further, contracts which are beneficial to the minor are binding. Educational contracts and other contracts of necessities are binding on the minor. **In the case at hand, the contract between Chanda and the company organizing dances is binding because it is beneficial to Chanda.**The law provides that contracts for certain goods and services are not voidable. Necessaries include items and services that are necessary to the minor's health and safety, such as food, lodging, education, shelter and clothing. In some instances, automobiles are considered necessaries. Contracts beneficial to the minor are binding.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.5: MANAGEMENT THEORY AND PRACTICE

MONDAY 11 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: 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.

SECTION A – (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

QUESTION ONE

1.1 Which 18th century writer produced a famous book called 'The Wealth of Nations'?

A. Frederick Taylor
B. Henry Mintzberg
C. Adam Smith
D. Dr Samuel Johnson

(2 marks)

1.2 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)

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

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

(2 marks)

1.4 Which feature does NOT form one of Fayol's 14 principles of management?

A. Esprit de corps
B. Initiative
C. Order
D. Individualism

(2 marks)

1.5 ________________ is a set of activities directed at bringing together an organization's resources, with the aim of achieving organizational goals in an efficient and effective manner.

A. Leading
B. Organizing
C. Decision making
D. Communication (2 marks)

1.6 Managers are often expected to engage in ceremonial or symbolic activities, such as presenting awards and holding retirement ceremonies. Which role do managers fill in performing these activities?

A. Spokesperson
B. Liaison
C. Figurehead
D. Resource allocator

(2 marks)

1.7 Luyando is a manager who recently merged the company's personnel and employee training departments into a single human resources department. Which management function has Luyando performed?

A. Empowerment
B. Quality control
C. Leading
D. Organizing

(2 marks)

1.8 Which of the legal structure(s) for a business confers limited liability?

A. The sole trader only

B. The partnership only

C. The limited company only

D. Both the sole trader and partnership

(2 marks)

1.9 The main reason why the owners of many private limited companies convert into public limited companies is because:

A. They do not want to remain in the private sector

B. They want to gain the benefits of limited liability

C. They want to keep the annual accounts secret

D. They want to raise additional capital to expand the business.

(2 marks)

1.10 One of the claimed advantages of a sole trader business is that:

A. Owners have limited liability

B. Shares can be sold to raise capital

C. Decisions and responsibilities can be shared

D. The owner has independence (2 marks)

[Total: 20 Marks]

SECTION B

Question two 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)

Ngoma and Manasseh started operating their business in the year 2000 in the construction industry in Kitwe. Ngoma is a skilled Carpenter and picked up the skill of carpentry and joinery from his father. Manasseh is an experienced bricklayer who worked for some construction companies before joining hands with Ngoma to set up their business called Bongo Construction. The principal line of business is construction of housing units within Kitwe. The business environment in Kitwe was relatively stable from the year 2000 up to 2010. However, in the past six (6) years the environment has been dynamic and most of the forces from the external environment have negatively impacted most businesses. Ngoma and Manasseh have seen the need to seriously consider the macro-environment in which their business is operating by using a structured approach.

Required:

(a) Describe the elements in the macro-environment and state how a business like Bongo construction can be affected. (14 marks)

(b) Explain the limitations of using PESTEL analysis as a framework for identifying and assessing the external influences on business. (6 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

(a) Fiedler in his Contingency Theory studied the relationship between style of leadership and the effectiveness of the work group and identified two types of leader - *psychologically distant manag*ers (PDMs) and *psychologically close managers* (PCMs).

The terms 'management' and 'leadership' are often used interchangeably, as if they have the same meaning. However, there are differences between the two terms. Kotter (2001) argues that management is about coping with complexity, its functions are to do with logic, structure, analysis and control while leadership is about coping with change. Management can be exercised over resources, activities, projects and other essential non-personal things. Leadership can only be exercised over people.

A good leader therefore is expected to possess a range of business and managerial skills to enable him create a sense of direction among the people he is leading.

Required:

(i) Distinguish between *psychologically distant managers* (PDMs) and *psychologically close managers* (PCMs). (2 marks)

(ii) Explain any five (5) key leadership skills. (10 marks)

(b) Within a company, the owners appoint the Board of Directors to provide oversight on the general management of the company and ensure that it is run in the best interest of the owners. The Board of Directors are given power and authority to fulfil this responsibility, and they should be accountable to the owners. The Board of Directors delegates a large amount of their authority to the Chief Executive Officer and his management team.

Required:

With reference to the scenario above, explain the meaning of Authority, Delegation, Accountability and Power. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Imagine you have just been appointed as head of a department in an organization. Your preliminary situational analysis review that there is need to change the way work is done in the department. You have an idea of what you are trying to achieve, and the future status of the department you are trying to get to. However, as you plan for this change and get input from your subordinates, you discover that some employees are seeing the need for change, while others are resisting change development programme.

In addition to the situation above, you have also noted that individuals are motivated through a sense of personal achievement and they seek to achieve even more in the future. Therefore you have identified that one way of motivating employees is by putting in place a well-structured career development programme.

Required:

(a) Using Kurt Lewin's Force Field Analysis Theory, describe any five (5) factors that could either be driving forces or restraining forces that you need to be aware of, in the process managing your proposed change. (10 marks)

(b) As a manager, outline critical success factors that would enable you to be successful and to enable the career development programme to succeed.

(10 marks)

[Total: 20 Marks]

QUESTION FIVE

Public Sector Organizations (PSO) may be statutory bodies, parastatal organizations, government departments or boards. Organizations in this sector are accountable to government and rely on government for most or all of their funding, consequently most of them operate with limited resources.

Required:

Using examples of parastatal organizations you know in Zambia in each case, describe at least five (5) key objectives and characteristics of these organizations.

[Total: 20 Marks]

QUESTION SIX

(a) Corporate governance guidance has concentrated on the work of the audit, remuneration and nomination committees. The Higgs report (2003) recommended that no one individual should serve on all committees. Thus the committees should be staffed by non-executive directors and preferably independent non-executive directors.

Required:

Give an explanation of at least five (5) advantages that the non-executive directors can bring to a board of directors**.** (10 marks)

(b) Luangwa Company Limited produces **product x** to large clients. Project managers are employed to ensure that the orders of a customer are fulfilled on time and in accordance with the customer's requirements. Luangwa Company Limited has functional departments for purchasing, production planning, production operations, accounting and finance and distribution and delivery. Each functional department will deal with the work for many customers and many orders, while project managers try to ensure that the activities of the functional departments are properly coordinated to deal with the customers for which they are responsible.

Required:

(i)	Describe the organizational design that Luangwa Ltd has adopted.	(2 marks)
(ii)	Explain any two (2) advantages of such a structure.	(4 marks)
(iii)	Explain any two (2) disadvantages of such a structure.	(4 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.5 MANAGEMENT THEORY AND PRACTICE SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) The term macro-environment refers to general factors in the business environment of an organization. These environmental factors are analyzed in six categories, which provide a useful framework for analysis.

Political environment

Political factors can have a strong influence on business entities and other organizations like Bongo construction. Factors like government policy on providing financial support to small businesses like Bongo, the stability of the political environment and generally government intervention in the business environment by way of enacting pieces of legislation that affect business.

Economic Environment

Organizations operate in an economic environment and this environment can have an important influence on their business and strategic plans may be affected by economic conditions and forecasts. Elements of the economic environment include; the rate of economic growth, interest rates, the rate of inflation etc. Decisions of a business like Bongo will obviously be affected by changes in any of these variables like access to credit.

Social Environment

The social and cultural environment in which an organization operates affects the way that business is done and the behavior of customers and other stakeholders. Elements in this environment include; attitudes to leisure and what people like to do with their leisure time, women empowerment, social changes like tastes, preferences and life styles. These social changes have created opportunities in the construction industry in the sense that people now have realized the need to build their own houses with latest designs.

Technological Environment

Technological changes have a big influence on organizations and the way in which business is conducted. For a business like Bongo, developments in this industry like, pre-mixed concrete equipment for mortar, using machines to make blocks have brought in efficiency and effectiveness.

Ecological and Environmental factors.

This has to do with concern for the environment and ecological system. Businesses are looking for ways to develop their businesses in a way that protects the environment and ensures long term sustainability.

Legal Environment

There are many laws and regulations affecting business today and as such business must be conducted within the legal framework. Some of these laws include; Healthy and safety laws especially in the construction industry where Bongo is operating, the employment law i.e. issues of casualization, Tax laws etc. Even small businesses like Bongo will be required to pay 3 percent turnover tax before registering for VAT. Noncompliance or ignorance of the law will attract fines.

(b) Limitations of the PESTEL Framework

PESTEL analysis is a helpful framework for analyzing the external influences of the business. However, there are limitations to the value of this technique;

(i) It is a tool for analysis by management, but it does not provide any answers to problems.

(ii) It is a method of qualitative analysis. It does not quantify the significance of environmental factors.

(iii) It may even be more difficult to compare environmental factors and decide which is more significant than others.

(iv) It is fairly easy to use PESTEL analysis to describe environmental influences that exist today and have existed in the past. Strategic planning however is futuristic and it may not be easy to identify key factors that affect the business environment in the future.

SOLUTION THREE

(a- i.) The distinction between psychologically distant managers (PDMs) and psychologically close managers (PCMs) is that:

Psychologically distant managers (PDMs) maintain distance from their subordinates, they formalize the roles and relationships between themselves and their superiors and subordinates.

Psychologically close managers (PCMs) are closer to their subordinates, they do not seek to formalize roles and relationships, they are more concerned to maintain good human relationships at work and they prefer informal contacts to regular formal staff meetings.

(a - ii.)There is a range of business and managerial skills important to a good leader, including:

(i) Entrepreneurship, the ability to spot business opportunities and mobilize resources to capitalize on them.
(ii) Interpersonal skills, such as networking, rapport building, influencing, negotiating, conflict resolution, listening, counselling, coaching and communicating assertively.
(iii) Decision-making and problem solving skills, including seeing the big picture.
(iv) Time management and personal organization.
(v) Self-development skills, the ability to learn continuously from experience, to grow in self-awareness and to exploit learning opportunities.

b) The meaning of the terms **Authority, Delegation, Accountability** and **Power**.

Authority is the right given to a person to make decisions by virtue of the position they hold in the organization. Managerial authority has three aspects: making decisions within the scope of the authority, giving tasks to subordinates and expecting satisfactory performance of these tasks by subordinates. In the scenario given the shareholders give authority to the board of directors.

Delegation means handing authority down from a higher level of management to a lower level in the organization. It is a process of entrusting authority and responsibility to others throughout the various levels of the organization.

Accountability means having to explain actions or performance to the person from whom authority has been delegated. With regard to the scenario given, directors are accountable to the shareholders who delegate authority to them. In the same vain management is accountable to the board of directors.

Power is the ability to do something. In other words power is the ability to marshal the human, informational, and material resources to get something done. Power affects decisions, behavior and situations.

SOLUTION FOUR

(a) A career development programme should have the following characteristics for it to succeed:

(i) It must be clear and transparent to individuals in the sense that it must show how they might expect to develop their career with the organization, what path the progress of their career will take and how far they might expect their career to develop.

(ii) The career development programme should be realistic and believable as not everyone can reach the top of the management tree.

(iii) It should be acceptable to employee. They should see opportunities that they want to take, so that they can be motivated by the prospect of career development.

(iv) There should be feedback to employees, providing evidence of how the career development programme is working.

(v) There must be support for employees in planning their personal development and career development.

(b) Kurt Lewin argued that in managing change, it is necessary to be aware of forces that are driving the need for change, and forces that resist change. Any of the following factors could be either a driving force or a restraining force:

(i) The people involved in the change, and what they want for themselves.

(ii) Their habits and customs.

(iii) Their attitudes to the proposed change.

(iv) The relationships between the people involved.

(v) The resources available to make the change.

(vi) The organization structure.

(vii) The regulations
(viii) Events (happenings)

SOLUTION FIVE

Parastatal organizations have the following main objectives and characteristics:

(i) **Their prime objective** is to look after the interest of the public, although commercialization is an objective too.

(ii) **Accountability:** The board of directors of public institutions should be accountable to their shareholders, the people of Zambia. In their annual report as part of full disclosure, these organizations should state their functions and report on the results of their operations.

(iii) **Transparency:** Transparency goes side by side with accountability. When an organization is public, it should operate in the most transparent manner possible. Transparency is one of the key performance indicators for good corporate governance of public organizations.

(iv) **Decentralization:** Decentralization tends to be easier to implement in private sector organizations than it is in public sector organizations, where there is greater demand for accountability of operations, regularity of procedure and uniformity of treatment.

(v) **Funding:** Funding of public sector organizations is generally by the government. The government is the major shareholder in public corporations and always want to control these institutions, hence the appointment of the board of directors by government.

(vi) **Commercialization:** Public corporations such as ZAMTEL, ZESCO and ZSIC now focus on commercialization of their operations, adopting strict commercial principles in the management of the organization. There are has been a shift in focus, instead of just providing a good or service without consideration for profit, as commercialized entities the focus on profitability is emphasized.

SOLUTION SIX

(a) Non-executive directors can bring a number of advantages to a board of directors which include:

(i) They may have **external knowledge and experience** which executive directors do not possess. The experience they bring can be in many fields i.e. they may be executive directors of other companies, they can also bring knowledge of markets within which the company operates.

(ii) Non-executive directors can provide a **wide perspective** than executive directors who may be more involved in detailed operations.

(iii) Good non-executive directors are often a **comfort factor** for third parties such as investors or creditors.

(iv) There are certain roles non-executive directors are well suited to play. These include; **father-confessor role** (being a confidant for the chairman and other directors), **oil-can role** (intervening to make the board run effectively), and **acting as high sheriff** (if necessary taking the steps to remove the chairman or chief executive)

(v) The other advantage lies in the dual nature of the non-executive director's role. They are full members who are expected to have the level of knowledge that full membership implies, at the same time they are expected to provide the so called strong independent element on the board.

(b)

(i) Theudas has adopted a Matrix organization structure. Matrix organizational design combines functional organization with project managers. Project managers are responsible for an entire project and coordinate all functional activities, while functional managers take responsibility for each of the different functions in the organization.

(ii) Advantages of a Matrix structure include:

- Managers can specialize in particular products, projects or customers.
- The structure creates responsibilities for individual customers or projects, as well as responsibilities for functional activities, thus enhancing coordination.

- There is improved efficiency and effectiveness in an organization where cooperation between functional departments is critically important.

(iii) Disadvantages of a Matrix structure include:

- A matrix structure may create a dual chain of command, with some employees taking orders from two bosses (their functional manager and the project manager).
- This may create confusion, because employees may not know who they should take orders from. Dual command is a potential source of conflict.
- Project managers may rely on functional managers for support and co-operation, in order to get employees to do as they ask. They may also need to rely on persuasion to get employees to assist them willingly.

END OF CA 1.5 SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

KNOWLEDGE LEVEL

CA 1.6: BUSINESS COMMUNICATION

WEDNESDAY 13 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: 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.

SECTION A – (COMPULSORY)

Attempt all ten (10) multiple choice questions

QUESTION ONE

1.1 Which one of the following security risks is associated with information systems

A. Trojans

B. Worms

C. Time bomb

D. Ransomware (2 marks)

1.2 Which one of the following sets represents models that are used mainly to calculate tools for various scenarios in spreadsheet construction?

A. Input, parameters and output section

B. Input, result and parameters section

C. Result, output and parameters section

D. Parameters, input and output section (2 marks)

1.3 Give an example of validation test in the following statement below?

A. Arithmetic tests to ensure totals within a record are correct

B. Sequence tests to ensure records are in correct order

C. Format checks to ensure the record is stored in the correct file format for the system

D. Range tests to ensure correct identification of validation tests (2 marks)

1.4 Which one of the following sets classify the four(4) main types of IT solutions to security concerns (Technical controls)

A. Recovery, backup, validation and documentation

B. Validation, authorization, Technical controls and documentation

C. Backup, documentation, authorization and validation.

D. Authorisation, documentation, backup and recovery (2 marks)

1.5 What does the term justification mean in word processing?

A. It refers to how the text is laid out on the screen.

B. It refers to how the text is copied and pasted on the screen

C. It refers to how the text is edited on the screen

D. It refers to how some spelling mistakes are detected and highlighted on the screen.

(2 marks)

1.6 Why is an appendix placed at the back of a written report?

A. To show where the reference can be found
B. To show the relative size of information in a report
C. To assist readers not to be distracted by high volumes of technical information from the main body.
D. To show the relationship of information in the main body and that which is placed back of the report (2 marks)

1.7 What is the other name used for communication that is not official?

A. Grape vine

B. Formal communication

C. An official communication

D. Social communication (2 marks)

1.8 Which of the following documents provides a reference record to decisions and actions points agreed by participants in a meeting?

A. Notice
B. Agenda
C. Report
D. Minutes (2 marks)

1.9 Which one of the following is a characteristic of written communication?

A. It allows interaction
B. A formal record of communication is created
C. It can have a high impact
D. It requires little preparation time (2 marks)

1.10 What is the difference between a memo and a business letter?

A. A letter is used for internal communication only while a memo is used for external communication
B. A letter is used for mass communication only while a memo is used for external communication
C. A letter is used for external communication only while a memo is used for both internal and external
D. A letter is used for both internal and external communication only while a memo is used for internal communication only

(2 marks)

[Total: 20 Marks]

SECTION B

Question TWO in this section is compulsory and must be attempted

Then attempt any three (3) questions from the remaining four

QUESTION TWO – (COMPULSORY QUESTION)

As a qualified accountant, one needs to be proficient with application packages like Microsoft Office. You are a newly recruited accountant at Shining Star Investment. One of you duties is to prepare the payroll using spreadsheet software (MS Office Excel) as using a spreadsheet would make your work more efficient.

Required:

(a) Explain the differences between a spreadsheet and word processing software.

(4 marks)

(b) Consider the spreadsheet in Fig 1.0 below and answer the questions that follow.

	A	B	C	D	E	F	G	H
1	**ABC Ltd Payroll for March 2018**							
2	Customer Name	Basic Pay	Housing Allowance	Transport Allowance	Gross Pay	NAPSA Amt	ZRA Amt	
3	J. Mulima	3250	500	500				
4	S. Salimu	2500	600	500				
5	L. Sitali	950	400	500				
6	M. Phiri	1000	400	100				
7								
8	NAPSA	5%						
9	ZRA	25%						
10								
11								

Fig 1.0

(i) Write two formulae that would help you calculate the "**gross pay"**

(4 marks)

(ii) NAPSA amount is calculated on the gross pay. Using absolute referencing, write the formula you would use to calculate the NAPSA amount and ZRA amount for each customer. (4 marks)

(iii) ZRA amount is calculated on the gross pay and if the gross pay is less than 3300, then no ZRA is paid otherwise any amount above 3300 is taxed at 25%. Write a function that will compare the ZRA amount and calculate it where it is applicable for all the customers. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Information is the blood line of every organisation. It is used for key management functions like planning, decision making, organising and controlling. For such functions to be performed efficiently good information is needed.

Storage of information has moved away from traditional file based systems to database which are believed to have more advantages compared to the file based systems.

Required:

(a) Explain any five (5) qualities of good information (10 marks)

(b) Categorise the following types of memory into volatile or non-volatile

(i) Cache
(ii) Micro SD (2 marks)

(c) Explain any four (4) advantages of using a database. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Information System security is critical to every organisation as computers store organisations' critical and sensitive data. The data can be stored on files and in folders. As a trained Accountant you need to be aware of security threats to computer systems and types of processing systems.

Required:

(a) Explain the term computer security (2 marks)

(b) Identify and explain any four (4) security risks associated with information systems. (8 marks)

(c) Distinguish between files and folders (4 marks)

(d) Briefly explain the following types of processing

(i) Batch Processing (2 marks)
(ii) Online processing (2 marks)
(iii) Real time processing (2 marks)

[Total: 20 Marks]

QUESTION FIVE

You work at TPM Telecom Company. Due to advanced Technology, you wish to take advantage of the new technology so that you assist organisations that are lagging behind in terms of automation. Recently you conducted a research on the use of automated Technology to five (5) different sector organisations.

From the research that you conducted, the following statistics show the number of different sector organisations that used automated technology during the year 2017.

Airlines	= 17
Financial institution	= 40
Training institutions	= 10
Other private organisations	= 20
Other public organisations	= 12

Required:

(a) Using statistics presented in the scenario above, Draw a pie chart as a way of visually showing the 5 sector organisations that used automated Technology.

(4 marks)

(b) Briefly interpret the information from the pie chart that you have drawn. (4 marks)

(c) Give two (2) characteristics of a pie chart. (2 marks)

(d) Briefly explain 5 key principles of effective graphic communication. (10 marks)

[Total: 20 Marks]

QUESTION SIX

You are the head of accounting department in your company. Recently you have received a report from your assistant that most staff in your department often report late for work and in some cases stay away from work without permission. Your supervisor has equally received the same report about the negative work behaviour. Following such negative reports, you have been requested to investigate on the causes of late coming for work and other negative work behaviour and prepare a report on the findings. The report is to be submitted by the end of this Month.

Required:

(a) Write a formal report outlining the causes of poor time keeping and other negative work behaviour among staff in your department. (15 marks)

(b) State any **five (5)** key aspects that you would consider as you write a report so that the receiver of the report can easily understands it as they read through.

(5 marks)

[Total: 20 Marks]

END OF PAPER

CA 1.6 BUSINESS COMMUNICATION SOLUTIONS

SOLUTION ONE

1. 1 **D** Ransomware

1.2 **B** Input, result and parameters section

1.3 **B** Sequence tests to ensure records are in correct order

1.4 **D** Authorization, Documentation, backup and recovery

1.5 **A** It refers to how the text is laid out on the screen.

1.6 **C** To assist readers not to be distracted by high volumes of technical Information from the main body

1.7 **A** Grape vine

1.8 **D** Minutes

1.9 **B** A formal record of communication is created

1.10 **D** A letter is used for both internal and external communication only while a memo is used for internal communication only

SOLUTION TWO

a) Explain the differences between a spread sheet and word processing software.
   - The spreadsheet is a rectangular array of cells made of rows and column used for calculating, analysing and manipulating numeric data whereas

   - a word processing software is used to create, edit, prints documents such as memos, letters etc

b) Consider the below spreadsheet and answer the questions that follow.

i) = B3 + C3 + D3 and =SUM(B3:D3)

ii) Mulima = E3 * B8
Salimu = E4 * B8
Sitali = E5 * B8
Phiri = E6 * B8

iii) Mulima =IF(E3 <= 3300, "0", (E3 – 3300) * B9)
iv) Salimu = IF(E4 <= 3300, "0", (E4 – 3300) * B9)
v) Sitali = IF(E5 <= 3300, "0", (E5 – 3300) * B9)
vi) Phiri = IF(E6 <= 3300, "0", (E6 – 3300) * B9)

SOLUTION THREE

a) Explain the qualities of good information

- Accurate – should have the precise information needed
- Complete – should contain all the necessary information
- Cost effective – should not be more than the benefit
- Understandable – should be easy to understand
- Relevant – should have necessary information
- Accessible – should be easily and readily available
- Timely – should be there when needed
- Easy to use – should not be complicated

b) Categorise the following types of memory into volatile or non-volatile

a. Cache volatile
b. Micro SD non-volatile

c) Explain any four (4) database advantages
- Less duplication – data is stored in one location
- Data integrity – data is collected from one central place
- Updating – all data is current or least & updated at once
- Improved access to data – controlled access of data/security
- Data can be used by different people – multiple users of the same application

SOLUTION FOUR

(a) Explain the term Computer security

Computer security can be defined as protection of computers and the data they store from accidental or deliberate threats which might cause unauthorised modification, disclosure and destruction of data

(b) Identify and explain any four (4) security risks associated with information systems.

- Viruses – they corrupt data files or computer system
- Hackers – unauthorised users who access computer systems
- Denial of service (DoS) attack – making the computer system unavailable to legitimate users
- Threats from internal staff – can use
- Ransomware
- Spyware etc

(c) Distinguish between files and folders

- File is a common storage unit in a computer and all programs and data are written into a file and read from a file whilst
- a folder hold one or more files

(d) Briefly explain the following types of processing

(i) Batch Processing

This is where a group of similar transactions are processed in the same processing run. Input data could be entered into the system over a period of time or at the same time.

(ii) Online processing

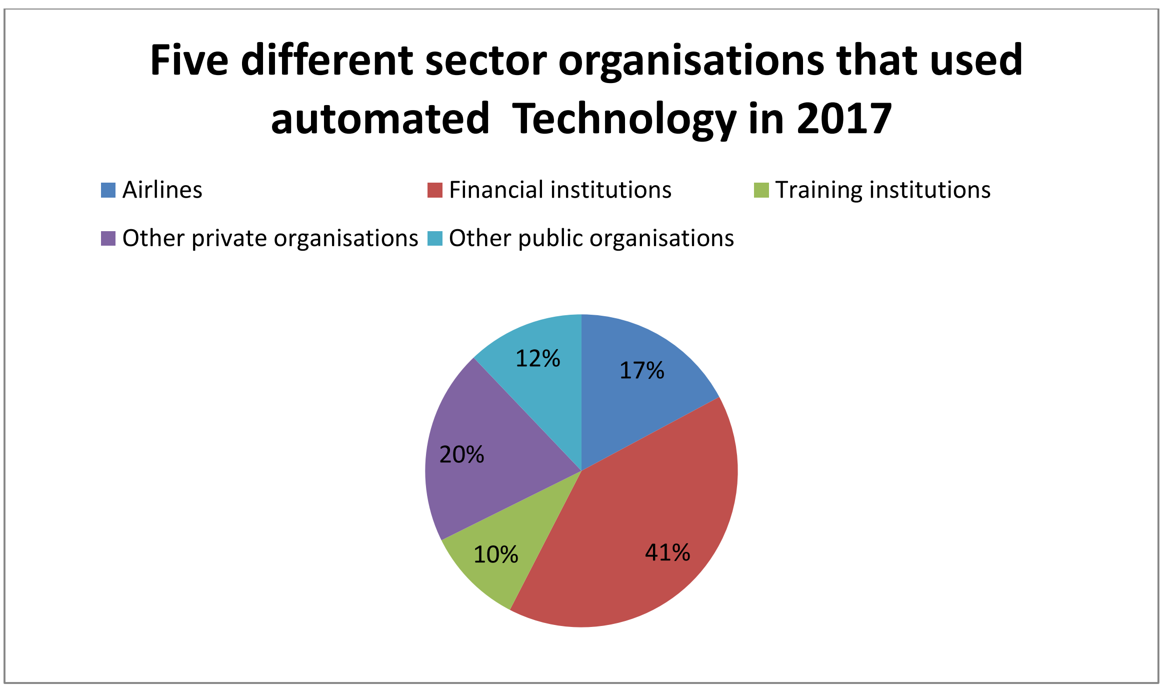
Online processing is where data is processed immediately while it is entered. The user only has to wait a short time for response.

(iii) **Real time processing**

Real time processing is a subset of online processing where input is continuously, automatically acquired from sensors which is processed immediately.

SOLUTION FIVE

(a)



Airlines 17/99 x 360 = 62°

Financial institutions	40/99x360	= 145°
Training institutions	10/99x 360	= 36°
Other private institutions	20/99x360	= 73°
Other public organisation	12/99x360	= 44°

(b)

Financial institutions tend to use more of automated technology with a 41% usage rate, while the least training institutions have 10% usage rating as the least in the 5 sector organisation. The gap between the highest and the least sector organisations in terms of usage of automated technology is big, suggesting that there is need to sensitise organisations about the benefits of automated Technology.

(c) Characteristics of Pie chart

- Relative sizes of component elements of total value or amount
- The circle or pie is represented by the 360^0

(d) The key principles of effective graphic communication are:

(i) A concise and meaningful title must be provided
(ii) The source of data where relevant must be cited
(iii) Clear labelled elements of the diagram or a separate key must be provided
(iv) Keep labelled texts brief.(labels and explanatory notes)
(v) Do not over crowd , clutter the diagram
(vi) Make the diagram large enough so that it is easy to read.

SOLUTION SIX

(a) Report on late coming and other negative work behaviour.

1.0 Terms of Reference

The Manager in the accounts department requested the head of department to write a report on late coming and other negative work behaviour among staff in the organisation.
The purpose of the report was to investigate on some of the causes of reporting late for work and other negative work attitudes
The report was to be submitted by the end of the month (month end during examination time)

2.0 Procedures / Methodology

The procedures used to carry out investigations were as follows:

2.1 interviews
2.2 observations
2.3 questionnaires

3.0 Findings

The following were some of the findings of the investigations

3.1 Traffic congestion
3.2 Lack of motivation among staff due to low salaries
3.3 Going to bed very late especially when there was football to watch at home Or when there was work carried forward from the office.
3.4 Different family challenges that some staff face disturbing the work routine
3.5 General bad work attitude by some staff.
3.6 The work place is very far from most residential areas

4.0 Conclusion

From the above findings, it was concluded that traffic, Lack of motivation, going to bed very late and different family challenges as well as general bad work attitude by some staff were some of the causes of late coming in the department.

5.0 Recommendations

The recommendations were as follows:

5.1 The department should buy a staff bus that would assists staff with transport
5.2 Increase employees' salaries so that they get motivated.

Report prepared by:

Writer's signature

Name and title of the writer

Date………………………

(b)

i) Avoid technical language

ii) Organise your materials logically – especially if it is designed to be persuasive, leading up to a conclusion or recommendation

iii) Signal relevant topics by using appropriate headings

iv) Use tables and diagrams where this would be helpful in highlighting important points or organising raw data.

vi) Use appendices for detailed supporting materials in order to keep its main body concise and flowing.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.1: FINANCIAL REPORTING

MONDAY 11 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

Section A – (COMPULSORY)

The question is compulsory and must be attempted

QUESTION ONE

Truck-N Trailer Group comprises of companies manufacturing spare parts and accessories for diesel vehicles. The separate statements of financial position for the parent, Truck-N and its investees, Trailer and Scooter as at 30 June, 2018 are given below:

	TRUCK-N	TRAILER	SCOOTER
Non-Current Assets:	**K'000**	**K'000**	**K'000**
Property, Plant and Equipment	58 400	45 000	37 860
Investments	47 680	18350	
	106 080	63 350	37 860
Current Assets:			
Inventory	8 500	13 250	8 590
Trade and Other Receivables	25 400	10 800	8 720
Cash and Cash Equivalent	1 200	2 800	3 350
	35 100	26 850	20 660
Total Assets	141 180	90 200	58 520
Equity:			
Ordinary shares of K1.00 each	80 000	42 000	18 500
Retained Earnings	48 000	22 800	18 200
	128 000	64 800	36 700
Non-current Liabilities:			
Long term borrowings		15 000	2 000
Current Liabilities:			
Trade and Other Payables	13 180	10 400	19 820
Total Equity and Liabilities	141 180	90 200	58 520

Other information:

(i) Truck-N acquired 80% of Trailer's equity on 1 July 2016 through a share exchange of 2 shares in Truck-N for every 5 shares acquired in Trailer. In addition, Truck-N paid a cash consideration amounting to K30 million including a loan amount to Trailer of K10 million on that date. The fair value of each Truck-N share on 1 July 2016 was K3. The fair value of each Trailer share on 1 July 2016 was K2.5. Truck-N has not yet accounted for the issue of shares consideration in its financial statements.

(ii) On 1 July 2016 Truck-N also purchased 7.4 million shares of Scooter for a cash consideration of K14.8 million. Truck-N has a board member representing its interest on the Scooter board but no power to appoint the majority of the board members for Scooter.

(iii) The retained earnings of Trailer and Scooter on 1 July 2016 were K 14.5 million and K 3.8 million respectively.

(iv) During the year to 30 June 2018 Trailer supplied goods to Truck-N worth K6.4 million. Trailer adds a markup of 25% on cost in pricing these goods. Truck-N in turn sold half of the goods received from Trailer to Scooter for K4 million. The rest of the goods bought by Truck-N from Trailer are still in Truck-N closing inventory. All the goods bought by Scooter from Truck-N are still in Scooter's closing inventory.

(v) Goodwill on acquisition of Trailer has been impaired by K5 million whilst the investment in scooter has been impaired by K2.5 million.

(vi) The fair value of Trailer's identifiable net assets were equal to their carrying amount at 1 July 2016 except for Land and Buildings whose fair value exceeded carrying amount by K6 million. Of this amount, 75% relates to buildings whose remaining life at 1 July 2016 was 40 years.

(vii) Truck-N payables include K1.4 million payable to Trailer. However, Trailer's receivables include K6.4 million as receivable from Truck N. The difference between Truck-N's payables and Trailer's receivables is due to a consignment of inventory priced at K0.5 million sent by Trailer but not yet received by Truck-N and a cash in transit remitted by Truck-N but not yet received by Trailer.

(viii) Truck-N accounts for non-controlling interest at fair value. For this purpose, the fair value of each Trailer share at 1 July 2016 is representative of the fair value of the NCI shares.

(ix) On 1 January 2017, Truck-N sold a used item of plant and machinery to Trailor at K15 million. The carrying amount of the plant at that date was K10 million. The plant had a remaining useful economic life of 5 years at 1 January 2017.

Required:

(a) Prepare the Consolidated Statement of Financial Position for Truck-N group as at 30 June 2018. (34 marks)

(b) Discuss the circumstances in which a company may be considered to be a subsidiary even though the size of shareholding is not more than 50%. (6 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section

QUESTION TWO

When preparing financial statements it is important to ensure that the tax consequences of all transactions are appropriately recognised. IAS 12 – *Income Taxes* – details the requirements relating to the accounting treatment of both current and deferred tax assets and liabilities.

Current tax is the amount of income tax payable or recoverable in respect of the taxable profit or tax loss for a period. Deferred tax is tax on temporary differences. A temporary difference is the difference between the carrying amount of an asset or liability and its tax base. A taxable temporary difference leads to a potential deferred tax liability and a deductible temporary difference leads to a potential deferred tax asset.

Required:

(a) Explain the purpose of accounting for deferred tax and briefly outline the requirements of IAS 12 *Income taxes* relating to accounting for deferred tax. (8 marks)

(b) Lusaka, a listed company, operates in the mining sector on the Copperbelt. The company had acquired an item of plant at a cost of K250 million on 1 April 2015. The plant's useful economic life and the residual value at end of its life were initially estimated at 10 years and K10 million respectively.

Subsequently, the plant was revalued, for the first time, to a fair value of K210 million on 31 December 2016, the **total useful economic life** of the plant has been revised to 8 years and the residual value at the end of that life to K5 million.
Management of Lusaka further reviewed the asset and reliably determined that the fair value of the asset at 31 December 2017 was K130 million. The company is liable to income tax at 30%.

For tax purposes, Lusaka plc is given tax depreciation (wear and tear allowances) at 25% on cost per annum starting with the year of acquisition (in full).

Required:
Explain how Lusaka Plc must account for the above transaction, including the deferred tax effects, in its financial statements for the year ended 31 December 2017. (12 marks)

[Total: 20 Marks]

QUESTION THREE

ZED is a publicly listed company, it operates in the construction industry and prepares its financial statements in accordance with IFRS. ZED is looking to expand its operations by acquiring a new business. Entity A operates in Southern province and entity B operates in Luapula province. Both entities are listed on Lusaka Stock Exchange. The financial highlights for entities A, B and ZED are provided below for the year ended 31 March 2018.

	A	**B**	**ZED**
Revenue	K200m	K340m	K550m
Gross profit margin	26%	17%	28%
Net profit	9%	11%	16%
Gearing	65%	30%	38%
Average rate of interest	6%	10%	9%
P/E ratio	11.6	15.9	16.3

Required:

(a) Identify any two (2) yardsticks or benchmarks against which an entity's ratios can be compared. (2 marks)

(b) Analyse the information provided by the key financial indicators above and explain the impact that each entity would have on the financial indicators of ZED if acquired. (10 marks)

(c) Explain three (3) limitations of using this type of analysis to decide on a potential takeover target. (3 marks)

(d) Explain any five (5) pieces of additional information that would help you assess the performance of each entity. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

Non-current assets are often a highly significant component of the total assets of an entity. Therefore, a number of different International Financial Reporting Standards have been published which regulate their definition, recognition, measurement and disclosure. IAS 16 *Property, Plant and Equipment* and IAS 38 *Intangible Assets* specifically regulate the recognition, measurement and disclosure of tangible and intangible assets respectively.

ZAMSHOE is a listed company which prepares financial statements in accordance with International Financial Reporting Standards (IFRS). An assistant of yours has been criticised over a piece of assessed work that he produced for his study course for giving the definition of a non-current asset as 'a physical asset of substantial cost, owned by the company, which will last longer than one year'.

Required:

(a) Explain to your assistant of the weaknesses in his definition of non-current assets when compared to the International Accounting Standards Board's (IASB) view of non current assets. (5 marks)

(b) Describe the circumstances under which intangible assets should be recognised and the accounting treatment allowed as per IAS 38 for business research and development costs. (5 marks)

(c) Zamtel owns a 9th floor building (provident house) in Ndola which it has been using as head office. In order to reduce costs, on 30 June 2016 it moved its head office functions to Lusaka and is now letting out its head office. The building had an original cost on 1 January 2007 of K500, 000, 000 and was being depreciated over 50 years. At 30 June 2016 and 31 December 2017 its fair value was judged to be K700, 000, 000 and K760, 000, 000 respectively. Zamtel measures investment property using the fair value model in line with *IAS 40 Investment Property.*

Required:

(i) Define investment property and explain its initial and subsequent measurements using both the cost and fair value models. (5 marks)

(i) Explain how the building will be treated in the financial statements at 31 December 2017. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

The financial statements of Mukapasa Ltd, a micro enterprise based in Muchinga Province, are given below:

Income Statement for the year ended 31 March 2018

	K'000
Revenue	30,000
Cost of sales and expenses	(16,000)
Operating Profit	14,000
Distribution costs	(3,600)
Administrative expenses	(9,200)
Profit from operations	1, 200
Finance cost	(180)
Profit before tax	1,020
Income Tax Expense	(560)
Profit for the year	460

Statements of Financial Position as at 31 March:

	2018		**2017**	
	K'000	**K'000**	**K'000**	**K'000**
Assets				
Non-current Assets				
Development Expenditure	1, 480		1,600	
Property, plant and equipment	18,000		19,200	
		19,480		20,800
Current Assets				
Inventory	2,740		2,300	
Trade Receivables	2,060		1, 680	
Cash and Cash Equivalents	2,208		928	
		7,008		4,908
Total Assets		**26,488**		**25,708**

Equity and Liabilities				
Equity Shares of K0.50 each	10,400		7,600	
Share Premium	3,000		1,600	
Revaluation Surplus	1,700		1,200	
Retained Earnings	5,720		5,660	
		20,820		16,060
Non-current Liabilities				
10% Loan Notes	0		4,000	
5% Loan notes	2,000		2,000	
Deferred tax	1,000		800	
		3,000		6,800
Current Liabilities				
Trade Payables	1,920		1,400	
Tax Payable	320		760	
Accrued expenses	428		688	
		2,668		2,848
Total Equity and Liabilities		**26,488**		**25,708**

Additional information:

1. The accrued expenses balance includes interest payable of K348,000 at 31 March 2017 and K48,000 at 31 March 2018.
2. On 31st March 2018, the company proposed ordinary dividends amounting to K400,000.
3. The income tax expense in the income statement comprises corporate tax of K360,000 and deferred tax of K200,000.
4. Depreciation charged for the year was K2,880,000.
5. During the year, Mukapasa disposed of non-current tangible assets with a carrying amount of K300, 000 for K392,000. The gain or loss on disposal had been included under cost of sales.
6. Cost of sales also include K320,000 for development expenditure amortised during the year.

Required:

Prepare Mukapasa Ltd's Statement of Cash flows for the year ended 31st March 2018, in accordance with requirements of IAS 7 *(Statement of Cash flows).* (20 marks)

[Total: 20 Marks]

END OF PAPER

CA2.1 SOLUTIONS

SOLUTION ONE

a)

Truck N Trailer Group Consolidated Statement of Financial Position as at 30 June 2018

	K 000	K 000
Non-current Assets:		
PPE (w)		105,675
Goodwill (w)		23,820
Investment in Associate (w)		17,404
Other Investments (w)		11,230
		158,129
Current Assets:		
Inventories (8500 + 13250 +500-(25/125X3450))	21,560	
Trade and Other Receivables (w)	29,800	
Cash (1200+2800+4500)	8,500	
		59,860
Total Assets		217,989
EQUITY AND LIABILITIES		
Equity:		
Share capital (80,000+2/5x80%x42000XK1)		93,440
Share premium (2/5X80%X42000X(3-1))		26,880
Group retained earnings (w)		49,012
Equity Attributable to Owners of Parent		171,568
NCI (w)		21,477
Total Equity		190,809
Non-current Liabilities:		
Long Term (15,000-10000)		5,000
Current Liabilities		
Trade and other liabilities (13180 + 10400 +500 - 1900)		22 180
Total Equity and Liabilities		217,989

Workings:

W1. PPE

			K'000
Given amounts			
Truck N			58,400
Trailer			45,000
Adjust			
FV gain on acq of trailer			6,000
Accum FV deprec	75%X6000/40X2		(225)
URP on plant (15000-10000)/5X3.5			(3,500)
			105,675

W2. Goodwill

Cost of acq:			
Issue of Shares	2/5X42000X80%X3		40,320
Cash			30,000
NCI at acq	20%42000X2.5		21,000
Equity at acq.			
S/C		42,000	
RE		14,500	
FV reval		6,000	
			(62,500)
Goodwill at acq			38,820
Less impairment loss			(5,000)
			23,820

W3. Investment. In Assoc

Cost of invest.		14,800
Share of		
Post acq RE 40%(18200-3800)		5,760
URP	40%(4000- (6400-500)X1/2X100/125)	(656)
Impairment loss		(2,500)
		17,404

W4. Other Investments

Given amts	
Truck N	47,680
Trailer	18,350
Less Truck N invest in Trailer	(30,000)
LessTruc N invest in Scooter	(14,800)
Less Loan to Trailer	(10,000)
	11,230

W5. Truc N closing inventory from Trailer

Total purchases including in transit inventory	6,400
Less sales to scooter ½(6400-500)	(2950)
	3,450

W6. Trade and Other Receivables

Given	
Truck N	25,400
Trail	10,800
Cash in transit	4,500
Intra group	(1,900)
	29,800

W7. Recon of intra-group balances

	Truck N payables	Trailer Receiv
Given	1,400	6,400
Inventory in transit	500	-
	1,900	6,400
Cash in Transit (balance)(6400-1900)	-	(4,500)
	1,900	1,900

W8. RE

Truck N given RE	48,000
Share of Post acq RE of:	
Trailer 80%(22800-14500)	6,640
Scooter 40%(18200-3800)	5,760
Adjustments:	
FV deprec 75%6000/40X2X80%	(180)
URP on inventory Trailer to Truc N 25/125X3450X80%	(552)
URP on inventory Truc N to Scooter	(656)
URP on plant	(3,500)
Impairmnet losses: Goodwill 80%X5000	(4,000)
Associate	(2,500)
	49,012

W9. NCI

At acquisition	21,000
Share of post acq changes:	
RE 20%(22800-14500)	1,660
FV deprec 20%X).75X6000/40X2	(45)
URP 20%X25/125X3450	(138)
Impairment of goodwill 20%X5000	(1,000)
	21,477

b)

A subsidiary is an investee company over which the investor exercises control by virtue of its voting rights. An investor is said to have control over the investee if it has the right to receive variable return and has the ability to affect those returns by virtue of the power over the investee. There are two circumstances in which the investor may exercise control and the investee company will be treated as a subsidiary:

i) Where the investor has actual control because its effective shareholding is 51% or more. The company will be able to affect returns by its decisions
ii) Where the investor has de facto power arising from a contract giving it unconditional right to purchase shares from other investors. The existing shareholding plus those to be acquired under the contract would effectively amount to 51% or more, thereby giving the investor more voting power than other investors. Even before such acquisition of shares, the said company would be able to exercise control over the investee company (because of the unconditional right). *(International Financial Reporting and Analysis, David Alexander, et. al. 2017)*

There are factors that are used to identify the acquirer of an investee but they do not necessarily determine who has control over the investee. However, in most cases ultimately the acquirer exercises control. The acquirer is identified as:

i) The entity that transfers a significant amount of cash or other assets, or incurs the most of liabilities in a business combination.
ii) The entity that receives or gains the largest portion of the voting rights to the combined entity.
iii) The entity whose management is able to dominate in the selection of the management team of the resulting combined entity.
iv) The entity whose owners is able to elect or appoint or remove a majority of the members of the governing body of the combined entity.

SOLUTION TWO

(a) **Purpose and principles of deferred tax**

Deferred tax is the future tax effect of temporary difference. It is essentially tax that is payable (or tax relief that will be available) in the future. Yet this is not yet due. So, in simple terms, deferred tax is tax that is payable in the future. **Temporary differences** are differences between the **carrying amount** of an asset or liability in the statement of financial position and its **tax base**. **Permanent differences** (e.g. fines, political donations, entertainment) do not give rise to defered tax, they are normally **disallowed** for tax purposes.

Accounting base- the carrying amounts of items in the financial statements. **Tax base**- the **value** of items recognised in the financial statements for **tax** purposes. Temporary differences can be either:

i) **taxable differences** – temporary differences which give raise to deferred income tax liabilities; or
ii) **deductible temporary differences** – result in amounts that are deductible in determining taxable profit of **future periods** when the carrying amount of the asset or liability or recovered or settled.

In many countries different rules are used for calculating accounting profit (as used by investors) and taxable profit. This can give rise to **temporary differences**. Temporary differences arise when income or expenditure is recognised in the financial statements in one year, but is charged or allowed for tax in another. Deferred tax needs to be provided for on these items. IAS 12 requires that an entity must provide for deferred tax on all temporary differences. This is known as the full provision basis.

The most important temporary difference is that between depreciation charged in the financial statements and capital allowances in the tax computation. In practice capital allowances tend to be higher than depreciation charges, resulting in accounting profits being higher than taxable profits. This means that the actual tax charge (known as **current tax**) is too low in comparison with accounting profits. However, these differences even out over the life of an asset, and so at some point in the future the accounting profits will be lower than the taxable profits, resulting in a relatively high current tax charge.

These differences are misleading for investors who value companies on the basis of their post tax profits (by using EPS for example). Deferred tax adjusts the reported tax expense for these differences. As a result the reported tax expense (the current tax for the period plus the deferred tax) will be comparable to the reported profits, and in the statement of financial position a provision is built up for the expected increase in the tax charge in the future.

There are many ways that deferred tax could be calculated. IAS 12 states that the **liability method** should be used. This provides for the tax on the difference between the carrying value of an asset (or liability) and its tax base. The tax base is the value given to an asset (or liability) for tax purposes. The deferred tax charge (or credit) in profit or loss is the increase (or decrease) in the provision reported in the statement of financial position.

(b)

The plant will be reported in the Statement of financial position at 31.12.2017 within Property, plant and equipment at its fair value of K130million in accordance with the entity's Revaluation model per IAS 16. The plant's depreciation charge will be based on its carrying amount of K210 million during the year to 31.12.2017, its revised residual value of K5 million and the revised remaining life of 6.25 years (8 – 1.75). This gives a depreciation charge of K32.8 million = (210 -5)/6.25 to report in profit or loss for the year to 31.12.2017.

The revaluation at 31.12.2017 will give a revaluation loss as follows:		K'm
Carrying amount after revaluation		130
Carrying amount before revaluation	(210-32.8)	(177.2)
Loss on revaluation		(47.2)

Accounting for the revaluation loss:

Without revaluation, the cost model carrying amount of the plant at 31.12.2017 would be:

		K'm
Cost		250
Depreciation up to 31.12.2016	(250-10)/10X1.75	(42)
		208
Depreciation for y/e 31.12.2017	(208-5)/6.25	(32.5)
Carrying amount at 31.12.2017		**175.5**

With the above in mind, of the total loss of K47.2 million at 31.12.2017, a loss equal to K1.7 million (i.e. 177.2 -175.2) reverses a past unrealized gain on the plant and will therefore be reported in other comprehensive income (no recycling to profit or loss). The balance of the loss amounting to K45.5 million must be reported in profit or loss.

In accounting for deferred tax, Lusaka must consider any temporary difference between the accounting base and the tax base of the plant as follows:

	K'm	K'm
Accounting base at 31.12.2017		130
Tax base at 31.12.2017 (250-25%X250X3)		(62.5)
Taxable difference at 31.12.2017		67.5

Therefore, at 31.12.2017, Lusaka must report a deferred tax liability of K20.3 million under non current liabilities (i.e. 67.5X30%).

The total deferred tax expense or credit to SPLOCI will be computed as follows:

	K'm
Liability at 31.12.2017	20.3
Less opening liability:	
Accounting base	210
Tax base 250 -250X25%X2	(125)
Taxable difference	**85**
Deferred tax liability 85X30%	(25.5)
Total credit to SPLOCI for the y/e 31.12.2017(decrease in liability)	**(5.2)**

Of the total decrease in the deferred tax liability of K5.2 million, a credit of K0.5 million (i.e. 30%X1.7) will be reported in OCI against the loss of K1.7 million. The balance of the credit equal to K4.7 million will be in profit or loss as part of the income tax expense

SOLUTION THREE

(a)

- Past periods
- Planned performance/budget
- Other businesses in the same industry

(b)

Entity A is considerably smaller than B in terms of revenue and would not impact ZED's revenue to the same extent. However A earns a considerably better gross profit margin at 26% as opposed to 17% for B. A's margin is closer to ZED's and would have a less negative impact. It maybe suggests that A has targeted a similar market to ZED, whereas B has focussed on revenue at the expense of margin – high volume / low margin strategy. Alternatively, it could indicate that the two entities classify costs differently between cost of sales and other operating costs – especially when we consider the difference in net profit margin.

Entity B earns a better net profit at 11% and would have less impact on ZED's net margin. A's figure of 9% appears very low with its GP at 26%. It could be that this is a smaller entity and not able to take advantage of economies of scale, has high fixed costs or has poor cost control. A has high gearing and the related finance costs are also having an impact on net profit.

The gearing of A would have a significant effect on the results of ZED as gearing is at 65% as opposed to B's gearing of 30% and ZED's 38%. However when we consider this together with the available lending rates, it perhaps suggests that the management of A have shrewdly capitalised on low lending rates and funded the entity through external finance. The low gearing of B however, probably gives room to increase borrowing if required in the future.

The P/E ratio is an important ratio for investors and ZED's ratio would be adversely affected by either acquisition. A's P/E ratio is considerably lower than B and ZED but it is difficult to make an assessment of the relevant risk of the entities when they are judged by different markets.

(c)
The entities may prepare their financial statements using different accounting standards. This will reduce the comparability of financial highlights. The ratios provided tell us nothing about the efficiency of the entities and the fit of management styles could be an important factor in a takeover situation. The entities could apply different accounting policies that could impact on the ratios, e.g. equity could be boosted by a revaluation of non-current assets which would reduce the gearing ratio and could mask an increase in borrowings.

(d)
- Industry average ratios, to compare entity's performance with that of other entities.
- The financial statements of the previous year, to compute percentage changes in the figures and perform trend analysis
- The entity's future plans i.e. short-term, medium and long-term plans, in order to know the direction of the entity and establish how far it is from achieving its objectives and management's commitment towards attaining entity's goals.
- Cash flow information to understand how well the entity manages its cash and whether it generates sufficient cash to meet its needs.
- Non- financial key performance indicators that its management use to assess performance.
- Inventory holding period inventory turnover, to establish how long the company takes to sell its inventory.

SOLUTION FOUR

a) The IASB *Conceptual Framework* defines an asset as 'a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity'. The assistant's definition diverges from this in a number of ways:

(i) A non-current asset does not have to be physical. The definition can include intangible assets such as investments or capitalised development costs.
(ii) A non-current asset does not have to be of substantial cost. An item of immaterial value is unlikely to be capitalised, but this is not part of the definition.
(iii) A non-current asset does not have to be legally owned. The accounting principle is based on 'substance over form' and relies on the ability of the entity to **control** the asset. This means for instance that an asset held under a finance lease is treated as an asset by the lessee, not the lessor.
(iv) It is generally the case that non-current assets will last longer than one year. IAS 16 specifies that property, plant and equipment 'are expected to be used during more than one period'. However, if anon-current asset failed to last longer than one year, it would **still be classified as a non-current asset during its life**.

(b) An intangible asset is defined in IAS 38 Intangible Assets as being identifiable non monetary asset with no physical form. Examples of intangible assets include brand names, licences, patents, goodwill and customer lists etc.

Internally generated intangible assets are not recognized unless an active market exists, this is extremely rare in practice. Purchased intangible assets are to be recognized at cost and then amortised over their useful economic life if they have a finite life. If the intangible has an indefinite life then it should be reviewed annually for impairment.

Research is defined in IAS 38 as being 'original and planned investigation undertaken with the prospect of gaining new scientific knowledge and understanding'. Research is always written off as an expense to the income statement.

Development is defined in IAS 38 as being 'the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use. Development expenditure must be recognized as an intangible asset if, and only if, an entity can demonstrate all of the following **(PIRATE):**

(i) Technical feasibility of completing the project.

(ii) Its intention to complete the asset and use it.

(iii) Its ability to use/sell the asset.

(iv) That the asset will generate future economic benefits

(v) Availability of adequate technical, financial and other resources to complete the development and use/sell the asset.

(vi) Ability to measure expenditure reliably.

If the above criteria are not met development expenditure must be written off to the income statement as it is incurred. It is only expenditure incurred after the recognition criteria have been met which should be recognized as an asset. Development expenditure recognized as an expense in profit or loss cannot subsequently be reinstated as an asset. Development costs must be amortised as soon as commercial production begins.

(c)

i. Investment property is property (land or a building—or part of a building—or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for:
   - use in the production or supply of goods or services or for administrative purposes; or
   - sale in the ordinary course of business.

   A property interest that is held by a lessee under an operating lease may be classified and accounted for as investment property provided that:
   - the rest of the definition of investment property is met;
   - the operating lease is accounted for as if it were a finance lease in accordance with IAS 17 *Leases*; and

- the lessee uses the fair value model set out in this Standard for the asset recognised.

Investment property shall be recognised as an asset when, and only when:
- it is probable that the future economic benefits that are associated with the investment property will flow to the entity; and
- the cost of the investment property can be measured reliably.

An investment property shall be measured initially at its cost. Transaction costs shall be included in the initial measurement.
The Standard permits entities to choose either:
- a fair value model, under which an investment property is measured, after initial measurement, at fair value with changes in fair value recognised in profit or loss; or
- a cost model. The cost model is specified in IAS 16 and requires an investment property to be measured after initial measurement at depreciated cost (less any accumulated impairment losses).

ii. The building will be **depreciated up to 30th June 2016.**

	K'000
Original cost	**500, 000**
Depreciation 1/1/2007 to 30/06/2016 (500/50X9.5)	(95, 000)
Carrying amount at 30.06.16	**405, 000**
Revaluation surplus	295, 000
Fair value at 30.6.16	**700,000**
Fair value gain	60,000
Fair value at 30.6.17	**760,000**

The **difference** between the **carrying amount and fair value** (K295, 000, 000) is taken to other comprehensive income and accumulated in the **revaluation surplus reserve in accordance with IAS 16**. However the building will be **subjected to a fair value exercise at each year end and these gains or losses will go profit or loss**. Therefore K60, 000, 000 will be reported in profit or loss and the asset will be recorded at K760, 000 in the statement of financial position

SOLUTION FIVE

(a) Mukapasa Ltd

Statement of Cash Flows for Year Ended 31st March 2018

	K'000	K'000
Cash Flows from Operating Activities		
Net Profit Before Taxation		1,020
Depreciation		2,880
Amortisation of Development Expenditure		320
Interest Expense		180
Profit on Disposal of Tangible Non-current Asset (392-300)		(92)
Increase in Inventory (2,300-2,740)	(440)	
Increase in Receivables (1,680-2,060)	(380)	
Increase in Payables (1, 400-1,920)	520	
Increase in Accrued expense ((428-48)-(688-348))	40	(260)
Cash Generated from Operations		4,048
Interest paid (348+180-48)	(480)	
Taxation paid ((760+800)+560-(320+1000))	(800)	(1, 280)
Net Cash Flow from Operating Activities		**2,768**
Cash Flows from Investing Activities		
Purchase of Tangible Non Current Assets (w1)	(1, 480)	
Development expenditure (w2)	(200)	
Proceeds from Disposal of Non-Current Asset	392	**(1,288)**
Net Cash Flow from Investing Activities		
Cash Flows from Financing Activities		
Proceeds from Share Issue (7,600+1,600-10,400-3,000)	4,200	
Dividends paid	(400)	
Redemption of 10% Loan Notes (0-4,000)	(4,000)	
Net Cash Flow from Financing Activities		**(200)**
Net Decrease in Cash and Cash Equivalents		1, 280

Cash and Cash Equivalents at Start	928
Cash and Cash Equivalents at end	2,208

Workings

1 **Tangible Non-current Assets**

	K'000		K'000
Balance b/d	19,200	Disposal	300
Revaluation	*500*	Depreciation	2,880
Bank (Bal fig)	1, 480	Balance c/d	18,000
	21,180		**21,180**

2. **Development Expenditure**

	K'000		K'000
Balance b/d	1,600	Amortisation	320
Bank (Additions)	200	Balance c/d	1, 480
	1,800		**1,800**

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.2: MANAGEMENT ACCOUNTING

TUESDAY 12 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

SECTION A

This Question is compulsory and MUST be attempted

QUESTION ONE

DG Ltd manufactures three components used in its finished products, Delta and Gamma. The component workshop is currently unable to meet the demand for components and DG Ltd is investigating the possibility of 'buying-in' some of its requirements for a short period to meet the demand for the production of Delta and Gamma. During this short period there would be no reduction in fixed overhead costs. DG Ltd has been using an absorption costing system and a pricing policy of 20% margin. DG Ltd hopes to use Activity Based Costing for Delta and Gamma in arriving at the selling price.

The following data has been made available:

Component	**A1**	**A2**	**A3**
	K	**K**	**K**
Unit costs			
Direct materials	20	30	90
Direct labour	40	45	60
Direct production overhead	15	22.5	35
Fixed production overhead	7.5	12.5	32.5
Other information			
Machine hours per unit	1 hour	0.5 hours	2 hours
Cost per unit to 'buy-in'	K70	K117.5	K245

Annual total machine capacity is 500,000 hours. This machine is used to produce the components. Once produced, the same machine is used to press fit the components into the products, a process which takes additional machine time. The production of the two products Delta and Gamma is given below:

	Delta	**Gamma**	
Units produced per annum	50,000	20,000	
Other Material cost per unit	K30	K20	
Component usage per unit;			
A1	1	2	
A2	1.5	2	
A3	2	1.5	
Direct labour per unit	30 minutes	20 minutes	
Machine time per unit	2 hours	1 hour	
Number of set ups per annum	60	40	500

Number of material purchase orders	700	120	2,500
Number of materials handling	30,000	25,000	100,000
Direct labour cost per hour	K90	K90	

Overhead costs allocated to cost pools:	**K**
Set up	560,000
Purchasing	290,000
Materials handling	260,000
Machines	1,320,000
Total cost	2,430,000

Required:

(a) Determine the shortfall in the number of machine hours. (7 marks)

(b) Recommend, supporting your answers with suitable calculations, which component DG Ltd should 'buy-in' (4 marks)

(c) List three factors, other than cost, which DG Ltd should take into consideration before deciding whether or not to 'buy-in' the components. (3 marks)

(d) Calculate, to two decimal places, a unit cost and price for Product Delta and Product Gamma using:

(i) Activity-based costing

(13 marks)

(ii) Absorption costing with overheads absorbed on the basis of machine hours

(5 marks)

(e) Management of DG Ltd had heard that budgetary control is an essential component of good company management.

(i) Define 'budgetary control'.

(2 marks)

(ii) Explain three differences between a cash budget and a cash flow statement.

(6 marks)

[Total: 40 Marks]

SECTION B

Attempt Any THREE (3) questions in this section

QUESTION TWO

Cookies Ltd is a local company that manufactures confectionery products. During the current period, the company is considering producing two types of biscuits; Chocolate Creamy and Vanilla creamy. The projected maximum daily demand and sales is 8,000 packets of Chocolate Creamy and 7,000 packets of Vanilla Creamy. The biscuits are produced in batches of 100 packets. The following data relates to the production of one batch of the biscuits:

	Chocolate	**Vanilla**
	K	**K**
Labour costs (K50 per hour)	200	500
Flour and Ingredients (K10 per kg)	160	300
Fixed overheads	40	50
Full cost per batch	**400**	**850**

Cookies Ltd has been facing stiff competition from its rivals and recently a competitor company introduced a similar product at a competitive price. The management of Cookies Ltd is due to launch its biscuit products soon and is considering implementing some strategies in order to fight off the competition.

During a management meeting, the following comments were made:

1. Marketing Director – we need to review our pricing policy. The current planned selling prices of the biscuits are K6 per packet and K10 per packet of the Chocolate and Vanilla respectively. I would recommend a price reduction of at least 8% on these products in response to our competitors.

2. Production Director – we need to consider implementing tighter cost controls and restricting overtime working hours. This would imply limiting labour hours to 800 hours per day.

3. The Managing Director – I may consider approving your proposals but I would like to see the effect of these on our total contribution. A reduction in total contribution of more than 30% would not be acceptable by our shareholders.

Additional information

The fixed overhead costs are apportioned to the biscuits on the basis of labour hours. The company operates its confectionery seven days a week. Assume a 52 week year.

Required:

(a) Calculate the total maximum contribution and profit that could be generated from each biscuit annually based on the current planned prices. (6 marks)

(b) In view of the Directors' suggestions, calculate the percentage reduction in variable costs required to maintain the total contribution for the biscuits if the price reduction of 8% is implemented and assume no change in output. (4 marks)

(c) Given that labour hours are limited to 800 hours per day, calculate;

(i) The profit maximising output (4 marks)

(ii) The reduction in contribution (2 marks)

(d) Discuss whether the Managing Director should approve the proposals. (4 marks)

[Total: 20 Marks]

<u>QUESTION THREE</u>

Product XX is made by processing materials in three sequential processes, 1, 2 and 3. In process 3, a by-product arises and after further processing in process 4, at a cost of K4 per kg, a by-product called Z is produced. Marketing and distribution costs of K2 per kg are incurred in marketing Z at a selling price of K18 per kg.

The details of the process cost for the financial period 2 were as follows.

	Process 1	Process 2	Process 3

	K	K	K
Direct Material Introduced (5,000kg)	40,000		
Direct materials added	12,000	25,280	46,400
Direct Labour	10,000	12,000	20,000
Direct Expenses	8,000	12,400	8,160

Budgeted departmental overheads for period 2 were K168,000 and absorbed into the cost of each process on a percentage of direct labour cost.

Output and normal loss data are as follows

	Process 1	Process 2	Process 3	Process 4
Actual Output	4,400kg	4,200kg	3,500kg of Product XX	210kg of Z
Normal loss	10%	5%	10%	

Normal loss is a partially toxic material and is sold at K2, K6 and K10 in processes 1, 2 and 3, respectively.

There was no finished inventory at the beginning of the period and no work- in process at either the beginning or end of the period.

Required

(a) Prepare process 1, 2 and 3 accounts. (9 marks)

(b) Prepare process 4 Account. (3 marks)

(c) Prepare abnormal losses and Abnormal Gain account showing balances to be transferred to the statement of comprehensive income account. (4 marks)

(d) Explain the distinction between a by-product and a joint product. (4 marks)

[Total: 20 Marks]

QUESTION FOUR

K-Longwa Ltd manufactures three types of cleaning materials; Ram, Rap and Rag. The selling prices are K180, K70 and K30 for each of Ram, Rap and Rag respectively. Variable costs per unit as a percentage of selling price are 60%, 50% and 30% for each of Ram, Rap and Rag respectively. Annual fixed costs on the three materials amount to K980,000.
K-Longwa Ltd is subject to an income tax rate of 35% on its profits.

Unit sales for the year 2018 are expected to be 4600 units for Ram, 2300 units for Rap and 1150 units for Rag.

The selling pricing of the three materials was a subject of controversy in one of the management meetings. This is because the selling prices of these materials are higher than the average market price of similar materials .The three materials were launched in the year 2017. However the finance manager clarified that K-Longwa would make a loss if the materials were priced in-line with the prevailing market prices of similar materials. Instead a full cost price pricing strategy was adopted for the launch.

Required:

(a) Determine K-Longwa's breakeven point (in units) for the year 2018.

(5 marks)

(b) Determine the breakeven point (in units) for each material for the year 2018.

(3 marks)

(c) What volume of sales (in units and kwacha) for each material must K-Longwa Ltd achieve to earn a net profit of K153,400 after tax in 2018? (5 marks)

(d) Describe three drawbacks and three benefits of a full cost plus pricing strategy.

(7 marks)

[Total: 20 Marks]

QUESTION FIVE

ABC makes a single cosmetic product called Water of Life (WOL) by mixing three raw materials X, Y and Z. The standard mix of materials for one batch of output of WOL is as follows.

Materials	Litres	Price/Litre	Cost/unit
X	100	K15.00	1,500
Y	200	K7.15	1,430
Z	700	K0.10	70
	1,000		K3,000

Each batch should produce a standard output of WOL sufficient to fill 500 bottles. During period 10, 100 batches of material were processed, producing enough WOL to fill 45,000 bottles. Actual results were as follows

X	8,000 litres	K19.00 per litre	K152,000
Y	20,000 litres	K6.85 per litre	K137,000
Z	80,000 litres	K0.10 per litre	K8,000

Alice, Beauty and Cecilia are partners in ABC. Alice has been calculating standard cost variances for material in period 10. She calculated the material variances as follows.

Total materials cost variance	K27,000 (A)
Mix variance	K29,000 (F)
Yield variance	K30,000 (A)

However, she was not very sure of her calculations and, therefore, asked Beauty to verify her calculations. Beauty agreed with Alice's calculations for total cost variance and the yield variance. She, however, calculated the mix variance as K53,000 (F).

Because of these differences, Cecilia was asked to independently calculate the three variances. She confirmed the total cost variance as K27,000 (A) and agreed with Beauty that the mix variance was K53,000 (F) but the yield variance was calculated as K54,000 (A).

Required:

(a) Calculate the material cost variance, the price variance, the mix variance and the yield variance as they have probably been calculated by Beauty and Cecilia. Explain the difference between Beauty's and Cecilia's yield variances. (12 marks)

(b) Explain the significance of mix and yield variances using figures from part (a) to illustrate your answer. (4 marks)

(c) ABC has just introduced a deodorant product for ladies. It has a standard direct material cost in the budget of K2.5 kg of material per unit at a price of K3 per kg. The budgeted production is 1,000 units of the deodorant in each quarter. During quarter 2, 1,200 units of the product were produced, using 2,425 kg of direct material at a cost of K35,600.

Because of moving to a different supplier and a consequent reduction in material wastage, it is established in hindsight that the appropriate standard material cost per unit is actually 2kg of material at K3.5 per kg.

Required:

(i) Calculate the direct material planning variances in quarter 2. (2 marks)

(ii) Calculate the direct material operational variance in quarter 2. (2 marks)

[Total: 20 Marks]

END OF PAPER

CA 2.2 SOLUTIONS

SOLUTION ONE

Part (a)

Determination of shortfall in machine hours;

	Used in Delta	**Used in Gamma**	**Total components**	**Machine time**
A1	50,000	40,000	90,000	90,000 hrs
A2	75,000	40,000	115,000	57,500 hrs
A3	100,000	30,000	130,000	260,000 hrs
Total component hours				407,500 hrs
Additional machine usage time				
Delta (50,000 x 2 hrs)				100,000 hrs
Gamma (20,000 x 1 hr)				20,000 hrs
Total machine hours required				527,500 hrs
Available machine hours				500,000 hrs
Shortfall				27,500 hrs

Part (b)

	A1	A2	A3
Manufacturing cost per unit	K75	K97.5	K185
Buying the component per unit	K70	K117.5	K245

The variable unit cost of making component A1 is K75. The buy-in price is K70.
Component A1 should therefore always be 'bought in'. The buy-in of A1, will release the required machine hours to produce the other components and meet the production of Gamma and Delta

Part (c)

Allow suitable alternatives. Any three reasonable suggestions for 1 mark each e.g.
- Quality of component 'bought- in'
- Continuity of supply
- Ability of supplier to meet volume required
- Ability of supplier to meet strict deadlines

Part (d)

(i) Unit cost and price using ABC

Calculation of cost driver rates
Set ups: K560,000/500 = K1,120 per set up
Material purchasing: K290,000/2,500 = K116 per purchase order
Material handling: K260,000/100,000 = K2.6 per material handled
Machine costs: K1,320,000/500,000 = K2.64 per machine hour

Allocation of overheads to products;

	Delta K	**Gamma K**
Set up costs	67,200	44,800
Material purchasing costs	81,200	13,920
Material handling costs	78,000	65,000
Machine costs	726,000	237,600
Total overheads	952,400	361,320
Production units	50,000	20,000
Overhead cost per unit	**19.05**	**18.07**
Prime costs per unit;		
Other materials	30.00	20.00
Component costs;		
A1	70.00	140.00
A2	146.25	195.00
A3	370.00	277.50
Labour	45.00	30.00
Total full costs	680.30	680.57
Profit (20/80)	170.08	170.14
Selling price	**850.38**	**850.71**

*Total machine hours for the products;

Delta: 275,000 hrs (75,000 + 100,000 + 100,000) A1 will be bought in so no machine hours will be required for its production. However, the additional time of press fitting the components of 2hrs per unit x 50,000 units will be required. Therefore, the is traced based on the hours as 275,000 x K2.64 per hour = K726,000

ii) Absorption Costing

Overhead absorption rate per hour; K2,430,000/500,000 = K4.86 per hour

	Delta	Gamma
	K	K
Total prime cost	661.25	662.50
Overheads K4.86 x 5.5* hrs per unit	26.73	
K4.86 x 4.5 hrs per unit		21.87
Full costs	687.98	684.37
Profit (20/80)	172.00	171.09
Selling price	**860.00**	**855.46**

*machine hours per unit output of Delta (275,000/50,000 units = 5.5 hrs per unit);

Part (e)

(i)
The methodical control of an organisation's operations
Through establishing standards and targets of income and expenditure
Accompanied by continuous monitoring and adjustment of performance against them

(ii)

A cash budget plans for the future
A cash flow statement reports on the past

A cash flow statement is a legal requirement for many limited liability companies

A cash budget, although good practice, is not a legal requirement

A cash flow statement is a summary of an entire period's operations usually covering a financial year

A cash budget is broken down into shorter periods, e.g. a month, thus enabling corrective action to be taken, where necessary

SOLUTION TWO

a) Total maximum contribution and profit

	CHOCOLATE	VANILLA
Total sales of pkts per year	8000 Pkt x 7 x 52 weeks = 2,912,000	7000 Pkt x 7 x 52 weeks = 2,548,000
	K	K
Price per pkt	6	10
Labour per pkt	(2)	(5)
Flour & Ingredients per pkt	(1.6)	(3)
Contribution per pkt	2.4	2
Total Contribution	**6,988,800**	**5,096,000**
Fixed overheads	1,164,800	1,274,000
Profit	**5,824,000**	**3,822,000**

b) Percentage reduction

	CHOCOLATE	VANILLA
	K	K
Selling price (8% decrease)	5.52	9.2
Variable costs (bal fig)	**3.12**	**5.2**
Contribution	2.4	7.2
Percentage decrease	13.33%	10%

(c)

(i) Profit maximising output

	CHOCOLATE	VANILLA
	K	**K**
Selling price	6	10
Variable cost per packet (w1)	3.6	8
Contribution per packet	2.4	2
Labour hours/packet (w2)	0.04	0.1
Contribution per labour hour	K60	K20

First make the chocolate biscuit. The maximum demand of 8000 packets uses 320 labour hours.

This leaves 480 hours to be used on the vanilla biscuit so the maximum daily demand of 7000 packets can be made in 700 hours. However only 480 hours are available. 10 packets can be made per hour so in 480 hours only 4800 packets can be made.

(ii) Reduction in contribution is only in the Vanilla biscuit.

Lost contribution = 2200 pkt x7days x 52 weeks x K2 per pkt = K1,601,600

Percentage reduction; K1,601,600/K5,096,000 x 100 = 31.4%

Part (d)

In view of the Directors' comments and existing competitive rivalry, it is necessary for the company to remain competitive in the market. The total reduction in the contribution following the proposals by the Marketing and Production Directors is about 31.4%. The Managing Director stated that a drop in total contribution of more than 30% would not be accepted by the shareholders. It is important therefore to perform further review to ascertain where costs could be further reduced. It is also necessary that the company responds to the market with regards competitor reactions, therefore, increasing the price would not be a good option. Seeing that the percentage gap is only 1.4%, the Managing Director should consider negotiating with the shareholders on this. A long term strategy would be required to remain competitive.

WORKINGS

1) Chocolate (K200+K160)/100=K3.6/packet
   Vanilla (k500+k300)/100=k8/packet
2) Chocolate (K200/K50)=4hrs/100 =0.04 hrs/per packet
   Vanilla (k500/k50)=10hrs/100=0.1hrs /per packet

SOLUTION THREE

a) Process 1 A/c

	Kg	K		Kg	K
Direct Material	5,000	40,000	Normal/Loss		
			(10% x 5,000)	500	1,000
Added Material		12,000	Process 2	4,400	106,578
Direct Labour		10,000	Abnormal loss	100	2,422
Direct Expenses		8,000			
Production Overheads					
(400% x K10,000)		40,000			
	5,000	110,000		5,000	110,000

Process 2 A/c

	Units	Amount		Units	Amount
	Kg	K		Kg	K
Process 1	4,400	106,578	Normal/Loss		
			(5% x 4,400)	220	1,320
Added Material		25,280	Process 3	4,200	203,909
Direct Labour		12,000			
Direct Expenses		12,400			
Production Overheads					
(400% x K12,000)		48,000			

Abnormal gain	20	971			
	4,420	205,229		4,420	205,229

Process 3 A/c

	Units	Amount		Units	Amount
	Kg	K		Kg	K
Process 2	4,200	203,909	Normal/Loss		
			(10% x 4,200)	420	4,200
Added Material		46,400	Finished Goods	3,500	266,421
Direct Labour		20,000	Abnormal loss	70	5,328
Direct Expenses		8,160	Ab A/c By-Prod		
			210x(K18-K4-K2)	210	2,520
	4,200	278,469		4,200	278,469

b) Process 4 A/c

	Units	Amount		Units		Amount
	Kg	K		Kg		K
Process 3	210	2,520	Sales Revenue	210	@K18	3,780
Processing costs						
(K4 x 210)		840				
Marketing costs						
(K2 x 210)		420				
	210	3,780		210		3,780

c) Abnormal loss A/c

	Units	Amount		Units	Amount
	Kg	K		Kg	K
Process 1	100	2,422	Scrap A/c -		
			Process 1	100	200
Process 3	70	5,328	Scrap A/c -		
			Process 2	70	700
			Statement of Income A/c		6,850
	170	7,750		170	7,750

Abnormal Gain A/c

	Units		Amount		Units	Amount
	Kg		K		Kg	K
Scrap A/c	20	@K6	120	Process 2	20	971
Statement of Income A/c			851			
	20		971		20	971

Workings

W.1 Overhead Absorption rate = $\frac{K168{,}000}{K10{,}000+K12{,}000+K20{,}000}$ x 100%

= <u>400%</u>

Cost per Unit

				Process 1	Process 2	Process 3
$\frac{K110{,}000 - k1{,}000}{5{,}000\ x\ 90\%}$	$\frac{K(204{,}258 - 1{,}320)}{4{,}400\ x\ 95\%}$	$\frac{K278{,}469 - K4{,}200 - K2{,}520}{4{,}200\ x\ 90\% - 210kg}$	=	K24.22	K48.55	76.12

d) Distinction between a by-product and a joint product.

Where more than one product is output from a production process, there may be either a joint or by-product(s) or both. The distinction between a joint product and a by-product is usually made by a comparison of their respective sales values. A joint product would be a product which has a relatively HIGH sales value; and is therefore of comparable worth with other products.

A by-product, however, would have a relatively low sales value in comparison to the main product or products' output.

SOLUTION FOUR

Workings

a)

Determination of mix = RAM=4600/1150=4

RAP=2300/1150=2

RAG=1150/1150=1

Therefore the product mix is 4:2:1

Calculation of contribution

Material	**Selling price**	**X %**	**V. Costs**	**Selling price**	**Less V. costs**	**Contribution**
Ram	180	60%	108	180	108	72
Rap	70	50%	35	70	35	35
Rag	30	30%	9	30	9	21

BEP= K980000/ {[72*4+35*2+21*1]/ [4+1+2]}

=980000/54.143

=18100.2 units

b) Ram = 18100.2*4/7 =10343
Rap = 18100.2*2/7 =5171
Rag = 18100.2 * 1/7 =2586

c) Profit After tax = K153400
Profit before tax = K153400/0.65=K236000
Target sales in units= [980000+236000]/ {[72*4+35*2+21*1]/ [4+2+1]} =22459 units

Material	Units	mix	Target sales in units	Selling price	Target sales in kwacha
Ram	22,459	4/7	12,833.7	180	2,310,066
Rap	22,459	2/7	6,416.86	70	449,180.2
Rag	22,459	1/7	3,208.43	30	96,252.9

d) Full cost plus approach adds a mark-up to the total cost to arrive at the selling price. There are many drawbacks and benefits associated with the pricing method though:

DRAWBACKS:

1) It fails to ensure that the quantity produced will also be sold since the company does not know if the price is in line with the customer's perceptions of the value of the product.
2) It can result in different selling prices due to different absorption methods used when determining the total cost.
3) It ignores competitor's reactions to a price change. This can result in the competitors reducing their prices if a new price is set below current market price.

BENEFITS:

1) It ensures that all costs are covered and a desired profit is achieved.
2) It allows a company to avoid the costs involved in seeking information about the level of demand in the market.
3) It allows the maintenance of relatively stable prices and any price increases are easier to justify to clients.

4) It is easy to calculate, as once cost is determined, a simple mark up on these costs identifies the selling price.

SOLUTION FIVE

a) (i) Total material cost variance

Standard cost of 45,000 bottles [45,000 x $\frac{K3{,}000}{500}$]	K270,000
Actual cost of 45,000 bottles [K152,000+K137,000+K8,000]	K297,000
	K27,000 (A)

a) (ii) Material Price Variance

Standard Price [8,000xK15+20,000xK7.15+80,000xK0.10]	K271,000
Actual Price [8,000xK19+2,000xK6.85+80,000xK0.10]	K297,000
	K26,000 (A)

a) (iii) Materials Mix Variance

Material	Std. Mix	Actual Mix	Variance	Price per Litre	Variance (K)
	Litres	Litres	Litres		
X (10%)	10,800	8,000	2,800 (F)	K15	42,000 (F)
Y (20%)	21,600	20,000	1,600 (F)	K7.15	11,440 (F)
Z (70%)	75,600	80,000	4,400 (A)	K0.10	440 (A)
	108,000	108,000			53,000 (F)

a) (iv) Materials Yield Variance (Beauty's Version: based on batches processed)

Standard production [100 batches should have yielded x $\frac{500}{batch}$]	50,000
Actual production [100 batches yielded]	45,000
	5,000 (A)
	x

Standard cost per bottle	K6
	K30,000 (A)

a) (v) Material Yield Variance (Cecilia's version: based on quantities processed)

	Bottles
Standard Yield [108,000 litres should have yielded x $\frac{500}{1,000}$]	54,000
Actual Yield [108,000 litres yielded]	45,000
	9,000 (A)
	x
Standard cost per bottle	K6
	K54,000 (A)

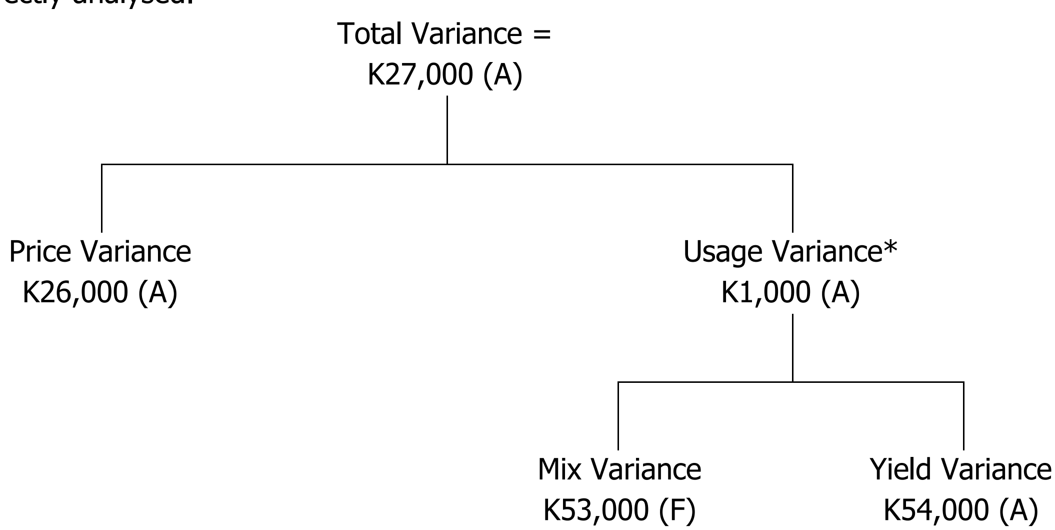
Explanation of Yield Variance Difference

Beauty's yield variance calculation	K30,000 (A)
Cecilia's yield variance calculation	K54,000 (A)
	K24,000 (A)

The difference between the two yield variances is due to the extra 8,000 litres (108,000 litres – 100,000 litres) used to make up the 100 batches.

Thus, 8,000 litres x $\frac{K3,000}{1,000\ litres}$ = K24,000

Alice and beauty should have included the K24,000 adverse usage variance in their calculations because without it the total material cost variance of K27,000 is not fully or correctly analysed.



Usage variance*

Standard cost of Std quantity for actual production (*see (a)(i) above*)	K270,000
Standard cost of actual quantity used (*See (a)(ii) above*)	K271,000
	K1,000 (A)

N.B. This calculation analysis is not asked for but for further proof

b) Importance of Mix and Yield variances

The materials mix variances quantifies the extent to which the total materials cost variance is caused by deviating from standard of the relative proportions of materials used. The materials mix variance is the change in standard cost caused by mixing the materials in a different proportion to standard. For example, if proportionately more of a cheaper material is used in the mix then a favourable mix variance will result. In the ABC question, the variance of K53,000 is favourable because more of the cheaper Z material is used in the mix. The variance has only significance and provide useful control information where the mix of materials is within the control of management and where information about the total yield is more useful than the usage variances for the individual materials calculated separately.

The materials yield variance is the change in standard cost caused by using a different amount of material in total than the standard expected for the output achieved. I.e. the variance is caused by a departure from standard of quantities of finished output from the process.
In this particular case various methods have been proposed – see (a) above. Either variance is acceptable as long as the difference between the two is understood. If it is specifically a batch which produced 500 bottles, then Beauty's variance is more correct. On the other hand, if, as it seems more likely, it is the 1,000 litres that produces 500 bottles, then Cecilia's variance is more correct.

c) (i) Materials Planning Variance

	K
Original standard total material cost [2.5kg x K3 x 1,200 units]	9,000
Revised standard total material cost [2kg x K3.5 x 1,200 units]	8,400
	600 (F)

c) (ii) Materials Operational Usage Variance

Revised standard usage [1,200 x 2kg]	2,400
Actual usage	2,425
	25 (A)
	x
Revised standard price	K3.5
	K87.5 (A)

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.3: AUDITING PRINCIPLES AND PRACTICE

THURSDAY 14 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

Your firm of Chartered Accountants has been appointed auditor of Luxury Lodges Ltd. The previous auditors resigned due to disagreements with management of Luxury Lodges Ltd, concerning weaknesses in internal controls.

Your firm has not communicated with the outgoing auditors because you are still waiting for authorization from management of Luxury Lodges Ltd to communicate with them. You have been appointed audit manager for the audit of Luxury Lodges Ltd's financial statements for the year ended 31 December 2017.

You assigned Chanda ,the senior auditor on this assignment, to carry out a preliminary review of the internal controls at Luxury Lodges Ltd, in line with the requirements of ISA 315 (Revised) *Identifying and assessing the risks of material misstatement through understanding the entity and its environment.*

Below are the narrative notes prepared by Chanda:

The Lodge employs two duty managers who work in shifts during the day. In order to cut on costs, no duty manager works at night. The security officer on duty is responsible for checking in night guests and recording the guest's details in a register kept for this purpose. The following day the security officer gives the details of guests who checked in, during the previous night to the manager on duty and hands over cash received during the night.

The duty managers receive all cash from guests and record the amounts received in a cash register. No receipts are issued to the guests unless on request. The Lodge is registered for Value Added Tax (VAT) but does not charge VAT on its supplies to guests to keep prices low. Therefore, all prices to guests are exclusive of VAT. Guests choose whether or not to complete the guest register which is maintained at the reception. Each duty manager keeps the cash that they collect in a lockable drawer and banks the cash for the week on Saturday.

Luxury Lodges Ltd runs a restaurant for its guests. The restaurant is managed by the Chef on duty who collects all the sales proceeds received during his shift and hands over the cash to the duty manager the following day. The chef retains some of the cash for the day for use to buy food requirements for the following day. No receipts for meals served are issued unless the customer specifically requests for a receipt.

The Lodge does not employ an accountant and has requested your firm to second one member of the audit team to prepare the financial statements before the audit commences. The seconded member of your firm will be required to write up the cash book and prepare the bank reconciliation statement at the year end.

The owners of Luxury Lodges Ltd have informed you that they charge preferential rates to some of their clients. It is normal practice of the Lodge to extend this gesture to members of the audit team and has asked you to inform your audit team members.

Chanda has indicated that Luxury Lodges Ltd appears to have serious cash flow problems and in his view will not be able to meet its debts as they fall due. He is doubtful about the ability of Luxury Lodges Ltd, to continue operating as a going concern. It will be important to ensure that all the audit team members apply professional skepticism throughout the audit and look out for any indications of going concern problems during the audit of Luxury Lodges Ltd.

Required:

(a) Identify and explain the internal control weaknesses that exist in Luxury Lodges Ltd. (10 marks)

(b) Recommend suitable controls to mitigate each of the weaknesses you have identified in (a) above. (10 marks)

(c) Discuss the responsibilities of Management of Luxury Lodges Ltd and the auditor with regards to the going concern of Luxury Lodges Ltd. (4 marks)

(d) Discuss the reasons why your firm will be concerned about the ability of Luxury Lodges Ltd to continue as a going concern. (4 marks)

(e) Explain the ethical principle of confidentiality and discuss how your firm should deal with your discovery that no VAT is charged by Luxury Lodge Ltd on supplies made to guests. (4 marks)

(f) Discuss the ethical issues in the above scenario that may threaten your firm's independence in the audit of the financial statements of Luxury Lodge Ltd and recommend actions to resolve them. (8 marks)

[Total: 40 marks]

SECTION B

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

You are employed as an Audit Senior at JB Chartered Accountants and have just concluded the audit of your client, Mwandwe Engineering Limited.

Your audit manager has called a meeting with you so that you agree on the proposed opinion having concluded and obtained sufficient appropriate audit evidence. He has informed you that in giving an opinion on the financial statements of Mwandwe Engineering Ltd for the current year, your firm will for the first time, be applying the new and revised guidance provided in following standards:

(1) ISA 700(Revised) *Forming an opinion and reporting on financial statements* which gives guidance on the form and content of the auditor's report.

(2) ISA 701 *Communicating key audit matters in the independent auditor's report* which was recently issued in order to make the audit report more informative.

(3) ISA 705(Revised) *modifications to the opinion in the independent auditor's report which* gives guidance on modifications of the auditor's opinion.

Required:

(a) State and explain any FIVE (5) elements of the auditor's report in accordance with ISA 700 (Revised). (5 marks)

(b) Explain the meaning and relevance of Key Audit Matters (KAMs) in relation to audit reporting. (2 marks)

(c) State the factors that may influence the auditor in determining the matters to be reported as Key Audit Matters. (3 marks)

(d) Write brief notes on each of the following:

(i) A qualified opinion (3 marks)
(ii) An adverse opinion (2 marks)
(iii) A disclaimer of opinion (2 marks)
(iv) Expectations gap (3 marks)

[Total: 20 Marks]

QUESTION THREE

You are employed as an audit assistant at MKM Chartered Accountants. You joined the firm after completing the Application level of the CA Zambia program. Your firm has been engaged to conduct an audit of Central Business College, a premier private institution of higher learning.

The college is headed by a Chief Executive Officer. He has three directors under him in charge of Finance, Education and Administration respectively.

The Director of Finance supervises two accounting staff responsible for the preparation of financial statements. The two employees complain that they have too much work to do and this affects their efficiency. In view of this, the accounting function for Central Business College has sometimes engaged a company secretarial firm to perform some of its duties.

During your initial meeting with the client, you requested for information to be used during your audit. Financial records are submitted to your firm in form of records prepared by the accounting staff and the company secretarial firm. Additionally, photocopies of certain records are submitted while verbal explanations are provided in certain instances. You have been provided with the tangible non-current asset register of the college and you wish to design audit procedures to test the financial statements assertions relating to the figures for tangible non-current assets.

ISA 500 *Audit evidence* requires auditors to design and perform audit procedures that are appropriate in the circumstances for the purposes of obtaining sufficient appropriate audit evidence.

Required:

(a) Explain the meaning of sufficient appropriate audit evidence. (2 marks)

(b) Explain **FOUR (4)** general guidelines (generalisations) that may assist you in assessing the reliability of audit evidence. (8 marks)

(c) Explain the factors the auditor should consider in deciding whether to use the work of a management's expert as audit evidence. (2 marks)

(d) Using appropriate financial statement assertions draw an audit plan to describe the procedures you would perform in obtaining evidence on tangible non-current assets. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Your firm of chartered accountants is auditor of Modern Electronics Ltd. You are the audit manager for the audit of Modern Electronics Ltd's financial statements for the financial year ending 31 December 2017.

The audit team under the supervision of a newly promoted audit senior has just completed performing work on assessing the risk of material misstatement through understanding the entity and its environment as part of the audit planning for this audit.

Modern Electronics Ltd runs three large shops dealing with the sale of electronic equipment and the company holds large quantities of inventory.

The following risks have been identified by the audit team.

(1) Management of Modern Electronics Ltd pays an annual bonus of 2% of the profit for the year and the renewal of the work contracts of the Chief Executive and other management staff is conditional on meeting specified financial benchmarks. This poses a risk that financial statements may be manipulated.
(2) Inventory accounting at Modern Electronics is poor as there are no inventory records in place to monitor the receipt and issues of inventory from the main warehouse. There is a risk that the inventory value at the year-end will be misstated. Further, due to the extent of obsolete inventory items there is a risk that inventory has a lower net realizable value than cost.
(3) The company gives a warranty to repair or replace any defective items that are returned within one month of sale. There is a risk that provisions may be misstated.
(4) The three outlets of Modern Electronics Ltd hold large sums of cash. Cash received is not banked promptly the following day and bank reconciliations are not done on a regular monthly basis. This poses a risk that cash may be stolen or misstated at the period end.
(5) The company introduced sales on credit to some of its customers. Receivables are a material figure in the financial statements. There are no systems for vetting credit customers posing a risk that some of the receivables may be irrecoverable.

The engagement partner on the audit of Modern Electronics Ltd has called for a pre-audit meeting with all of the audit team members. A number of issues will be discussed in this meeting including suggestions on the possible responses to the risks identified above by the audit senior in accordance with ISA 330 *The auditor's responses to assessed risks which gives* guidance on this area. The engagement partner has also indicated that an interim audit will be performed during the audit of the financial statements of the company for the year ended 31 December 2017 and wishes the audit team to agree on the work that should be performed during the interim audit.

Required:

(a) Explain the possible audit responses to each one of the **FIVE (5)** audit risks identified in the audit of Modern Electronics Ltd. (10 marks)

(b) Explain **FIVE (5)** matters that should be documented in the audit working papers with regards risk assessment in accordance with relevant auditing standards. (5 marks)

(c) List and explain **FIVE (5)** audit procedures that may be undertaken during the interim audit of the financial statements of Modern Electronics Ltd. (5 marks)

[Total: 20 Marks]

QUESTION FIVE

Your firm Kambo & Co. has been appointed auditor of Megulu Ltd. You are the Audit Manager and have visited the company premises in Chilanga. Megulu Ltd is an Internet Service Provider (ISP) and also offers various computer consultancy services and training.

The services offered include:

(1) Providing cost effective learning opportunity to everyone using electronic media and technology.
(2) Connecting users to the International network and allowing clients to have e-mail addresses on the ISP's machine.
(3) Assisting CA Zambia students download various ZiCA publications from the ZiCA website and electronic payments to ZiCA.
(4) Developing websites on behalf of clients and Web-hosting.

The internal auditors of Megulu Ltd play an important role in monitoring the effectiveness of the systems and controls related to the services offered.

You are currently briefing the audit team involved in the interim audit of Megulu Ltd. The audit plan contains the following:

(1) Flowcharts documenting the accounting and control systems of Megulu Ltd.
(2) The consideration of the possible use of Internal Audit in the performance of the audit.
(3) Sample of accounts receivables meant for circularization.

You have assessed the risk of material misstatements in the receivables for Megulu Ltd as high.

Required:

(a) State **FOUR (4)** advantages and **TWO (2)** disadvantages of using flowcharts to record accounting and control systems. (6 marks)

(b) Explain the criteria Kambo & Co will consider before determining whether the work of the internal audit function can be used. (6 marks)

(c) Discuss whether Kambo & Co should use negative confirmation as the sole substantive procedure when auditing the accounts receivables in Megulu Ltd. (4 marks)

(d) Explain **FOUR (4)** audit procedures to be performed for any exceptions and non-responses to the receivables confirmation at Megulu Ltd. (4 marks)

[Total: 20 marks]

END OF PAPER

CA2.3 SOLUTIONS

SOLUTION ONE

a) Internal control weaknesses in Luxury Lodges:

1. There is no responsible person to manage the lodge at night. The two duty managers only work during the day and night shifts are manned by the security officer on duty.
2. The security officer' who checks in guests in the night holds a position that is too low to entrust with such a responsibility. There is a risk that proceeds from sale of rooms may be misappropriated by the guard.
3. The duty managers who manage the lodge are the ones who receive payment for guests. There is a risk that funds may be misappropriated as there is no segregation of duties.
4. The use of a register and the non-issuance of receipts except when requested for can result in misappropriation of cash. No entry may be made in the register and the proceeds misappropriated.
5. The non-completion of the guest register is a weakness in that its completion serves as a control against which funds can be compared. The register is confirmation of guests that have checked in and so can be used to confirm receipts of funds or creation of a debt.
6. Keeping of cash received by each duty manager in a lockable drawer is a weakness in that drawers may be broken into and cash stolen.
7. Banking of cash weekly without reconciliations to receipts can result in misappropriation and loss of cash.
8. Chefs receiving cash without raising receipts can result in cash being misapplied for personal use.
9. The handover of cash by the chef to the duty managers is not evidenced in writing. The duty manager may misuse the funds for personal use.
10. The use of proceeds from restaurant sales for purchase of food stuffs for the following day can result in difficulties in reconciling cash received to bankings made. This can result in cash being misused.
11. It would appear like the bank reconciliation is only prepared once at the year end. This can result in fraud and errors going undetected until the year end when it may be too late to do anything about it.

b) Controls to mitigate the control weaknesses:

1. There should be a responsible person to manage the lodge at night. The cost of having a responsible person will be outweighed by the savings that may accrue by having such a person.

2. A person with a more senior position should be assigned to manage the lodge at night. If assigning duty managers with this task would be more costly, a junior officer would be more appropriate compared to the security guard.
3. Cash should be received by someone else other than the duty managers.
4. Receipts should be raised for all cash received. These should be made accountable documents so that all proceeds are accounted for.
5. The guest register must be completed at all times before guests are checked in. random comparisons between cash receipts and entries in the guest register should be made.
6. Any cash held should be securely kept preferable in a secure safe which cannot easily be broken.
7. Funds received should be promptly banked and reconciled to sales proceeds.
8. Receipts should be raised for all funds received and preferably this should be by someone other than the chef.
9. All movements of cash from one person to another must be evidenced in writing to avoid disputes.
10. All cash received by the chef should be banked intact for ease of control.
11. Bank reconciliations must be prepared and reviewed regularly on a monthly basis in order to promptly detect errors and fraud.

c) **Responsibility of management for going concern:**

IAS 1 *Presentation of financial statements* requires that management makes an assessment of an entity's ability to continue as a going concern.

This is because management is responsible for the preparation and presentation of the financial statements and this goes with responsibility to assess the ability of the company to continue as a going concern.

Responsibility of the auditors for going concern:

ISA 570 *Going concern* gives guidance on the responsibilities of the auditors with regards going of a company.

The objective of the auditor with regards going concern of Luxury Lodges Ltd is:

- For the auditor to obtain sufficient appropriate evidence regarding the appropriateness of the assessment of management for using the going concern assumption.
- To conclude whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of Luxury Lodge's ability to continue as a going concern and
- To report in the audit report as guided by ISA 570.

d) Why auditors are concerned about a company's ability as a going concern:

In accordance with IAS 1 *Presentation of financial statements,* general purpose financial statements are prepared on the assumption that the company is a going concern. For this reason it is important that the auditor obtains sufficient appropriate evidence of the going concern ability of the company.

Historical cost financial statements are prepared on the assumption that the company is a going concern. In this case the assets and liabilities are stated at their historical cost.

If, on the other hand, a company is not a going concern, the assets will be valued on a break up basis, which is at amounts that are likely to be recovered from the sale of the assets.

The ability or lack of the ability of a company being a going concern has implications on the auditor’s report.

It is, therefore, important for the auditor to establish whether or not an entity is a going concern because this will determine the basis of the preparation of the financial statements.

e) Confidentiality and illegal acts of Luxury Lodges:

One of the fundamental principles of professional ethics that accountants are required to follow is that of confidentiality.

This requires that the auditors should not disclose to third parties information that comes to their attention by virtue of the engagement to third parties without the permission of the client.

The guidance on confidentiality gives situations when the auditor may disclose information to third parties without seeking the authority of the client.

Under voluntary disclosure auditors may make disclosures if it is in the public interest to make such disclosures.

In the case of Luxury Lodges, they are not charging VAT to their guests as required by law. This is noncompliance with laws which management is required to observe. In this regard the financial statements may be misstated because of not complying with the VAT law and specifically provisions may be misstated because there are penalties for non-compliance with the Act.

The auditor is advised to discuss with management on the need to adhere to the legal requirements with regards VAT. If management is unwilling to follow the law, the auditor may seek legal advice and may under the public interest exception inform the appropriate authority in this case the Zambia Revenue Authority.

The auditors will not be in breach of the fundamental principle professional ethics of confidentiality if they report to the responsible party.

f) Ethical issues:

1. Appointment ethics require that before accepting appointments as auditors the incoming auditors should communicate with the outgoing auditors. In this case the firm has started performing the audit before getting clearance from the outgoing auditors.

   Safeguard:
   The auditors should regularize the appointment by seeking permission to communicate with the outgoing auditors. If this permission is not given the firm will need to cease going ahead with the audit work.

2. Secondment of one of the audit team members to prepare the financial statements of Luxury Lodges Ltd is an ethical matter which gives rise to a self-review threat. It is not appropriate that someone on the audit team prepares the financial statements on which they are required to form an opinion.

   Safeguard:
   A different person who will not be part of the audit team should be assigned to prepare the financial statements. If there is no such person the firm should not accept the assignment to prepare the financial statements.

3. The offer of accommodation at preferential rates to the audit team is prohibited. This is under gifts and hospitality which could impair the independence of the auditor and subsequently objectivity.

   Safeguard:
   The auditors should decline the offer for low preferential room rates to the audit team members.

4. Non-compliance with the VAT regulations by Luxury Lodges Ltd poses an ethical issue of confidentiality. The auditors will need to consider matters relating to confidentiality when deciding whether or not to disclose the non-compliance with regulations to relevant authorities.

Safeguard:

There is need to ensure that ethical guidelines relating to disclosure of client information to third parties are followed. If necessary legal advise may be sought by the auditors.

SOLUTION TWO

a) Elements of an auditor's report:

i. Title-The title to the auditor's report must clearly indicate the independence of the auditor who carried out the engagement. This signifies that the auditor fulfilled the ethical requirements concerning independence
ii. Addressee- This part is mainly determined by law though many typical reports are addressed to shareholders or those charged with governance
iii. Opinion paragraph-This highlights the audited entity, statement that the statements have been audited, summary of accounting policies and period under review.
iv. Basis of opinion- The benchmark against which the audit was conducted e.g. ISAs, auditors' responsibility for the audit.
v. Going concern- Where the auditor considers a material uncertainty related to going concern exists.
vi. Key audit matters – For listed companies and where required by law the auditor will include this paragraph which will contains matters , in the auditor's professional judgement, that are most significant to the audit.
vii. Other information – stating the responsibilities for other information contained in the financial statements and the fact that the audit opinion does not cover other information.
viii. Responsibilities for the financial statements – Describes management's responsibility for the preparation of the financial statements.
ix. Auditor's responsibilities – Explaining the auditor's responsibilities for the audit of the financial statements clearly explaining that the objective of the auditor is to form an opinion on the financial statements.
x. Other reporting responsibilities – Where required by law to report on any other matters these will be included in this paragraph.
xi. Name of the engagement partner – This should be identified, unless such a disclosure is reasonably expected to lead to a significant personal security threat.
xii. Auditor's signature – This should contain the signature of the auditor which could be the auditor's own name or the audit firm's name or both.
xiii. Auditor's address – The location of where the practice is should be included.
xiv. Date of the report – Which must be no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence on which to base the opinion.

b) Key audit matters

ISA 701 *Communicating key audit matters in the independent auditor's report* gives guidance in this area,

Key audit matters 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. They are mostly selected from matters communicated with those charged with governance.

Relevance of KAMs:
Reporting on KAMs aims at improving transparency by assisting users to understand the most significant issues the auditor faced which ultimately enhance the communicative value of the auditor's report.

c) Factors influencing the determination of KAMs

i. The importance of the matter to intended user's understanding, including its materiality.
ii. The nature of the underlying accounting policy relating to the matter or the complexity or subjectivity involved.
iii. The nature and extent of audit effort needed to address the matter.
iv. The severity of any control deficiencies.
v. The effect of significant events or transactions.
vi. Significant judgements in relation to areas where management made judgements.

d) Brief notes on the following:

i. **Qualified opinion- Is an opinion expressed by an auditor when:**
   - The auditor has obtained sufficient appropriate audit evidence but there is a matter of concern that is material but not pervasive to the financial statements.
   - The auditor cannot obtain sufficient appropriate audit evidence on which to base the opinion but concludes that the possible effects of undetected misstatements, if any, could be material but not pervasive.

   The form of qualification is that 'except for' the matter of concern, the financial statements show a true and fair view.

ii. **Adverse opinion**- An opinion expressed when the auditor, having obtained sufficient appropriate evidence, concludes that misstatements are both material and pervasive to the financial statements.
   The form of opinion is that the financial statements **do not show** a true and fair view.

iii. **Disclaimer of opinion**-This arises when the auditor cannot obtain sufficient and appropriate evidence on which to base the opinion and concludes that the possible effects on the financial statements of undetected misstatements, if any, could be both material and pervasive.

The form the opinion takes is that the auditor is **'unable to form an opinion'.**

iv. **Expectations Gap-** It is the difference between the apparent public perception of the responsibilities of the auditor on the one hand and the legal and professional reality on the other.

Specifically this relates to the following matters:

- Misunderstanding with regards the nature of audited financial statements such as that amounts in the financial statements are stated precisely.
- Misunderstanding as to the type and extent of work undertaken by auditors and
- Misunderstandings about the level of assurance provided by auditors such as that the issue of an unmodified opinion means that no frauds occurred in the period.

SOLUTION THREE

a) Sufficient appropriate audit evidence:

Sufficient in the context of evidence is the measure of the quantity and is affected by the auditors assessment of the risks of material misstatement as well as the quality of such evidence

Appropriate is the quality or reliability of audit evidence in supporting the conclusions on which the auditor's opinion is based

b) Generalizations which help assess the quality of evidence:

1. Auditor- Evidence obtained directly by auditors is more reliable than that which is obtained indirectly or by inference.
2. Entity- Evidence obtained from the entity's records is more reliable when the related control systems are operating effectively.
3. Originals-These are more reliable than photocopies which can easily be altered by the client.
4. Written-Evidence in the form of paper/documents or written representations are more reliable than oral representations which can easily be retracted
5. External- When evidence is obtained from external sources, it is more reliable because it is from an independent source.

c) Factors to consider before using work of a management expert:

A management's expert is an individual or organization possessing expertise in a field other than auditing or accounting and whose work is used by an entity to prepare financial statements.

Matters to consider when placing reliance on the work of a management expert:

- The competence of the expert in carrying out the work required.
- The objectivity of the expert particularly matters relating to independence.
- The capabilities of the management's expert.

d) Audit plan for tangible non-current assets:

1. **Completeness:**
    - Obtain and prepare a summary of tangible noncurrent assets showing how the GBV, depreciation and NBV reconciles with opening position.
    - Compare NCA in the GL with the asset register.

2. **Existence:**
    - Confirm that all items in the asset register are physically inspected during the year.
    - Physically inspect a sample of tangible non-current assets.
    - Review records of income yielding assets.

3. **Accuracy, Valuation and Allocation:**
    - Verify valuation to valuation certificate.
    - Consider reasonableness of valuation.
    - Re-perform calculation of revaluation surplus etc.

4. **Rights and Obligations:**
    - Verify title in the name of the client by inspecting evidence of title such as title deeds or invoices.
    - Obtain a certificate from solicitors.
    - Inspect registration certificates etc.

    Marks awarded for other relevant audit procedures relating to:

    - Additions to tangible non-current assets.
    - Self-constructed assets and
    - Disposals of tangible non-current assets.

SOLUTION FOUR

a) Responses to identified risks in Modern Electronics Ltd:

1. **Annual bonus based on performance:**

There is need that focus should be placed on matters that require management judgment to determine figures in the financial statements. This will include areas such as provisions and revenue recognition. Audit procedures must be performed and recorded in these areas in order to detect any material misstatements that may exist.

2. **Lack of controls over inventory:**
   There is need to examine the inventory count instructions with regards identification of slow moving and obsolete inventory. This will also necessitate ascertaining sales values for items sold post year end that were in inventory at the year end to ensure that NRV was higher than cost.

   Attendance during the inventory count will also be necessary.

3. **Warranty provisions:**
   A review of any warranty provision will be made and confirm in line with the provisions of IAS 37 *Provisions, contingent liabilities and contingent assets.*

   Review previous year provisions for warranty and compare with actual payments incurred in order to assess reasonableness of management estimates.

   Review the cost of repair and replacement post year end which may give evidence of the provision made at the period end.

   Obtain written representations from management regarding the provision made in the financial statements,

4. **Risk of cash misappropriation and misstatements:**
   Confirm banking of receipts at the three locations by examining bank deposit slips. Re-perform bank reconciliations and look out for unusual transactions.

5. **Misstatement of accounts receivables:**
   There will be need to identify year end receivables balances that are still outstanding at the date of the audit. Review post year end receipts from customers, for those still outstanding confirm whether these have been provided for at the year end.

   For a sample of receivables at the period end confirm amounts received post year end as this gives evidence of amounts that were outstanding at the period end.

Review receivables age analysis and any customer correspondence and consider adequacy of related receivables allowance.

Circularize a sample of the receivables and analyze responses.

b) Matters that should be documented as part of risk assessment:

- The outcome of the discussion among the audit team concerning the susceptibility of the financial statements to material misstatement and any significant decisions reached.
- Key elements of the understanding gained of the entity and the risk assessment procedures carried out.
- The identified and assessed risks of material misstatement at the financial statements level and at the assertion level.
- Risks identified and the related controls evaluated.
- The overall responses reached to address the risks of material misstatement at the financial statement level.
- The nature, extent and timing of further audit procedures linked to the assessed risks at the assertion level.
- The results of the audit procedures.

c) Audit procedures that may be undertaken during the interim audit:

- The risk assessment in accordance with ISA 315 (*Revised) Identifying and assessing the risks of material misstatement through understanding the entity and its environment* can be carried out during the interim audit.
- Understanding and recording the internal control systems of Modern Electronics Ltd.
- Evaluating the design of internal controls.
- Tests of controls on company internal controls in order to ensure they are operating as expected.
- Performing substantive procedures on the transactions to the date of the interim audit and balances during this period(e.g. Additions to tangible non-current assets to the date of the interim audit can be tested)
- Identification of issues that may have an impact on the work that will take place at the final audit.

SOLUTION FIVE

a) Advantages of flowcharts:

i. After a little experience they can be prepared quickly.

ii. As the information is presented in a standard form, they are fairly easy to follow and to review.
iii. They generally ensure that the system is recorded in its entirety, as all document flows have to be traced from beginning to end. Any 'loose ends' will be apparent from a cursory examination.
iv. They eliminate the need for extensive narrative and can be of considerable help in highlighting the salient points of control and any deficiencies in the system.

Disadvantages of flowcharts:

i. They are most suitable for describing standard systems. Procedures for dealing with unusual transactions will normally have to be recorded using narrative notes.
ii. Major amendment is difficult without redrawing.
iii. Time can sometimes be wasted by charting areas that are of no audit significance.

b) Criteria Kambo & Co. can use for evaluating the Internal Audit Function:

i. The extent to which its objectivity is supported by its organizational status, relevant policies and procedures – Kambo & Co. should consider the status of the internal audit function, to whom it reports, any conflicting responsibilities, any constraints or restrictions, whether those charged with governance oversee employment decisions regarding internal auditors, whether management acts on recommendations made, whether internal auditors are members of professional bodies and obligated to comply with their requirements for objectivity.

ii. The level of competence of the function – Kambo & Co. should consider whether the internal audit function is adequately resourced, whether internal auditors are members of relevant professional bodies, have adequate technical training and proficiency, whether there are established policies for hiring and training, whether internal auditors possess the required knowledge of financial reporting/the applicable financial reporting framework.

iii. Whether the internal audit function applies a systematic and disciplined approach (including quality control) – Kambo & Co. should consider whether internal audit activities include a systematic and disciplined approach to planning, supervising, reviewing and documenting assignments, whether the function has appropriate quality control procedures, the existence of audit manuals, work programmes and internal audit documentation.

c) Use of negative confirmation in Megulu Ltd:

A negative confirmation request is one in which the confirming party responds directly to the auditor only if they disagree with the information in the request.

The negative method provides less persuasive audit evidence and shall not be used as the sole substantive procedure to audit of receivables unless all of the following are present:

- The risk of material misstatement has been assessed as low.
- The auditor has obtained sufficient appropriate audit evidence on the operating effectiveness of relevant controls.
- The population consists of a large number of small, homogeneous account balances.
- A very low exception rate is expected.
- The auditor is not aware of circumstances or conditions that would cause customers to disregard the requests.

The risk of material misstatement in Megulu Ltd has been assessed as high and therefore negative confirmation cannot be used as the sole substantive procedure to audit receivables in Megulu Ltd. A positive confirmation could be used. A positive confirmation request is one in which the confirming party responds directly to the auditor indicating whether they agree or disagree with the information in the request or provides the requested information.

d) Audit procedures regarding any exceptions and non-response to receivables confirmation in Megulu Ltd:

i. Review after-date cash receipts by inspecting bank statements and cash receipts documentation.
ii. Examine the customer's account and customer correspondence to assess whether the balance outstanding represents specific invoices and confirm their validity.
iii. Examine the underlying documentation (purchase order, dispatch documentation, duplicate sales invoice etc.)
iv. Inquire from management explanations for invoices remaining unpaid after subsequent ones have been paid.
v. Check whether the balance on the account is growing and if so, find out why by discussing with management.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.4: TAXATION

THURSDAY 14 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

Taxation Table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income from mineral processing	30%
On income from mining operations	30%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	4% of norm value
From US$4,500 to less than US$6,000	5% of norm value
From US$6,000 and above	6% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper)	5% on norm value
Energy and Industrial Minerals	5% on gross value
Gemstones	6% on gross value
Precious Metals	6% on norm value

Capital Allowances

Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance –	Standard wear and tear allowance	25%
	Wear and tear allowance if used in manufacturing and leasing	50%
	Wear and tear allowance if used in farming and agro-processing	100%

Non- commercial vehicles

Wear and Tear Allowance	20%

Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

Low Cost Housing **(Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

Commercial Buildings

Wear and Tear Allowance	2%

Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax

Monthly turnover	**Turnover Tax per month**
K1to K4,200	3% of monthly turnover above K3,000
K4,200.01to K8,300	K225 per month+3% of monthly turnover above K4,200
K8,300.01 to K12,500	K400 per month+3% of monthly turnover above K8,300
K12,500.01 to K16,500	K575 per month+3% of monthly turnover above K12,500
K16,500.01 to K20,800	K800 per month+3% of monthly turnover above K16,500
Above K20,800	K1,025 per month+3% monthly of turnover above K20,800

Annual turnover	**Turnover Tax per annum**
K1to K50,400	3% of annual turnover above K36,000
K50,400.01to K99,600	K2,700 per annum+3% of annual turnover above K50,400
K99,600.01 to K150,000	K4,800 per annum +3% of annual turnover above K99,600

K150,000.01 to K198,000	K6,900 per annum+3% of annual turnover above K150,000
K198,000.01 to K249,600	K9,600 per annum+3% of annual turnover above K198,000
Above K249,600	K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Tax for Transporters

Seating capacity	**Tax per annum K**	**Tax per day K**
From 64 passengers and over	10,800	29.55
From 50 to 63 passengers	9,000	24.60
From 36 to 49 passengers	7,200	19.50
From 22 to 35 passengers	5,400	15.00
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.95
Less than 12 passengers and taxis	900	2.40

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of tax on the Realised value on the transfer of intellectual property	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

	Aged 2 to 5 years		**Aged over 5 years**	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	Aged 2 to 5 years		Aged over 5 years	
	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

Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Aged 2 to 5 years**		**Aged over 5 years**	
	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

Attempt THIS question

QUESTION ONE

Kutemba Ltd is a manufacturer of permanent markers and other writing implements in Zambia. The company is incorporated abroad, although its directors are based in Zambia and hold their board meetings in Zambia. Kutemba Ltd's summarised statement of profit or loss for the year ended 31 December 2018 is as follows:

	K	K
Gross profit		1,913,600
Operating expenses		
Depreciation	119,800	
Gifts and donations (note 1)	8,200	
Professional fees (note 2)	17,600	
Repairs and renewals (note 3)	81,600	
Other expenses (note 4)	668,000	
		(895,200)
Operating profit		1,018,400
Income from investments		
Dividends (note 5)		90,000
Profit from sale of non-current assets		
Disposal of industrial building (note 6)		120,000
		1,228,400
Interest payable (note 7)		188,400
Profit before taxation		1,040,000

Note 1 – Gifts and donations

Gifts and donations are as follows:

	K
Gifts to customers (permanent markers costing K20 each displaying Kutemba Ltd's name)	4,080
Gifts to customers (food hampers costing K15 each)	1,540
Gifts to employees	540
Donation to an approved public benefit organisation	1,200
Donation to a local charity as a result of which Kutemba Ltd received free advertising in the chartity's magazine	240
Donation to a political party	600
	8,200

Note 2 – Professional fees

Professional fees are as follows:

	K
Accountancy and audit fee	4,600
Legal fees in connection with the issue of share capital	6,200
Legal fees in connection with the issue of a 12% debenture loan that was subsequently cancelled	3,600
Legal fees in connection with the defence of the company's internet domain name	3,200
	17,600

Note 3 – Repairs and renewals

The figure of K81,600 for repairs and renewals includes K29,600 for replacing the roof of a warehouse, which was in a bad state of repair, and K27,800 for initial repairs to an office building that was acquired on 20 December 2018. The balance represents allowable expenses.

The office building was not usable until the repairs were carried out, and this fact was reflected by a reduced purchase price.

Note 4 – Other expenses

The figure of K668,000 for other expenses includes K7,400 for entertaining customers, K3,400 for entertaining employees, K800 for counselling services provided to an employee who was made redundant, and a fine of K5,200 for publishing a misleading advertisement. The remaining expenses are all allowable.

Note 5 – Dividends received

During the year ended 31 December 2018 Kutemba Ltd received dividends of K54,000 from Muyombo Ltd, an unconnected Zambian company, and dividends of K36,000 from Nokenu Ltd, its 100% Zambian subsidiary company. Both figures are the actual cash amounts received. Withholding Tax had been deducted at source.

Note 6 – Disposal of industrial building

The profit of K120,000 is in respect of a factory that was sold on 31 March 2018 for K600,000. The factory had been purchased on 1 April 2012 for K480,000. The cost of K480,000 and the selling price of K600,000 are made up as follows:

	Cost	Selling price
	K	K
Land	90,000	112,000
Factory	290,000	360,000
General offices	100,000	128,000
	480,000	600,000

Note 7 – Interest payable

The interest payable is in respect of the company's 10% debenture loan stock that was issued in the year 2008. The proceeds of the issue were used to finance the company's trading activities. Interest of K94,200 was paid on 30 June 2018 and again on 31 December 2018.

Note 8 – Implements, plant and machinery

On 1 January 2018, the income tax values of implements, plant and machinery were as follows:

	K
Office furniture	16,400
Audi motor car	19,600
Old equipment	27,600

The office furniture was bought for K65,600 while the Audi motor car was bought for K49,000. The old equipment was bought for K55,200.

The following transactions took place during the year ended 31 December 2018:

Date		Cost/(Proceeds)
		K
4 June 2018	Purchased Nissan Tiida motor car	36,400
4 June 2018	Purchased Mercedes Benz E240 motor car	62,800
4 June 2018	Purchased Toyota Camry motor car	60,400
18 August 2018	Purchased new equipment	80,600
12 October 2018	Sold old equipment	(25,400)
20 December 2018	Sold Audi motor car	(22,200)

The Nissan Tiida motor car purchased on 4 June 2018 is a pool car in the operations department but it has private use of 25% by the company's Operations Director and it has a cylinder capacity of 2,000 cc. The Mercedes Benz E240 motor car is the Managing Director's personal to holder motor car and it has a cylinder capacity of 2,600 cc. The Toyota Camry motor car is the Finance Director's personal to holder motor car and it has a cylinder capacity of 2,000 cc.

Note 9 – other information

Kutemba Ltd's capital allowances on other buildings in the tax year 2018 amount to K29,730.

Required:

(a) (i) Explain why Kutemba Ltd is treated as being resident in Zambia.

(ii) State what difference it would make if the directors were based abroad and were to hold their board meetings abroad and briefly explain why that difference would arise. (4 marks)

(b) Calculate the following values for Kutemba Ltd for the tax year 2018:

(i) The capital allowances on buildings (7 marks)

(ii) The capital allowances on implements, plant and machinery (9 marks)

(iii) The taxable business profit after capital allowances. Your computation should commence with the profit before taxation figure of K1,040,000. (9 marks)

(c) Calculate the amount of company income tax payable by Kutemba Ltd for the tax year 2018 and explain how it must have been properly paid under the self-assessment system, specifying the relevant due dates and the amounts payable.

(6 marks)

(d) Advise Kutemba Ltd of the Property Transfer Tax implications of the disposals of assets made in the tax year 2018 and calculate the amount of property transfer tax payable.

(5 marks)

[Total: 40 marks]

SECTION B

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

Maimbolwa runs a farming business and prepares accounts to 31 December each year. Her annual turnover has always exceeded K800,000. In January 2018, she estimated the taxable farming profit from her farming business for the year ending 31 December 2018 to be K860,000. Due to a poor crop yield in March 2018, Maimbolwa revised the provisional taxable business profit, from the original estimate of K860,000 to only K550,000.

The actual net profit from the business as per accounts for the year ended 31 December 2018, was K680,000. This profit figure was arrived at after taking into account the following items:

(1) Wages and salaries for workers comprising:

	K
Salaries and wages for farm employees	46,000
Employer's Pension contributions	2,300
Loans to former farm employees written off	12,000
Maimbolwa's salary	90,000
	150,300

(2) Maintenance expenses of K55,600 which included the following:

	K
Repairing storage facilities for farm produce	6,800
Repair and maintenance work on farm dwellings for farm employees	4,300
Stumping and clearing of fields in readiness for planting	9,700
Construction of a wire fence around the farm	16,300
Expenditure on works for the prevention of soil erosion	18,500
	55,600

(3) Motor vehicle running expenses of K23,300 comprising:

	K
Servicing and fuel for farm tractor	13,800
Repairs and fuel for motor van	9,500
	23,300

It has been agreed with the Commissioner General that Maimbolwa has private use of 20% of the motor van.

(4) General expenses of K53,900, which included:

	K
Depreciation of assets	14,400
Increase in general provision for bad debts of	2,600
Increase in specific provision for bad debts of	3,300
Loss on disposal of farm implements	7,100
Miscellaneous allowable business expenses	26,500
	53,900

(5) Farm produce with a cost of K15,000 withdrawn from the business by Maimbolwa for personal use. She makes a mark-up of 20%. This transaction was recorded as sales at cost in her books.

Additional information

At 1 January 2018, the only asset qualifying for capital allowances was the motor van which was purchased in March 2016 at a cost of K90,000.

During the year, Maimbolwa purchased a Tractor at a cost of K130,000 and sold some farm implements for K6,400. The farm implements had an income tax value of nil at 1 January 2018, whilst the original cost was K60,000.

Required:

(a) Calculate the amount of provisional income tax paid by Maimbolwa in respect of the tax year 2018 and state the due dates and amounts paid on each due date. (5 marks)

(b) Compute the maximum amount of capital allowances claimable by Maimbolwa in the tax year 2018. (6 marks)

(c) Calculate Maimbolwa's actual taxable farming profit for the tax year 2018. (6 marks)

(d) Calculate the final amount of income tax payable by Maimbolwa for the tax year 2018. (3 marks)

[Total: 20 marks]

QUESTION THREE

Lumba, Lunda and Lubono have been in business as partners for many years, sharing profits and losses in the ratio of 4 : 3 : 1 respectively. This is after allowing for partnership salaries of K180,000 per annum for each partner. The partnership accounts are prepared annually to 31 December.

On 31 March 2018, Lunda resigned from the partnership and with effect from that date, the partnership agreement was changed. Partners' annual salaries and profits and loss sharing arrangements were to be provided for as shown below:

	Lumba	Lubono
Salaries per annum	K240,000	K216,000
Share of balance of profits and losses	70%	30%

The partnership's statement of profit or loss for the year ended 31 December 2018 was as follows:

	Note	K	K
Gross profit			2,005,740
Less expenses:			
Depreciation		18,200	
Wages and salaries	(1)	1,409,100	
Legal expenses	(2)	64,200	
Gifts and donations	(3)	26,100	
Provision for income tax	(4)	188,800	
Miscellaneous expenses	(5)	60,440	
Motor car running expenses	(6)	64,800	
			(1,831,640)
Net profit			174,100

Notes

(1) **Wages and salaries**

Wages and salaries include the following:

	K
Employee's wages and salaries	860,000
Employee's professional subscriptions	45,600
Employees golf club subscriptions	26,500
Partners salaries:	
- Lumba	225,000
- Lunda	45,000
- Lubono	207,000
	1,409,100

(2) **Legal expenses**

These are made up of the following:

	K
Defending action by customer in respect of alleged breach of contract	25,000
Fees in relation with the acquisition of a new 55-year lease of business premises	11,200
Fees in connection with defending title to business premises	12,000
Legal fees in connection with registration of partnerships trademark	16,000
Total	64,200

(3) **Gifts and donations:**

These comprise the following:

	K
New year gifts to employees costing K80 each	3,000
Gifts of food hampers to customers costing K90 each	9,270
Donations to political parties	2,500
Donations to approved public benefit organisations	6,830
Entertaining suppliers	4,500
	26,100

(4) **Provision for income tax**

This relates to the total amount of provisional income tax paid by the partners during the tax year 2018 and is broken down as follows:

	K
Lumba	99,200
Lunda	16,500
Lubono	73,100
	188,800

(5) **Miscellaneous expenses**

These expenses consist of the following:

	K
Theft of money by employee	6,100
Fines for breach of health and safety regulations	3,500
Advertising	10,200
Insurance of business premises	4,600
Bank overdraft interest	19,500
Sundry allowable expenses	16,540
	60,440

(6) **Motor car running expenses (see also note 7 below)**

These include motor car running expenses of K21,600 incurred on motor vehicles used by employees wholly and exclusively for business purposes. The balance of the expenditure relates to motor vehicles used by partners for both business and private purposes.

The partners use their own personal motor cars in the partnership's business. Business mileage as a percentage of total mileage done by each partner together with the motor car running expenses relating to their vehicles are as given below:

Partner expenses	Motor car running expenses	Private mileage
	K	%
Lumba	19,500	70
Lunda	7,200	40
Lubono	16,500	60
	43,200	

(7) **Additional information (see also note 6 above)**

Each partner used his own personal motor car in the business (referred to in note 6 above).

Details relating to the motor cars are as follows:

	Purchase cost	Date brought into business use
Lumba's car	K190,000	1 March 2015
Lunda's car	K170,000	1 June 2016
Lubono's car	K150,000	1 April 2017

When Lunda resigned on 31 March 2018, he left his car in the partnership at an agreed valuation of K95,000. Lumba and Lubono have since made the car available for the use of their employees as a pool car.

(8) **Implements, plant and machinery and other assets**

At 1 January 2018, the only other asset qualifying for capital allowances was a delivery van which was acquired at a cost of K130,000 in January 2016.

Required:

(a) Calculate the partnership's tax adjusted business profit for the year ended 31 December 2018 before division between the partners. (9 marks)

(b) Calculate the amount of business profits on which each partner will be assessed for the year ended 31 December 2018. (11 marks)

[Total: 20 marks]

QUESTION FOUR

Dr. Sialubono, a married man with four school going children, is the Managing Director of Munali hospital, a private hospital. His annual basic salary is K500,000 and he is entitled to a gratuity calculated at the rate of 35% of his cumulative basic salary upon the termination of employment.

He signed a five year contract of employment which commenced on 1st January 2014 with the hospital. In addition to working for Munali hospital, Dr. Sialubono also runs a private clinic as a medical practitioner and his tax adjusted profit for the tax year 2018 was K230,000. As part of his contract with Munali Hospital, Dr. Sialubono is entitled to a personal to holder motor vehicle. The hospital has therefore provided him with a brand new Toyota Landcruiser V8 motor vehicle that was bought for K2,560,000 on 1 January 2014. Dr. Sialubono lives in a house whose gross monthly rent is K9,000. The amount of monthly gross rent is paid on behalf of Dr. Sialubono by Munali hospital. In addition, Munali hospital also pays for the following on behalf of Dr. Sialubono:

	K
Electricity bills	1,520 per month
Property maintenance	1,700 per month
Telephone bills	850 per month
Entertainment allowance	2,000 per month
Protective clothing allowance	520 per month
School children's allowance	K2,000 per month

Dr. Sialubono bought protective clothing worth K6,240. On 1 May 2018, Dr. Sialubono received a Labour Day award of K5,600 for his outstanding management style which saw the hospital build a state of the art Cancer wing.

In July 2018, Dr. Sialubono's Father had passed away in the village. Dr. Sialubono was paid a funeral allowance K7,000 to help in the burial of his father.

On 24th December 2018, Dr. Sialubono received a cash voucher from Munali hospital of K3,000 for Christmas.

During the tax year 2018, Dr. Sialubono incurred the following expenses which he wishes to claim for deduction against the emoluments:

	K
Subscription to the medical association of Zambia	3,400
Golf club subscriptions	1,800
Donation to local football club	3,000
Contribution to an approved pension scheme	2,450
NAPSA contribution	10,735
Transport expense when on call	2,500

On 31 December 2018, Dr. Sialubono's contract expired. He received the accrued leave pay of K87, 500 and a payment to agree to a restrictive undertaking of K255,000. Dr. Sialubono also received his gratuity of K875,000. The PAYE deducted was K180,000.

Required:

(a) Explain the receipts basis of assessment as it applies to directors' emoluments. (5 marks)

(b) Calculate the income tax payable by Dr. Sialubono for the tax year 2018 (13 marks)

(c) Assuming Dr. Sialubono was engaged on pensionable terms and he was to be declared redundant, explain how the payments he would receive would be taxed. (2 marks)

[Total: 20 marks]

QUESTION FIVE

Joyce Mutinta is a Zambian resident individual who had been employed until 31 December 2017 when she retired. Upon retiring, Joyce intends to set up a business which should be run through a company.

In the tax year 2018, Joyce had the following transactions:

(1) On 2 February 2018, Joyce sold a plot of land for K120,000. This was the amount before deduction of estate agent fees of 5% of the sales value. Joyce acquired the plot from a traditional leader for K40,000 in the year 2016. The plot did not have any drawings and therefore, there was no value determined by the government valuations department.

(2) On 10 February 2018, Joyce sold a low cost house for K338,100 to an unconnected third party after deducting estate agents fees of 2% of the sales value. The house had been valued at K310,000 according to the latest report obtained from the Government of the Republic of Zambia.

(3) On 5 March 2018, Joyce bought 12,000 ordinary shares of K1 each at a price of K9.00 each in Kafue Plc, a Zambian resident company that is listed on the LuSE. The shares in the company were issued to the public at a price of K11.90 when the company obtained a listing on the LuSE in October 2017.

(4) On 30 March 2018, Joyce donated a plot of land valued at K50,000 to the Zambia Police Service for the construction of a police post. The plot is situated in the eastern part of Lusaka where a new residential area that is growing rapidly needs a police post.

(5) On 30 June 2018, Joyce sold his Toyota Land Cruiser Prado for K70,000 to an unconnected third party. The amount of K70,000 is after deducting the agent's fee of K3,000. Joyce had owned the Toyota Land Cruiser Prado for three years.

(6) Joyce gave a plot of land valued at K180,000 to his son who had just graduated from University to enable him construct his own house. Joyce made the gift on 15 July 2018 and the son did not give any consideration to Joyce.

(7) On 1 August 2018, Joyce and her old friend Anita incorporated a company called ANJOY Ltd. In order to satisfy the value of the nominal capital that was allotted to her, Joyce transferred a plot of land valued at K40,000 to the company. Anita contributed a cash amount of K40,000 to satisfy the value of the nominal capital allotted to her. ANJOY Ltd was expected to commence to trading on 1 September 2018 and therefore, the company was registered with the Zambia Revenue Authority for Turnover Tax, Withholding Tax and Property Transfer Tax effective from 10 August 2018. The company was not registered for Value Added Tax although all of its sales, purchases and expenses are expected to be standard rated supplies.

ANJOY Ltd commenced to trade on 1 September 2018 and the company reported the following amounts of monthly sales revenue.

Month	Sales Revenue
	K
September 2018	55,000
October 2018	57,300
November 2018	61,290
December 2018	53,980

Purchases and expenses over the four months period were as follows:

	Purchases	Expenses
	K	K
September 2018	17,400	12,760
October 2018	19,720	15,080
November 2018	20,880	18,560
December 2018	17,168	12,818

The amounts of sales revenue are VAT exclusive because the company is not registered for VAT. The figures for both Purchases and expenses are VAT inclusive.

Required:

(a) Explain the Property Transfer Tax implications of each of the transactions that Joyce took in the tax year 2018. Your explanations MUST state the realized value and MUST include calculations of the amount of Property Transfer Tax paid where applicable. (11 marks)

(b) Calculate the amount of Turnover Tax paid by ANJOY Ltd on a month by month basis and in total for the four months from September to December 2018. (5 marks)

(c) Assuming that ANJOY Ltd had registered for VAT voluntarily, calculate the total amount of VAT that the company would have paid for the four months period ended 31 December 2018. You are not expected to calculate monthly amounts of VAT paid. (4 marks)

[Total: 20 marks]

END OF PAPER

CA 2.4 – TAXATION SOLUTIONS

SOLUTION ONE

(a)

(i) Reason why Kutemba Ltd will be treated as being resident in Zambia

Since the directors are Zambian based and hold their board meetings in Zambia, this would indicate that Kutemba Ltd's place of effective management is in Zambia, and therefore it is resident in Zambia.

(ii) Residence issues for Kutemba Ltd are as follows:

(1) Companies that are incorporated abroad are only treated as being resident in Zambia if their place of effective management is in Zambia.

(2) If the directors were to be based abroad and to hold their board meetings abroad, the Kutemba Ltd would probably be treated as resident abroad since the company's place of effective management would be abroad.

(3) The reason why Kutemba Ltd would then be treated as being resident abroad is because the company is incorporated abroad. Companies that are incorporated abroad and that also have places of effective management abroad are resident abroad.

(b) Various values for Kutemba Ltd for the tax year 2018

(i) Capital allowances on buildings:

(1) Only the factory qualifies as an industrial building because the cost of the general offices exceeds 10% of the total construction cost of the building. The total construction cost is K480,000 – K90,00 = K390,000. 10% of K390,000 is only K39,000 and the cost of the general offices is K100,000. The general offices are therefore a commercial building.

(2) <u>Calculation of balancing adjustments on disposal of the buildings:</u>

	Industrial <u>Building</u>	Commercia <u>Building</u>
	K	K
Qualifying cost	290,000	100,000
Less allowances claimed		
Initial allowance		
K290,000 x 10%	(29,000)	
Annual wear and tear allowances		
(tax years 2012 to 2017: 6 years)		

K290,000 x 5% x 6	(87,000)	
K100,000 x 2% x 6	________	(12,000)
Income Tax Value b/f at 1 January 2018	174,000	88,000
Disposal proceeds (limited to original cost)	(290,000)	(100,000)
Balancing charges	(116,000)	(12,000)

(ii) Capital allowances on implements, plant and machinery

		Capital allowances
Office furniture	K	K
Wear and tear allowance		
K65,600 x 25%		16,400
Audi Motor Car		
Income Tax Value b/f	19,600	
Disposal	(22,200)	
Balancing charge		(2,600)
Old equipment		
Income Tax Value b/f	27,600	
Disposal	(25,400)	
Balancing allowance		2,200
Nissan Tiida Motor car		
Wear and tear allowance		
K36,400 x 20%		7,280
Mercedes Benz E240 Motor car		
Wear and tear allowance		
K62,800 x 20%		12,560
Toyota Camry Motor car		
Wear and tear allowance		
K60,400 x 20%		12,080
New equipment		
Wear and tear allowance		
K80,600 x 25%		20,150
Total capital allowances		68,070

(iii) Kutemba Ltd

Computation of Taxable business profits for the tax year 2018

	K	K
Profit before taxation as per accounts		1,040,000
Add:		
Depreciation	119,800	
Gifts of food hampers	1,540	
Donation to political party	600	
Legal fees connected with issuing shares	6,200	
Initial repairs	27,800	
Entertaining customers	7,400	

Fine for publishing misleading information	5,200	
Personal to holder motor car benefits		
Managing Director's car (Mercedes Benz E240)	30,000	
Finance Director's car (Toyota Camry)	30,000	
		228,540
		1,268,540
Less:		
Dividends	90,000	
Profit on disposal of building	120,000	
		(210,000)
		1,058,540
Capital allowances		
Balancing charge on factory	(116,000)	
Balancing charge on general office	(12,000)	
Capital allowances on implements, plant and machinery	68,070	
Other capital allowances	29,730	
Net balancing charge		30,200
Taxable business profit		1,088,740

(c) Kutemba Ltd

Company income tax computation for the tax year 2018

	K
Taxable business profit	1,088,740
Company Income Tax payable	
K1,088,740 x 35%	381,059

The company income tax of K381,059 must have been paid in four quarterly instalments, with each instalment being due within 10 days following the end of the quarter that it relates to. The amount payable in respect of each quarter would have been K95,265 (i.e., K381,059 x 0.25).

The payments would have been made on the dates shown in the schedule below:

Due date	**Amount**
	K
10 April 2018	95,264
10 July 2018	95,265
10 October 2018	95,265
10 January 2019	95,265

Mark for correct due dates (quarter end due dates are acceptable)

(d) The Property Transfer Tax issues are as follows:

(1) In respect of the disposal of the old equipment on 12 October 2018, the company is not required to pay Property Transfer Tax because equipment is not property for the purposes of Property Transfer Tax.

(2) In respect of the disposal of the Audi Motor car on 20 December 2018, the company is not required to pay Property Transfer Tax because a motor car is not property for the purposes of Property Transfer Tax.

(3) In respect of the disposal of the building on 31 March 2018, the company is required to pay Property Transfer Tax because the disposal of a building is a transfer of property. The realized value is the actual disposal proceeds amount of K600,000 and the Property transfer Tax payable is = 5% x K600,000
= K30,000.

SOLUTION TWO

(a) COMPUTATION OF PROVISIONAL INCOME TAX

	K
Revised estimated taxable profit	550,000
Provisional Income Tax	
K39,600 x 0%	0
K510,400 x 10%	51,040
	51,040
Amount of provisional income tax paid each quarter (K51,040 ÷ 4)	12,760

Instalment	Due Date	Amount K
1st Instalment	31 March but not later than 10 April 2018	12,760
2nd Instalment	30 June but not later than 10 July 2018	12,760
3rd Instalment	30 September but not later than 10 October 2018	12,760
4th Instalment	31 December but not later than 10 January 2019	12,760

(b) COMPUTATION OF MAXIMUM CAPITAL ALLOWNACES

	K
Stumping and clearing Expenditure	
Farm works allowance	
(K9,700 x 100%)	9,700
Construction of Fence	
Farm improvement allowance	
(K16,300 x x 100%)	16,300
Expenditure for Prevention of Soil Erosion	
Farm works allowance	
(K18,500 x 100%)	18,500
Motor van	
wear and tear allowance	
(K90,000 x 25%) x 80%	18,000
Tractor	
Wear and tear allowance	
(K130,000 x 100%)	130,000
Farm implements	
Balancing charge	
(0 – K6,400)	(6,400)
	186,100

(c) COMPUTATION OF ACTUAL TAXABLE PROFIT FOR THE TAX YEAR 2018

	K	K
Profit for the year		680,000
Add:		
Maimbolwa's salary	90,000	
Loans to former employees written off	12,000	
Repairs and fuel for motor van		
(K9,500 x 20%)	1,900	
Depreciation	14,400	
Increase in general provision	2,600	
Loss on disposal of farm implements	7,100	
Stumping and clearing	9,700	
Constructing wire fence	16,300	
Expenditure on prevention of soil erosion	18,500	
Good for personal use (K15,000 x 20%)	3,000	
		175,500
		855,500

Less: capital allowances (b)	(186,100)
Final actual taxable profit	669,400

(d) COMPUTATION OF ACTUAL INCOME TAXABLE PROFIT FOR THE TAX YEAR 2018

Final taxable profit	669,400
Income Tax	
K39,600 x 0%	0
K629,800 x 10%	62,980
	62,980
Less provisional income tax	(51,040)
Final income tax payable	11,940

SOLUTION THREE

(a) PARTNERSHIP'S TAX ADJUSTED PROFIT FOR THE YEAR ENDED 31 DECEMBER 2018

	K	K
Net profits per accounts		174,100
Add:		
Depreciation	18,200	
Partner's salaries		
(K225,000 + K45,000 + K207,000)	477,000	
Fees in connection with acquisition of new lease	11,200	
Fees in connection with registering trade marks	16,000	
Gift to customers	9,270	
Donations to political parties	2,500	
Entertaining suppliers	4,500	
Fines for breach of health regulations	3,500	
Provisional income tax	188,800	
Motor car running expenses		
- Lumba’s car (K19,500 x 70%)	13,650	
- Lunda’s car (K7,200 x 40%)	2,880	
- Lubono’s car (K16,500 x 60%)	9,900	
		757,400
		931,500

Less:

Capital allowances on:		
- Delivery van		
(K130,000 x 25%)	32,500	
- Pool car		
(K95,000 x 20%)	19,000	
		(51,500)
Profit to be shared by partners		880,000

(b) Assessable profits for each partner

	Total	*Lumba*	*Lunda*	*Lubono*
(1.1.18–31.3.18)	K	K	K	K
Salaries (3/12)	135,000	45,000	45,000	45,000
Balance (4:3:1)	85,000	42,500	31,875	10,625
3 months' profit	220,000	87,500	76,875	55,625
(1.4.18–31.12.18)				
Salaries (9/12)	342,000	180,000	nil	162,000
Balance (70:30)	318,000	222,600	nil	95,400
9 months' profit	660,000	402,600	nil	257,400
Total	880,000	490,100	76,875	313,025
Less capital allowances				
Lumba's car				
K190,000 × 20% × 30%	(11,400)	(11,400)		
Lunda's car				
(K102,000 – K95,000) x 60%	(4,200)		(4,200)	
Lubono's car				
K150,000 × 20% × 40%	(12,000)			(12,000)
Taxable profits	852,400	478,700	72,675	301,025

SOLUTION FOUR

(a) The emoluments payable to directors are deemed to have been received on the earliest of the following dates:

(1) The time when entitlement to the pay arises,

(2) The time when payment is actually made,

(3) The time when the amount payable is decided,

(4) The time when the amount payable is credited in the company's records and

(5) The end of the company's financial year.

(b) **Dr SIALUBONO**
PERSONAL INCOME TAX COMPUTATION FOR THE YEAR 2018

	K	K
Business Profit		230,000
Salary		500,000
Gross rent (K9,000 x 12)		108,000
Accrued pay		87,500
Electricity bills (K1,520 x 12)		18,240
Property maintenance (K1,700 x 12)		20,400
Telephone bills (K850 x 12)		10,200
Entertainment (2,000 x 12)		24,000
School children allowance (K2,000 x 12)		24,000
Protective clothing allowance (K520 x 12)	6,240	
Less Expenditure on Protective clothing	(6,240)	-
Cash voucher		3,000
Restrictive undertaking		255,000
		1,280,340
Less: Allowable deductions		
Transport expense on call	2,500	
Subscriptions to medical association	3,400	
		(5,900)
		1,274,440
Less: tax free income		(39,600)
		1,234,840
Income tax		
K9,600 x 25%		2,400

K25,200 x 30%	7,560
K1,160,440 x 37.5%	435,165
	445,125
Less: Tax already paid	
PAYE	(180,000)
Income tax payable	265,125

(c) The payments made to an employee who is declared redundant or who retires are taxed as follows:

(1) The final salary, accrued service bonuses, and leave pay are taxable under the normal PAYE system at the time when they are received by the employee.
(2) Salary in lieu of notice, repatriation pay, severance pay and compensation for loss of office are all exempt from tax, being pension benefits. The refunded employee's pension contribution as well as the refunded employer's pension contribution under a defined contribution scheme are also both exempt from income tax being pension benefits.

SOLUTION FIVE

(a) The Property Transfer Tax implications are as follows:

(1) The sale of the plot of land for K120,000 on 2 February 2018 is a transfer of property with a realized value of K120,000. Property Transfer Tax was paid by Joyce.

Property Transfer Tax paid = 5% x K120,000

= K6,000

(2) The sale of a low cost house by Joyce is a transfer of property that has a realised value that is equal to the higher of the actual sales proceed and the open market value. The actual sales price before deducting the agent’s fees is the realised value because it is higher than the open market value. Joyce was required to pay Property Transfer Tax.

Property Transfer Tax paid = 5% x K338,100 x 100/98

= K17,250

(3) The purchase of shares in a LuSE listed company by Joyce on 5 March 2018 does not result in a liability to Property Transfer Tax. This is because Joyce is a buyer of the shares. Property Transfer tax is paid by the seller (The transferor) of property.
(4) The donation of the plot of land by Joyce to the Zambia Police Service is an exempt transfer because it is made to a government agency. Therefore the transfer has no realized value and Joyce is not required to pay Property Transfer Tax.

(5) The sale of a Toyota Land Cruiser Prado is not a transfer of property for the purposes of Property Transfer Tax. There is therefore no realized value since there is no transfer of property and Joyce is not required to pay Property Transfer Tax.

(6) The gift of a plot of land by Joyce to her son is a transfer of property that has a realised value of nil because the son is a member of Joyce's immediate family. As a result, Joyce is not required to pay Property Transfer Tax.

(7) The transfer of a plot of land to the company is a transfer of property for the purposes of Property Transfer Tax. However, because the transfer was made to enable Joyce satisfy the nominal value of capital that was allotted to her, the transfer has a realized value of nil. Therefore, Joyce is not required to pay Property Transfer Tax.

(b) Amounts of Turnover Tax paid on a monthly basis

Month		Turnover Tax
		K
September	K1,025 + [3% x (K55,000 – K20,800)]	2,051
October	K1,025 + [3% x (K57,300 – K20,800)]	2,120
November	K1,025 + [3% x (K61,290 – K20,800)]	2,240
December	K1,025 + [3% x (K53,980 – K20,800)]	2,020
Total		8,431

(c) Value Added Tax that would have been paid over the four months period ended 31 December 2018

	K	K
Output VAT		
(55,000 + 57,300 + 61,290 + 53,980) x 16%		36,411
Less recoverable input VAT		
Purchases		
(17,400 + 19,720 + 20,880 + 17,168) x 4/29	10,368	
Expenses		
(12,760 + 15,080 + 18,560 + 12,818) x 4/29	8,168	
Total recoverable input VAT		(18,536)
VAT that would have been paid		17,875

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

APPLICATION LEVEL

CA 2.5: FINANCIAL MANAGEMENT

FRIDAY 15 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Formulae, Present Value, Annuity and normal distribution tables are attached at the end of the question paper.

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

KLM Ltd manufactures bottles for packaging a popular carbonated drink. The plant is located in the heavy industrial area of Lusaka. The manufacturing process is, at present, semi-automated. The manufacturing equipment which initially cost K340, 000 four years ago has a written-down value of K190, 000. Demand for the product has been fairly stable, and output has been maintained at 60,000 units a year in recent years. Although demand is expect to increase slightly. The following data, based on the current level of output, have been prepared in respect of the product:

	Per Unit(K')	Per Unit (K')
Selling Price		11.40
Less:		
Labour	3.30	
Material	3.65	
Variable Overhead costs	1.58	
Fixed Costs	1.625	
Total Costs		10.155
Profit		**1.245**

Although the existing equipment is expected to last for a further four years before it is sold for an estimated K40,000, the business has recently been considering purchasing new equipment that would completely automate much of the production process and increase output by 10%. All units produced are expected to be sold. This is seen as a way of achieving the primary objective of KLM Ltd which is to maximize the shareholder's wealth. The new equipment would cost K680, 000 and would have an expected life of four years, at the end of which it would be sold for an estimated net price of K80, 000. If the new equipment is purchased, the old equipment could be sold for K190, 000 after two years. The new equipment would attract capital allowances at the rate of 25% per year on a reducing balance basis.

The finance team has prepared a report to help assess the viability of the proposed change, which includes the following estimated data:

	Per Unit(K’)	Per Unit (K’)
Selling Price		11.40
Less:		
Labour	1.20	
Material	3.20	
Variable Overhead costs	1.40	
Fixed Costs	2.92	
Total Costs		8.72
Profit		**2.68**

Depreciation charges will increase by K150, 000 a year as a result of purchasing the new machinery; however, other fixed costs are not expected to change. Selling prices and variable costs are expected to increase from the current estimations by 8% and 7% respectively per year. The Company is financed by 70% equity and 30% debt. The debt consists of a 10% bond with a six years to maturity issued at a nominal value of K1000. The current market value of the bond is K1, 031 per K1000. The equity premium is 7% and Company asset beta is 0.9. The five year government bond yield is 6%. Corporate tax is 30% per year.

Required:

(a) Calculate the current weighted average cost of capital (WACC) of the business. (11 marks)

(b) Evaluate the proposed purchase of new manufacturing equipment using the net present value (NPV) and internal rate of return (IRR) techniques. (23 marks)

(c) Explain how the primary objective of KLM Ltd can be achieved. (6 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

<u>QUESTION TWO</u>

Mululu Ltd a listed company has made the following projected financial information for the next four years:

Year	1	2	3	4
Earnings before tax (Million)	200	215	275	296

Mululu Ltd expects the earnings after tax to grow by 6% after the fourth year. The company has in issue two hundred million ordinary shares. The company's capital structure is represented by 80% equity and 20% debt. The before tax cost of debt is 14% and pays corporate tax at the rate of 30% per year. Mululu Ltd has an asset beta of 0.91. The risk free rate of return is 7% and market rate of return of 15%. The management of Mululu Ltd has been debating on the best way to value the business.

Required:

(a) Calculate the value of the company based on the present value of expected earnings. (10 marks)

(b) Discuss the relative merits of the following methods of business valuation:

(i) Asset based valuations
(ii) P/E ratio valuations
(iii) Dividend based valuations

(10 marks)
[Total: 20 Marks]

QUESTION THREE

Lindon Co Ltd has annual sales revenue of K60 Billion and all sales are on 30 days credit although customers on average take ten days more than this to pay. Contribution represents 60% of sales and the company currently has no bad debts.

Accounts receivable are financed by an overdraft at an annual interest rate of 7%. Lindon Co plans to offer an early settlement discount of 2.5% for payment within 15 days and to extend the maximum credit offered to 60 days. The company expects that these changes will increase annual credit sales by 5%, while also leading to additional incremental costs equal to 0.5% of turnover. The discount is expected to be taken by 30% of customers, with the remaining customers taking an average of 60 days to pay.
The company is considering formulating a working capital funding policy.

Required:

(a) Evaluate whether the proposed changes in credit policy will increase the profitability of Lindon Co Ltd. (10 marks)

(b) Discuss the key factors to be considered when formulating a working capital funding policy. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

You are a consultant for Ibenga Plc., a wholesale company. The following information for the year ended 31 December 2017 is provided to you:

	K'm
Property plant & Equipment original (cost K20m)	12
Inventory	4.2
Cash at bank	4.8
Accrued income	2.5
Accrued Expenses	7.6
Prepaid Income	2.0
Prepaid Expenses	7.8
Government Bonds	3.2
Certificates of deposit	12
Bank Loan	1.0
5% Redeemable preference shares (K20 each)	5.8
Retained earnings	9.3

You have the following additional information for the year 2018:

(i) Prepaid income is expected to reduce by 50% while accrued income is expected to increase by 20%.

(ii) Accrued expenses and inventory levels are expected to remain constant while prepaid expenses are expected to reduce by 30%.

(iii) The Government bonds balance is expected to be K0.5m

(iv) Depreciation on non-current assets is calculated on a straight line basis over 5 years. Scrap value is nil.

(v) Ibenga Plc. will require financing for an expansion program. Additional redeemable preference shares will be issued at book value to bring the total number of preference shares to 540,000.

(vi) Certificates of deposit are expected to reduce by K2million while the bank loan is expected to remain constant.

Required:

(a) Prepare the forecast statement of financial position for the year ended 31 December 2018 and determine the change in the value of its cost of equity.

(14 marks)

(b) Explain the following two aspects of globalization which are considered to be key drivers of change in the macro-environment:

(i) Government policy (3 marks)

(ii) Global competition (3 marks)

[Total: 20 Marks]

QUESTION FIVE

Reit Zambia is quoted on the Lusaka Stock Exchange (LuSe). The following information relates to the company as at 31 December 2017:

Number of ordinary shares	20 million
Book value of 12% preference shares (K15 shares)	K30 million
Book value of 20% bank loan	K5 million
Market price of ordinary shares	K7·50 per share
Equity beta of Reit Zambia	1.3
Risk- free rate of return	14%
Equity risk premium	10%
Rate of taxation	30%

The current price of the preference shares is K10.00 and the dividend has recently been paid.

Required:

(a) Distinguish between maximization of shareholder wealth and maximization of profits as financial objectives of a listed company such as Reit Zambia. The discussion should include accounting ratios or financial indicators. (8 marks)

(b) Calculate the gearing ratio (Prior charge capital/ (Prior charge capital + Equity)) for Reit Zambia using market values. (4 marks)

(c) Compute the company's weighted average cost of capital (WACC), using market values as weighting factors. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formula Sheet

Economic order quantity

$$= \sqrt{\frac{2C_oD}{C_H}}$$

Miller – Orr Model

$$\text{Return point} = \text{Lower limit} + (\frac{1}{3} \times \text{spread})$$

$$\text{Spread} = 3\left[\frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}}\right]^{\frac{1}{3}}$$

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

$$P_o = \frac{D_o(1+g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1-T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$s_1 = S_0 \times \frac{(1+h_c)}{(1+h_b)} \qquad f_0 = s_0 \times \frac{(1+i_c)}{(1+i_b)}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 2.5 FINANCIAL MANAGEMENT SOLUTIONS

Weighted Average Cost of Capital

Equity beta:

0.9= Be x 0.7/0.7+0.3(0.7)

1.17

Cost of equity = 6%+1.17(7%) =14.19%

Cost of debt

Period			Cashflow	Discount@11%	PV	Discount @6%	
	0	MV	(1,031)	1	(1,031)	1	(1,031)
1 to 6		Interest(I x 0.7)	70	4.231	296.17	4.917	344
	6	Redemption	1000	0.535	535	0.705	705
				NPV	(200)		18

IRR= 6% + 18/18+200 (11%-6%)

6.41%

Cost of debt = 6.41%

WACC = 14.19 x(0.7) + 6.41% x (0.3) = 11.9%

FINANCIAL EVALUATION OF PURCHASE OF EQUIPMENT

Year	1	2	3	4
Sales	812,592	877,599	947,807	1,023,632
Varible costs	(409,596)	(438,268)	(468,946)	(501,773)
Fixed Costs	(66,000)	(66,000)	(66,000)	(66,000)
Cash flow before tax	336,996	373,332	412,861	455,859
Tax@30%	(101,099)	(111,999)	(123,858)	(136,758)
Capital allowances	51,000	38,250	28,688	62,063
Net realisable value of equipments	-	190,000	-	80,000
Net Cash flows	286,897	489,582	317,690	461,164
Discount@12%	0.893	0.0797	0.712	0.636
Present Values	**256,199**	**390,197**	**226,195**	**293,300**

Total PVs	1,165,891
Less: Initial cost of equip	(680,000)
NPV	**485,891**

b) INTERNAL RATE OF RETURN

YEAR	1	2	3	4
Net cashflow	286,897	489,582	317,690	461,164
Discount@45%	0.690	0.476	0.328	0.226
Present Value	197,860	232,857	104,208	104,324

Total PVs = 639,249

Less: Initial cost of equipment = (680,000)

NPV (40,751)

$$IRR = 12\% + \frac{485{,}891}{485{,}891+40{,}751} \times (45\%-12\%) = \mathbf{42.4\%}$$

W1. Sales				
Year	1	2	3	4
Units	66,000	66,000	66,000	66,000
Selling prices	12.31	13.30	14.36	15.51
Sales	**812,592**	**877,599**	**947,807**	**1,023,632**
W.2 Variable Costs				
Total variable costs per unit= 1.2+3.20+1.4=5.8				
Year	1	2	3	4
Variable costs	6.21	6.64	7.11	7.60
Units	66,000	66,000	66,000	66,000
Variable costs	**409,596**	**438,268**	**468,946**	**501,773**
W3. Fixed costs				
Depreciation = (K340,000-K40,000)/8 = K3	37500			
Year	1	2	3	4
Fixed costs per unit	1.625	1.625	1.625	1.625
Less: Depreciation (K37,500/60,000)	(0.625)	(0.625)	(0.625)	(0.625)
	1.00	1.00	1.00	1.00
Units	66,000	66,000	66,000	66,000
Fixed costs	**66,000**	**66,000**	**66,000**	**66,000**
Capital Allowances				
Period	WDV	CA@25%	Tax@30%	
Year 1	680,000	170,000	51,000	
Year 2	510,000	127,500	38,250	
Year 3	382,500	95,625	28,688	
Year 4	286,875	206,875	62,063	

Based on the on financial evaluation in both (a) and (b) the investment in the equipment is financially viable because it gives a positive NPV of K485,891 and an IRR of 42.4% higher than the cost of capital of 12%.

c) PRIMARY OBJECTIVE: MAXIMISATION OF SHAREHOLDERS WEALTH

Shareholders wealth is maximised when their value is increased through undertaking profitable investments (investments which gives positive NPV). The value of shareholders can be measured by the stock prices and dividend earned by shareholders. If a company undertake profitable investment, it would be to generate a healthy return on invested capital hence increase the value. If this value is created over the long term, the share price increases and the company can pay larger cash dividends to shareholders.

SOLUTION TWO

a)

Workings

1. Cost of capital

$$\blacksquare os = \blacksquare_e \times \frac{V_e}{V_e + V_d\,(1-t\,)}$$

$$0.91 = \blacksquare_e \blacksquare = \frac{0.80}{0.80 + 0.20(1-0.3)}$$

$$\blacksquare_e \blacksquare\blacksquare = 1.07$$

Cost of equity = 7% + 1.07(15%-6%)

=16.6%

Cost of debt = 14% x (1-0.3)

= 9.8%

WACC = 16.6% x 0.80 + 9.8% x 0.20

=15.24% say 15%

2. Present values after year 4

$$CF = \frac{119(1+0.06)}{0.15-0.06} = K1,\ 401.55 million$$

Year	1	2	3	4
	K'm	K'm	K'm	K'm
Earnings before tax	200	215	275	296
Tax@30%	-60	-65	-83	-89
Earnings after tax	140	151	193	207
Discount@ 15%	0.870	0.756	0.658	0.572
Present values	122	114	127	119
		K'm		
Total present value (1-4 yr)		480.76		
Total present value (after yr 4)		1,401.55		
Total value of the company		**1,882.31**		
Value per share (K1,882.31m/200m)		9.41		

(b)(i) Asset based valuation

Valuing a company on the basis of its asset values alone is rarely appropriate if it is to be sold on a going concern basis. Exceptions would include property investment companies and investment trusts, the market values of the assets of which will bear a close relationship to their earning capacities. For instance a lot of service companies the value lies in the skill, knowledge and reputation of its personnel and therefore this is not reflected in the net asset values, and renders this method quite inappropriate. Knowledge of the net asset value (NAV) of a company will, however, be important as a floor value for a company in financial difficulties or subject to a takeover bid. Shareholders will be reluctant to sell for less than the net asset value even if future prospects are poor.

(ii) P/E ratio valuation

The P/E ratio measures the multiple of the current year's earnings that is reflected in the market price of a share. It is thus a method that reflects the earnings potential of a company from a market point of view. Provided the marketing is efficient, it is likely to give the most meaningful basis for valuation.

One of the first things to say is that the market price of a share at any point in time is determined by supply and demand forces prevalent during small transactions, and will be dependent upon a lot of factors in addition to a realistic appraisal of future prospects. A downturn in the market, economies and political changes can all affect the day-to-day price of a share, and thus its prevailing P/E ratio. This can result in a very inaccurate result if account has not been taken of all the differences involved.

(iii) Dividend based valuation

The dividend valuation model (DVM) is a cash flow based approach, which valued the dividends that the shareholders expect to receive from the company by discounting them at their required rate of return. It is perhaps more appropriate for valuing a non-controlling shareholding where the holder has no influence over the level of dividends to be paid than for valuing a whole company, where the total cash flows will be of greater relevance.
The practical problems with the dividend valuation model lie mainly in its assumptions. Even accepting that the required 'perfect capital market' assumptions may be satisfied to some extent, in reality, the formula used assumes constant growth rates and constant required rates of return in perpetuity.
Determination of an appropriate cost of equity is particularly difficult and similar problems arise in estimating future growth rates, and the results from the model are highly sensitive to changes in both these inputs. It is also highly dependent upon the current year's dividend being a representative base from which to start.

SOLUTION THREE

a) Evaluation of change in credit policy

Current average collection period = 30 + 10 = 40 days
Current accounts receivable= K60m x 40/365= K6,575,342.
Average collection period under new policy
= (30% x 15) + (70% x 60)
= 46.5 days.

New level of credit sale = K60 m x 1.05 = K63 m
Accounts receivable after policy change
=K63 m x 46.5/365 = K8026 027
Increase in financing cost = (K8026027-K6575342) x 7%=K101548

	K'000	K'000
contribution from increased sales K3 x 60%		1,800,000
Increase in financing cost	101,548	
Incremental costs =K63m x 0.005	315,000	
Cost of discount = K63 m x0.025 x 0.3	472,500	
Increase in costs		889,048
Net benefit of policy change		910,952

The proposed policy change will increase the profitability of Lindon Co Ltd

b) When considering how working capital is financed it is useful to divide assets into non- current assets, permanent current assets and fluctuating current assets. Permanent current assets represent the core level of working capital investment needed to support a given level of sales. As sales increase this core level of working capital also increases. Fluctuating current assets reprensent the changes in working capital that arise in the normal course of business operations, for example when some accounts receivable are settled later than expected or when inventory moves more slowly than planned.

The matching principle suggest that long term finance should be used for long term assets. Under a matching working capital funding policy therefore long term finance is used for both permanent current assets and non -current assets. Short term finance is used to cover the short term changes in current assets represented by fluctuating current assets.
Long term debt has a higher cost than short term debt in normal circumstances for example because lenders require higher compensation for lending for longer periods or because the risk of default increases with longer lending periods. However long term debt is more secure from a company point of view than short term debt, since provided interest payments are made when due and the requirements of restrictive covenants are met, terms are fixed to maturity. Short term debt is riskier than long term debt because for example an overdraft is repayable on demand and short term debt may be renewed on less favourable terms.

A conservative working capital funding policy will use a higher proportion of long term finance than a matching policy, thereby financing some of the fluctuating current assets from a long term source. This will be less risky and less profitable than a matching policy and will give rise to occasional short term cash surpluses.

An aggressive working capital funding policy will use a lower proportion of long-term finance than a matching policy, financing some of the permanent current assets from a shorter source such as an overdraft. This will be more risky but more profitable than a matching policy.

Other factors that influence a working capital funding policy include management attitude to risk, previous funding decisions and organization size. Management attitude to risk will determine wether there is a preference for a conservative an aggressive or a matching policy. Previous funding decisions will determine the current position being considered in policy formulation. The size of the organization will influence its ability to access different sources of finance. A small company for example may be forced to adopt an aggressive working capital funding policy because it is unable to raise additional long term finance, wether equity or debt.

SOLUTION FOUR

(a)

Computation of capital at 31st December 2017

ASSETS	Km
Property plant and Equipment	12
Inventory	4.2
Cash	4.8
Prepaid expenses	7.8
Accrued income	2.5
Certificates of deposit	12
Total Assets	**43.3**
LIABILITIES	
Accrued Expenses	7.6
Prepaid income	2.0
Government bonds	3.2
Bank loan	1.0
Redeemable preference shares	5.8
Capital and reserves	
Retained earnings	9.3
Ordinary Share Capital	14.4
Total equity and liabilities	**43.3**

IBENGA PLC FORECAST STATEMENT OF FINANCIAL POSITION
AS AT 31ST December 2018.

ASSETS	
Non Current Assets	
Property plant & Equipment (12-4)	8
Inventory	4.2
Cash (4.8-2.7+5+2)	9.1
Prepaid expense (7.8-2.34)	5.46
Accrued income (2.5 + 0.5)	3.0
Certificates of deposit (12-2)	10
ASSETS	**39.76**
LIABILITIES	
Accrued Expenses	7.6
Prepaid Income (2-1)	1.0

Government bonds	0.5
Bank Loan	1.0
Redeemable preference shares (5.8 +5)	10.8
Capital and reserves	
Retained earnings (9.3 + 1 +0.5-2.34-4)	4.46
Ordinary Share Capital	14.4
Total Equity & Liabilities	**39.76**

Change in Value of Equity = Forecast Equity (4.46+14.4) – (9.3+14.4)

= 18.86 – 23.7 = <u>K (4.84) m</u>

(b)

I) Government Policy

The climate of government policy has been increasingly sympathetic to free trade, though producer special interests and popular discontent continue to hamper it.

Technical standardization in both manufacturing and services has also encouraged increased trade, while some governments have been active in seeking foreign direct investment.

II) Global competition

Competitive forces seem to have had global effects:

a. Existing high levels of international trade encourage further interaction between competitors as a matter of routine.
b. The existence of global competitors and global customers in an industry prompts purely national firms to start trading globally so as to be able to compete on an even footing.

SOLUTION FIVE

(a) A key financial objective for a stock exchange listed company like Reit Zambia is to maximise the wealth of shareholders. This objective can also be translated as maximising the company's total shareholder return, which is the increase in the share price or capital gain and dividends paid. Shareholder wealth is also achieved through maximization of the present value of future dividends.

The market value (market capitalisation) of Reit Zambia is equal to number of issued shares multiplied by share price. Maximising the company's share price is therefore the same as maximising the equity market value of the company. Maximising the market value of a company can be achieved by maximising its cash income and the expected growth in that income, while minimising its cost of capital. Listed companies therefore have maximising net cash income as a key financial objective.

Profits may not necessarily represent money that investors can use to consume. Profits may be maximized in the short-run by manipulation of accounting profits but this is not sustainable in the long-run. They may therefore not be the best measure of a company's performance.

Wealth is what needs to be maximized. At the same time firms may also have other stakeholders that may need to be considered for the long-term sustainability of the business. The wealth of shareholders comes from dividends received and capital gains from increases in the market value of shares. This measure is called the total shareholder return.

Listed companies are constrained by budgets, since they need to control the use of their limited cash resources. A common key financial objective for listed companies is therefore to spend within their budgets.

Profit maximisation requires the application of economy, effectiveness and efficiency or the three Es or value for money. Economy refers to achieving a certain level of outputs with at lowest cost. Efficiency is the relationship between inputs and outputs. Effectiveness is the extent to which organisational goals are achieved.

A definition of the three Es clearly shows that a listed company like Reit Zambia also seeks to achieve value for money in their business operations. A listed company has a profit motive, and so VFM for a listed company can be related to performance measures linked to maximising the equity market value of the company.

In managing their performance, listed companies can use accounting ratios such as a target return on capital employed, a target level of income per employee, or a target current ratio.

(b)

	Market value
Prior charge capital includes:	K' million
20% bank loan @ book value	5
12% preference shares @ K10 per K15	20
Total	25
Equity:	
20 million Ordinary shares @ K7.50	150
Grand Total	175

Gearing = (25/25+150) = <u>14.3%</u>

(c) Compute weighted average cost of capital

Ke = Rf + (Rm-Rf)β = 14 +1.3 (10) = <u>27%</u>

Cost of bank loan = 20% (1- 0.30) = <u>14%</u>

Cost of preference shares = [1.80/10 X 100] = <u>18%</u>

WACC = (27% X 150) + (14% X 5) + (18% X 20)/175)) = <u>25.6%</u>

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.1: ADVANCED FINANCIAL REPORTING

MONDAY 11 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

SECTION A
This question is compulsory and must be attempted

QUESTION ONE

Lanata Plc was formed more than 40 years ago. Lanata Plc and its subsidiaries deal in various goods ranging from cement, auto spares, hardware to groceries. The companies have branches in 10 countries on the Continent of Africa.

Lanata Plc has a policy of not disclosing information relating to their several operating segments and loans between Lanata Plc and its subsidiaries as well as loans to directors. The group finance director believes the policy helps the Lanata Plc group to maintain and protect its competitive advantage.

You are the group accountant of Lanata Plc. The following draft statements of financial position relate to Lanata Plc, Dala Plc and Matana Plc as at 30 September 2017.

	Lanata Plc	Dala Plc	Matana Plc
	K'000	**K'000**	**K'000**
Assets			
Non-current assets			
Property, plant and equipment	1,176.70	1,050.00	630.00
Investments in:			
Dala Plc	365.00	-	-
Matana Plc	107.50	430.00	-
	1,649.20	1,480.00	630.00
Current assets	973.30	546.00	483.00
Total Assets	**2,622.50**	**2,026.00**	**1,113.00**
Equity and liabilities			
Equity			
Equity shares of K0.50 each	483.00	399.00	378.00
Other components of equity	220.50	178.50	157.50
Retained earnings	312.50	(52.50)	126.00
Total Equity	**1,016.00**	**525.00**	**661.50**
Liabilities			
Non-current liabilities	1 260.00	1 096.50	357.00
Current liabilities	346.50	404.50	94.50
Total Liabilities	**1,606.50**	**1,501.00**	**451.50**
Total equity and liabilities	**2,622.50**	**2,026.00**	**1,113.00**

The following information is relevant in the preparation of group accounts.

1. Lanata Plc acquired 80% of Dala Plc's equity shares and 15% of Matana Plc's equity shares on 1 October 2013 for a cash consideration of K365,000 and K107,500 respectively. The fair value of Dala Plc's identifiable net assets stood at K449,000. On the same date, other components of equity and retained earnings were K31,500 and K10,500 respectively. The excess in fair value relates to non – depreciable land.

2. Dala Plc acquired 60% of Matana Plc's equity shares on 30 September 2014 for a cash consideration of K430,000. The fair values of identifiable net assets stood at K488,200 and K469,200 on 30 September 2014 and 1 October 2013 respectively. On 30 September 2014, other components of equity and retained earnings were K94,500 and K35,700 respectively. Other components of equity and retained earnings were K80,500 and K30,700 respectively on 1 October 2013. The deficit in fair values relates to an item of plant. The plant had an economic useful life of five (5) years on 1 October 2013. The fair value of Lanata's 15 % holding in Matana at 30 September 2014 was still K107 500.

3. On 30 September 2017 Lanata Plc disposed all of its 100% equity interests in Nola Plc for a cash consideration of K190,000. Lanata Plc acquired 100% equity interests in Nola Plc on 1 October 2009 for cash consideration of K182,000. The fair value of Nola Plc's identifiable net assets stood at K240,000 and K180,000 on 30 September 2017 and 1 October 2009 respectively. Goodwill had not been impaired up to the date of disposal. This transaction was correctly recorded in Lanata Plc's individual books.

4. Dala Plc and Matana Plc have not issued any additional shares since their respective acquisition dates. Further, fair value adjustments referred to in (1) and (2) above have not been incorporated in the above statements of financial position.

5. Investments in Dala Plc and Matana Plc were classified as financial assets through other comprehensive income in accordance with IFRS9 '*Financial instruments*'. The investments are shown in the statement of financial position of

Lanata Plc at cost. This is because changes in their respective fair values were insignificant.

6. Goodwill in Dala Plc and Matana Plc has not been impaired as at 30 September 2017.

7. It is group policy to value non-controlling interests using proportion of net assets method.

Required:

(a) Calculate profit on disposal of 100% equity interests in Nola Plc included in individual books of Lanata Plc as at 30 September 2017. (1 mark)

(b) Prepare the consolidated statement of financial position of Lanata Plc group as at 30 September 2017. (29 marks)

(c) Evaluate any ethical and professional issues arising from Lanata Plc's policy of not disclosing information relating to their several operating segments and loans between Lanata Plc and its subsidiaries and directors. (10 marks)

[Total: 40 Marks]

SECTION B

Attempt only three (3) questions from this section

<u>QUESTION TWO</u>

Lute plc is a manufacturing entity with extensive operations throughout Zambia, although its head office is located in Lusaka. The company was incorporated several years ago and has grown to the extent of being listed on the Lusaka Stock Exchange.

The directors of Lute plc are preparing financial statements for the reporting year to 31 December 2017 and are considering the accounting treatment of the following transactions:

Transaction One

Lute entered into a lease contract with another entity, Mwenya Ltd, a property investment company in which Lute is renting a property from Mwenya Ltd. The lease has a primary duration of 3 years commencing on 1 January 2017 but subject to an extension for a further 2 years at Lute's option. Lute management have indicated that the lease is required till such a time when the entity constructs their own building. It is unlikely that Lute plc will construct their own building within the next 10 years due to scarcity of development land in Lusaka.

The lease requires Lute plc to pay rentals of K2.4m annually in arrears. A security deposit of K0.6m refundable at end of the lease was paid at inception of the lease. Further, Lute plc incurred legal costs in arranging the lease contract amounting to K0.1m. Lute is also required to pay 10% of the agreed rent as a charge for cleaning and maintenance of the premises. Lute's pre-tax incremental borrowing rate is 10% and Lute's applicable income tax rate is 35%.

For income tax purposes, all lease rentals and other lease related costs are tax deductible.

(13 marks)

Transaction Two

On 20 October 2016, Lute plc entered an agreement with its 10 senior managers in which each manager would be issued with 100,000 K10 Lute plc equity shares upon remaining in employment with Lute plc over a three year period commencing 1 January 2017. The shares are issuable at the end of the three year period but must be held by the managers for at least two years in case any one of them wants to sell some or all of the shares. The fair value of each Lute plc K10 equity share granted to the managers was valued at K11.20 at 20 October 2016 (less than the market price because of the restricted right to sell the shares in the two years after meeting the performance conditions). However, the managers can opt to be paid cash instead of being issued with shares. Under the cash alternative, each manager would receive cash equivalent to the market value of 80,000 K10 Lute plc equity shares on the date of settlement.

Each Lute plc K10 equity share has been trading as follows:

Date	market price (K)
20 October 2016	12.3
1 January 2017	13.5
31 December 2017	16.5

One manager left during the year to 31 December 2017 and only one more manager is expected to leave over the next two years.

(7 marks)

Required:

Advise the directors of Lute plc on the accounting treatment of the above transactions in accordance with IFRS. In respect of transaction one *only*, you must also include the deferred tax implications as part of your advice.

[Total: 20 Marks]

QUESTION THREE

Zala Plc was formed 25 years ago. The company has grown steadily over the years organically and through acquisition of other companies in various industries. The directors of Zala Plc need your advice on the accounting treatment of the following transactions in their consolidated financial statements for the year to 30 September 2017.

Transaction One

Zala Plc acquired 16% of the equity interests in Batu Plc at a cost of K25,000 on 1 July 2017. The company was given two seats on the board of directors. Zala Plc took part in coming up with the dividend policy of Batu Plc. This policy will be implemented on 1 October 2017. The 16% investment in Batu Plc was measured to fair value at 30 September 2017 at K23,000. Batu Plc made profit after tax of K80,000 for the year ended 30 September 2017. The company will make its first dividends' payments on 30 September 2018.

Zala Plc has no intention of disposing off its investment in Batu Plc.

The directors of Zala Plc need your advice on the accounting treatment of Batu Plc in their consolidated financial statements for the year to 30 September 2017. (10 marks)

Transaction Two

The Board of Directors of Zala Plc passed a resolution on 1 August 2017 to dispose off 75% of their 100% equity investment in Kanu Plc in a single transaction. The Board also formed a marketing committee to oversee a successful disposal of the equity shares. The committee has been tasked with the responsibility of looking for a suitable buyer and ensuring that the shares are sold at a reasonable price. Disposal of 75% equity interests in Kanu Plc is expected to be completed by 31 July 2018.

Zala Plc will not have significant influence in Kanu Plc after disposing of 75% equity interests in Kanu Plc.

The directors of Zala Plc seek advice on how to treat Kanu Plc in their consolidated financial statements for the year to 30 September 2017. (10 marks)

Required
Advise the directors of Zala Plc on their various requests above. **(Your answer should include relevant calculations where applicable).**

[Total: 20 Marks]

QUESTION FOUR

Vitendwe Wealth Creators Plc (VWC plc) is an investment bank that offers its services to both corporate and individual clients. In addition to offering investments products to its customers, the bank also makes investments in various products available in both the money and capital markets. These activities result in substantial exposure to different forms of financial risk by VWC plc.

In preparing financial statements for the year to 31 December 2017, the directors of VWC plc would like advice on how the following matters must be accounted for:

On 1 January 2017, VWC plc issued one million K100, 10% loan notes at a premium of 3.24%. Issue costs amounted to 1% of the gross issue proceeds. The notes have an original term to maturity of four years and are redeemable on maturity at par. The specific market interest rate on the notes (the interest rate that reflects VWC's credit rating) was 9% on 1 January 2017 whilst the general market interest rate for this type of instrument was 12% on the same date. VWC issued the notes to finance the cost of investments which have been classified as Fair Value Though Profit or Loss (FVTPL) assets. Consequently, in rectifying a potential measurement mismatch between those assets and the loan notes, VWC plc has designated the loan notes as a FVTPL liability. On 31 December 2017, the loan notes were trading at K95.06 each whilst the general market interest rate was 13%.

(12 marks)

On 1 January 2017, VWC made a loan of K200 million to Munaka Plc, a mining entity. The loan attracts interest at 11% p.a on principal only (overdue interest does not attract interest). Interest accruing in each period is due for settlement on 31 December each year over the term to maturity. All principal is due for settlement on 31 December 2020. VWC had recognised an initial loss allowance on the loan asset on 1 January 2017 in accordance with IFRS 9 Financial Instruments based on an assessment that there was a probability of 15% that the counterparty would default on the first year's interest payment. The assumption was that any default during the first year would lead to a delay in all loan cash flows over the term to maturity by 6 months. The only other possibility was that the counterparty would meet all payments in full on the due dates. At 31 December 2017, Munaka plc has actually defaulted on the interest payment due on that date.

VWC plc now assesses that though the first interest payment is likely to be paid in full on 31 March 2018, only 70% of the remaining cash flows are likely to be received due to the deterioration in Munaka plc's credit rating. However the cash flows will be received on their due dates.

(8 marks)

Required:
Advise the directors of Vitendwe Wealth Creators Plc on how to account for the above matters in finalising the entity's financial statements for the year to 31 December 2017 in accordance with relevant IFRSs.

[Total: 20 Marks]

QUESTION FIVE

Macha Plc deals in groceries and perishable goods. It was formed 8 years ago. The following are the financial statements of Macha Plc for the year to 31 August 2017 and 31 August 2016.

Statement of Profit or loss and other comprehensive income for the year ended 31 August:

	2017 K'000	2016 K'000
Revenue	1 300.00	2 000.00
Cost of sales	(500.00)	(600.00)
Gross profit	800.00	1 400.00
Other income	40.00	50.00
Distribution cost	(250.00)	(350.00)
Administrative cost	(450.00)	(600.00)
Finance cost	(125.00)	(65.00)
Profit before tax	15.00	435.00
Taxation	(6.00)	(174.00)
Profit for the period	9.00	261.00
Other comprehensive income		
Revaluation gain	120.00	-
Net actuarial gain	35.00	25.00
Total comprehensive Income	44.00	286.00

Statement of Financial Position as at 31 August:

	2017	2016
	K'000	K'000
Assets		
Non-current assets		
Property, plant and equipment	1 226.00	1 050.00
Investment property	458.00	330.00
Other intangible assets	252.00	210.00
Financial assets	47.00	36.00
	1 983.00	1 626.00
Current assets		
Inventory	110.00	100.00
Trade Receivable	150.00	156.00
Cash & cash equivalents	-	23.00
	260.00	279.00
Total Assets	**2 243.00**	**1 905.00**
Equity and liabilities		
Equity		
Equity shares of K0.50 each	320.00	210.00
Other components of equity	230.00	51.00
Retained earnings	196.00	237.00
Total Equity	**746.00**	**498.00**
Liabilities		
Non-current liabilities		
Employee benefits	260.00	308.00
Deferred Tax	105.00	130.00
20% Loan Note	712.00	520.00
	1 077.00	958.00
Current liabilities		
Trade payables	130.00	134.00
Taxation	101.00	250.00
Finance cost payable	125.00	65.00
Cash & cash equivalents	64.00	-
	420.00	449.00
Total Liabilities	**1 497.00**	**1 407.00**
Total equity and liabities	**2 243.00**	**1 905.00**

Additional information:

1. Macha Plc revalued its building on 31 August 2017 for the first time. This was as a consequence of changing its policy from cost model to revaluation model of IAS 16'*Property, plant and equipment*'.

2. Macha Plc paid out total dividends of K50,000 in the year to 31 August 2017 and K24,000 in the year to 31 August 2016.

3. Non – financial information as at 31 August:

	2017	2016
Number of employees	800	1,200
Number of outlets	10	10
Number of competitors	100	60
Number of Macha Plc's customers	4million	5million
Population in towns where Macha Plc has presence	10million	9million

4. Macha Plc issued additional equity shares on 1 September 2016.

Required:

Write a report to the director that evaluates the position and performance of Macha Plc for the year to 31 August 2017. **(Your answer should include relevant calculations).**

[Total: 20 Marks]

END OF PAPER

CA 3.1 ADVANCED FINANCIAL REPORTING SOLUTIONS

SOLUTION ONE

a) **Calculation of profit on disposal of 100% in Nola Plc**

	K'000	Marks
Consideration received	190	0.5
Cost of investment sold	182	0.5
Profit	**8**	

b) **Lanata Plc Group**
Consolidated Statement of Financial Position as at 30 September 2017

	K'000
Assets	
Non-current assets	
Property, plant andequipment (1,176.7+1,050+630+8W1-20W1+15W1)	2 859.70
Goodwill **(W1)**	149.73
	3 009.43
Current asset (973.30+546+483)	2 002.30
Total Assets	**5 011.73**
Equity and liabilities	
Equity	
Equity shares of K0.50 each	483.00
Other components of equity (W3)	377.79
Retained earnings (W4)	328.44
	1 189.23
Non - controlling interests (W5)	263.50
Total Equity	**1 452.73**
Liabilities	
Non-current	
Non-current liabilities (1,260+1,096.50+357)	2 713.50
Current liabilities (346.50+404.50+94.50)	845.50
Total Liabilities	**3 559.00**
Total equity and liabilities	**5 011.73**

c) Ethical Issues

The IASB Conceptual Framework states that 'the objective of general purpose financial reporting is to provide information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about utilising resources to the entity'. Further, to make the financial information useful, two fundamental qualitative characteristic have to be met:

- **Relevance**. This is met when the information has a predictive value or confirmatory value or both, or it is capable of influencing the decision of the user, if omitted. The nature and materiality of information is vitally important here.
- **Faithful representation**. This is met when the information is complete, neutral and free from error. The information must include all necessary descriptions and explanation to support the items recognised in the financial statements. It must not be manipulated in any way in order to influence the decisions of users.

IFRS 8'*Operating segments*' requires an entity to disclose information relating to its reportable operating segment separately. Not doing so makes users of financial statements unable to:

- Better understand the entity's past performance
- Better assess the entity's risks and returns
- Ultimately make an informed judgement about an entity as a whole.

This is so because the users of financial statements will not be able to tell the various markets that Lanata Plc and its subsidiaries are operating in and their associated risks simply by looking at the statement of profit or loss and statement of financial position. More information has to be provided in the form of disclosures to the financial statements.

IAS 24'*Related party disclosures*' requires disclosures about transactions and outstanding balances with an entity's related parties. The standard further states that a person or a close member of that person's family is related to a reporting entity if that person is a subsidiary or is a member of the key management personnel of the reporting entity or of a parent of the reporting entity; and directors of an entity fall in this category. The objective of IAS 24 is to ensure that an entity's financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances with such parties. This is because related party transactions are rarely done at arm's length. In most cases related party transactions are designed to benefit the parties involved at the expense of the company.

Non – disclosure of related party transactions may make the users of financial to conclude that all the transactions accounted for involved third parties.

Lanata Plc is of course allowed to use judgement when coming up with accounting policies but it should not conflict with the requirements of applicable accounting standards. Non – disclosure may be indicative of manipulation of financial statement as the entity will only show what it wants investors and potential investors to use as opposed to what it is supposed to show.

Lanata Plc should ensure that its financial statements are useful for making economic decisions by including all the necessary disclosures, bearing in mind their materiality.

WORKINGS

W1 Goodwill

	K'000	K'000
Dala Plc		
Cost of investment		365.00
Non - controlling interest at acquisition		89.80
Fair value of net assets acquired:		
Equity shares	399.00	
Other components of equity	31.50	
Retained earnings	10.50	
Fair value adjustment **(bal. figure)**	8.00	
Fair value of net assets acquired		449.00
Goodwill		**5.80**
Less: Impairment loss		-
		5.80
Matana Plc		
Cost of investment: Direct 15%		107.50
Indirect (80% x 430)		344.00
Non - controlling interest at acquisition		180.63
Fair value of net assets acquired:		
Equity shares	378.00	
Other components of equity	94.50	
Retained earnings	35.70	
Fair value adjustment **(bal. figure)**	(20.00)	
Fair value of net assets acquired		488.20
Goodwill		**143.93**
Less: Impairment		**-**
		143.93
Total net goodwill		**149.73**

Excess depreciation of fair value adjustment:		
(20 x 3/4yrs)		**15.00**

W2 Calculation of Loss - Disposal of 100% in Nola Plc

	K'000
Consideration received	190.00
Less: FV of net assets at disposal	(240.00)
Goodwill (182 - 180)	(2.00)
Loss on disposal	**52.00**

W3 Other components of equity

	K'000
Lanata Plc	220.50
Share of post acquisition in:	
Dala Plc [80% x (178.5-31.5)]	117.60
Matana Plc [63% x (157.5-94.5)]	39.69
	377.79

W4 Retained earnings

	K'000
Lanata Plc	312.50
Share of post acquisition in:	
Dala Plc [80% x (-52.5-10.5)]	(50.40)
Matana Plc [63% x (126-35.7+15W1)]	66.34
Nola Plc 100% x (240-180)	60.00
Reversal of profit **part (a)**	(8.00)
Loss on disposal W2	**(52.00)**
	328.44

W5 Non - controlling interests

	K'000	K'000
Dala Plc		
At acquisition	89.80	
Less: Share of investment in Matana Plc (20% x 430)	(86.00)	
Share of post acquisition:		
Other component of equity (20% x 147)	29.40	
Retained earnings (20% x -63)	(12.60)	
		20.60

Matana Plc		
At acquisition	180.63	
Share of post acquisition:		
Other component of equity (37% x 63)	23.31	
Retained earnings (37% x 105.3)	38.96	
	-	
		242.90
Total		**263.50**

SOLUTION TWO

Transction one

The lease of property by Lute plc must primarily be accounted for under IFRS 16. However, the contract appears to be composed of two elements, the lease of property and the contract for cleaning services. In that case, IFRS requires separation of the two elements and each element accounted for separately.

The contract for cleaning services will be accounted for by charging a periodic expense of 10% of the total rental ie, 10%XK2.4m=K0.24m as an expense each year over the duration of the contract. Therefore in P/L for the year to 31.12.2017, Lute plc must recognise an expense of K0.24m for cleaning services.

In accounting for the lease contract, among other things, Lute plc should determine the lease term as the primary part of the lease (3 year) plus any extension to the extent that it is probable that the lease will be extended. In this case, Lute plc will most likely extend the lease to a total duration of five years as it will not have acquired their own property at end of the first three years.

IFRS 16 requires that all lease contracts must be capitalised with limited exemptions. In accounting for the this lease contract, Lute plc will therefore recognise and account for the Right-of-Use Asset acquired under lease and a Lease Liability as follows:

a) Initially on 1.1..2017;

1. Recognise the lease liability at the present value of future lease cashflows discounted at Lute's incremental borrowing cost as follows:

Date		cash flow	PV factor @10%	K'm
31.12.2017	(90%XK2.4m)	2.40	1.1^-1	2.18
31.12.2018		2.40	1.1^-2	1.98

31.12.2019		2.40	1.1^-3	1.80
31.12.2020		2.40	1.1^-4	1.64
31.12.2021	(2.40-0.6(note))	1.80	1.1^-5	1.12
Lease liability at 1.1.2017				8.72

2. Recognise the Right-of-Use Asset at an amount equal to the initial lease liability and any cash paid to enter the lease as follows:

	K'm
Initial Lease liability	8.72
Refundable deposit	0.60
Transaction Costs	0.10
Initial carrying amount of Right of Use Asset	9.42

b) Subsequent accounting will be as follows:

1. The lease liability must be measured at amortised cost using the pre tax incremental borrowing cost as follows (first two years):

Period (y/e 31.12)	opening liability K'm	finance cost @10% K'm	cash flow K'm	closing liability K'm
2017	8.72	0.87	(2.4)	7.19
2018	7.19	0.72	(2.4)	5.51

Based on the above, Lute must report a finance cost of K0.87m in P/L for the year to 31.12.2017 in respect of the lease liability. In the SFP, a total lease liability of K7.19m will be reported at 31.12.2017 split as follows:

		K'm
Non-current liability (amount still outstanding after one year)		5.51
Current liabilities	(7.19-5.51)	1.68

2. The right of Use Asset must be amortised to P/L over the shorter of the lease term and its useful economic life, on a straight line basis. This gives an amortisation charge to P/L for the year to 31.12.2017 of K1.88m (ie 9.42/5). The Carrying amount of the Right-of-Use Asset at 31.12.2017 will be K7.54m (ie 9.42-1.88X1). The Right-of-Use Asset will be presented in non-current assets as a separate item or as a matter of policy within PPE.

In accounting for any deferred tax amounts in respect the above contract, Lute plc must first determine the temporary differences on the assets and liabilities arising from the contract in accordance with IAS 12, Income taxes. A temporary difference is any difference between the accounting base amounts and the tax base amounts in respect of the assets and liabilities arising from the lease contract to the extent that these have an effect on future income tax liabilities.

The accounting base amounts in respect of the Right of Use Asset and the Lease Liability at 31.12.2017 are K7.54m and K7.19m respectively. The tax base amounts are based on the tax treatment of the lease contract. In this jurisdiction, tax law does not recognise lease assets and liabilities though the amounts giving rise to the assets and liabilities have tax effect (they are deductible). Therefore, the tax base amounts for the Right-of-Use Asset and the Lease liability must be nil and any differences arising with the accounting base are temporary diferences.

The deferred tax amounts to recognise in the financial statements for the year 31.12.2017 are therefore as follows:

Temporary Differences at 31.12.2017:

Item	Accounting Base	Tax Base	Difference
	K'm	K'm	K'm
Right of Use Asset	7.54	0.00	7.54 taxable
Lease Liability	7.19	0.00	7.19 tax deductible
Net Taxable temporary difference		(7.54-7.19)	0.35

At 31.12.2016, there were no temporary differences relating to the lease (lease did not exist).

The deferred tax liability at 31.12.2017 is therefore:

Temp. difference X Tax rate = K0.35X35% = K0.12m

The deferred tax expense to charge in SPLOCI for the year to 31.12.2017 is computed as follows:

	K'm
Deferred tax liability at 31.12.2017	0.12
Less opening deferred tax asset or liability	-
Total deferred tax expense for y/e 31.12.2017	0.12
Less expense to charge in OCI (ie relating to OCI)	-
Deferred tax expense to charge in P/L	0.12

Transaction two

This transaction involves obtaining employee services for which Lute plc will settle by either issuing an equity instrument or by paying an amount of cash based on the fair value of an equity instrument. It therefore meets the definition of share based payments and falls within the scope of IFRS 2 *Share based payments*.

In accounting for share based payments, IFRS 2 requires that the nature of the transaction must be established, that is whether cash settled or equity settled. In this case, employees have an option on the basis of settlement. The transaction therefore has two elements, equity element (settlement by issuing shares) and a liability element (the cash alternative). Where a SBP (share based payment) has both equity and liability components, IFRS 2 requires a split into the two elements at initial recognition. For purposes of the split, the total value of the transaction must be based on classification as equity settled. Therefore on 1.1.2017, Lute plc must initially measure the transaction as follows:

	K'm
Total value of transaction if classified as equity settled (10X100,000 X K11.2 per share)	11.2
Less total value if classified as cash settled, ie liability component (10X80,000 X K12.3 per share)	(9.84)
Fair value of the share option (equity component)	1.36

(Notes: 1.36 is from workings above, and Market value of 16.50 is the share price on cash settlement)
Lute plc must recognise the expense arising from each component over the performance period of three years commencing 1.1.2017 based on the number of managers expected to meet performance conditions. Whilst the total value of the equity component for the 10 managers will not be subject to remeasurement, the liability component will subsequently be subject to remeasurement based on the market price of the shares each reporting date. Both elements will be subject to adjustment based on the number of managers who have actually left to date and those expected to leave over the remainder of the performance period.

For the year to 31.12.2017, the following amounts will be recognised and reported in respect of:

1. The equity component:

	K'm
SBP reserve balance at 31.12.2017 (1.36X1/3X(10-2)/10)	0.36
Less opening SBP reserve at 1.1.2017	-
SBP expense to charge in P/L for y/e 31.12.2017	0.36

2. The liability component:

	K'm
SBP liability at 31.12.2017 (80,000X(10-2)X16.5X1/3	3.52
Less opening SPB liability at 1.1.2017	-

SBP expense to charge in P/L for y/e 31.12.2017	3.52

In summary, Lute plc will charge a total SBP expense in P/L for the year ended 31.12.2017 of K3.88 million (ie 0.36+3.52) and report within non current liabilities (two years before settlement) a SPB liability of K3.52 million. The SBP reserve balance of K0.36 million at 31.12.2017 must be reported within equity in the statement of financial position.

SOLUTION THREE

Transaction One

The accounting treatment of Batu Plc in the consolidated financial statements of Zala Plc will depend on whether Zala Plc has significant influence or not. IAS 28'*Investments in associates and joint ventures*' states that an entity is presumed to have significant influence when it holds 20% or more of the equity interests in another entity directly or through subsidiaries unless it can be clearly demonstrated that this is not the case. If the holding is less than 20% the entity presumably, does not have significant influence unless it can be clear demonstrated otherwise. In addition, the existence of significant influence by an entity is usually evidenced in one or more of the following ways:

- representation on the board of directors or equivalent governing body of the investee;
- participation in the policy-making process, including participation in decisions about dividends or other distributions;
- material transactions between the entity and the investee;
- interchange of managerial personnel; or
- provision of essential technical information

Zala Plc has 16% equity interests in Batu Plc. This points to the company not having significant influence in Batu Plc. Zala Plc has, however, representation on Batu Plc's board by having two seats. Further, it participated in coming up with the dividend policy of Batu Plc. These two points show that Zala Plc has significant influence in Batu Plc despite having less than 20% equity interests in the company. Batu Plc should therefore be treated as an associate in the consolidated financial statements of Zala Plc for the year ended 30 September 2017. Equity method of accounting should be used. It should be shown in the consolidated statement of financial position at K28,200 **W1**. Zala Plc should recognise its share of profit after tax of Batu Plc amounting to K3,200 **W1** in its consolidated statement of profit or loss for the year ended 30 September 2017. (Think of the significance of K 23000 in the question paper in line with impairment of assets)

Transaction Two

IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* states that for an asset or disposal group as is in the case of Kanu Plc to be classified as held for sale, the following conditions must be met:

- management is committed to a plan to sell the assets
- the asset is available for immediate sale
- an active programme to locate a buyer has been initiated
- the sale is highly probable, within 12 months of classification as held for sale (subject to limited exceptions)
- the asset is being actively marketed for sale at a sales price reasonable in relation to its fair value
- actions required to complete the plan indicate that it is unlikely that the plan will be significantly changed or withdrawn

The assets need to be disposed of through sale. Therefore, operations that are expected to be wound down or abandoned would not meet the definition of assets held for sale (but may be classified as discontinued operations once abandoned).

Kanu Plc has met the conditions of being classified as a disposal group in accordance with IFRS 5. This is because management is committed to a plan of sale by forming a marketing committee to oversee the sale. In addition, the selling price is likely to be reasonable making the sale highly probable to take place. Lastly, the sale is expected to happen within 12 months that is by 31 July 2018. Zala Plc should therefore classify all of the assets and liabilities of Kanu Plc as held for sale, even if it will retain a non-controlling interest in its former subsidiary after the sale.

Immediately before the initial classification of the asset as held for sale, the carrying amount of the asset will be measured in accordance with applicable IFRSs. Resulting adjustments are also recognised in accordance with applicable IFRSs.

After classification as held for sale*.* Kanu Plc, being a disposal group that is classified as held for sale is measured at the lower of carrying amount and fair value less costs to sell.

Impairment of Kanu Plc must be considered both at the time of classification as held for sale and subsequently:

- *At the time of classification as held for sale.* Immediately prior to classifying it as a disposal group held for sale, impairment is measured and recognised in accordance with the applicable IFRSs (generally IAS 16 *Property, Plant and Equipment*, IAS 36 *Impairment of Assets*, IAS 38 *Intangible Assets*, and IAS 39 *Financial Instruments: Recognition and Measurement*/IFRS 9 *Financial Instruments*). Any impairment loss is recognised in profit or loss unless the asset in the disposal group had been measured at revalued amount under IAS 16 or IAS 38, in which case the impairment is treated as a revaluation decrease.

- *After classification as held for sale.* Calculate any impairment loss based on the difference between the adjusted carrying amounts of the asset/disposal group and fair value less costs to sell. Any impairment loss that arises by using the measurement principles in IFRS 5 must be recognised in profit or loss, even for assets previously carried at revalued amounts, which on actual sale become realised. (First and second bullets: same date? or after some months: confirm logic.)

- *Assets carried at fair value prior to initial classification.* For such assets, the requirement to deduct costs to sell from fair value may result in an immediate charge to profit or loss.
- *Subsequent increases in fair value.* A gain for any subsequent increase in fair value less costs to sell of an asset can be recognised in the profit or loss to the extent that it is not in excess of the cumulative impairment loss that has been recognised in accordance with IFRS 5 or previously recognised in accordance with IAS 36.
- *No depreciation.* Non-current assets or disposal groups that are classified as held for sale are not depreciated.

The assets and liabilities included within Kanu Plc, a disposal group classified as held for sale, must be presented separately on the face of the consolidated statement of financial position as at 30 September 2017.

Workings

W1 Investment in Batu Plc

	K'000
Cost of investment	25.00
Share of post acquisition retained earnings (16% x 80,000 x 3/12)	3.20
	28.20

(in relation to K 23 000, do you see a possible impairment?)

SOLUTION FOUR

Issue of 10% loan notes:

The loan notes will be accounted for as a financial liability in accordance with IAS 32 Financial Instruments – Presentation and IFRS 9 Financial Instruments.

The loan notes have been classified as a FVTPL liability. Therefore they must initially be measured at their gross fair value of K103.24 million without offsetting the issue costs. Issue costs must be charged in P/L for the year to 31.12.2017.

Subsequently, the notes must be remeasured at each reporting date to their fair value. Although remeasurement gains and losses must primarily be reported in P/L for the period, any gains or losses arising from changes in the credit rating of VWC plc must be reported in OCI (items that are not reclassified in P/L). At 31.12.2017, the loan notes liability must be reported in the SFP at their fair value of K95.06 million (ie 95.06X1 million). Remeasurement gains or losses during the year to 31.12.2017 arise as follows:

	K'm
Fair value at 31.12.2017	95.06
Less carrying amount before remeasurement (working below)	(102.53)
Total remeasurement gain for y/e 31.12.2017(decrease in liability)	(7.47)
Gain to report in P/L (working below)	1.91
Gain to report in OCI (balance)	5.56

The net amount to report in P/L for the year to 31.12.2017 will be made up as follows:

		K'm
Transaction costs on entering the contract	(1%X103.24)	(1.03)
Finance costs on liability during the year	9%X103.24	(9.29)
Remeasurement gain to report in P/L (working below)		1.91
Net Finance Costs		(8.41)

Workings:

i) Carrying amount of the loan notes before remeasurement at 31.12.2017

		K'm
Opening liability at 1.1.2017		103.24
Finance cost for the year	(9%X103.24)	9.29
Less interest paid	(K100X10%X1 million)	(10.0)
Liability at 31.12.2017 before remeasurement		102.53

ii) Remeasurement gain to report in P/L for the period

This is the remeasurement gain that would arise on the notes if VWC's credit rating at 31.12.2017 is the same as it was on 1.1.2017. At 1.1.2017, the interest rate specific to VWC was 75% of the general market interest rate (ie 9/12X100). If VWC's credit rating did not change, the interest rate specific to VWC at 31.12.2017 would be 9.75% (ie 75% of 13%). At a specific market interest rate of 9.75%, the loan note would have a fair value computed as follows:

Date (31.12)		Cash flow K'm	PV factor @9.75%	PV K'm
2018	(K100X10%X1 million)	10	1.0975^-1	9.11
2019	(K100X10%X1 million)	10	1.0975^-2	8.30
2020	(10+K100X1 million)	110	1.0975^-3	83.21
Expected fair value at 31.12.2017 without a change in credit rating				100.62

Therefore, the remeasurement gain if VWC's credit rating did not change would be:

	K'm
Expected fair value at 31.12.2017 without a change in credit rating	100.62
Less carrying amount at 31.12.2017 before remeasurement (above)	(102.53)
Remeasurement gain to report in P/L	1.91

Loan to Munaka Plc:

The loan made to Munaka appears to meet conditions for classification as an Amortised Cost item (contractual terms involve settlement through payment of interest and principal only and there no indication that VWC can sell the loan asset before maturity) in accordance with IFRS 9. Therefore, initially on 1.1.2017, the measure the asset at fair value including transaction costs, that is at K200 million. Subsequently the loan would be measured at amortised cost.

However, VWC must apply the IFRS 9 *expected credit losses model* in accounting for any losses that would arise on the loan asset as follows:

i) On 1.1.2017:
VWC must recognise a loss allowance on the loan asset equal to the difference between the gross carrying amount of the loan asset and the expected value of the possible present values of future cash flows receivable, discounted at the original effective interest rate as follows:

	K'm
Gross carrying amount of the loan asset at 1.1.2017	200
Less expected PV of future cash flows receivable (working below)	(198.47)
Initial loss allowance recognised at 1.1.2017	1.53

The initial loss allowance will be charged in P/L and credited to a separate loss allowance account, because it is not a permanent reduction in the amount of the loan asset.

Working – expected present value of future cash flows expected to be received as:

Possible PV of receipts	Probability	Expected value
K'm		K'm
189.83 (working below)	0.15	28.47
200 (ie, without default)	0.85	170.00
Expected Value of possible Present Values of future receipts from the loan asset		198.47

Working – Present value of receipts where probability of default in the first 12 months is at 15%.

Date		Cash flow K'm	PV factor at 11%	PV K'm
30.6.2018	11%X200	22	1.11^-1.5	18.81
30.6.2019		22	1.11^-2.5	16.95
30.6.2020		22	1.11^-3.5	15.27
30.6.2021	(22+200)	222	1.11^-4.5	138.80
Present Value of expected receipts following with default in first year				189.83

ii) Subsequently, at 31.12.2017, VWC must assess whether there is a change in the credit worthiness of the counterparty since inception of the loan. It appears that the credit worthiness has deteriorated and actually the loan must be impaired because other than the first interest cash flow, only 70% of the other contractual cash flows will be received. The asset is therefore in the stage three of the IFRS 9 impairment model. VWC must therefore recognise an impairment loss at 31.12.2017 equal to the difference between the Net carrying amount at that date and the present value of expected future cashflows discounted at the original effective interest rate of 11%as follows:

	K'm
Net carrying amount at 31.12.2017 (working below)	220.47
Less Present value of expected future cash flows (working below)	(161.43)
Impairement loss to recognise in P/L at 31.12.2017	59.04

The carrying amount of the loan asset to report in the SFP at 31.12.2017 must be the recoverable amount of K161.43 million.

Working - Net carrying amount at 31.122.2017:

		K'm
Gross carrying amount at 1.1.2017		200
Finance income for y/e 31.12.2017	11%X200	22
Less receipts in y/e 31.12.2017		-
Gross carrying amount at 31.12.2017		222
Less initial loss allowance		(1.53)
Net Carrying amount at 31.12.2017		220.47

Working - Present value of expected future cash flows at 31.12.2017:

Date		Cashflow K'm	PV factor @11%	PV K'm
31.3.2018		22.0	1.11^-0.25	21.43
31.12.2018	70%X22	15.4	1.11^-1	13.87
31.12.2019		15.4	1.11^-2	12.50
31.12.2020	70%X222	155.4	1.11^-3	113.63
Present value of expected future cash flows				161.43

SOLUTION FIVE

To: The Director – Macha Plc
From: Accountant
Date:
Subject: **Evaluation of position and performance of Macha Plc**

1.0 Introduction

The evaluation of position and performance of Macha Plc for the year ended 30 September 2017 is based on the financial and non-financial information for two years. Ratio analysis used is based on calculations in the workings.

2.0 Evaluation of position and performance

2.1 Profitability and Revenue Growth

Revenue has reduced by 35% **(W1)** though number of customers only reduced by 20% **(W1)**. This shows that Macha Plc may have reduced its selling price in order to attract and keep already existing customers as result of increased competition. This is evidenced by an increased number of competitors from 60 to 100. Gross profit margin reduced from 70% to 62% **(W1)**. Similarly, operating profit margin reduced from 25% to 11% **(W1)**. These indicate a downward trend in the company's profitability and overall performance of the company. This is substantiated by the company's decision to downsize its labour force from 1,200 employees to 800 employees.

Return on capital employed has shown a similar downward trend. It has drastically reduced from 34% to 8% **(W1)**. This can be attributable to an upward revaluation of property, plant and equipment and reduction in the company's profitability.

2.2 Liquidity and working capital

Current ratio has remained the same at 0.62 **(W2)**. Quick ratio on the other hand has reduced from 0.40 to 0.36 **(W2)**. Both ratios show that Macha Plc's current assets are not adequate to cover its current liabilities.

Inventory turnover has risen from 61 days to 80 days **(W2)**. This is an indication of slowing down in the level of business activity which Macha Plc tried to boost by extending payment period given to trade receivables from 28 days to 42 days **(W2)**. Conversely, the company may have reduced its selling price and over stocked in anticipation of increase in demand for its product. The increase in trade receivable days may also reveal poor management of receivables which may result in increased risk of irrecoverable debts.

Macha Plc's worsened liquidity position is shown by increased trade payables' payment period from 82 days to 95 days, a risky situation altogether **(W2)**.

2.3 Gearing Ratios

The gearing level in relative terms has <u>reduced</u> from 51% to 49% **(W3)** as can be seen from capital gearing ratio and from 104% to 95% according to the debt to equity ratio **(W3)**. However, in absolute terms debt has <u>increased</u> from K520,000 to 712,000 representing 37% **(W3)**. In addition, interest cover has reduced from 7.69 times to 1.12 times **(W3)**. This is attributable to reduction in the company's profitability and increased interest cost. Interest cost increased by 92% **(W3)** whilst the absolute amounts of interest bearing liabilities only increased by 37%. This shows that the additional borrowings during 2017 were at a much higher interest rate reflecting the increased default risk perceived by the markets. This may indicate the high level of risk third parties attach to the company. It may also show the difficulty the company has been facing to raise funds.

2.4 Investor Ratios

Macha Plc's earnings per share has reduced from K0.62 to K0.01 **(W4)**. This is caused by reduction in the company's profitability and increased number of equity shares. However, dividend per share increased from K0.06 to K0.08 **(W4)** which may not be sustainable if the company continues paying from its retained earnings.

3.0 Conclusion

The position and performance has drastically declined. The company needs to act quickly to avoid being wound up. It is however, of significant importance to also look at industry ratios to ascertain the severity of the position and performance of Macha Plc.

WORKINGS

	2017	20
W1 Profitability Ratios		
Percentage decrease in revenue = Change in revenue / Revenue for last year = (2,000 -1,300) / 2,000	700.00 / 2 000.00	
	35%	
Percentage decrease in customers= Change in customers= (5 - 4) / 5	1.00 / 5.00	
	20%	
Return on capital employed = PBIT / CE = (15+125): (435+65) / (2,243-420): (1,905 -449)	140.00 / 1 823.00	500.00 / 1 456.00
	8%	**34**
Operating profit margin = PBIT / Revenue = (15+125): (435+65) / 1,300 : 2,000	140.00 / 1 300.00	500.00 / 2 000.00
	11%	**25**
Gross profit margin = GP / Revenue = 800: 1,400 / 1,300: 2,000	800.00 / 1 300.00	1 400.00 / 2 000.00
	62%	**70**
Asset turnover = Revenue / Capital employed	1 300.00 / 1 823.00	2 000.00 / 1 456.00
	0.71	**1.37**

W2 Liquidity and working capital Ratios

Current ratio =	Current assets / Current liabilities	260.00 / 420.00	279.00 / 449.00
		0.62	**0.**
Quick ratio =	Current assets – inventory / Current liabilities	150.00 / 420.00	179.00 / 449.00
		0.36	**0.**
Inventory days =	Inventory x 365 days / Cost of sales	110 x 365 / 500.00	100 x 365 / 600.00
		80	
Receivable collection period =	Trade receivables x 365 days / Revenue	150 x 365 / 1 300.00	156 x 365 / 2 000.00
		42	
Payables payment period =	Trade payables x 365 days / Cost of sales	130 x 365 / 500.00	134 x 365 / 600.00
		95	

W3 Gearing Ratios

Capital gearing =	Prior charge capital x 100% / Prior charge capital + Equity	712.00 / 1 458.00	520.00 / 1 018.00
		49%	**51**
Debt to Equity ratio =	Debt x 100% / Equity	712.00 / 746.00	520.00 / 498.00
		95%	**104**
Interest cover =	PBIT / Interest charges	140.00 / 125.00	500.00 / 65.00

	1.12	**7.**
Percentage increase in debt= current debt-debt for last year / debt for last year	192.00 / 520.00	
	37%	
Percentage increase in interest= current interest-interest for last year / debt for last year	60.00 / 65.00	
	92%	

Note: Gearing ratio computed based on the Capital Employed that includes all non current liabilities would also be correct.

W4 Investor Ratios

Earnings per share = Profits attributable to equity shareholders / Weighted average number of shares	9.00 / 640.00	261.00 / 420.00
	0.01	**0.**
Dividend cover = Profits attributable to equity shareholders / Dividends paid	9.00 / 50	261.00 /
	0.18	**10.88**
Dividends per share = Dividends paid / Number of shares	50 / 640.00	/ 420.00
	0.08	**0.06**

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.2: ADVANCED AUDIT AND ASSURANCE

THURSDAY 14 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

Your firm of Chartered Accountants has been appointed auditor of Sweet Sugar Plc. The year-end of Sweet Sugar Plc is 31 December 2017 and this will be the first time your firm will audit a company in this industry. The firm has several other clients whose year ends are also on 31 December.

Sweet Sugar Plc has large sugar plantations and operates an out grower scheme whereby it supports small scale farmers by supplying them with inputs and buys the sugarcane once it matures. The sugar industry is highly regulated by the Zambia Environmental Management Authority. Sanctions against non-compliance include penalties and revocation of the license to operate.

Sweet Sugar Plc has an internal audit department under the supervision of Mumbi who has recently been appointed Finance Manager. He previously held the position of Chief Internal Auditor and until his replacement is found, the internal audit function will report to him. The company recently constituted an audit committee comprising non-executive directors.

The Finance Manager agrees on the annual audit plan with the internal audit department. He also reviews the work carried out by the internal audit department and the reports before they are circulated to the rest of the management team. Only two of the five internal auditors have knowledge of financial reporting. The remaining three are engineers employed in order to assist in the audit of technical matters. There is no evidence that working papers are prepared by the internal audit department to support the conclusions reached. As a result, it is difficult to confirm that planning and supervision of the work is carried out.

Annually, the company uses the services of Expert Valuers Ltd to carry out annual valuations of work in progress. Expert Valuers Ltd has been conducting valuations for Sweet Sugar Plc for the last five years. Your firm intends to engage a different company to carry out the valuation on its behalf.

Sweet Sugar Plc exports the bulk of its products to the European Union (EU). The EU recently banned the importation of sugar products from countries outside the EU. This has adversely affected the sales of the company resulting in the company having large stocks of sugar at the year end. A new statutory instrument was recently issued by the Ministry of Commerce lifting the ban of sugar imports into Zambia. This is in line with the trade agreements signed by the government. Sugar has a shelf life of three months and because of this, the company is under pressure and is selling the sugar below cost. At the period end there are inventories of sugar which will expire in a month’s time.

Sweet Sugar Plc has not been paying Out Grower Farmers for the supplies of sugarcane made to the company in the last two years. The Out Grower Farmers have sued the company for non-payment and are claiming for payment of the sugarcane supplied and damages. This case is still in court as at the year end. As a result of the pressure on cash flows, the company has defaulted on loan repayments for a loan obtained from the development bank.

During the year, Sweet Sugar Plc started using a new accounting package that it acquired from a software company. This is a package that has been specifically designed for organizations in this industry. The accounts staff of Sweet Sugar Plc recently underwent training in the use of this package. Sweet Sugar plc used direct changeover to switch from the previous accounting system that was in use to the new accounting package.

Required:

(a) Discuss the factors your firm should consider in assessing whether to use the work of the internal audit function of Sweet Sugar plc in the audit of the company's financial statements for the year ended 31 December 2017. (8 marks)

(b) Describe the nature of the work that internal auditors may perform on behalf of external auditors in accordance with ISA 610 (revised) *Using the work of internal auditors.* (4 marks)

(c) Discuss the matter your firm should consider at the planning stage of the audit of Sweet Sugar Plc. (5 marks)

(d) Identify and discuss Six (6) matters you will need to gain an understanding of as part of risk assessment in the audit of Sweet Sugar Plc. (9 marks)

(e) Identify and explain the risks of material misstatement in the financial statements of Sweet Sugar Plc and clearly recommend an appropriate audit response for each risk identified. (9 marks)

(f) Distinguish between a Management's expert and an Auditor's expert stating the impact that the work of each will have on the auditor's opinion. (5 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

You are employed as an audit manager in Zimba & Associates Chartered Accountants and you have been assigned to the audit of the financial statements of Hygiene Beverages Plc. The audit for the year ended 30 September 2017 is about to commence. You have just returned from a meeting with the Finance Manager of Hygiene Beverages and you have established the following:

Part-way through the current financial year, Hygiene Beverages Plc acquired a 60% stake in Kaoma Steel Ltd. The engagement partner on the audit of Hygiene Beverages Plc owns shares in Kaoma Steel Ltd. He acquired the shares three years ago from one of the major directors of the company who decided to sell his shares.

Kaoma Steel Ltd suffered huge losses in the year just ended which resulted in share prices dropping by 40%. It was established that the loss arose because of material understatements of inventory at that year end. The auditors of Kaoma Steel Ltd did not attend the inventory count although inventory was a material figure in the financial statements. As a result of this, shareholders made losses on share transactions that subsequently took place. At a specially convened extra ordinary general meeting, it was resolved to remove and take legal action against Fast Consultants Chartered Accountants, who were the auditors of Kaoma Steel Ltd before the acquisition, for professional negligence. The shareholders were concerned that the auditors did not detect the fraud due to non-attendance of the inventory count.

The company has excess storage warehouses and has put some of these warehouses on let. The engagement partner of Hygiene Beverages Plc has entered into an agreement with the company to rent one of these warehouses. The warehouse will be used by his wife for her private business at agreed rentals of K2 000 per month. The commercial amount of rentals the company charges for letting out similar warehouses to other customers is K10,000 per month.

Inventory count of Hygiene Beverages Plc was conducted on the last day of the year. On this same day the firm had three other clients conducting inventory counts and so the firm was under pressure to witness all the inventory counts. Although inventory was a material figure in the financial statements of Hygiene Beverages Plc, the audit manager was of the view that the risk was low because of a strong control environment and so assigned two junior auditors who did not understand their role during the inventory count to attend the inventory count. The two junior auditors were taken around by the warehouse manager who was responsible for the inventory count. At the end of the count each of the two junior auditors was given ten cases of juice as a token of appreciation for attending the inventory count.

Zimba & Associates will be responsible for the audit of the parent company and the consolidated financial statements. A new audit firm, Mazuba Chartered Accountants, has been engaged to audit the financial statements of the component, Kaoma Steel Ltd, following the removal of Fast Consultants Chartered Accountants. You have been informed that Hygiene Plc used the services of a Management's expert in the valuation of work in progress at the year end.

Required:

(a) Discuss and evaluate the likely success of the resolution by shareholders of Kaoma Steel Ltd to take legal action against Fast Consultants Chartered Accountants. (7 marks)

(b) Discuss what is meant by the expectation gap and explain the responsibilities of the auditors and management with regards to fraud in an audit of financial statements. (7 marks)

(c) Discuss the reporting responsibilities of Zimba & Associates Chartered Accountants in the audit of the consolidated financial statements and assess the impact that the use of a management's expert by the parent company will have on these responsibilities. (6 marks)

[Total: 20 Marks]

QUESTION THREE

You are an audit manager at Kasuba Associates, a firm of chartered accountants. Your engagement partner has informed you that the firm is considering taking out appropriate insurance cover to protect itself against the consequences of possible successful litigation against it. He has also requested you to address the following matters relating to five audit clients of your firm:

1. Mansa Ltd:

Mansa Ltd is a successful company operating in the hospitality industry. The company is currently seeking for financial assistance from a reputable financial institution. The financial institution has asked Mansa Ltd to provide a reference endorsed by their auditors in relation to their ability to service the loan.

The Finance Director of Manasa Ltd has requested your firm to provide the required reference. He has assured you that the cash flow problems currently being faced by the company are due to normal seasonal variations within the industry in which Mansa Ltd operates.

2. **Thswane Plc:**

   This company is a manufacturer of copper ornaments. Ruth Mutale one of the audit partners in your firm, has served as the Engagement Partner on this assignment since 2011 when the company started operating. During the year ended 31 December 2017, the company was listed on the Lusaka Stock Exchange (LuSE).
   The Managing Partner of your firm has written a memo to Ruth Mutale requesting her to continue as engagement partner on the audit of this client for the current year and to maintain the same audit team for the next five (5) years to ensure consistency in quality delivery.

3. **Bulawayo Ltd:**

   The audit of this client for the year ended 30 September 2017 is nearing completion. However, despite a number of requests by your firm to the directors of Bulawayo Ltd to provide evidence relating to material pension valuations, management has not provided the evidence.

   The Managing Director was heard instructing other directors in the comapny not to give your firm a lot of information so that audit queries are minimised. The Finance Director of Bulawayo Ltd was given specific instructions not to give your firm access to the tax planning model used by the company.

4. **Trywell Ltd:**

   Management of Trywell Ltd has assessed the ability of the company to continue as a going concern and have concluded that the going concern basis of accounting is appropriate for the Trywell Ltd, but a material uncertainty exists. In the notes to the financial statements, management has appropriately disclosed the material uncertainty relating to the going concern basis of the company.

5. **Giraffe Ltd:**

   The entry of a successful competitor in the industry of Giraffe Ltd has threatened the ability of Giraffe Ltd to continue as a going concern. This has given rise to a material uncertainty affecting the company's ability to continue as a going concern although management is of the view that this competition is for a short period of time only.

   In your view, the going concern basis of accounting is not appropriate for Giraffe Ltd. Management of Giraffe Ltd has not made any mention of the material uncertainty in the financial statements.

Required:

(a) Identify and explain the ethical and other professional issues relating to:

(i)	Mansa Ltd.	(3 marks)
(ii)	Thswane Plc.	(4 marks)
(iii)	Bulawayo Ltd.	(3 marks)

(b) Discuss the impact on the audit reports your firm will have to issue on the financial statements of Trywell Ltd and Bulawayo Ltd in relation to the going concern situations facing each company. (6 marks)

(c) Discuss the requirements of the Accountants Act (2008) regarding indemnity and Fidelity Guarantee Insurance for auditors. (4 marks)

[Total 20 marks]

QUESTION FOUR

Mwela Plc was established in 1949, and is involved in copper mining. The company is listed on the Lusaka Stock Exchange. The company's three plants are old and this is putting pressure on the company's profitability due to increased maintenance and repair costs, and operational compliance issues. It currently employs 5,000 employees but if the decline in profitability continues, some employees aged below 16 years may be declared redundant next year. The human resource function has been outsourced overseas as a cost saving measure.

The mining activities have adversely affected wildlife and are threatening extinction of a rare species of monkeys in affected areas. The pollution levels are unbearable and the communities have threatened legal action accusing the regulators of being incompetent and corrupt. Waste disposal management is evidently poor.

The company sells all its copper to European countries where environmental laws and regulations are very stringent.

You are an Audit Manager at Lawema Chartered Accountants and you are currently planning the audit of Mwela Plc for the year ending 30 September 2017. This is first time your firm will be auditing this client. Your firm has no experience in the audit of mining companies. The Engagement Partner has warned that Mwela Plc appears to be a high risk client and has directed you to take extra care when determining materiality levels.

The draft financial statements of Mwela plc show Total Assets of K170 million and the inventory value of K69 million. Theft of copper has increased following the removal of government controls on the sales of copper in the country.

Management has not carried out an impairment review of non-current assets, even though there are indications of impairment of non-current assets.

Required:

(a) Explain what is meant by the concept of performance materiality and give an appropriate example of why this concept is important. (4 marks)

(b) Compute an appropriate performance materiality level for inventory and comment on it. (3 marks)

(c) Identify and explain Four (4) main environmental and social risks faced by Mwela Plc. (8 marks)

(d) Suggest the general procedures which Lawema Chartered Accountants should undertake as part of non-current asset testing to establish whether an impairment review is required. (5 marks)

[Total: 20 marks]

QUESTION FIVE

Your firm of chartered accountants has just been appointed the auditors of Impala Manufacturing Plc. As part of planning for this audit you are leading a team of auditors to assess the risk of material misstatements in the financial statements of Impala Manufacturing plc in accordance with guidance provided in ISA 315 *Identifying and assessing the risks of misstatement through understanding the entity and its environment.*

Impala Manufacturing Plc is engaged in the manufacture of home and office furniture. The Ministry of Lands and Natural Resources regulates the cutting of timber and there are stiff penalties for non-compliance with regulations and may result in withdrawal of licenses in extreme cases.

Impala Manufacturing Plc sells most of its furniture to large commercial organizations and hotels. It has enjoyed a good market share in the last few years. For all sales made, the company undertakes to repair any defective furniture within a warranty period of six months. There has been a noted increase in customers returning furniture for repairs in the recent past. Further, because of international and regional conventions which Zambia is a signatory to, the ban on the importation of furniture into the country has been lifted. This has seen a rapid increase in imports of cheap but high quality furniture from China.

Impala Manufacturing Plc buys its timber from local timber suppliers who are required to obtain the necessary licenses to cut timber in accordance with regulations. Non-compliance with the regulations results in penalties being imposed on the person who obtained the license as well as the buyer of the timber who is required to ensure that the supplier complies with the legal requirements before purchasing raw timber.

The management of Impala Manufacturing Plc is required to meet set performance targets by the parent company. Further, performance based bonuses are paid to management based on the company achieving set revenue targets. It is clear from the previous year's management letter that internal controls at Impala Manufacturing Plc are weak. This observation has been made in the last three years and very little has been done by management to remedy the situation.

The company holds substantial quantities of consumables used in the manufacture of furniture. Some of these are small items with a high value and a readily available market. Further, the company is experiencing cash flow problems resulting in delayed payments of wages and a general decline in the morale of staff. There is no physical count of inventory conducted at the period end and the book value of closing inventory is taken as the closing inventory value at the period end.

A review of the minutes of management meetings for the previous year has shown that Impala Manufacturing Plc was involved in the illegal export of exotic timber to the Far East. During the year under review the company exported timber worth K50 million. The Directors have informed you that the proceeds from the exports have been classified as local revenue and they do not want you to disclose these exports in your audit report. The previous auditors had no problems in concealing information about these exports.

The Chief Executive of Impala Ltd is aware that your firm provides other assurance services such as review engagements. He is of the view that it will be cheaper for the company in future to engage your firm to perform review engagements on its financial statements rather than external audits wishes to know how a review engagement differs from an external audit.

You are concerned about the integrity of the management of Impala Manufacturing Plc particularly about the illegal exports of exotic timber. You are concerned with how your firm should deal with this matter taking into account the fundamental principle of confidentiality that your firm is bound by.

Required:

(a) Identify and explain six (6) fraud risk factors that exist at Impala Manufacturing Plc.

(9 marks)

(b) Discuss the nature of the role that management of Impala Manufacturing plc has as stewards of the company and comment on the impact external auditor's work has on this role. (3 marks)

(c) Using relevant information from the scenario above as examples, explain the elements of an assurance engagement. (5 marks)

(d) Advise the Chief Executive Officer of Impala Manufacturing Plc of the objective of a review engagement and contrast the level of assurance provided in a review engagement with that provided in an audit of financial statements. (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.2 ADVANCED AUDIT AND ASSURANCE SOLUTIONS

SOLUTION ONE

a) i Matters that should be considered in assessing the use of the internal audit department of Sweet Sugar:

1. **Reporting of the internal audit function:**
   The fact that currently the internal audit department is reporting to the Finance Manager rather than an independent body such as the audit committee will be considered. This reporting line affects the independence of the internal audit function.

2. **Skills and qualifications:**
   The skills that the internal auditors have will be a matter of consideration. The fact that only two or the internal auditors have knowledge of financial reporting is a matter to be considered when deciding whether to use the work of internal audit.

3. **Management's responses to recommendations made by the internal audit department:**
   Management responses to the recommendations of the internal audit department will be considered. If the recommendations are not implemented by management this fact would be considered in deciding whether or not to use the work of internal audit.

4. **Methods of operating and working papers:**
   The fact that there is no evidence of work that has been carried out is a matter that will be considered.

5. **Lack of planning and supervision:**
   The fact that there are no working papers is indicative of the fact that there is no planning and supervision of the work of the internal audit department. This is a matter of concern that will be considered.

b) Areas that the external auditors may seek assistance of internal auditors: (ISA 610 *Using the work of internal auditors*)

1. Performing tests of control in testing the effectiveness of the internal controls of Sweet Sugar Plc.
2. Internal auditors may be used in performing substantive procedures where there is a limited amount of judgment involved.

3. Attending and observations at the inventory count.
4. Testing for compliance with regulatory requirements.
5. Tracing transactions through the financial reporting information system.

c) Matters that should be considered at the planning stage of the audit of Sweet Sugar:

1. It is necessary to consider the ability of the audit firm to undertake the audit in view of the fact that it will be the first time for the firm to audit a client in this industry. The question to consider is whether the firm has the skills and competences to carry out the audit.
2. The need to engage experts should be considered as the firm may not have the expertise to value work in progress for example.
3. The fact that the firm will be able to carry out the audit within the timeframe expected in view of the fact that there are other clients with the same year end as Sweet Sugar Plc.
4. The need for using the work of an expert should be considered. This is because this will be the first client in this industry for the audit firm.
5. The need to use the work of internal auditors or to use the internal auditors in gathering evidence will be considered.
6. The integrity of management will be considered because of the failure to pay the out grower farmers.
7. The business and audit risks inherent in Sweet Sugar Plc. should be considered at the planning stage of the audit.

d) Matters that will need an understanding in Sweet Sugar Plc.:

1. **Nature of the industry:**
   Being the first time that the firm will audit a client in this industry there is need to gain an understanding of the nature of the industry that Sweet Sugar Plc. is in.

2. **Laws and regulations Sweet Sugar is subject to:**
   The industry is subject to laws and regulations issued by the Zambia Environmental Management Authority. The firm should familiarize with the relevant laws and regulations that apply.

3. **The role of internal audit:**
   The firm should understand the role that the internal audit department has in Sweet Sugar Plc. and the reporting structure. This is necessary in the event that use of the work of internal audit or direct use may be necessary.

4. **The financial reporting framework:**
   The firm should have a clear understanding of the financial reporting framework in use and its appropriateness for the preparation of the financial statements.

5. **The risks inherent in Sweet Sugar Plc.:**

   Throughout the process of assessing the risk in Sweet Sugar Plc, the firm should assess the risks that exist in the company. It is necessary that the firm assesses the significance of the risks identified.

6. **Accounting system in use:**
   The firm should understand the new accounting package in use. This is important because the financial statements will be prepared from information from the accounting package.

7. **Internal controls:**
   The firm should gain an understanding of the control environment and specific controls in use in Sweet Sugar Plc. This will determine the extent of reliance on internal controls as well as the other audit procedures that may be performed.

8. **Out-grower Scheme Agreements:**
   The fact that Sweet Sugar Plc. has an out grower scheme in place and that the farmers sued the company for non-payment imp0lies that there are formal agreements in place. There is need for the auditors to know the conditions contained in any agreement with the farmers.

e) Risks of material misstatement in Sweet Sugar Plc.:

1. **First client in this industry:**
   There is a risk that detection risk is high because this is the first time that the firm will be auditing a client in this industry.

   Audit response to risk identified:
   Will need to discuss with the audit team members on the use of professional skepticism throughout the performance of the audit and to be alert for contradictory evidence and any indicators of fraud and error.

2. **Valuation of inventory:**
   The nature of the industry is that it requires specialized skill to value inventory which includes valuing sugarcane in different stages of growth. Further, the shelf life of sugar is three months and so there is a risk of obsolescence.

Audit response to risk identified:
There will be need to engage expert to assist in the valuation of inventory at various stages of the process.

Establish procedures in place at inventory count to isolate and determine qualities of sugar that has expired. Determine the post year-end sales value of expired sugar at the period end to determine net realizable value.

3. **Non-compliance with ZEMA laws and regulations:**
   There is a risk that Sweet Sugar will be non-compliant with laws and regulations. Non-compliance has consequences including penalties and possible revocation of operating licenses. Such action may have going concern implications for Sweet Sugar.

   Audit response to risk identified:
   During the cause of the audit look out for any evidence of non-compliance with laws and regulations. Enquire rom management any known and suspected noncompliance with laws and regulation that they are aware of. Further, obtain written representations in this regard.

4. **Ban on export of sugar to the EU and removal of restrictions in importation of sugar:**
   The ban of exports of sugar to the EU and the revocation of the ban on imports of sugar from the Far East poses a risk in reduced sales for Sweet Sugar. This can result in reduced margins due to competition and this could have going concern implications for Sweet Sugar.

   Audit response to risk identified:
   Perform analytical reviews on performance of Sweet Sugar from the time the ban was imposed and the removal of restrictions on imports of sugar. May request management to give written representations of their views of the going concern aspects of the company in light of these issues.

5. **Litigation against Sweet Sugar Plc. for non-payment of out grower farmers:**
   The failure by Sweet Sugar Plc. to pay the out grower farmers for the supply of sugarcane to it is indicative of the poor cash flow position that the company is facing. Further, depending on the outcome of the court case the company may be liable to penalties which could have an impact on the financial statements.

   There is a risk that provisions may be understated as management may choose not to provide for the damages it may be liable to or may understate such provisions.

Audit response to risk identified:
Discuss with management on their assessment of the court case and on the need for a provision if not yet made. Where a provision has been made establish the basis that was used to determine the amount provided.

Discuss with the in-house and external legal experts to find out the likely outcome of the case and estimates of the damages that may be payable.

6. **New accounting package:**
A new accounting introduced in the year under review poses a risk that the financial statements may contain errors giving rise to material misstatements of the financial statements. The risk is rather high because there appears to have been no parallel run that was used during the changeover.

Audit response to risk identified:
This will require an increase in audit procedures to obtain evidence of transactions and balances. Further, the audit team would need to remain alert during the audit and look out for errors arising because of the new accounting system.

f) Management's expert:

A management expert in the context of accounting is one who is an expert in a field other finance and who is engaged by management to perform work in their field of expertise. Management will engage an expert to perform work the outcome of which will be used in the preparation of the financial statements. For example, the management may engage an actuarial expert to determine the adequacy of funds in a pension scheme.

Impact work of management expert on auditor's opinion:
The work of a management expert will have no impact on the auditor's opinion. The role of the auditor is to obtain sufficient appropriate evidence that the figures in the financial statements arising from the work of a management expert are not materially misstated.

The auditor is fully responsible for his opinion and will normally not refer to the work of the management expert in his report.

Auditor's expert:
From the point of view of the auditor, an audit expert is one with skills in a field other than auditing and accounting. The auditor expert is engaged by the auditor to perform

work the auditor is not able to carry out in gathering evidence on the financial statements of a client company.

Impact work of auditor expert will have on auditor's opinion:
The work of an auditor expert does not have any impact on the opinion formed by the auditor. The auditor is responsible for his opinion and will not refer to the work of the auditor expert in his opinion.

SOLUTION TWO

a) Resolution to take legal action against Fast Consultants Chartered Accountants:

The guidance with regards who can and who cannot sue the auditors for professional negligence is largely based on case law.

There are several parties who may wish to sue the auditors. With regards the company and the shareholders the following is the position:

The company has a contractual relationship with the auditors. This is for the supply of a service to the client by the auditor and so there is an expectation that the auditor has a duty of reasonable care implied into the contract.

The company, meaning all shareholders as a whole, can therefore bring an action against the auditors for professional negligence.

There are three conditions that must be met if an action against the auditors should succeed which the injured party must prove:

1. That there exists between the auditor and the party a duty of care.
2. That the duty of care was breached by the auditor and
3. The breach of the duty the injured party suffered loss and this loss must be a financial loss.

In the case of the intended litigation by the shareholders of Kaoma Steel Ltd the following is the position.

The passing of the resolution at the extra-ordinary general meeting can stand and represents the decision of shareholders as a whole.

The following is the position in this case:

Duty of care:

Because of the contractual relationship between Fast Consultants Chartered Accountants and Kaoma Steel a duty of care on the auditor is implied and is allowed by the courts.

Breach of the duty of care:

The company must prove that there was a breach of the duty of care by the auditors.

The company (shareholders) suffered the loss as a result of the breach:

The shareholders must prove that the losses that they suffered as a result of a drop in share prices are as a result of a breach of the duty of care by the auditors.

Conclusion:

The litigation proposed by the shareholders of Kaoma Steel is in order and as long as the shareholders can prove that there was a breach of care and that they suffered a loss as a result their action can succeed.

b) Expectation gap:

The expectation gap is the difference with the public perception about the role of the auditors. A major component of this misunderstanding is the one concerning the role of the auditor with regards fraud in a client company.

The public perception is that auditors are responsible for the prevention and detection of fraud in a client company. This is contrary to what the correct position is which is that the auditor should gather sufficient appropriate audit evidence to enable him form an opinion on the financial statements.

Management responsibilities with regards fraud:

Management is responsible for the preparation of the financial statements and also for putting in place controls in the organization which will help prevent and detect fraud that may occur.

Management will acknowledge their responsibility for the above through written representations given to the auditors.

Auditor's responsibilities with regards fraud:

ISA 240 *The auditor's responsibilities relating to fraud in an audit of financial statements* gives guidance on the role of the auditor with regards fraud in a client company.

The responsibility of the auditor is to obtain reasonable assurance that the financial statements taken as a whole are free from material misstatements whether caused by fraud or error.

This means that:
The auditor should be aware of the fact that fraud can result in a misstatement of the financial statements. He should, therefore, design audit procedures that will help detect fraud that may exist but it is not the primary duty of the auditor to detect fraud.

c) Reporting responsibilities of Zimba & Associates:

Zimba & Associates are the parent company auditors as well as the group auditors. They will perform an audit of the financial statements of the parent company in order to obtain sufficient appropriate audit evidence and form an opinion on whether the financial statements show a true and fair view.

The fact that the parent company uses the services of an expert does not take away the responsibility of the firm to form the opinion. Zimba & Associates is responsible for its opinion and does not have to refer to the expert in its report.

Secondly, Zimba & Associates is responsible for the audit of the group consolidated financial statements. They will be responsible for the opinion of the consolidated financial statements notwithstanding the fact that the financial statements of the component are audited by different auditors.

It should be noted that Zimba & Associates have a duty to obtain sufficient appropriate audit evidence from significant components.

SOLUTION THREE

a) Ethical and other professional issues:

i. Mansa Ltd.

Where no additional work is required to provide a reference, the following matters should be considered by Kasuba Associates:

- Inherent uncertainty of future income and expenditure.
- The difficulty of reporting on present solvency (given that the audit is a historical exercise; such information might be available if a separate engagement was made).
- The possibility of a duty of care arising.
- That clarification might be required (there has been no engagement and no fees, and that liability might have to be expressly disclaimed)

However, Kasuba Associates might be able to provide certain information without difficulty depending on the following:

- The length of time they have acted for the client.
- The results declared to the taxation authorities over past years.
- A statement of a level of negative assurance given past performance.

Where it is necessary to create a separate engagement in order to provide the relevant information, Kasuba Associates should consider the guidance in ISAE 3000(Revised) *Assurance engagements other than audits or reviews of historical financial information.*

ii. Thswane Plc.

Long association of senior personnel with assurance clients can be a significant threat to independence. Kasuba Associates is required to monitor the relationship between staff and established clients and use safeguards to independence such as rotating senior staff of the assurance team, involving second partners to carry out reviews and obtaining independent (but internal) quality control reviews. The rules do not necessarily apply to junior staff as long as appropriate safeguards are put in place.

The International Ethics Standards Board for Accountants (IESBA) code sets out specific rules for public interest entities in this situation. These state that for the audit of listed and other public interest entities key audit partners should be rotated after seven years, and should not return to the engagement as a member of the team or as key audit partner for two years.

When an audit client becomes a public interest entity as is the case with Thswane Plc., the length of time the individual has served the client as key audit partner before this should be taken into consideration. If this is five years or less when the client becomes a public interest entity, the partner may continue to serve the client as key audit partner for seven years or less the number of years already served. If the individual has already served as key audit partner for six or more years (as is the case with Kasuba Associates) when the client becomes a public interest entity they may continue in that role for a maximum of two additional years.

These rules should be followed, but there may be circumstances in which it is necessary to be flexible, such as when Kasuba Associates is small as to make rotation impracticable and when the person involved is particularly important to the audit. If the local regulatory framework allows an exemption from partner rotation in such circumstances the firm may take advantage of the exemption but should apply safeguards.

iii. Bulawayo Ltd.

The first thing to consider if Kasuba Associates' audit report is to be modified is whether the matter in question suggests that management may not have the requisite integrity. This is particularly relevant where the scope of the audit has been limited by management, e.g. if management refuses to allow auditors access to all necessary books and records as is the case with Bulawayo Ltd.

It is possible that Bulawayo's management's integrity could be in doubt given the circumstances in the scenario. In the light of this, Kasuba Associates should reconsider any representations (including written representations) provided by management during the course of the audit.

It may also be necessary to perform an engagement quality control review on the audit, as a lack of management integrity would mean that the audit carries a higher level of risk than may have been envisaged at the planning stage of the audit.

If the matter in relation to which the auditor's report is modified is sufficiently serious, then it may be necessary to seek to withdraw from the audit engagement. If Kasuba Associates does seek to withdraw then it will be necessary to obtain legal advice. In some jurisdictions such as the UK, the audit firm must comply with the requirements of legislation to make a statement in relation to ceasing to hold office.

ISA 210 *Agreeing the Terms of Audit Engagements* states that if there has been a limitation on the scope of a prior audit which leads the auditor to believe that the audit opinion expressed this year will likely be a disclaimer of opinion, then the auditor must not accept the engagement unless required to do so by law.

b) Effect on the auditor's report regarding going concern situations:

Trywell Ltd:

In this case, there was a material uncertainty with regards going concern which has been adequately treated and disclosed.

In this situation the auditor will issue an unmodified opinion and introduce a paragraph in the auditor's report headed Material Uncertainty Related to Going Concern.

In the event that management did not disclose the going concern uncertainty in the financial statements, then a qualified or adverse audit opinion will be issued depending on the pervasiveness to the financial statements.

Giraffe Ltd:

In this case, the going concern basis of accounting is inappropriate and the impact on the audit report will be as follows:

Since in the opinion of the auditors the use of a going concern basis of accounting is inappropriate, an adverse opinion should be expressed. This is notwithstanding that management makes necessary disclosures or not in the financial statements.

c) Professional indemnity insurance and fidelity guarantee insurance:

The Accountants Act 2008 requires chartered accountants to have the prescribed professional indemnity and fidelity 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 the insurance that firms holding practicing certificates and auditing certificates should take. They are required to have professional indemnity insurance with a reputable insurance company. Firms 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.

SOLUTION FOUR

a) Concept of performance materiality:

ISA 320 *Materiality in Planning and Performing an Audit* defines performance materiality as the amount or amounts set by the auditor at less than materiality for the financial statement as a whole to reduce to an appropriate low level the probability that the aggregate of uncorrected and undetected misstatements exceed materiality for the financial statements as a whole.

The concept of performance materiality allows an auditor to set different materiality levels for different areas of the financial statements, according to their judgment of the audit risk that is particular to that area.

By setting performance materiality at a level lower than the materiality for the financial statements as a whole the auditor reduces the risk that misstatements will exceed the materiality level for the financial statements as a whole. The concept of determining performance materiality depends on the auditor's assessment of risk. The higher the assessed risk the lower the materiality level.

If for example the materiality level for the financial statements as a whole is set at K10 000 the performance materiality level could be set at K7 000. This means that any misstatements above this level will be of concern to the auditor.

b) Performance materiality computation:

The overall materiality might be set at 2% of total assets, i.e. K3.4m (2% x K170m). Inventory in Mwela Plc. could be judged as a high-risk area following the increased theft.

Performance materiality for inventory could then be set as a simple proportion of materiality, e.g. K1.38bn [(K69m/K170m) x K3.4m].

Comment

Taking into account that inventory is a high risk area and that this is the first audit, performance materiality could be reduced to K1bn in order to provide a greater margin of safety. Any misstatements above this level would be judged material.

c) Main environmental and social risks faced by Mwela Plc.:

1. There are a number of employees so that the risk from the need to comply with the health and safety issues and other employment legislation is significant, especially that the company has outsourced its human resource function overseas. The service provider may not possess the required expertise in the local laws.

2. The employment of people aged 16 years or below amounts to child labour, even if it may not be illegal in some countries. Lobby groups could organize mass protests against the company and its products. This could threaten the going concern status of the company.
3. The threatened legal suit could result in bad publicity. The customers may start dealing with other complaint companies or simply organize massive boycotts of the company' product. This could lead to loss of market share significant enough to prevent the business from continuing in operation.
4. Fines and penalties for non-compliance could be significant enough to prevent the continuance of the business.
5. Poor waste management is a danger to human beings and the environment in general. Society is concerned with harm to the natural resources, as they and their children have to live on planet earth and may suffer direct or indirect effects of pollution or waste. Failure to act responsibly could prompt further legislation.
6. Disqualification of directors may result and if the staff involved are key members of the organization, this could threaten the ability of the company to continue.

d) General procedures – Need for impairment review:

IAS 36 *Impairment of Assets* requires an impairment review to be undertaken with regard to non-current assets if certain indicators of impairment exist.

Lawema Chartered Accountants should perform the following procedures to determine the need for impairment reviews of the assets of Mwela Plc.

1. Discuss with the audit team the need for professional skepticism during the audit and look out for any signs of impairment of non-current assets.
2. Review board minutes for any indications of changes in the environment that Mwela Plc. operates in.
3. Review relevant mining trade magazines or newspapers for any information suggesting the impairment of non-current assets.
4. Discuss with management and obtain its views on the need for impairment reviews to be carried out and compare with own assessment made by the auditor.

SOLUTION FIVE

a) **Fraud risk factors in Impala Manufacturing Ltd:**

1. **Poor internal controls in the company:**
   Poor internal controls in Impala manufacturing Plc. is a fraud risk factor in that employees may be motivated to commit fraud knowing that the controls are unlikely to prevent or detect it. In a company where the internal control environment is strong the motivation to commit fraud is less.

2. **Pressure to meet set targets:**
   The pressure to meet the set targets by the parent company of Impala Manufacturing Plc. is a risk factor in that management will be inclined to do whatever it takes to meet the set targets. They will be motivated to do this knowing that there could be sanctions against not meeting the set targets.

3. **Performance based bonus payments:**
   Performance based bonus is for the personal benefit of those entitled to it in this case management. Because they are the ones managing the company and have the authority they will be motivated to do anything including fraud in an effort to meet the targets so that they get the bonus.

4. **No inventory count and stock of high value small items:**
   The fact that the company will not carry out an inventory count at the period end can motivate employees to commit fraud including stealing inventory.

5. **Low staff morale:**
   Generally when the morale of staff is low, the risk of fraud taking place is high. Staff will develop an attitude of not caring and so doing wrong things including fraud.

6. **Uncompetitive wages to staff:**
   The paying of uncompetitive wages and salaries to staff can motivate employees to commit fraud. Staff will feel they are being exploited by not being paid what competitors in the same industry pay and they will be inclined to compensate this through fraudulent activities.

7. **Management not leading by example:**
   When management does not lead by example then the rest of staff will tend to so the same things that management does. In this case the company is illegally exporting timber. Staff will get the impression that integrity is not considered important in this company and so will also involve themselves in wrong things.

b) Management of Impala Manufacturing as stewards:

Separation of ownership and management:

Stewardship is the principle where one is a manager and takes care of another's property. This occurs when the owner is not there and needs someone else to take charge. In the context of listed companies such as Impala Manufacturing Plc. the public subscribe to the capital of the company through buying shares.

The management of the company is left in the hands of management who are employees and do not necessarily own shares in the company. There is clear separation of ownership of the company and management.

The management of Impala manufacturing are stewards who are supposed to act in the best interest of the shareholders.

The role of external auditors:

The role of the statutory auditors in this situation is to carry out an independent audit on the performance of management and give assurance to the shareholders on how management has fulfilled its role as stewards.

This is done through a financial audit of the financial statements prepared by management. In doing so the external auditors gather evidence and form an opinion which is communicated to the shareholders through the audit report.

(c) An assurance engagement:

The relationship between the auditor and the company being audited such as Impala Manufacturing Plc. is known as an assurance engagement and it has the following elements:

1. *The three parties to an assurance engagement:*
   There are three parties involved in this engagement namely the firm of auditors, the company which is Impala Manufacturing Plc. and the shareholders who own shares in Impala Manufacturing Plc.

2. *The subject matter:*
   The subject matter which is subject to the audit by the external auditors are the financial statements prepared by management. The financial statements are the link between the management of Impala manufacturing and its shareholders.

The performance of management is judged by the performance shown in the results in the financial statements which are considered by the shareholders at the annual general meeting.

3. *Criteria:*
   This is the yardstick against which the financial statements prepared by management are measured. The auditor's objective is to confirm whether or not the financial statements have been prepared in accordance with the criteria.

   In the case of Impala manufacturing the criteria will include the acceptable financial reporting framework namely the CA 1994 and the applicable IFRSs.

4. *Evidence gathering:*
   The external auditor gathers evidence that the financial statements have been prepared in accordance with the criteria. They do this through various methods such as enquiry of management and examination of documents. The management of Impala manufacturing Plc. for example is required to provide the information that the auditors require as part of them gathering evidence.

5. *Report to the shareholders who are the owners of the company:*
   After gathering sufficient appropriate evidence, the auditors form an opinion on the financial statements and write a report which is communicated to the shareholders.

(d) Objectives of a review engagement:

A review engagement:

This is an engagement that is designed to enable the practitioner to state whether anything has come to his attention to believe that the financial statements are not prepared in accordance with an identified financial reporting framework. To conclude this way the practitioner performs fewer procedures than would be necessary for an audit.

In the case of Impala Plc., the option of a review engagement would be cheaper for the company but being a listed company it is a legal requirement that Impala Manufacturing undergoes a full audit. The type of assurance that will be given in a review engagement is limited and the practitioner gives a negative form of reporting by stating that they have no reason to suppose that anything was wrong rather than reporting positively believing than nothing is wrong.

The types of procedures carried out in a review are largely enquiries of the directors and management.

In the case of an audit like the one Impala manufacturing is subject to, the practitioner performs more work in line with the International Standards on Auditing and gives a positive form of reporting by arriving at an opinion based on evidence that has been gathered.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.3: STRATEGIC BUSINESS ANALYSIS

WEDNESDAY 13 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:

   Section A: One (1) compulsory scenario question.

   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u> – (COMPULSORY)

THE ENGLISH PREMIER LEAGUE

It is debatable whether the English Premier League is the foremost football league in the world. Some would definitely argue it is. Matches are televised for a global audience. The leading teams have relied on overseas players for many years – there are matches when Arsenal may not even include one English player in their line-up. Chelsea is not far behind in this. There are several foreign managers in charge of the top clubs. A number of these clubs have become public companies, but at the same time a number of the leading clubs have been bought by wealthy foreign businessmen. Although it is not this simple, two broad types are prominent: Russian (and other) oligarchs (such as the owner of Chelsea) and owners of USA sports franchises (Manchester United and Liverpool). The owner of Fulham is Mohamed Al-Fayed (owner of Harrods) and until recently the owner of Manchester City was the ex-Prime Minister of Thailand. In September 2008 the ownership of City moved to that of the Abu Dhabi Investment Group for a reported £200 million. In contrast many of the leading clubs in Europe still tend to be dominated by family dynasty ownership.

The big clubs are attractive because of their earnings potential. They are global brands which can be exploited in various ways and they are also a route to huge television earnings. But as businesses they carry risks. Success on the football field becomes something of a prerequisite, but only a few can succeed – and that success may not be sustainable (football) season after (football) season. In turn that success implies huge wage bills with some players earning well over £100,000 every week. It seems wage bills have been increasing at 12 per cent per year. Huge transfer fees are paid for top players, whose loyalty may change after just a few seasons and they choose to leave. New stadia, often linked to hotel and leisure complexes, are essential – but costs and planning restrictions are not always easily dealt with.

By 2008 the total indebtedness of English football was some £3 billion, with £2.6 billion of this attributable to the Premier League. According to Deloitte (February 2009) Manchester United was £604 million in debt, Chelsea £620 million, Liverpool £350 million and Arsenal £268 million. However, this needs to be balanced by the value of the current Premier League TV deal for 2007 – 2010, which is £2.7 billion. BSkyB attracted 171,000 new customers in the last six months of 2008, with fans apparently deciding it was cheaper to watch games at home rather than on large screens in their local pub. Attendances for the top clubs are also holding up, with only five clubs – Wigan, Blackburn, Bolton, Sunderland and Middlesbrough – using only 80 per cent of their seating capacity. Yet the average price of a ticket in the Premier League is £34, more than double the price of a similar ticket for the Bundesliga in Germany, where a similar pattern exists – namely the attendances of the top clubs remaining strong and only struggling clubs, performance wise, suffering any significant drop.

Early in 2009 the point was made that the credit crunch had yet to really hit English football. Contracts, sponsorship and season ticket sales for (at least) the 2008/9 season were in place. But what about further down the line? Is there a real risk a Premier League club could go into receivership?

Moreover, football governing bodies in Europe are suggesting this is unsustainable and clubs with huge debts should be banned from European competitions. Cynics would comment that this happened when England's top four clubs were particularly strong, if not dominant, in Europe. It is also an issue that these clubs are all able to service their debt. Chelsea is exceptional, of course. The money is owed to (the) owner and benefactor Roman Abramovitch, so is it realistically any more than a paper figure?

A second problem that might have to be faced is the call from certain quarters to limit the number of overseas players in any one team. One other related and contentious issue is that as the Premier League has got stronger and stronger, the fortunes of the English team, which has won nothing since the 1966 World Cup, have waned.

(Source: Thompson, J. & Martin, F. Strategic Management – Awareness and Change. Sixth Edition. South-Western CENGAGE Learning, UK, pp.97 - 98).

Required:

(a) Analyze the English Premier League as an industry using Porter's Five Forces and determine whether it is profitable or otherwise. Draw a diagram of the Five Forces Model. (20 marks)

(b) Explain a SWOT analysis of this industry and advise potential investors accordingly. (16 marks)

(c) Describe the corporate governance issues which could help the English League to become sustainable. (4 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) from this section

QUESTION TWO

(a) Mukula Forestry Company is a private company operating in the Northern Province of Zambia dealing with both growing and harvesting of the various tree species sold on the international market. Due to various misunderstandings of its operations by major stakeholders, the company needs to redefine its objectives and publicise them in clear terms.

Required:

Using the Ashridge College Model of Mission, advise management on how this model can be used to expand the mission of the Company. (12 marks)

(b) Management at Mukula Forestry Company further realizes the need to formulate a strategic marketing plan as the company enters the international market.

Required:

Outline the contents of the strategic marketing plan. (8 marks)

[Total: 20 Marks]

QUESTION THREE

Mapenzi Business Limited is a private company that deals in perishable food products including meat and fruits. It has been in operations for over 25 years and had so far performed well. Lately, it has been facing some operational problems arising from its imported food products that had not conformed to ethical and regulatory requirements. Management has been working on strategies to address this ethical situation in its operations.

Required:

(a) Advise management on the significance of the code of ethics as a way of addressing this ethical situation. (10 marks)

(b) Evaluate ethical threats to compliance as prescribed by the International Ethics Standards Board for Accountants (IESBA) working in practice. (10 marks)

[Total: 20 Marks]

QUESTION FOUR

The Industrial Development Corporation (IDC) that was constituted to help in developing capacity of the state owned business enterprises has identified strategic leadership deficiencies among top executives of a number of them. This has accounted for poor implementation of what IDC management considers to be very good strategies most companies have developed.

As an expert in the area of organization leadership you have been appointed to come up with a list of core characteristics of strategic leadership that are needed in strategy execution.

Required:

Evaluate in detail any five (5) of such characteristics you would include that will be observed in a strategic leader. **[Total: 20 Marks]**

QUESTION FIVE

Air Zambia limited is a private and wholly Zambian owned company operating in both the local and regional air passenger markets. Based on good business in these markets, the company has a desire to enter global markets, which includes flights to London, New York, Dubai, and Mumbai and in Africa, Johannesburg, Nairobi via Dar es Salaam, Cairo through Addis Ababa and Accra through Lagos. These routes are considered profitable despite being very competitive as the preliminary market research carried out shows. To this effect, the company is in the process of acquiring six 200 seater aircrafts to service these routes.

Required:

(a) You have been requested to give your input. Recommend four (4) main drivers of globalization which the company will have to consider carefully as it pursues this international strategy. (16 marks)

(b) State any four (4) factors that influence strategic risks as in the case or Air Zambia going global. (4 marks)

[Total: 20 Marks]

END OF PAPER

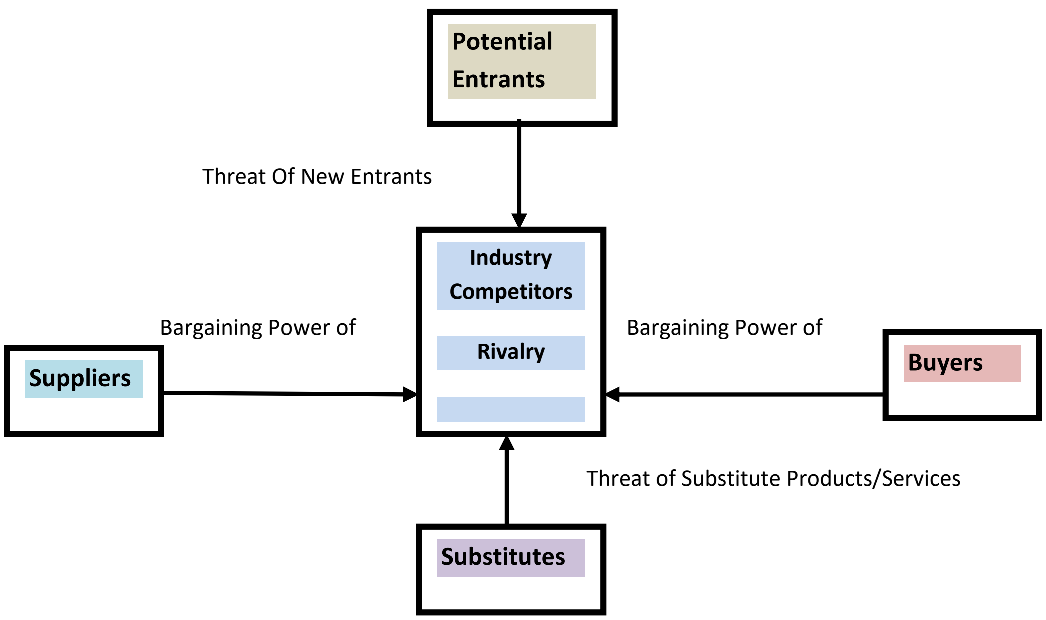
CA 3.3 – STRATEGIC BUSINESS ANALYSIS SOLUTIONS

SOLUTION ONE

a. Analyze the English Premier League as an industry using Porter's Five Forces and determine whether it is profitable or otherwise. Draw a diagram of the Five Forces.

Answer

There are five forces that determine the profitability of an industry: threat of new entrants, threat of substitute products, bargaining power of suppliers, bargaining power of buyers and rivalry among the existing firms in the industry.



Threat of New Entrants

These are the new competitors who can enter the industry if it is perceived to be attractive in terms of profitability or other returns.

The English Premier League is arguably the foremost football league in the world. Matches are televised for a global audience. The leading teams have relied on overseas players for many years – there are matches when Arsenal may not even include one English player in their line-up. Chelsea is not far behind in this. This increases the threat as it indicates the attractiveness of the industry.

There are several foreign managers in charge of the top clubs. A number of these clubs have become public companies, but at the same time a number of the leading clubs have been bought by wealthy foreign businessmen. The two prominent broad types are Russian (and other) oligarchs (such as the owner of Chelsea) and owners of USA sports franchises (Manchester United and Liverpool). In September 2008 the ownership of City moved to that of the Abu Dhabi Investment Group for a reported £200 million. In contrast many of the leading clubs in Europe still tend to be dominated by family dynasty ownership.

The big clubs are attractive because of their earnings potential. They are global brands which can be exploited in various ways and they are also a route to huge television earnings. This increases the threat of new entrants. But as businesses they carry risks because success on the football field becomes something of a prerequisite, but only a few can succeed – and that success may not be sustainable (football) season after (football) season. In turn that success implies huge wage bills with some players earning well over £100,000 every week. It seems wage bills have been increasing at 12 per cent per year. This reduces the threat.

Huge transfer fees are paid for top players, whose loyalty may change after just a few seasons and they choose to leave. New stadia, often linked to hotel and leisure complexes, are essential – but costs and planning restrictions are not always easily dealt with. By 2008 the total indebtedness of English football was some £3 billion, with £2.6 billion of this attributable to the Premier League. All these are risks that can reduce the threat of new entrants.

Fans too have apparently been deciding that it was cheaper to watch games at home rather than on large screens in their local pub. Attendances for the top clubs are also holding up, with only five clubs using only 80 per cent of their seating capacity. Yet the average price of a ticket in the Premier League is more than double the price of a similar ticket for the Bundesliga in Germany, where a similar pattern exists – namely the attendances of the top clubs remaining strong and only struggling clubs, performance wise, suffering any significant drop. This increases the threat.

Contracts, sponsorship and season ticket sales for (at least) the 2008/9 season were in place. But football governing bodies in Europe are suggesting the debt levels were unsustainable and clubs with huge debts should be banned from European competitions. But this also happened when England's top four clubs were particularly strong, if not dominant, in Europe. Moreover, these clubs are all able to service their debt so they are solvent. This increases the threat.

Threat Of Substitute Products

Football has always been the most popular sport of England. Hence this threat is not significant.

Bargaining Power Of Suppliers

The leading teams have relied on overseas players for many years. Huge transfer fees are paid for top players, whose loyalty may change after just a few seasons and they choose to leave. New stadia, often linked to hotel and leisure complexes, are essential – but costs and planning restrictions are not always easily dealt with. By 2008 the total indebtedness of English football was some £3 billion, with £2.6 billion of this attributable to the Premier League. All these are risks that can reduce the threat of new entrants. Contracts, sponsorship and season ticket sales for (at least) the 2008/9 season were in place. Hence the bargaining power of suppliers is high.

Bargaining Power of Buyers

Although fans have apparently been deciding that it was cheaper to watch games at home rather than on large screens in their local pub, attendances for the top clubs are still holding up and are strong. Hence the bargaining of buyers is high.

Rivalry Among The Existing Firms In The Industry.

There is a lot of rivalry among the teams in the English Premier League in terms of attracting the best players, popularity among fans, winning the most silverware, branding, stadia, and sponsorship deals.

This industry is therefore not profitable at all.

b. Conduct a SWOT analysis of this industry and advise potential investors accordingly.

Answer

SWOT is an acronym that stands for strengths, weaknesses, opportunities and threats.

For the English Premier League as an industry, its strengths are its global reputation (it is the foremost football league in the world), global branding, the global audiences whereby matches are televised for a global audience, a number of these clubs have become public companies, a number of the leading clubs have been bought by wealthy foreign businessmen, lucrative TV deals and sponsorships, contracts, huge television earnings, ability to service debts, high ticket prices and seasonal tickets.

The weaknesses are dependency upon foreign managers and players, foreign ownership, ownership by family dynasties, success on the field unsustainable seasonally, and excess stadia capacity.

The opportunities are high attendances, increasing popularity of football, wealthy foreign investors, new stadia and globalization.

The threats are the high unsustainable indebtedness levels, high costs of stadia, players and transfer fees, lack of loyalty among players, fans preferring to watch matches at home, debt causing banning of clubs, planning restrictions, and the credit crunch.

Advice: Since the strengths and opportunities are more than the weaknesses and threats, this industry is still viable in terms of investment.

c. Describe the corporate governance issues which could help the English League to become sustainable.

Answer

Localizing club ownership and player recruitment can help the league become sustainable since it reduces the complexities of cultural diversity. Employing more locals should improve relations with the local communities. Avoiding sole ownership or ownership by a single wealthy investor or family dynasties should be encouraged. The managements of the clubs should pursue continuous improvements unrelentlessly so that costs are minimized which reduces indebtedness and increases returns to the key stakeholders. There should be strong boards to control the foreign managers who have become celebrities and hence not easy to control. The appropriate corporate governance mechanisms should be utilized to improve corporate governance in the English Premier League as an industry.

SOLUTION TWO

(a) The Ashridge College Model of Mission presents four (4) separate elements in an expanded definition of the mission:

I. Purpose: Fundamental questions to help redefine the mission include: Why does an organization exist and who does it exist for?

- Is it to create wealth for the owners?
- To satisfy the needs of all stakeholders?
- To reach some higher goal such as advancement of society?

II. Values: These refer to the beliefs and moral principles that underlie the organization's culture.

III. **Strategy:** This provides the commercial logic for the company, and so addresses questions such as; What is our business? What should it be?

IV. **Policies and standards of behavior**: These provide guidance on how the organization's business should be conducted.

(b) The strategic marketing plan must be consistency with the corporate strategy and should include the following:

I. **The Executive Summary**: This is the finalized planning document with a summary of the main goals and recommendations in the plan.

II. **Situational Analysis**: This consists of a SWOT analysis and forecasts.

III. **Objectives and Goals**: These refer to what the organization is hoping to achieve, or needs to achieve i.e. in terms of market share or profitability.

IV. **Marketing strategy**: This considers selection of target markets, the marketing mix and marketing expenditure levels.

V. **Strategic marketing plan**: These are long-term plans with a strong external orientation which aims to match the activities of the organization to its distinctive competences.

VI. **Tactical Marketing plan**: These are usually annual plans and generally based on existing products and markets. They are concerned with marketing mix issues.

VII. **Action plan:** These set out how the strategies are to be achieved for example the marketing mix strategy which may vary for each segment.

VIII. **Budgets:** These are developed from the action programme.

IX. **Controls**: These will be set up to monitor the progress of the plan and the budget.

SOLUTION THREE

(a) The significance of the code of ethics as a way of addressing the ethical situation include:

I. **Establishment of organization's values**: Ethical codes form part of the organization's underlying environment. They develop and promote values that linked to the organization's mission statement.

II. **Promotion of stakeholder responsibilities**: Codes also demonstrate whom the organization considers as important stakeholders. They also show what action should be taken to maintain good stakeholder relationships.

III. **Control of individual behavior**: Ethical codes form part of the human resources mechanisms by which employee behavior is controlled.

IV. **Promotion of business objectives**: Codes can be an important element in the company's strategic positioning. Taking a strong stance on responsibility band ethics can help build a good corporate image.

V. **Conveying values to stakeholders**: The code is a communications device, not acting to communicate between partners and staff, but also increasing the transparency of the organization's dealings with stakeholders.

(b) Ethical threats to compliance as prescribed by the International Ethics Standards Board for Accountants (IESBA) working in practice

I. **Self- interest**: Financial interests of a professional accountant inappropriately influence judgment or behavior i.e. having a financial interest in the client.

II. **Self-review:** Evaluation of a judgment by the accountant who made the judgment i.e. auditing financial statements prepared by the firm.

III. **Advocacy:** Accountant promoting a position or opinion to the point where objectivity may be compromised i.e. advocating a client's case in a lawsuit

IV. **Familiarity:** A close relationship resulting in excessive trust in or sympathize with others.

V. **Intimidation**: Accountant not acting objectively because of actual or perceived pressures i.e. Threats of replacement due to disagreement.

SOLUTION FOUR

A few key characteristic of good strategic leaders have been identified by several authors. These characteristics include;

1. **Vision, Eloquence and Consistency**

   One of the key tasks of leadership is to give the organization a sense of direction of vision.

   The leaders are also eloquent enough to communicate this vision to others within the organization in terms that can energise people and they consistently articulate their vision until it becomes part of the culture of the organization.

2. **Commitment**

   A strong leader is someone who demonstrates commitment to his/her particular vision, often leading by example.

   Leading by example can mean doing what one preaches; this kind of commitment is a powerful signal to employees within the organization. If it is cost minimization the CEO is the first to do it.

3. **Being Well Informed**

   Good leaders develop a network of formal and informal sources that keep well informed about what is going on within their organization. They develop feedback- channels of finding out what is going on within the organization so that they do not have to rely on formal information.

4. **Willingness to delegate and empower subordinates**

   - Good leaders are good delegators. They recognize that unless they do delegate, they can quickly become overloaded with responsibilities.
   - They also recognize that empowering subordinates to make decisions is a good motivational tool.
   - Delegating also makes since when it results in decisions being made by those who must implement them.
   - Although good leaders will delegate many decisions to lower level employees, they will not delegate those they judge to be critical to the future success of the organization under their leadership.

5 Astute use of Power

Good leaders tend to be very astute in their use of power, which means three things; First, Good leaders play the power game with skill preferring to build consensus for their ideas; Secondly, Good leaders often hesitate to commit themselves publicly to detailed strategic plans or precise objectives since in all probability, the emergency of unexpected contingencies will require adaptation. Thirdly, a Good leader poses the ability to push through programmes in a piecemeal fashion. The successful leaders tries to push through his ideas, one piece at a time so that they appear incidental to other ideas, though in fact they are part of a larger programme or hidden agenda that moves the organization in his desired direction.

SOLUTION FIVE

a. In drawing a conclusion based on market and product analysis that support business strategy concerning the 4Ps decisions in a strategic marketing plan, the company needs to examine the drivers of globalization as these will affect the bottom-line. There are generally four agreed on drivers of globalization as articulated by Johnson and Scholes (1999) which will ultimately affect its performance of the desired strategy. These include the following with corresponding characteristics:

(i) Global market convergence
Similar customer needs
Global customers
Transferable marketing

(ii) Government influence
Trade policies
Technical standards
Host government policies

(iii) Cost advantage
Scale economies
Sourcing efficiencies
Country-specific costs
High product development costs

(iv) Global competition
Interdependence
Competitors global
High exports/imports

b. Four risk factors for air Zambia includes

i. Action of competitors
ii. State of the economy
iii. Significance of new technology
iv. Level of operating gearing
v. Organization ability to innovate

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL – PUBLIC PRACTICE ROUTE

CA 3.4: ADVANCED TAXATION

THURSDAY 14 JUNE 2018

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.
2. This paper is divided into TWO 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.

Taxation Table

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

Income from farming for individuals

K1 to K39,600	first K39,600	0%
Over K39,600		10%

Company Income Tax rates

On income from manufacturing and others	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%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US$4,500	4% of norm value
From US$4,500 to less than US$6,000	5% of norm value
From US$6,000 and above	6% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper)	5% on norm value
Energy and Industrial Minerals	5% on gross value
Gemstones	6% on gross value
Precious Metals	6% on 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%

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

Monthly turnover	Turnover Tax per month
K1to K4,200	3% of monthly turnover above K3,000
K4,200.01 to K8,300	K225 per month+3% of monthly turnover above K4,200
K8,300.01 to K12,500	K400 per month+3% of monthly turnover above K8,300
K12,500.01 to K16,500	K575 per month+3% of monthly turnover above K12,500
K16,500.01 to K20,800	K800 per month+3% of monthly turnover above K16,500
Above K20,800	K1,025 per month+3% monthly of turnover above K20,800

Annual turnover	Turnover Tax per annum
K1to K50,400	3% of annual turnover above K36,000
K50,400.01to K99,600	K2,700 per annum+3% of annual turnover above K50,400
K99,600.01 to K150,000	K4,800 per annum +3% of annual turnover above K99,600
K150,000.01 to K198,000	K6,900 per annum+3% of annual turnover above K150,000
K198,000.01 to K249,600	K9,600 per annum+3% of annual turnover above K198,000
Above K249,600	K12,300 per annum +3% of annual of turnover above K249,600

Presumptive Taxes for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
Less than 12 passengers and taxis	900	2.40
From 12 to 17 passengers	1,800	4.95
From 18 to 21 passengers	3,600	9.90
From 22 to 35 passengers	5,400	15.00
From 36 to 49 passengers	7,200	19.50
From 50 to 63 passengers	9,000	24.60
From 64 passengers and over	10,800	29.55

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of tax on the realized value on the transfer of intellectual property	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise duties on used motor vehicles

	Aged 2 to 5 years		Aged over 5 years	
Motor vehicles for the transport of ten or more persons, including the driver	**Customs duty K**	**Excise duty K**	**Customs duty K**	**Excise duty K**
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged over 5 years	
Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Sedans				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185

Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wagons				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc 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 to 5 years		**Aged over 5 years**	
Motor vehicles for the transport of goods - with compression-ignition internal combustion piston engine (diesel or semi-diesel):	**Customs duty**	**Excise duty**	**Customs duty**	**Excise duty**
	K	**K**	**K**	**K**
Single cab				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	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.

<u>QUESTION ONE</u>

For the purposes of this question you should assume that today's date is 31 December 2018.

Chaisa Plc, a Zambian resident company that is listed on the LuSE, owns 100% of the ordinary shares of Twaisa Plc, another Zambian resident company. Both companies are registered for VAT and are engaged in manufacturing.

Chaisa Plc also owns 40% of the ordinary share capital of Baisa Ltd, a company incorporated overseas. The directors of Baisa Ltd hold their board meetings overseas. All of the three companies prepare accounts to 31 December. The following information relates to the Chaisa group for the year ended 31 December 2018:

Disposal of Twaisa Plc

On 31 March 2018, Chaisa Plc sold its 100% interest in Twaisa Plc to an unrelated company which is registered for VAT for K80 million, following poor results in recent years.

The following information relates to the sale:

(1) The fair value of the assets and liabilities of Twaisa Plc on the date of disposal were as follows:

	K'000
Land and buildings (including K20 million for land)	54,000
Plant and equipment	20,000
Motor vehicles	8,000
Current assets	5,000
Total Assets	87,000
Total liabilities	(15,000)
Net Assets	72,000
Goodwill	8,000
Sales Proceeds	80,000

(2) The land and buildings were acquired by Twaisa Plc at cost of K35 million with K10 million of the cost being attributed to the land and the remaining K25 million of the cost being attributed to the buildings which are industrial buildings for tax purposes. The industrial buildings had an income tax value of K11.25 million on 1 January 2018.

(3) The plant and equipment comprises manufacturing plant and equipment which was acquired at a cost of K60 million in January 2017.

(4) Motor vehicles comprises commercial motor vehicles which were acquired in June 2015 at a cost of K14 million.

(5) Twaisa Plc had tax adjusted business profits before capital allowances of K8,310,000 for the period from 1 January 2018 to 31 March 2018.

(6) Twaisa Plc had unused overlap profits brought forward of K280,000, which arose when the company changed its accounting date to a 31 December year end, to align its year end with that of Chaisa Plc.

Acquisition of Mwaisa Ltd

On 1 July 2018, Chaisa Plc acquired 100% of the ordinary shares in Mwaisa Ltd, a company engaged in manufacturing paying K74 million cash.

Information relating to the purchase of Mwaisa Ltd is as follows:

	K'000
Property	30,000
Plant and equipment	20,000
Net current Assets	14,000
Net Assets	64,000
Goodwill	10,000
Consideration paid	74,000

Notes:

(1) Property comprises land with a market value of K5 million, administration buildings with a market value of K15 million and factory buildings with a market value K10 million.

(2) Plant and equipment comprises manufacturing plant with a market value of K12 million, office equipment with a market value of K6 million and non-commercial motor vehicles with a market value of K2 million.

(3) Net current assets comprises of inventories with a value of K9 million and cash of K5 million. All liabilities were settled by the previous owners prior to the sale of Mwaisa Ltd to Chaisa Plc.

(4) The first accounts for Mwaisa Ltd, after its acquisition, were prepared for the period from 1 July 2018 to 31 December 2018. The tax adjusted profits before capital allowances for this period were K12,500,000.

Intragroup Transactions

The profit for Chaisa Plc for the year ended 31 December 2018 was K34,610,000. This profit figure was arrived at after taking into account the following intragroup transactions:

(1) Chaisa Plc regularly imports semi-processed materials from Baisa Ltd which are used by the Chaisa Plc in one of its production processes in the manufacture of a product that is sold on the local Zambian market. During the year ended 31 December 2018, Baisa Ltd transferred 20,000 kgs of this material to Chaisa Plc at a selling price of K1,500 per Kg. Chaisa Plc accordingly valued the goods at this price and included the amount in cost of

sales in computing the profit for the year figure provided above. Baisa Ltd exports this material to other customers at a fair market selling price of K800 per kg.

(2) On 1 January 2018, Chaisa Plc made a loan of K2,500,000 to Baisa Ltd, interest free. The loan is repayable in 5 years. The commercial rate of interest on loans of this type in Zambia is 29% per annum.

(3) On 31 December 2018, Chaisa Plc received dividends of K350,000 from Baisa Ltd net of withholding tax at the rate of 30%, deducted at source in the foreign country in which Baisa Ltd operates. Chaisa Plc has included the dividends at this amount in its financial statements when computing the profit for the year.

There is no double taxation treaty between Zambia and that foreign country in which Baisa Ltd operates; any double taxation relief available is given by way unilateral credit relief.

(4) A profit of K2 million arose on the disposal of Twaisa Plc, which has been included in computing the profit figure for the year given above for Chaisa Plc.

(5) On 1 July 2018, immediately after the acquisition of its stake in Mwaisa Ltd, Chaisa Plc transferred title to land which had a market value of K900,000 to Mwaisa Ltd at nil consideration for the purposes of the internal reorganisation of the group.

(6) Chaisa Plc did not have any assets qualifying for capital allowances in the tax year 2018.

Future Plans

Management of Chaisa Plc is planning to further expand the group's operations. They intend to incorporate another subsidiary in Zambia in the near future which will engage in the manufacture of priority products, declared under the Zambia Development Act. The subsidiary will set up manufacturing facilities in an area designated to be a Multi facility Economic Zone under the ZDA Act. Chaisa Plc wishes to finance this investment by issuing a mixture of ordinary shares and debentures.

Required:

(a) Discuss how the Chaisa group of companies will be assessed to income tax in the tax year 2018. Your answer should include:

(i) A discussion of the taxation issues arising from the sale of Twaisa Plc. (10 marks)

(ii) A discussion of the taxation issues arising from the acquisition of Mwaisa Ltd. (8 marks)

(iii) A discussion of the tax implications arising from the intragroup transactions. (10 marks)

Your discussion should additionally be supported by appropriate computations of all the relevant taxes that will arise and be payable in the tax year 2018, as far as the information provided above permits.

(b) Discuss the taxation implications for both Chaisa Plc and potential investors of using the following sources of finance to finance the expansion of the business:

(i) Issue of ordinary shares (4 marks)

(ii) Issue of debentures (4 marks)

(c) Explain any four (4) tax incentives available to companies like Chaisa plc engaged in manufacturing. (4 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section

QUESTION TWO

You are employed in a firm of Chartered Accountants. Your firm offers tax services to Chuma bank Ltd, a Zambian resident bank and audit services to several clients. Three of the audit clients have asked your firm to offer other services in addition to audit services.

Information about the four clients is as follows:

Moxey Ltd

Moxey Ltd has been your audit client for two years, and has requested for assistance in preparing VAT return, PAYE returns and Self-assessment returns.

Doxey Co

Doxey Co has been an audit client of your firm for four years. The company is requesting for tax planning advice. The directors wish the fee for the taxation services to be based on the efficiency of the firm's tax planning advice and have requested that the fee should be set as a percentage of tax saved as a result of your tax planning advice.

Loxey Co

This is a new audit client which is requesting for assistance in the resolution of a tax dispute relating to the amount of company income tax payable, VAT payable and the amount of penalties and interest recently assessed on the company by the ZRA for non-compliance with tax regulations.

Chuma bank Ltd

The following summarised statement of profit or loss relates to Chuma Bank Ltd for the year ended 31 December 2018.

CHUMA BANK LTD
STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2018

	K'000
Interest income (Note 1)	44,400
Interest expense	(26,200)
Net interest income	18,200
Provision for loan losses (Note 2)	(3,016)
Net interest income after provision for loan losses	15,184
Non- interest income (Note 3)	2,957,
Net interest and other income	18,141
Non-interest expenses (Note 4)	(9,786)
Income before taxes	8,355
Taxation (Note 5)	(2,924)
Income after tax	5,431

The following additional information is available:

(1) **Interest Income**

The total withholding tax deducted at source from total interest income during the charge year 2018 amounted to K6,660,000.

(2) **Provision for loan losses**

Provision for loan losses comprises an increase in general provision of loan losses amounting to K1,632,000, increase in specific provision of loan losses of K314,000, loan losses written off during the year of K1,620,000 and loan losses previously written-off recovered during the year amounting to K550,000.

(3) **Non-interest income**

This comprises rental income amounting to K548,000, foreign exchange gains of K606,000 (out of which K250,000 were unrealised), fees from foreign exchange transactions of K1,713,000 and profit on disposal of non-current assets of K90,000.

(4) **Non-interest expenses**

Non-interest expenses include depreciation charges of K186,000, employee's salaries of K1,385,000, entertainment expenditure for customers of K85,000, legal cost for recovery of loans K140,000, donations of K520,000 to approved public benefit organisations and K410,000 to unapproved public benefit organisations and miscellaneous allowable general business expenses of K7,060,000.

(5) **Taxation**

The figure for taxation in the statement of profit or loss above represents the provisional company Income Tax paid by the company in respect of the charge year 2018.

(6) **Implements plant and equipment**

No entries have been made in the financial statements in relation to the following lease transactions entered into by the bank during the tax year 2018:

(i) The purchase of office equipment which had a cash price of K80,000 under a hire purchase agreement. The company was required to pay an initial deposit of K20,000 and pay six monthly instalments of K14,000 each starting on 1 January 2018.

(ii) The lease of five pool cars under an operating lease at annual lease rentals of K25,000 per car. The cash price of each of the five leased car was K125,000. Each of the five operating leases is renewable annually.

Capital allowances on other assets held by the company were determined to be K180,000 for the tax year 2018.

(7) **Other information**

Chuma bank Ltd is planning to introduce an executive incentive scheme under which it will provide loans to its senior executives who are effective shareholders of the bank, interest free. The directors of the bank are not sure of what the tax implications of such a scheme would be.

Required:

(a) Explain the ethical threats that will arise from the provision of the required services to each of your three audit clients Moxey Ltd, Doxey Co and Loxey Co and advice on how each threat can be managed. (6 marks)

(b) In relation to Chuma Bank Ltd,

(i) Calculate the total company income tax payable for the tax year 2018. (10 marks)

(ii) Explain who an effective shareholder is and advise the bank of the taxation implications of any interest free loans the bank will provide to its effective shareholders under the proposed incentive scheme. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Benjamin Munyati had been employed at ATG Co, a private limited company, on a three year renewable contract that commenced on 1 January 2017 at an annual salary of K540,000. On the day he joined the company he was granted an option to purchase 200,000 ordinary shares of the company (each with a nominal value of K1) for an exercise price of K6.50 per share, under an unapproved share option scheme. The grant was on condition that the options were only exercisable once he had been employed for one year, but he was required to hold the shares for at least six months before he sold them.

On 1 January 2018, Munyati exercised the options on the 200,000 shares when the share price on that date was determined to be K9.50 per share. On 1 July 2018, he sold all the 200,000 shares for K10.00 per share being the market value of each share on that date.

On 31 August 2018, Munyati died in a tragic road traffic accident. Upon his death, the company paid his benefits which included accrued leave pay of K15,000, pension refunds of K150,000 and gratuity of 25% of his cumulative basic salary to the date of death according to the terms of the contract.

The company additionally paid K20,000 cash to meet the cost of funeral expenses and further undertook to pay a further K4,000 per month towards the cost of education fees for each of his two school going children for one year starting on 1 September 2018. PAYE amounting to K298,500 was deducted from his employment earnings. Ignore NAPSA contributions.

Munyati had held an investment of 100,000 ordinary shares in a foreign company that is resident in a country called Lestonia. He received an interim dividend equivalent to K22,400 on 30 June 2018 from the shares. The amount of K22,400 was net of Lestonian withholding tax at the rate of 36%. In addition, Munyati also owned investment property in Lestonia that has been let to Lestonian tenants over the last five years. He had always received monthly rentals equivalent to K10,800 (net of Lestonian withholding tax of 10%) in arrears. When computing the Zambian income tax payable, credit is available for any foreign tax paid in Lestonia.

On 31 August 2018, the shares in the foreign company had a total market value equivalent to K250,000. He bought these shares five years ago at a total cost of K160,000. The market value of the investment property he held in Lestonia at 31 August 2018 was equivalent to K750,000. He bought the property five years ago at a cost of K400,000. There is no Inheritance Tax or Estate Tax in Lestonia or income tax on Estates and therefore, Estates of the deceased are exempt from taxation in Lestonia.

Other assets owned by Munyati in Zambia included the following:

(1) A family house which was purchased from a local city council in 1996 for K15,000. Since acquisition he made improvements amounting to K150,000 in 2010. The market value of the house at 31 August 2018 was K780,000.

(2) A Toyota Fortuner car (3000cc) bought at a cost of K360,000 in 2016 with a market value of K210,000 at 31 August 2018.

(3) 2000 hectares of farmland, which he acquired in the year 2005 at a cost of K120,000. The market value of the land at 31 August 2018 was K450,000.

(5) Cash in his current account amounted to K18,000 on 31 August 2018.

(6) Various chattels with an original cost of K96,000 and a market value of K36,000 at 31 August 2018.

His will leaves all assets split in equal shares between his two children Dalisto and Kalui.

Required:

(a) Explain the taxation implications for Munyati of:

  (i) The exercise of the share options on 200,000 shares on 1 January 2018

  (ii) The sale of 200,000 shares in ATG Company on 1 July 2018. (4 marks)

(b) Compute the income tax payable by Munyati for the tax year 2018. You should state which benefits provided by the employer will be exempt from income tax. (10 marks)

(c) Calculate the income tax payable on the estate left by Munyati and the inheritances due to each of his two children. (6 marks)

[Total: 20 Marks]

QUESTION FOUR

For the purpose of this question, you should assume that today's date is 31 December 2018.

You are employed in a firm of Chartered Accountant. Your firm is dealing with the tax affairs of Matala Plc. Matala Plc is a retailer of various household goods. It has been in existence since April 2014. The company is registered for Income Tax, PayAs You Earn (PAYE), Value Added tax (VAT) and Withholding Tax (WHT).

The income tax paid and returns submitted by Matala Plc Limited in respect of the charge year 2017 were audited by a Tax Inspector from the Zambia Revenue Authority (ZRA). The ZRA issued an assessment on 20 December 2018 of K30,000 out of which K20,000 was principle and K10,000 penalties. The directors of Matala Plc are convinced that the inspector did not take into account capital allowances on a motor van with a cost of K120,000 bought on 1 December 2017. They wish to lodge in an objection against the assessment, but do not know the procedure and have requested your firm for advice.

You have further been provided with the following information relating to the transactions that took place during the charge year 2018:

(1) Matala Plc paid rent of K14,993 on 30 September 2018, for the new director for the period from 1 October 2018 to December 2018. The tenancy agreement was entered into, between the director and a landlord. The rental amount is VAT inclusive as the landlord is VAT registered. (3 marks)

(2) Matala Plc acquired a 3-tonne truck under an operating lease agreement on 1 January 2018 from Jasa Leasing Company Limited at an annual lease rentals of K59,972 VAT inclusive. The truck will be used for delivering goods to customers. (3 marks)

(3) Matala Plc engaged a foreign company Plat Plc to install elevators at its newly built office block. Installation works took ten (10) days. Plat Plc issued an invoice on its own behalf as it did not have enough time to appointment a tax agent in Zambia. The invoice issued by the foreign company to Matala Plc was denominated in US dollars and had a value of US$10,000. The exchange rate on the date of the issue of the invoice was K10 per $1.

(5 marks)

(4) On 1 December 2018, Matala Plc gave an interest free loan of K50,000 to Jala, a director and shareholder of the company. He owns 10% of the equity shares of the company. Jala has agreed to pay back the loan in two years' time. (2 marks)

(5) Matala Plc bought motor vehicles spare parts for its vehicles on 1 January 2018 for K145,000 VAT inclusive. (2 marks)

Required:

(a) Explain the procedure which the directors of Matala Plc should follow when objecting to the audit assessment. (5 marks)

(b) Advise Matala Plc using appropriate supporting computations, on the tax implications of each of the above transactions for the year ended 31 December 2018.

(15 marks)

[Total: 20 Marks]

QUESTION FIVE

You should assume that today's date is 15 October 2018 and that the tax rates for the tax year 2018 continue to apply for the foreseeable future

Gertrude Chibende has been in business for many years preparing financial statements to 30 June each year. On 31 March 2019, Gertrude will cease to trade and sell her business for K3,500,000 to Annabel, an unconnected third party.

Information about the assets that were used in the business is as follows:

	Original cost	Disposal proceeds
	K	K
Goodwill	0	900,000
Plot of land used for parking customer vehicles	120,000	550,000
Land and buildings	800,000	1,850,000
General Plant and machinery	90,000	40,000
Net current assets	135,000	160,000
Total	1,145,000	3,500,000

The cost of the land and buildings includes K140,000 for the land and included in the disposal proceeds of the land and buildings is K540,000 that relates to the land. The buildings are commercial buildings for capital allowances purposes. All of the amounts of disposal proceeds reflect the market values of the assets. At 1 January 2018, the income tax value of the commercial building was K462,000 while the income tax value of the general plant and machinery was K67,500 on the same date.

Gertrude had a tax adjusted profit of K230,000 for the year ended 30 June 2018 and she expects to earn a tax adjusted profit of K125,000 for the period from 1 July 2018 to 31 March 2019. Both of these figures are before taking into account any capital allowances.

Gertrude and Annabel are both registered for Value Added Tax (VAT) purposes. Gertrude is aware that she can also sell the individual assets instead of selling the business as a whole on the planned date of sale. Gertrude does not have any other sources of income.

Required:

(a) Calculate the capital allowances for the tax years 2018 and 2019. (4 marks)

(b) Calculate the income tax payable by Gertrude for the tax years 2018 and 2019 and explain how and when the income tax for the tax year 2018 should have been paid. (5 marks)

(c) Advise Gertrude of the VAT implications of the sale of her business as a going concern and compare them with the VAT implications of selling the individual assets instead. (4 marks)

(d) Advise Gertrude of the Property Transfer Tax implications of the sale of her business as a going concern and compare them with the Property Transfer Tax implications of the sale of the individual assets instead. (4 marks)

(e) Discuss from a VAT perspective whether it would be more beneficial to Gertrude to sell the entire business or to sell the individual assets. (3 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.4: ADVANCED TAX SOLUTION

SOLUTION ONE

(a) Members of a group are taxable as separate entities. A holding company of a group is not required to complete a single tax return for the entire group. Each group member should complete its own tax return covering the relevant tax year. This means that Chaisa Plc, Twaisa Plc and Mwaisa Ltd will each be assessed to income tax separately in the tax year 2018.

(i) **Tax implications of the disposal of Twaisa Plc**

When a company within the group is disposed of and hence exits the group, the taxation implications depends on whether that subsidiary has been sold as a going concern or not.

As Twaisa Plc was sold as a going concern, all the assets of that company will be taken over by the new owners. The business will continue operating but under new owners. Twaisa Plc will be deemed to have ceased trading on 31 March 2018, the date of disposal. Therefore, the company income tax assessment for the company in the tax year 2018 will be made using cessation rules.

The sale of Twaisa Plc business is a disposal of a going concern for VAT purposes. As a result, the whole transaction is outside the scope of VAT. Therefore, VAT would not be accounted for on the disposal of the business.

As result of the sale of the business, Twaisa Plc will be deregistered for VAT purposes. The new owner of the business would need to apply for VAT registration.

Property transfer tax will not be payable on the disposal of the subsidiary as a going concern. This is because a business is not property for the purposes of property transfer tax.

Since the last accounting period in the year of disposal of the business is less than 12 months, the profits of that accounting period will be assessed in the tax year following the one in which the profits of the second last accounting period are assessed. This means that profits made to 31 March 2018 will be the taxed in the year 2018, with the basis period being the 3 month period to 31 March 2018.

The computation of the final taxable profits and the company income tax payable by Twaisa Plc in the tax year 2018 will be as follows:

	K'000	K'000
Profit before capital allowances		8,310
Less Capital allowances on:		
Industrial buildings		
ITV b/f	11,250	
Disposal restricted to cost	(25,000)	
Balancing charge		13,750
Manufacturing Plant & Equipment		
ITV b/f	30,000	
Disposal	(20,000)	
Balancing allowance		(10,000)
Commercial Motor Vehicles		
ITV b/f (K14m – (K14 m x 25% x 3)	3,500	
Disposal	(8,000)	
Balancing charge		4,500
Less overlap profit brought forward		(280)
Final taxable profits		16,280
Company income Tax		
K16.28m x 35%		5,698

(ii) **Tax implications of the Acquisition of Mwaisa Ltd**

When a new company is acquired by a group and joins the group, that company is assessed separately for company income tax purposes. The existing members of the group will also still be taxable individually and separately.

Therefore, Mwaisa Ltd will be required to complete its own tax returns for the tax year 2018. Its company income tax assessments will be made using commencement rules. Since the first period of account after acquisition is less than twelve months long the normal rules will be used to determine the basis period for the first six months of trading after acquisition. Specifically the current year basis of assessment applies as the first accounting date falls on 31 December. The basis period for the tax year 2018 will therefore be the 6 month accounting period ending on 31 December 2018.

No VAT will arise on the acquisition of the assets of Mwaisa Ltd as the transfer of the subsidiary from the previous owners to Chaisa Plc was as a going concern. However, Mwaisa Ltd will need to apply for VAT registration individually as its previous VAT registration would have been cancelled on the sale by the previous owners.

The final taxable profit and the company income tax payable by Mwaisa Ltd will be as shown below:

	K'000	K'000
Profit before capital allowances		12,500
Less Capital allowances		
Administration buildings		
(K15m x 2%)	300	
Factory building		
(K10 m x 5%)	500	
Manufacturing Plant		
(K12m x 50%)	6,000	
Office equipment		
(K6m x 25%)	1,500	
Non-commercial motor vehicles		
(K2m x 20%)	400	
		(8,700)
Final taxable profit		3,800

Company income Tax K3,800,000 x 35%	1,330

(iii) Intragroup transactions

(1) When goods are purchased by a Zambian resident company at an artificially high price from a related company, the difference between the open market price of the goods and the actual transfer is not allowable when computing the taxable business profits.

Therefore, Chaisa Plc will be required to add back to accounting profit, the difference between the open market purchase price of the semi-processed and the actual purchase price. The amount disallowed in the computation of taxable profits of Chaisa Plc will be K14m
[(K1,500 – K800) x 20,000g]

(2) When a Zambian resident company makes a loan to a foreign related company, it must charge interest on that loan at a commercial rate.

Therefore, in the case of the interest free loan made by Chaisa Plc to Baisa Ltd, Chaisa will be deemed to have made the Loan to Baisa Ltd at a commercial rate of 29%. This will result in K725,000 (K2,500,000 x 29%) being disallowed when computing taxable business profits for Chaisa Plc.

(3) The transfer of title to land by Chaisa Plc to Mwaisa Ltd at nil consideration for the purposes of the internal reorganisation of the group will have no property transfer tax implications.

(4) The profit arising in the financial statements of Chaisa Plc on the disposal of Twaisa plc will not be taxable.

(5) The dividends received from Baisa Ltd are taxable in Zambia. However, the amount taxable is the gross amount before deducting the withholding tax charged in the foreign country. Since Chaisa has only recorded the net dividend received in computing profit for the year, the amount of the divided not recorded represented by the withholding tax deducted at source of K150,000 (K350,000 x 30/70) will be added when computing the final taxable business profits for Chaisa Plc. Credit will be given in respect of the foreign tax suffered on the dividends when computing the Zambian Income Tax charge.

The final taxable profit for Chaisa Plc will be computed as shown below:

CHAISA PLC

COMPANY INCOME TAX COMPUTATION OF INCOME TAX YEAR 2018

	K'000	K'000
Profit		34,610
Add:		
Excessive charge on semi-processed materials		
(K1,500 – K800) x 20,000	14,000	
WHT on Dividend from Baisa Ltd not recorded		
(K350,000 x 30/70)	150	
Interest free loan (K2,500,000 x 9%)	725	
		14,875
		49,485
Less profit on disposal of subsidiary		(2,000)
Final taxable profit		47,485
Company income Tax payable		
(K47,485 x 35%)		16,620
Less DTR foreign dividends		(150)
Final income tax payable		16,470

WORKINGS

Double taxation relief on the foreign dividends will be the lower of:

(1) Foreign tax on the foreign dividends

K350,000 x 30/70 = K150,000

(2) The Zambian tax charge the foreign dividends

K350,000 x 100/70 = K500,000 x 35%
= K175,000

DTR will therefore be K150,000 being the lower amount

(b) Tax implications for the company

(i) Issue of ordinary shares

Taxation Implications for the company

The implications for the company will be as follows:

(1) The fees the company will incur in issuing share capital will not be allowable expenses for tax purposes.

(2) The expenses the company will incur in making distributions to shareholders will not be allowable expenses for tax purposes.

(3) Dividends the company will be paying to shareholders will not allowable expenses for tax purposes.

Taxation Implications for Potential Investors

The taxation implications for potential investors will be:

(1) The dividends receivable by the investors are subject to withholding tax at the rate of 0%, for both individuals and companies, as the company is listed on the Lusaka Stock Exchange (LuSE).

(2) Property transfer tax will not arise on any transfer of shares by the investors as the company is listed on LuSE.

(ii) Issue Debentures

Taxation Implications for the company

The tax implications for the company will be as follows:

(1) Interest the payable on the debentures will be allowable.

(2) The incidental costs the company will incur in issuing the debentures will be allowable when computing business profits.

Taxation Implications for potential investors

(1) Interest received will be subject to a withholding tax which is a final tax for individuals.

(2) There will be no property transfer tax implications on the transfer of debentures between investors.

(c) 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.
(1) Guaranteed input tax claim for two years prior to commencement of production.
(2) Capital allowances on implements plant and machinery that are used in manufacturing are available at an accelerated rate of 50% on cost.
(3) Capital allowances on industrial buildings used for the purposes of manufacturing shall be entitled to a deduction of 10% in case of low cost housing and 5% for other industrial buildings.
(4) Persons who incur capital expenditure on an industrial building are entitled to claim a deduction called Initial Allowance at 10% of the cost incurred in the charge year in which the industrial building is first brought into use.
(5) Any person who incurs capital expenditure on an industrial building is entitled to an investment allowance at 10% of such expenditure in the first year that the building is used for manufacturing purposes.
(6) Refund of Zambian VAT on export of Zambian products by non-resident businesses under the Commercial Exporters Scheme.
(7) Income from chemical manufacturing of fertilizers is taxed at a reduced rate of 10%.
(8) Reduced Import Duty on selected raw materials and inputs used in manufacturing.

SOLUTION TWO

(a) **Moxey Ltd**

Threat

Tax return preparation does not generally threaten independence, although there is a possibility it may give rise to a self-review threat as staff may end up reviewing their own work.

Safeguard

Using a different department and ensuring that management takes responsibility for the returns.

Doxey Co

Threat

Offering tax planning services may result in your firm assuming management responsibility.

Safeguard

This threat can be managed by instructing audit team members not to perform any tasks which will result in them assuming management responsibility and ensuring management acknowledges responsibility for any work performed by the team.

Threat

Additionally, setting the fees for tax planning services as a percentage of tax saved is a form of contingent fees. This will give rise to a self-interest threat because the firm will want to save as much tax as possible in order to charge as high a tax fee as possible.

Safeguard

The safeguard is that the firm should not proceed to offer tax planning services because of the proposed fee structure.

Threat

An intimidation threat may arise from the fee arrangement for taxation services proposed by Doxey Co. The audit firm may be forced to accept the proposed fee arrangement for fear of losing Doxey Co as a client if the fee arrangement was not accepted.

Safeguard

To manage the threat the audit firm must explain to the directors of Doxey Co that the fee for any taxation services offered to by the firm will be based on the amount of time spent on the work.

Loxey Co

Threat

An advocacy threat may arise if the firm was to represent this company in a dispute with the taxation authorities.

Safeguard

The safeguard is that the firm must decline to represent Loxey Co in this dispute.

(b) (i) CHUMA BANK Ltd

COMPUTATION OF TAXABLE PROFIT

	K'000	K'000
Income before taxes		8,355
Add:		
Increase in general provision	1,632	
Depreciation	186	
Entertaining customers	85	
Donations - unapproved public benefit organisations	410	
		2,313
		10,668
Less:		
Rental income	548	
Unrealised exchange gains	250	
Profit on disposal of assets	90	
Hire purchase interest K20,000 +(K14,000 x 6) – K80,000	24	
Operating lease rentals (K25,000 x 5)	125	
Capital allowances on office equipment (K80,000 x 25%)	20	
Other Capital allowances	180	
		(1,237)
Taxable income		9,431

COMPUTATION OF TAXABLE BUSINESS PROFIT

	K
Company income tax	
(K9,431,000 × 35%)	3,300,850
Less:	
WHT on interest income	(6,660,000)
Provisional income tax	(2,924,000)
Income tax refundable	(6,283,150)

(ii) An effective shareholder in relation to a company is described as a person who is the beneficial owner of, or able to control either alone or as the nominees of that person, 5% or more of the issued share capital of or voting powers in such a company.

Tax consequences

The amounts of loans will be deemed to be emoluments paid by the bank net of income tax deductible under the Pay As You earn system at the highest rate of income tax for individuals.

The bank will therefore be required to pay tax at the rate of 37.5% of the gross amount of loans made to effective shareholders. This tax should be paid by the 10th day following the end of the month when the loan was made.

SOLUTION THREE

(a) (i) Tax implications of the exercise of the options

On the exercise of share options by an employee under an unapproved share option scheme run by the employer, an income tax charge arises on the difference between the market value of the shares bought on the exercise of the options and the amount actually paid for them. This amount is chargeable as emoluments.

In Munyati's s case the taxable amount will be:

	K
Value of the shares bought	
K9.50 x 200,000	1,900,000
Less amount paid by Munyati	

K6.50 x 200,000	(1,300,000)
Taxable emoluments	600,000

Alternatively:

In Munyati's case, the amount taxable as emoluments will be

= [200,000 x (K9.50 – K6,50)]

= K600,000.

(ii) Tax implication of the sale of the shares

On the sale of shares acquired under the share option scheme that is not approved for tax purposes in an unlisted company, property transfer tax is payable on the realised value of the shares sold. The shares have a realised value for property transfer tax purposes that is equal to the higher of their nominal value and the open market value, if this is greater than the sales price.

In Munyati's case, the amount of property transfer tax arising on the sale of the shares is: (200,000 x K10) x 5% = K100,000

(b) BENJAMIN MUNYATI
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2018

	K	K
Income from Zambian Sources		
Salary (K540,000 x 8/12)		360,000
Share options		
(K9.50 – K6.50 x 200,000)		600,000
Accrued leave pay		15,000
Total emoluments		975,000
Income from foreign Sources		
Dividend income (K22,400 x 100/64)		35,000
		1,010,000
Income Tax		
On first K74,400		9,960
On excess K935,600 x 37.5%		350,850
		360,810
Less PAYE		(298,500)
		65,310
Less: DTR on Dividends from foreign sources		

Dividends (W2)	(12,503)
Income Tax payable	52,807

The following benefits are exempt:

(1) Pension refunds
(2) Gratuity
(3) Payment for funeral expenses
(4) Payment for education school children

WORKINGS:

Double taxation relief on the dividends from foreign sources:

This will be the lower of:

(i) The foreign tax paid on the dividends:

K35,000 x 36% = K12,600; and

(ii) The Zambian Tax Charge computed as:

$$\left(\frac{K35{,}000}{K1{,}010{,}000}\right) x\ K360{,}810$$

= K12,503

DTR will therefore be K14,302 being the lower amount.

(c) COMPUTATION OF INCOME TAX ON ESTATE

	K
Shares in foreign company	250,000
Investment property in foreign country	750,000
Family house	780,000
Toyota Fortuner car	210,000
Farmland	450,000
Current account	18,000
Various Chattels	36,000
Gross Estate	2,494,000
Income tax on estate (K2,644,000 x35%)	(872,900)
Inheritance due to children	1,621,100

Inheritance due to Dalisto

(50% x 1,621,000) K810,550

Inheritance due to Kalui

(50% x 1,621,000) K810,550

SOLUTION FOUR

(a) **Appeals Procedure**

(1) Matala Plc should within 30 days of the date of the issue of the assessment make to the Commissioner General a written statement of objection to the assessment setting out the grounds for objection.
(2) If the objection is filed in late, the Commissioner General may make a determination either allowing or disallowing the late objection.
(3) The Commissioner General shall give the company written notice of his decision concerning the objection.
(4) If Matala Plc is dissatisfied with The Commissioner General's decision, the company may within 30 days of the Commissioner General's notice lodge an appeal with the Tax appeals Tribunal. The tax appeal may be on a point of law or fact or both.
(5) If either party is dissatisfied with the decision of the Tax Appeals tribunal, then they may appeal to the Supreme Court only on a point of law and not on a point of fact.

(b) Tax Implications of Matala Plc's Transactions for the year ended 31 December 2018

(1) Rent of K14,993

(i) No VAT will be chargeable on the rentals because domestic rentals are not subject to VAT.

(Full marks were awarded for solutions stating that Matala Plc will not be allowed to claim any input VAT on the rentals which will amount to K2,068 (K14,993 x 4/29))

(ii) Matala Plc will be required to gross up the rental amount and add it to the emoluments of the new director for the month of September 2018. An amount of K16,659 [K14,993/(1 – 0.10)] will be added to the emolument of the new director and taxed under PAYE.

(iii) The grossed up rentals paid by Matala Plc on behalf of the director will be allowed as an expense for income tax purposes.

(2) Operating lease

(i) Matala Plc will be allowed to treat lease rental net of VAT amounting to K51,700 (K59,972 x 25/29) as an allowable expense when calculating its tax adjusted profit or loss for 2018 charge year.
(ii) Moreover, Matala Plc can claim input VAT of K8,272 (K59,972 x 4/29) in its VAT return. This is because the expense is business related and the leased item is a commercial vehicle.
(iii) Matala Plc cannot however claim any capital allowances under an operating lease.

(3) Elevators' installation costs

(i) Reverse VAT will apply to this transaction because the installation service provided by the foreign company, Plat Plc, qualifies to be classified as an imported service and Plat Plc did not appoint an agent to act on its behalf for VAT purposes.
(ii) Matala Plc will have to charge itself reverse VAT of K16,000 (K100,000 x 16%). This will be included as part of Matala Plc's output VAT.
(iii) The VAT will form part of the cost of the elevator as it is not claimable as input VAT.
(iv) Matala Plc will recognise total capital expenditure of K116,000. This is made up of cost net of VAT of K100,000 ($10,000 x K10/$1) and VAT of K16,000 (K100,000 x 16%).

Matala Plc will claim capital allowance of K29,000 (K116,000 x 25%).

(v) Further, Matala Plc will have to deduct withholding tax of K20,000 (K100,000 x 20%) and remit it to the Zambia Revenue Authority.

(4) Loan to Jala of K50,000

(i) The Income Tax Act requires, as an anti-tax avoidance measure, that loans to effective shareholders be treated as emoluments as long as they remain outstanding.

(ii) Matala Plc will be required to gross up the loan amount and pay tax at the highest rate of 37.5% under PAYE system. Tax amounting to K30,000 [37.5% x (K50,000/(1 – 0.375)] should be remitted to ZRA by 10th January 2018.

(iii) The tax remitted will be refunded once the loan is repaid by Jala.

(5) Purchase of motor vehicle spares

(i) The VAT of K20,000 (K145,000 x 4/29) is not claimable as input VAT.

(ii) Therefore, the total cost of spares of K145,000 will be treated as an allowable expense

(iii) in full under income tax.

SOLUTION FIVE

(a) Capital allowances computation for the tax years 2018 and 2019

Tax year 2018		
	K	K
Commercial Building		
Income Tax Value b/f	462,000	
Wear and tear allowance: 2% x (K800,000 - K140,000)	(13,200)	13,200
Income Tax Value c/f	448,800	
General Plant and machinery		
Income Tax Value b/f	67,500	
Wear and Tear allowance: 25% x K90,000	(22,500)	22,500
Income Tax Value c/f	45,000	
Total capital allowances		35,700
Tax year 2019		
Commercial Building		
Income Tax Value b/f	448,800	
Disposal (K800,000 – K140,000)	(660,000)	
Balancing charge		(211,200)
General Plant and machinery		
Income Tax Value b/f	45,000	
Disposal	(40,000)	
Balancing allowance		5,000
Net balancing charge		(206,200)

(b) Gertrude

Personal Income Tax computations for the tax years 2018 and 2019

	2018	2019
	K	K
Tax adjusted profit before capital allowances		
Year ended 30 June 2018	230,000	
Period ended 31 March 2019		125,000
Capital allowances:		
Less: Capital allowances/ Add balancing charge	(35,700)	206,200
Taxable business profits	194,300	331,200
Income Tax		
On the first K74,400 of income	9,960	9,960
On the balance:		
37.5% x (K194,300 – K74,400)/ (K331,200 – K74,400)	44,962	96,300
Income Tax payable	54,922	106,260

The income tax payable by Gertrude for the tax year 2017 is K54,922. This income tax should have been paid in four equal quarterly instalments of K13,730 each. The due dates when these instalments should have been paid are 10 April 2018, 10 July 2018, 10 October 2018 and 10 January 2019.

(c) VAT implications:

(i) The sale of Gertrude's business is a disposal of a going concern for VAT purposes. As a result, the whole transaction is outside the scope of VAT. Therefore, VAT would not be accounted for on the disposal of the business.

Due to the sale of the business, Gertrude would be deregistered for VAT purposes. The new owner, Annabel would use her VAT registration to account for VAT on the newly acquired business.

(ii) If Gertrude instead sold the individual assets, then output VAT would have been charged on the sales of taxable assets. This is because a sale of individual assets is within the scope of VAT, even if those assets were used in a trader's business. Output VAT would be charged on the sale of the plot of land, the sale of the land and buildings, the sale of the plant and machinery and the sale of inventories.

(d) The disposal of the business as a whole would not result in property transfer tax being payable. This is because a business is not property for the purposes of property transfer tax.

If, instead Gertrude disposed off the individual assets, then property transfer tax would be payable on the disposal of the land and buildings. The property transfer tax would amount to

K92,500 (i.e., 5% x K1,850,000). This property transfer tax is avoided when the business is sold as a going concern.

(e) It would be more beneficial for Gertrude to sell the whole business as a going concern from a VAT perspective. This is because the transaction would then be outside the scope of VAT and no VAT would therefore be payable on taxable values of assets.

If Gertrude sold individual assets instead, VAT would be payable on each of those individual assets. This would reduce Gertrude's income because she would not be able to add VAT on the agreed sales values of each asset. The agreed sales values would be considered as the VAT inclusive amounts.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.5: ADVANCED MANAGEMENT ACCOUNTING

TUESDAY 12 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10 Discount Factor tables/Present Value and Annuity Tables are attached at the end of the question paper.

SECTION A

This question is compulsory and must be attempted.

<u>QUESTION ONE</u>

Rite Stores Plc (RS) is a chain stores business with its presence in all the 10 provinces of Zambia. The company was listed on the stock exchange some 6 years ago. RS deals in many products among them are groceries, hardware, clothing and food. Most of the goods are sourced from trusted manufactures from both abroad and locally. Besides these high quality goods, the company also sells 'own label' products.

Currently, RS faces a tough competitive environment with all the major players in its market trying to secure their positions. The Zambian currency has been stable compared to most of the leading world currencies. However, consumer spending is falling throughout the economy and there is no immediate likelihood of a resumption of growth.

The company management conducted a strategic review of the business in the context of the current economic status. It has identified the following strategies as critical for RS's success:

(i) Focus on key customers – those who are occasional shoppers but not currently loyal to the business
(ii) Ensure RS's offering addresses their needs
(iii) Eliminate costs which do not address these customers' priorities
(iv) Amend current processes to meet this new focus
(v) Build for the future with a programme of sustainable development.

Strategic performance
The company now needs to address the impact of these strategies on its performance measurement systems. RS uses a balanced scorecard to assess its strategic performance and the scorecard is used to connect the business strategy with its more detailed performance measures.

Financial performance
Currently, RS uses Economic Value Added (EVA), earnings per share (EPS) growth and share price performance to monitor its financial performance.
The management board is also considering a change to the information systems at RS. The existing systems are based on the individual functions (purchasing, production, sales, service, finance and human resources). The management team at RS is uncertain whether the purchasing function is maximising its potential in terms of purchasing efficiency and effectiveness.

The board is considering the implementation of a new system based on an integrated, single database that would be accessible by all the company's stores. The company network would be upgraded to allow real-time input and update of the database. The database would support a detailed management information system and a high-level executive information system.

Figure 1

Financial data for Rite Stores

	2016	2017
	K'000	K'000
Operating Profit	1,011.4	870.2
Interest	80.4	155.2
Profit before tax	931.0	715.0
Profit for the year	707.6	543.4
Average number of shares in issue	3,200,000	3,200,000

	2016	2017
Rite Stores Economic value added (EVA)	612	220
Market Index	557.6	362.45
Retailing sector index	1,225.35	955.75
Rite Stores average share price	K2.45	K2.08

Figure 2

Economic value added	*Year ended 31 June 2017*	
	K'000	*Note*
Operating profit	870.2	
Add back		
Non-cash expenses	30.2	
Marketing capitalised	46.2	5
Operating lease expenses	80	
Less		
Tax	291.4	6
Lost tax relief on interest	191.8	7
Net operating profit after tax (NOPAT)	543.4	
Capital employed		
From the statement of financial position	2,211.5	10
Marketing spend capitalised	46.2	5
Operating leases	230.0	8
Adjusted capital employed	2,487.7	

WACC = (1/2 x 15%) + (1/2 x 5.5%) = 13%

EVA™ = NOPAT – (WACC x Capital employed) = K220,000

Assumptions and notes:

1) Debt/Equity is 100.0%
2) Cost of equity is 15.0%
3) Tax rate is 35.0%
4) Cost of debt (pre-tax) is 5.5%
5) There has been K46,200 of marketing spent on three newly opened stores.

6) Tax paid in the year was K209,000 while the tax charged per the accounts was K291,400
7) Interest charged in the period was K548,000. Lost tax relief on this interest was 35% x K548,000.
8) The operating leases have an average life of four years.
9) The only research and development spending identified in the last five years was K20,000 expensed during this year on a prospective market. The company has not yet positioned its self in this market.

10) Capital employed during the period (from the statement of financial position):

Opening	1,979.2
Change in period	232.3
Closing	2,211.5

Required:

(a) Describe the four perspectives of the balanced scorecard showing how the new strategy of the business as outlined by the management links to the different perspectives. Illustrate your answer by suggesting appropriate performance measures for RS for each of the detailed points within the strategy.
(8 marks)

(b) Evaluate the accuracy of the EVA™ calculation and the assumptions in figure 2.
(12 marks)

(c) (i) Assess the financial performance of the company using the three shareholder performance indicators in figure 1 and the adjusted EVA™ in part (a) above.
(8 marks)

(ii) Evaluate the use of these performance metrics and how they may affect management's behaviour. (6 marks)

(d) Evaluate the potential impact of the introduction of the new executive information system at RS on performance management. (6 marks)

[Total: 40 Marks]

SECTION B
Attempt any THREE (3) Questions in this section.

QUESTION TWO

Toys For You (TFY) Plc makes children's construction toys. The company's products are subject to many complaints from customers. These include the frailty of the toys (which have parts which often break off) and the large number of parts used in each building block such as Legos building blocks. In addition, parts are often fitting badly due to poor specifications. They snap easily and are of varying thickness (due to a large number of suppliers used). They are easily assembled wrongly by both children and their parents too. This is all due to poor design or poor workforce training and poor supervision. While there is no doubt that the company's toys are educational and sell well, these problems are leading to a low satisfaction rate for the company's product from parents and children.

Required:

(a) Explain possible steps the design department should take to improve the quality of the company's products. (4 marks)

(c) Identify five groups involved in the design for quality process and explain what role they play in the design for quality process using the information in the TFY Plc scenario.

(d) (4 marks)

When TFY Plc was formed it enjoyed dynamic growth in sales and profits. However, due to quality problems mentioned above, management's over concentration on operational issues with little attention paid to strategic planning and development of new markets, it's market share has shrunk and profits have declined. Pamela Zindaba, the CEO of TFY Plc, is very worried about this development. (4 marks)

(c) TFY is focusing more on day to day operational activities at the expense of strategic planning.

Discuss how operational planning differs from strategic planning and management.
(6 marks)

(d) A Management Information System (MIS) for TFY Ltd which includes both operational and strategic information would be beneficial.

Explain some benefits of such a MIS. (6 marks)
[Total: 20 Marks]

QUESTION THREE

Tikonza Housing Authority (THA) is in real estate business. It specialises in house construction, offering them for direct purchase or pre-sale basis. Pre-sale houses are sold on 25% deposit for THA to start construction, 50% payment when construction reaches the lintel level and the final 25% payment when THA hands over the house to a client. THA also owns houses and flats for renting out. Recently it went into the business of making building blocks, paver blocks for residential clients, offices and cement sales.

Some houses and flats are now in a dilapidated state. Air conditioning and heating costs have increased due to outdated air conditioning models. In addition, security and burglary costs have also increased.

THA is considering investing in some major refurbishment of its flats to enable the provision of improved quality of life to tenants, improve rental income and save certain operating costs. THA is currently negotiating with two contractors, namely, Kazikika (K) and Tigwirizane (T).

Relevant data is as detailed below:

(i) Ninety (90) flats will be refurbished at a price of K100,000 each

(ii) Contractor K requires payment of two thirds ($^{2}/_{3}$) of the total contract price when the work starts. The remaining one third ($^{1}/_{3}$) is paid on completion of all the flats, at the end of year 2. On the other hand contractor T requires a payment of K180,000 on commencement of the work and the balance of the contract price to be paid in proportion to the number of flats renovated in each year.

(iii) Senior management has agreed to evaluate the viability of the refurbishment over a five year period.

(iv) Rental increases and cost savings will commence in the year following that in which each flat is refurbished.

(v) Savings in air conditioning costs are expected to amount to K6,000 per year for each flat upon refurbishment completion.

(vi) Security and burglary costs are expected to reduce by K18,000 per year for each flat upon refurbishment completion.

(vii) Senior management forecast that annual contribution from sales can be increased by K20,000 per flat once refurbishment is completed.

(viii) Contractors 'K' and 'T' have promised the following programme of completion:

	Number of flats completed			
Year	1	2	3	Total
Contractor 'K'	24	66	-	90
Contractor 'T'	20	24	46	90
Total	44	90	46	180

THA uses a hurdle rate of 20% pre-tax discount rate to evaluate its investments.

Assume that all cashflows occur at the end of the year. Ignore inflation and taxation.

Required:

(a) Evaluate the refurbishment investment in each of the following individual scenarios.
(i) Ignoring the discounting of cashflows.
(ii) Discounting the cashflows using the Net Present Value (NPV) method.
(10 marks)

(b) Comment on the results in part (a) and advise management accordingly.
(5 marks)

(c) Explain TWO (2) factors, in addition to your analysis in (a) that THA should take into account when choosing between contractors 'K' and 'T'. (2 marks)

In the THA question, inflation was ignored. However, inflation affects the viability of investments.

(d) Explain TWO (2) approaches for adjusting inflation when appraising capital projects.
(3 marks)
[Total: 20 Marks]

QUESTION FOUR

The Gamma Group owns several divisions. Amongst these are divisions Alpha (A) and Beta (B). Division A manufactures a single product which it sells to external customers and also transfers to Division B. Divisional autonomy is practiced in the Gamma Group.

The Gamma group uses residual income (RI) to evaluate the performance of the divisions. Every year a target RI is set for each division. In the year under review, Division A has been set a target RI of K150,000.

The budgeted information below relate to Division A for the year under review.
- Capital employed: K800,000
- The Gamma Group cost of capital: 14%
- Directly attributable fixed costs in Division A: K30,000
- Variable cost per unit: K7
- Sales to external customers K40,000 units
- External selling price: K12
- Maximum capacity: 60,000 units

(a) Division B has asked Division A to quote a transfer price for 25,000 units.

Required:
Calculate the transfer price (TP) per unit which Division A should quote in order to meet its budget residual income. (5 marks)

(b) Explain why the TP you calculated in part (a) may lead to dysfunctional decision making from the point of view of the Gamma group. (3 marks)

(c) Calculate the two prices Division A would quote to Division B, if transfer prices were to be based on opportunity costs. (4 marks)

(d) Explain TWO factors that the Gamma Group should take into account when designing divisional performance measures for its divisions. (4 marks)

(e) (i) Explain how multi-national companies can use transfer prices to reduce their overall tax liability and the actions that national tax authorities have taken to prevent the manipulation of transfer prices. (2 marks)

(ii) During the year under review Petite Ltd, a French manufacturing division of the Grande' Group, transferred 3,000 units to a selling division in Zambia.

Each unit cost €700 and was sold for K1,300. The variable cost proportion was 60%. The Zambian division incurred market and distribution costs of K40 per unit. The Zambian tax rate was 25% and the exchange rate was K1 = €1.80. Transfers were made at variable cost.

Required:

Calculate the profit after tax reported by the Zambian Division if 3,000 units were sold. (2 marks)

[Total: 20 Marks]

QUESTION FIVE

In the modern environment, organizations have adopted firm measures to manage and control costs. Public sector organizations have not been spared. Those that have not adapted the demands of the modern environment are being privatized.

"Recently we heard the Government of the Republic of Zambia giving a warning and caution statement to the parastatals and other government managed organizations to operate profitably." Therefore, many public sector organizations are adopting more efficient budgetary and cost control measures.

In view of this, incremental budgeting is being disregarded in preference to more robust approaches such as Zero Based Budgeting both in the private and public sectors.

Required:

(a) Discuss the difficulties encountered when budgeting in public sector organisations compared with private sector. (6 marks)

(b) Distinguish incremental budgeting from Zero based budgeting (3 marks)

(c) Explain three (3) main steps involved when preparing a Zero based budget. (3 marks)

(d) Discuss the view that 'incremental budgeting is no longer useful in both private and public sector organisations and thus Zero based must be adopted. (8 marks)

[Total: 20 Marks]

END OF PAPER

Formulae Sheet

Learning curve

$Y = ax^b$

Where Y = cumulative average time per unit to produce x units
a = the time taken for the first unit of output
x = the cumulative number of units produced
b = the index of learning (log LR/log2)
LR = the learning rate as a decimal

Demand curve

$P = a - bQ$

$$b = \frac{\text{change in price}}{\text{change in quantity}}$$

a = price when $Q = 0$

$MR = a - 2bQ$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}}\left(1 + r_e\right) - 1$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 3.5 ADVANCED MANAGEMENT ACCOUNTING SOLUTIONS

SOLUTION ONE

(a) Balanced Scorecard

The Balanced Scorecard provides a framework for a business to achieve its strategic objectives include both financial and non-financial objectives. The approach claims that performance has four dimensions: financial, customer, internal business, and innovation and learning. The financial perspective asks: What value is created for shareholders. The customer perspective asks: How does the business appear to the customers? The internal business perspective asks: What do we need to do to satisfy shareholders and customers, including the monitoring of unit costs?
The innovation and learning perspective looks at how products and processes should be changed and improved.
The scorecard is concerned with monitoring and measuring the critical variables that comprise the customer and internal perspective. The choice of variables for inclusion in the scorecard is significant because the scorecard report is a design for action.
Inappropriate indicators will trigger damaging responses. For example, the organisation needs to monitor what factors customers regard as contributing to quality of the products, not what the business thinks it should provide.

The new strategy addresses these perspectives in different ways. Ultimately all of the perspectives will have financial effects whether in the short or long-term interests of our shareholders.

Focus on key customers: this directly addresses the customer perspective and will require the collection of the profiles and needs of these customers in order to generate market growth and so improve our financial position. Suitable performance measurement would segment our market (for example, by customer age or gender) and identify our changing market share within each segment.

Ensuring we meet key customer needs: again addresses the customer perspective but will also impact on the products that Rite offers and so affect the process perspective. Suitable performance measures from the customer perspective would be levels of repeat business and customer satisfaction and from the process perspective, Rite will measure its product range and quality. Range would be measured against competitors while quality could be measured subjectively against competitors or internally by level of customer complaints or returns.

Cost cutting: this connects to the process perspective as it seeks to focus the business on value added activities. Suitable performance measures would be efficiency savings generated by removing or reducing unnecessary processes/products. Rite could possibly look to simplify its supply chain by cutting the number of suppliers with which it deals.

Amend current processes to meet the new focus: clearly, this takes the process perspective and measurement of this objective will be by way of the achievement of goals in a specific change programme to assist the other objectives.

Programme of sustainable development: this objective looks to the future and this is the learning and growth perspective. Suitable measures for this area would include efficiency of energy use of the business and the level of packaging waste generated more especially for 'own label' products.

(b) Economic value added (EVA™)

Although some elements of it have been performed correctly, there are a number of errors in the existing calculation of (EVA™). The correct treatments are described below, and then the corrected EVA™ is calculated.

Non-cash expenses are correctly added back to profit as such costs are treated as unacceptable accounting adjustments on a cash-based view. Marketing activities for long-term benefit are also correctly added back as they generate future value for the business. The prior year marketing expenditure is also added in to capital employed. Operating leases should be added back to profit and to capital employed. However, a suitable additional depreciation should also be charged on the operating leases as these are now treated as assets of the business. Research and development (R&D) expenditure should be added back to profit in the same way that the long term marketing spending is. The tax costing the calculation should be the amount paid, adjusted for lost tax on interest and not the adjusted amount of tax charged in the accounts.

The WACC is incorrectly calculated as it should be based on the post-tax cost of debt. The capital employed figure should be based on the figure at the start of the year (opening capital employed) not the end of the year.

Economic value added	*Year ended 31 March 2017*
	K'000
Operating profit	870.2
Add back	
Non-cash expenses	30.2
Marketing capitalized	46.2
Operating lease expenses	80
Research and development	20
Less	
Depreciation on leased assets (230/4)	57.5
Tax	209.0
Lost tax relief on interest	191.8
Net operating profit after tax (NOPAT)	588.3
Capital employed	
At start of year	1,979.2
Marketing spend capitalised	46.2
Operating leases	230.0
Adjusted capital employed	2,255.4

WACC = (1/2 x 15%) + (1/2 x 5.5% x (1 – 35%)) = 9.29%

EVA™ = NOPAT – (WACC x Capital employed) = K378,773

(c) (i) Rite Stores' financial performance

The year on year performance of RS has declined with earnings per share falling by 23%. Normally, this would imply that the company would be heavily out of favour with investors. However, the share price seems to have held up with a decline of only 15% compared to a fall in the sector of 22% and the market as a whole of 35%. The sector comparison is the more relevant to the performance of RS's management as the main market index will contain data from manufacturing, financial and other industries. Shareholders will be encouraged by the implication that the market views RS as one of the better future prospects for investment.
This view is substantiated by the positive EVA for 2017 (379) which RS generated. EVA has fallen by 38.5% from 2016 but it has remained positive and so the company continues to create value for its shareholders even in the poor economic environment.

Workings:

	2016	2017	
(W1)			
Economic value added (EVA)	612	379	(down 38.5%)
(W2)			
EPS (profit for year/av no of shares)	0.22	0.17	(down 23%)
Stock market information			
Main market index	557.6	362.45	(down 35%)
Retailing sector index	1,225.35	955.75	(down 22%)
Rite Stores share price	K2.45	K2.08	(down 15%)

(c) (ii) Evaluating the financial metrics

The indicators have strengths and weaknesses each. EVA is a widely used indicator which aims to capture the increase in shareholder wealth that the company generates. It uses amended traditional profit based information in order to approximate the net present value method of appraising an investment. Thus, EVA provides a clear focus on the major objective of most commercial entities. However, its calculation requires a large number of adjustments to the traditional accounting figures, for example the need to calculate the economic rather than accounting depreciation, the need to distinguish between cash flow and accruals and to distinguish between expense and investment. This makes the method less easily understood than the two other measures currently used by RS.
EPS growth is important to shareholders as it relates to dividend growth which is a fundamental variable used in the calculation of share value (Dividend valuation method). It is a widely used measure by equity analysts and so is a key driver of share prices. However, it is based on accounting profit and only captures year on year change and so can be subject to short-term manipulation if the trend over a number of years is not considered.
Share price performance reflects the capital performance of an investment but tends to be volatile and subject to significant fluctuations outside of the control of management. It will be the figure that most shareholders turn to in order to get a quick impression of their investment performance but it can lead to judgements being formed on the basis of that

short-term volatility which are more appropriate for speculators rather than investors. . The use of an average share price in this instance should help to ameliorate such problems but the averaging method and time-period should be further investigated.

The impact of these metrics on management is intended to focus their activities on improvement of financial performance for shareholders. The danger of EPS growth and share price is that these may be manipulated in the short-term in order to demonstrate improvement but at the risk of impairing long-term performance. EVA partially tackles this issue through its use of adjusted accounting figures (e.g. depreciation) but suffers from lack of clarity in its calculation compared to these other metrics.

(d) Impact of new executive information system (EIS)

Benefits

Improved decision making – At the strategic level, management should be looking at how well RS is performing in relation to its key performance indicators. However, the EIS should also allow management to drill-down to the more detailed operational records to help understand the reasons for any variances in performance, and to identify ways of improving performance.

Improved information – The new system will increase the amount of information that will be available to managers, and the analysis they can carry out on that information. In particular, the system will allow the managers to use more up-to-date information than they are currently able to use.

Data integrity – Having a single database should again improve the quality of data which is used in decision-making. For example, there is no longer the risk of inconsistency between data drawn from two different systems or sources.

Tactical information – The EIS will also give access to tactical information such as budgets, which will help the executives control the business; most obviously by comparing actual financial performance against budget.

Potential problems and issues

Information overload – Although allowing managers access to more information could be a benefit of the EIS, if the amount of information available is not controlled then information overload could become a problem. For example, managers could get obsessed with looking at detailed information rather than focusing on strategic issues and overall performance against key performance indicators.

Training – Because the EIS is a new system, in order to maximise the benefit which managers can get from using it, they will need to be trained in how to use it.

SOLUTION TWO

a) The design department should redesign the product and the parts that go into it. The aim should be the design of a quality product. The steps the design department should take to improve the quality of TFY's products include:

- Design the toy so that it is robust and can endure anything that children can do to it. This will probably involve recruiting local children to help with this aim.
- Redesign parts so that pieces do not break off, either by simplifying them or redesigning them.
- The large number of parts which go into each building block can be remedied by designing the blocks with fewer parts. This will also assist with waste elimination in the factory, by removing unnecessary parts.
- Varying thicknesses of materials which result in ill-fitting pieces can easily be remedied by limiting the number of suppliers and being much more specific about what thickness the parts should be.
- Parts will need to be designed in such a way that they can only be put together in the correct way.

The design department will look at each complaint in turn and redesign a good product into a quality product.

Design for quality will attempt to eliminate the above weaknesses, and wasted effort and wasted money to manufacture products that are strong, simple, accurately produced and assembled correctly.

b) Five groups involved in the design for quality process are supplier of parts, workforce, management, design department and customers. They take the product from the start of its life to its end:

i) **Suppliers of parts:** the design department will need to liaise with them very closely so that exactly the right products with the correct degree of accuracy, number of parts and strength will be supplied to the production process.
ii) **Workforce:** employees will need careful education on how to put products together. This training will take place whenever changes are made to product design and production processes.
iii) **Management:** they will be involved in providing the resources to make sure that the design for quality process can be completed successfully.
iv) **Design department:** designers will be involved continually in updating designs and making sure that quality products are being produced to the requirements of the consumer.
v) **Customers:** feedback will come concerning the quality of the products bought, whether they meet expectations or whether they need modification in some way.

All groups are therefore involved in making the design for quality process work.

c) TFY management has focused on operational day to day matters. Operational planning and control have characteristics which are explained below.
TFY management is likely to be performing these characteristics:
   i) Detailed plans are made, normally departmental planning and controlling to pursue department objectives
   ii) Operational planning activities are mostly concerned with current performance levels. Control activities mostly comprise comparing current performance with operational plan. Control and feedback can be immediate.
   iii) Operation planning and control are internally focused. It is basically detailed plan for executing and controlling activity. It is likely TFY is doing this. Information requirements are more specific at this level
   iv) Short term plans (yearly budgets) are normally for a period of one year. TFY Plc is preparing yearly budgets.
   v) Plans normally remain unchanged

On the other hand strategic planning and management tend to be:

   i) Broad and does not go into detail. It takes a holistic approach towards planning and control.
   ii) They are forward looking and feed forward control is used at this level
   iii) It considers both internal and external information. TFY Plc should be doing this to avert sales losses.
   iv) Strategic planning is externally oriented. It focuses on response of the organisation to external "shocks".
   v) Concerned with long term issues, perhaps 15 to 20 years. Normally 5 years plans are common.
   vi) Concerned with acquisition of new/additional resources, e.g. capital expenditure. TFY may need this to modernise its toy manufacturing plant.

d) TFY Plc needs to concentrate on both operational and strategic planning if it is to be successful in the long term. TFY Plc's business appears to have given little attention to the strategic issues. E.g. it has not explored new markets and new products. Market and product development require the consideration of external long term matters which may call for the purchasing of new resources. But it seems TFY Plc seems to be reactive to events – just watching its market share being eroded. It needs to be proactive. Its business needs to develop the MIS which would incorporate information for external environment.

   The MIS will provide market information about:
   - Competitors' reactions/ competitor prices
   - Government policy/ political/legal actions
   - Suppliers, new technology
   - State of markets and the economy

The bringing out of these issues does not mean that TFY Plc has to do away with operational planning. What is required is a balanced consideration of both operational and strategic issues. The MIS will support the information needs of these two planning levels.

SOLUTION THREE

a) Contractor K

i) Without Discounting K'000

Year	0	1	2	3	4	5	Total
Contractor Payment	(6,000)	–	(3,000)	–	–	–	(9,000)
Refurbishment savings	–	–	1,056	3,960	3,960	3,960	12,936
Cashflow	(6,000)		(1,944)	3,960	3,960	3,960	3,936

ii) With Discounting

Net Cashflow	(6,000)		(1,944)	3960	3960	3960
Discount factor @20%	1.0	0.833	0.694	0.579	0.482	0.402
PV	(6,000)		(1,349)	2,293	1,909	1,592
			NPV			(1,555)

Workings

Contractor payments

	K'000
Total payment: 90 flats x K100,000	9,000
Project start x K9,000	6,000
Project finish x K9,000	3,000
	9,000

Year 1 gains per flat

	K'000
Contribution increase from rentals	20
Air conditioning costs savings	6
Security/Burglary savings	18
Total gains per flat	44

Total gains after year 1: 24 x K44	K1,056
Total gains after year 2: 90 x K44	K3,960

Contractor T

i) Without Discounting

K'000

Year	0	1	2	3	4	5	Total
Contractor Payment	(180)	(1,960)	(2,352)	(4,508)	–	–	(9,000)
Refurbishment savings	–	–	880	1,936	3,960	3,960	10,736
Cashflow	(180)	(1,960)	(1,472)	(2,572)	3,960	3,960	1,736

ii) With Discounting

K'000

Year	0	1	2	3	4	5
Net Cashflow	(180)	(1,960)	(1,472)	(2,572)	3,960	3960
Discount factor @20%	1.0	0.833	0.694	0.579	0.482	0.402
PV	(180)	(1,633)	(1,022)	(1,489)	1,909	1,592
		NPV				(823)

Workings

i)

	K'000
Contractor total payments	9,000
Less initial deposit	(180)
Balance to pay	8,820
No. of flats	90
Payment per flat	98

Amounts payable at End of Years 1, 2 & 3

K,000

Y1 20 x K98,000 = K1,960

Y2 24 x K98,000 = K2,352

Y3 46 x K98,000 = K4,508

ii) Yearly gain per flat = K44,000

K'000

Yearly gain after Yr. 1 = 20 x K44,000 = 880 Y2

Yearly gain after Yr. 2 = 44 x K44,000 = 1,936 Y3

Yearly gain after Yr. 3 = 90 x K44,000 = 3,960 Y4

Yearly gain after Yr. 4 = 90 x K44,000 = 1,960 Y5

b) i) If the discounting of cashflows is ignored, the refurbishment of the flats is worthwhile in the use of both contractors, K and T. However, contract K will produce the highest total cashflow and will therefore win the tender. The reason is that the flats will be refurbished much more quickly. This means that savings will accrue much earlier.

ii) When cashflows are discounted, the NPV is negative in both cases over the five year period, although contractor 'T' has a smaller negative NPV. This suggests that the investment should not be undertaken on financial grounds.

If the appraisal period were to be extended to six years, the NPV would increase by K1,327,000 (i.e. K3,960,000 x 0.335) resulting in a positive NPV of K504,000. This suggests that contractor T is more cost effective with discounting because of the timing of the payments to the contractor. With contractor 'K' an extension to Year 6 still results in a negative NPV.

c) Other factors that THA should consider when choosing between the two contractors include:
   i) The reputation, reliability and quality of work of each of the contractors.
   ii) Contractor 'K' has fewer variables in terms of payments and therefore, less susceptible to forecast errors. It can complete refurbishing the flats in two years' time compared to T's three years and, therefore, less risky.
   iii) Contractor T has a liberal payment pattern allowing THA to organise finances or invest surplus funds on the money market. In addition, initial deposit is only K180,000 compared to K's requirement of K6,000,000.

d) The net present value can be adjusted by two basic ways to take inflation into account. First, a discount rate can be used, based on the required rate of return, that includes allowance for inflation. Remember that cashflows must also be adjusted for inflation. Secondly, the anticipated rate of inflation can be excluded from the discount rate, and cashflows can be expressed in real terms. In other words, the first method discounts nominal cashflows at a nominal discount rate and the second method discounts real flows at a real discount rate.

The relationship between real and nominal cashflows is expressed in the equation $(1 + m) = (1 + r)(1 + i)$

Where 'm' is the nominal rate of interest expressed as a decimal.
'r' is the real rate of interest expressed as a decimal
'i' is the expected rate of inflation expressed as a decimal

SOLUTION FOUR

a) RI = Profit – Notional Interest Charge
Profit = RI + Notional Interest Charge
Contribution = Fixed costs + Proft

Notional interest – 14% x K800,000 =		112,000
Add: RI		150,000
∴Profit		262,000
Add: Direct attributable fixed costs		30,000
∴Total Contribution		292,000
Less: Contribution from external sales		
40,000 x (K12 – K7)	(200,000)	
∴Contribution from internal transfers		92,000
		÷
Transfer units		25,000
Contribution per unit		K3.68
TP = VC + Contribution = K7 + K3.68 =		K10.68

b) A sub-optimal situation could arise if Division B discovers a source of external supply of units at a price lower than K10.68 but higher than K7. Unless Division B is forced to purchase internally a suboptimal decision would result because Division B would be paying more for the units than it costs to manufacture internally.
Up to 20,000 units, the opportunity cost is zero as there is no external demand for this quantity:
Division A has excess capacity for this quantity. For this quantity the TP should be K7 per unit. Division B would only wish to buy externally if the price were less than K7.

c) By transferring 25,000 units internally, external sales of 5,000 units are lost.
The opportunity cost of the 5,000 units is variable cost + opportunity cost. The opportunity cost is the contribution forgone by not selling the 5,000 units on the open market. Thus the TP should be K7 + K5 = K12.
This is the same as the market price
The remaining 20,000 units can be made using the spare capacity. The opportunity is the same as the variable cost, i.e. K7.
TP_1 = 5,000 units transfer at K12
TP_2 = 20,000 units transfer at K7

d) A number of factors have to be considered when designing divisional performance measures. Two of these are:

i) Simplicity and Understandability
Each measure should be simple to calculate and understand so that managers can see the effect of the decision that they make on the measurement of their performance. If a

manager does not understand how a performance measure is calculated he/she will not able to judge whether their decisions will enhance performance or not.

ii) <u>Controllability and Fairness</u>
Each measure should be fair to the divisional manager and must include only key metrics that are within their control, i.e. items they can influence. Otherwise, the performance measure may lead to demotivation.

e) i) At the heart of multinational corporations transfer pricing is the attempt to evade tax.
If Div. A in this question is located in Zambia where tax on profits is 25% and transfers the units to selling Division B (located overseas and where tax on profits is 45%), there may be attempts to manipulate profits. This will be achieved by increasing or decreasing transfer prices or by invoicing Division B (resident in high tax country) for services provided by Division A (in a low tax country). This will maximise profits for Division A by reducing profits for Division B. In other words, the Gamma Group may try to reduce the level of tax paid by moving profits from one country (Zambia) to another (overseas subsidiary) through TP manipulation.
However, attempts at tax evasion may be frowned upon by a country's tax authorities (e.g. ZRA in Zambia) and may lead to penalty payments. They can modify/revise the tax to its "arm's length" level. In such instances the Gamma Group may end up paying tax in both countries.

ii)

	K'000
External sales (3,000 x K1,300)	3,900
Less: Variable costs	
Transfer Price (€700 x 60% ÷ €1.80) x 3,000	(700)
Marketing & Distribution costs (K40 x 3,000)	(120)
Profit before Tax	3,080
Tax 25%	770
Profit after tax reported by Div. A	2,310

SOLUTION FIVE

Part (a)
Difficulties in the public sector
In the public sector, the objectives of the organisation are more difficult to define in a quantifiable way than the objectives of a private company. For example, a private company's objectives may be to maximise profit. The meeting of this objective can then be set out in the budget by aiming for a percentage increase in sales and perhaps the cutting of various costs. If, on the other hand, the public sector organisation is a hospital, for example, then the objectives may be largely qualitative, such as ensuring that all outpatients are given an appointment within eight weeks of being referred to the hospital. This is difficult to define in a quantifiable way, and how it is actually achieved is even more difficult to define.

This leads onto the next reason why budgeting is so difficult in public sector organisations. Just as objectives are difficult to define quantifiably, so too are the organisation's outputs. In a private company the output can be measured in terms of sales revenue. There is a direct relationship between the expenditure that needs to be incurred i.e. needs to be input in order to achieve the desired level of output. In a hospital, on the other hand, it is difficult to define a quantifiable relationship between inputs and outputs. What is easier to compare is the relationship between how much cash is available for a particular area and how much cash is actually needed. Therefore, budgeting naturally focuses on inputs alone, rather than the relationship between inputs and outputs.

Finally, public sector organisations are always under pressure to show that they are offering good value for money, i.e. providing a service that is economical, efficient and effective. Therefore, they must achieve the desired results with the minimum use of resources. This, in itself, makes the budgeting process more difficult.

Part (b)

Incremental and zero-based budgeting

'Incremental budgeting' is the term used to describe the process whereby a budget is prepared using a previous period's budget or actual performance as a base, with incremental amounts then being added for the new budget period.

'Zero-based budgeting', on the other hand, refers to a budgeting process which starts from a base of zero, with no reference being made to the prior period's budget or performance. Every department function is reviewed comprehensively, with all expenditure requiring approval, rather than just the incremental expenditure requiring approval.

Part (c)

Stages in zero-based budgeting

Zero-based budgeting involves three main stages:

1. Activities are identified by managers. These activities are then described in what is called a 'decision package'. This decision package is prepared at the base level, representing the minimum level of service or support needed to achieve the organisation's objectives. Further incremental packages may then be prepared to reflect a higher level of service or support.
2. Management will then rank all the packages in the order of decreasing benefits to the organisation. This will help management decide what to spend and where to spend it.
3. The resources are then allocated based on order of priority up to the spending level.

Part (d)

No longer a place for incremental budgeting

The view that there is no longer a place for incremental budgeting in any organisation is a rather extreme view. It is known for encouraging slack and wasteful spending, hence the comment that it is particularly unsuitable for public sector organisations, where cash cutbacks are being made. However, to say that there is no place for it at all is to ignore the drawbacks of zero-based budgeting. These should not be ignored as they can make ZBB implausible in some organisations or departments. They are as follows:

- Departmental managers will not have the skills necessary to construct decision packages. They will need training for this and training takes time and money.
- In a large organisation, the number of activities will be so large that the amount of paperwork generated from ZBB will be unmanageable.
- Ranking the packages can be difficult, since many activities cannot be compared on the basis of purely quantitative measures. Qualitative factors need to be incorporated but this is difficult.
- The process of identifying decision packages, determining their purpose, costs and benefits is massively time consuming and therefore costly.
- Since decisions are made at budget time, managers may feel unable to react to changes that occur during the year. This could have a detrimental effect on the business if it fails to react to emerging opportunities and threats.

It could be argued that ZBB is more suitable for public sector than for private sector organisations. This is because, firstly, it is far easier to put activities into decision packages in organisations which undertake set definable activities. Local government, for example, have set activities including the provision of housing, schools and local transport. Secondly, it is far more suited to costs that are discretionary in nature or for support activities. Such costs can be found mostly in not for profit organisations or the public sector, or in the service department of commercial operations.

Since ZBB requires all costs to be justified, it would seem inappropriate to use it for the entire budgeting process in a commercial organisation. Why take so much time and resources justifying costs that must be incurred in order to meet basic production needs? It makes no sense to use such a long-winded process for costs where no discretion can be exercised anyway. Incremental budgeting is, by its nature, quick and easy to do and easily understood. These factors should not be ignored.

In conclusion, whilst ZBB is more suited to public sector organisations, and is more likely to make cost savings in hard times such as these, its drawbacks should not be overlooked.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.6: ADVANCED FINANCIAL MANAGEMENT

FRIDAY 15 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) Compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any Three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

SECTION A
<u>QUESTION ONE</u> – (COMPULSORY QUESTION)

Zawi Co is a listed company operating in the haulage and shipping industry. The executive directors of Zawi Co recently met to discuss the future investment and financing strategy of the business. Two alternative financing strategies were put forward for further consideration.

Alternative one

This alternative involves three proposals given below:

Proposal 1

To increase the company's level of debt by borrowing a further K20 million and use the funds raised to buy back share capital.

Proposal 2

To increase the company's level of debt by borrowing a further K20 million and use these funds to invest in additional non-current assets in the haulage strategic business unit.

Proposal 3

To sell excess non-current haulage assets with a net book value of K25 million for K27 million and focus on offering more services to the shipping strategic business unit. This business unit will require no additional investment in non-current assets. All the funds raised from the sale of the non-current assets will be used to reduce the company's debt.

Zawi Co financial information

Extracts from the forecast financial position for the coming year

	Km
Non-current assets	282
Current assets	66
Total assets	348
Equity and liabilities	
Share capital (40n per share par value)	48
Retained earnings	123
Total equity	171
Non-current liabilities	140

Current liabilities	37
Total liabilities	177
Total liabilities and capital	348

Zawi Co's forecast after tax profit for the coming year is expected to be K26 million and its current share price is K3.20 per share. The non-current liabilities consist solely of a 6% medium term loan redeemable within seven years.

The terms of the loan contract stipulates that an increase in borrowing will result in an increase in the coupon payable of 25 basis points on the total amount borrowed, while a reduction in borrowing will lower the coupon payable by 15 basis points on the total amount borrowed.

Zawi Co's effective tax rate is 20%. The company's estimated after tax rate of return on investment is expected to be 15% on any new investment. It is expected that any reduction in investment would suffer the same rate of return.

Alternative two

Zawi Co has approached Ulap Bank for the financing it requires, based on Islamic finance principles. Ulap Bank has agreed to consider the request from Zawi Co, but the financing requirement will be for a long period of time. Because of uncertainties of long term financing, Ulap Bank wants to provide the finance based on the principles of a Musharaka contract. Ulap Bank will require representation on the Board of Zawi Co. Normally Ulap Bank provides funds based on the principles of a Mudaraba contract, which the bank provides for short-term, low-risk projects, where the responsibility for running a project rests solely with the borrower.

Required:

(a) Evaluate the impact of each of the three proposals under *alternative one* on the following:

(i) forecast statement of financial position,
(ii) the earnings and earnings per share,
(iii) gearing of Zawi Co.

(22 marks)

(b) An alternative suggestion to proposal three was made where the non-current assets could be leased to other companies instead of being sold. The lease receipts would then be converted into an asset through securitisation. The proceeds from the sale of the securitised lease receipts asset would be used to reduce the outstanding loan borrowings.

Explain securitisation process and the key barriers to Zawi Co undertaking the process.

(6 marks)

(c) Discuss the reasons Ulap Bank may need to consider when providing the finance based on a Musharaka contract instead of a Mudaraba contract, and any key concerns you may have from the arrangement between Zawi Co and Ulap Bank.

(12 marks)

[Total: 40 Marks]

SECTION B

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

QUESTION TWO

GDK Ltd is a Zambian company that is part of the giant industrial conglomerate the KAMA group. Recently GDK made a breakthrough in designing a new watch, one that someone could use every day and can store information. It meets the demands of everyday use under tough conditions, water-resistant and able to withstand heat and dust. At the same time, it will look elegant and ultra slim. Even the leaders in the watch manufacturing industry, thought this were impossible. You are a senior financial management advisor employed by the company to review its capital investment appraisal procedures and to provide advice on the acceptability of significant new capital projects. The watch project is a domestic project entailing immediate capital expenditure of K1 billion with scrap value of K90 million after five years of operation. Research and design costs incurred over the previous three years total K50 million and will be charged to the project in the first year of operation. The projected revenues over five years are as follows:

Year	1	2	3	4	5
Revenue (K'million)	790	810	860	850	510

It is expect that after five years new significant investment will be required to maintain production capacity. GDK projects direct costs to be 56% of revenues and indirect, activity based costs, K130 million for the first year of operations, growing at 6.5% per annum over the life of the project. The company depreciates plant and equipment on a straight-line basis and, in this case, the annual charge will be allocated to the project as a further indirect charge. In the first two years of operations, acceptance of this project will mean that other work making a net contribution before indirect costs of K148 million for each of the first two years will not be able to proceed.

The company currently has 3,000 shares with market value of K2.4 per share and K2,300 million of debt in issue quoted at current market values. The current cost of debt finance is the bank minimum lending rate plus 150 basis points. The bank minimum lending rate is currently 6.50%, which is 50 basis points above the one month Government Treasury bill rate. The equity risk premium is 5.7% and the company's beta is 1.5. The company wishes to raise the additional finance for this project by a new bond issue. Its advisors do not believe that this will alter the company's bond rating. The new issue will incur transaction costs of 2% of the issue value at the date of issue. GDK has an option of entering into an interest rate swap with HM ltd if it issues the new bond.

The company pays tax at an annual rate of 30% one year in arrears on its taxable profits and can claim a 50% first year allowance on qualifying capital expenditure followed by a writing down allowance of 25% applied on a reducing balance basis. The company has sufficient other profits to absorb any capital allowances derived from this project.

Required:

(a) Estimate the adjusted present value of the project resulting from the new investment and from the refinancing proposal and justify the use of this technique. (14 marks)

(b) Discuss the potential benefits and hazards of interest rate swaps as a tool for managing interest rate risk by GDK. (6 marks)

[Total: 20 Marks]

QUESTION THREE

Gum-gum is a Zambian based company. Most of Gum-gum's sales are made to customers in Zambia. Gum-gum imports many of the items that it uses from a variety of countries. The vast majority of Gum-gum's foreign suppliers insist on invoicing Gum-gum in their own currency and it has proved impossible to insist on paying for imported items in Zambian Kwacha.

The board of Gum-gum has always refused to devote any attention to the currency risks associated with importing. It has always absorbed minor fluctuations by taking a slightly larger or smaller profit on sales. Larger fluctuations have been passed on to customers in the form of increased or decreased selling prices. Certain members of the board have always argued that Gum-gum's competitors are subject to the same currency risks and so the market will always be forced to accept the impact of currency movements, in which case there is very little point in taking active steps to manage currency risks.

Gum-gum Ltd has imported goods from South Africa and has been invoiced for ZAR 470,000 payable in one month's time on 30 June 2018.

The following data is available:

Current ZAR/ZMW 1.5210 - 1.5240

June ZMW Options contracts - Contract size is K25,000

Exercise price	**June Option (premiums in ngwees/ZMW)**	
	Calls	**Puts**
ZAR 1.50	7.15	3.50
ZAR 1.55	4.10	5.85
ZAR 1.60	1.25	9.20

Gum-gum Ltd decides that it wishes to hedge using options.

Note: For this question, assume the Zambian Kwacha (ZMW) and the South African Rand (ZAR) are freely traded on the futures and other derivatives markets.

Assume 30 June 2018 spot rate (ZAR/K): 1.4680 - 1.4725

Required:

(a) Evaluate the views of certain board members concerning there being no need to manage Gum-gum's currency risks. (10 marks)

(b) Show how Gum-gum Ltd can hedge against foreign exchange rate risk using currency options and advise on the exercise price that the company may trade.

(10 marks)

[Total: 20 Marks]

QUESTION FOUR

BAG International is a multinational company specialised in the manufacturing of computers and other ICT equipment. The company has many subsidiaries across the world and uses a centralized treasury function to manage its international financial transactions. The board of the company is considering a major investment in a foreign country. Financial experts have projected that this investment would increase the company's market value significantly. The government in the host country has changed four times in the last seven years. However, the inflation, exchange rate, interest rate and other economic indicators have been favourable in last decade. The country's financial system is strong and stable. Recently the government introduced restrictions on the remittances and special taxes on foreign investors. A large multinational had its assets seized for failure to comply with restriction on remittances and imports. One senior government official was quoted in the media indicating that a new law was in the process of being enacted on environmental and consumer protection. Erring companies would severely be penalized.

Required:

(a) Discuss the strategies that BAG international may use to deal with the main issues raised in the scenario above. (12 marks)

(b) Discuss how a centralised treasury department may increase value for BAG International and the possible reasons for decentralising the treasury department. (8 marks)

[Total: 20 Marks]

QUESTION FIVE

The Government of the Republic of Zambia has recently signed a trade agreement with a major Middle East country to supply over 12 million goats per year. The contract is worth about $600 million or approximately K5,700 million. The Government of Zambia has encouraged SMEs to take advantage of this opportunity and venture into exporting to the Middle East.

MOMO Co is a medium-sized company based in Zambia and whose ordinary shares are all owned by the members of one family. It has recently begun exporting to the Middle East through the Government trade agreement and expects to receive $500,000 (K4.75 million) in six months' time. The prospect of increased exports to the Middle East means that MOMO Co needs to expand its existing business operations in order to be able to meet future orders. All of the family members are in favour of the planned expansion, but none are in a position to provide additional finance. The company is therefore seeking to raise external finance of approximately $1 million (about K9.5 million).

Required:

(a) Discuss the reasons small and medium-sized entities (SMEs) might experience less conflict between the objectives of shareholders and directors than large listed companies. (8 marks)

(b) Discuss the factors that MOMO Co should consider when choosing a source of debt finance and the factors that may be considered by providers of finance in deciding how much to lend to the company. (12 marks)

[Total: 20 marks]

END OF PAPER

CA 3.6 ADVANCED FINANCIAL MANAGEMENT SOLUTIONS

SOLUTION ONE

(a) Forecast financial position

Amounts in K'000

	Current	Proposal 1	Proposal 2	Proposal 3
Non-current assets	282,000	282,000	302,000	257,000
Current assets	66,000	64,720	67,720	63,682
Total assets	348,000	346,720	369,720	320,682
Current liabilities	37,000	37,000	37,000	37,000
Non-current liabilities	140,000	160,000	160,000	113,000
Total liabilities	177,000	197,000	197,000	150,000
Share capital				
(40n/share)	48,000	45,500	48,000	48,000
Retained earnings	123,000	104,220	124,720	122,682
Total equity	171,000	149,720	172,720	170,682
Total liabilities and capital	348,000	346,720	369,720	320,682

Adjustments to forecast earnings

Amounts in K'000

	Current	Proposal 1	Proposal 2	Proposal 3
Initial profit after tax	26,000	26,000	26,000	26,000
Interest payable on additional borrowing				
(K20m x 6% x (1 – 0.2))			(960)	(960)
Additional interest payable on extra coupon				

	Current	Proposal 1	Proposal 2	Proposal 3
(K160m x 0.25% x (1 – 0.2))		(320)	(320)	
Interest saved on less borrowing				
(K27m x 6% x (1 – 0.2))				1,296
Interest saved on lower coupon				
(K113m x 0.15% x (1 – 0.2))				136
Return on additional investment				
(K20m x 15%)			3,000	
Return lost on less investment				
(K25m x 15%)				(3,750)
Profit on sale of non-current assets				2,000
Adjusted profit after tax	26,000	24,720	27,720	25,682

	Current	Proposal 1	Proposal 2	Proposal 3
Gearing % (non-current liabilities/equity)	81.9%	106.9%	92.6%	66.2%
Number of shares ('000)	120,000	113,750	120,000	120,000
Earnings per share (adjusted profit after tax/number of shares)	21.67n	21.73n	23.10n	21.40n

Note: Gearing defined as non-current liabilities/(non-current liabilities + equity) and/or using market value of equity is acceptable as well.

The profit from the sale of the assets for proposal 3, of K2,000,000, is assumed to be after tax. Answers which consider the profit to be before tax, and therefore only take into account K1,600,000 as the net profit, will receive full credit.

Tutorial Note (Explanations are not required for the answer but are included to explain the approach taken) Explanations of the financial position based on the three proposals

Proposal 1

Debt is increased by K20m and share capital reduced by the same amount as follows: from par value = K20m x 40n/320n = K2·5m; from retained earnings = K20m x 280n/320n = K17·5m.

Additional interest payable totalling K1,280,000 (K960,000 + K320,000) is taken off retained earnings due to reduction in profit after tax and taken off current assets because presumably it is paid from cash. Note that an alternative answer would be to add the additional interest payable to current liabilities.

Proposal 2

Debt and non-current assets are increased by K20m.

Additional interest payable as above, plus the additional investment of K20 million will generate a rate of return of 15%, which is K3,000,000 income. Net impact is K1,720,000 income which is added to retained earnings as an addition to profit after tax and added to current assets as a cash income (presumably).

Proposal 3

Net non-current assets are reduced by the K25 million, their value at disposal. Since they were sold for K27 million, this is how much the non-current liabilities are reduced by and the profit of K2 million is included in the retained earnings

Interest saved totals K1,432,000 (K1,296,000 + K136,000). The reduction in investment of K25 million will lose K3,750,000, at a rate of return of 15%. Net impact is K2,318,000 loss which is subtracted from earnings as a reduction from profit after tax and deducted from current assets as a cash expense (presumably). Overall therefore the profit is reduced by K318,000 [K2,000,000 – K2,318,000].

If the profit from the sale of the asset is assumed to be K1,600,000 (K2,000,000 less tax), then the statement of financial position, EPS and gearing figures will all change to reflect this.

Discussion

Proposals 1 and 3 appear to produce opposite results to each other. Proposal 1 would lead to a small increase in the earnings per share (EPS) due to a reduction in the number of shares although profits would decrease by approximately 5%, due to the increase in the amount of interest payable as a result of increased borrowings. However, the level of gearing would increase substantially (by about 30%). With proposal 3, although the overall profits would fall, because of the lost earnings due to downsizing being larger than the gain in interest saved and profit made on the sale of assets, this is less than proposal 1 (1.2%). Gearing would reduce substantially (19.2%).

Proposal 2 would give a significant boost in the EPS from 21.67n/share to 23.10n/share, which the other two proposals do not. This is mainly due to increase in earnings through extra investment. However, the amount of gearing would increase by more than 13%.

Overall proposal 1 appears to be the least attractive option. The choice between proposals 2 and 3 would be between whether the company would prefer larger EPS or less gearing. This would depend on factors such as the capital structure of the competitors, the reaction of the equity market to the proposals, the implications of the change in the risk profile of the company and the resultant impact on the cost of capital. Zawi Co should also bear in mind that the above are estimates and the actual results will probably differ from the forecasts.

(Note: credit will be given for alternative relevant comments and suggestions)

Part (b)

Asset securitisation in this case would involve taking the future incomes from the leases that Zawi Co makes and converting them into assets. These assets are sold as bonds now and the future income from lease interest will be used to pay coupons on the bonds. Effectively Zawi Co foregoes the future lease income and receives money from sale of the assets today.

The income from the various leases would be aggregated and pooled, and new securities (bonds) issued based on these. The tangible benefit from securitisation occurs when the pooled assets are divided into tranches and tranches are credit rated. The higher rated tranches would carry less risk and have less return, compared to lower rated tranches. If default occurs, the income of the lower tranches is reduced first, before the impact of increasing defaults move to the higher rated tranches. This allows an asset of low liquidity to be converted into securities which carry higher liquidity.

Zawi Co would face a number of barriers in undertaking such a process. Securitisation is an expensive process due to management costs, legal fees and ongoing administrative costs. The value of assets that Zawi Co wants to sell is small and therefore these costs would take up a significant proportion of the income. High cost implications mean that securitisation is not feasible for small asset pools.

Normally asset pools would not offer the full value of the asset as securities. For example, only 90% of the asset value would be converted into securities, leaving the remaining 10% as a buffer against possible default. This method of credit enhancement would help to credit-rate the tranches at higher levels and help their marketability. However, Zawi Co would not be able to take advantage of the full asset value if it proceeds with the asset securitisation.

(Note: credit will be given for alternative relevant comments and suggestions)

Part (c)

With a Mudaraba contract, the profits which Zawi Co makes from the joint venture would be shared according to a pre-agreed arrangement when the contract is constructed between Zawi Co and Ulap Bank. Losses, however, would be borne solely by Ulap Bank as the provider of the finance, although provisions can be made where losses can be written off against future profits. Ulap Bank would not be involved in the executive decision-making process. In effect, Ulap Bank's role in the relationship would be similar to an equity holder, holding a small number of shares in a large organisation.

With a Musharaka contract, the profits which Zawi Co makes from the joint venture would still be shared according to a pre-agreed arrangement similar to a Mudaraba contract, but losses would also be shared according to the capital or other assets and services contributed by both the parties involved in the arrangement. Therefore a value could be put to the contribution-in-kind made by Zawi Co and any losses would be shared by Ulap Bank and Zawi Co accordingly. Within a Musharaka contract, Ulap Bank can also take the role of an active partner and participate in the executive decision-making process. In effect, the role adopted by Ulap Bank would be similar to that of a venture capitalist.

With the Mudaraba contract, Zawi Co would essentially be an agent to Ulap Bank, and many of the agency issues facing corporations would apply to the arrangement, where Zawi Co can maximise its own benefit at the expense of Ulap Bank. Zawi Co may also have a propensity to undertake excessive risk because it is essentially holding a long call option with an unlimited upside and a limited downside.

Ulap Bank may prefer the Musharaka contract in this case, because it may be of the opinion that it needs to be involved with the project and monitor performance closely due to the inherent risk and uncertainty of the venture, and also to ensure that the revenues, expenditure and time schedules are maintained within initially agreed parameters. In this way, it may be able to monitor and control agency related issues more effectively and control Zawi Co's risky actions and decisions. Being closely involved with the venture would change both Zawi Co's and Ulap Bank's roles and make them more like stakeholders rather than principals and agents, with a more equitable distribution of power between the two parties.

Zawi Co's concerns would mainly revolve around whether it can work with Ulap Bank and the extra time and cost which would need to be incurred before the joint venture can start. Although difficulties may arise about percentage ownership and profit sharing, these may be resolved through negotiation and having tight specific contracts.

The day-to-day running, management and decision-making process could be resolved through negotiation and consensus.

This is to ensure a high level of trust continues to exist between the parties, otherwise the venture may fail. Hence negotiation and construction of the contracts may need more time and may become more expensive.

Therefore, the integration process of bringing the partners into the joint venture needs to be handled with care and may take time and cost more money.

The above issues would indicate that the relationship between the parties is closer to that of stakeholders, with different levels of power and influence, at different times, as opposed to a principal–agent relationship. This would create an environment which would need ongoing negotiation and a need for consensus, which may make the joint venture hard work.

Additionally, it would possibly be more difficult and time consuming to accomplish the aims of the joint venture.

(Note: Credit will be given for alternative relevant comments and suggestions)

SOLUTION TWO

a)

Year	0	1	2	3	4	5	6
	K'm	K'm	K'm	K'm	K'm	K'm	K'm
Revenue		790	810	860	850	510	
Direct costs (56%)		(442)	(454)	(482)	(476)	(286)	
Net Cash flow before tax		348.6	358.4	381.4	378	229.4	
Tax@30%		-	(105)	(108)	(114)	(113)	(69)
Opportunity cost		148	150	-	-	-	-
Capital Allowances		150	38	23	21	16	20
Invesment	(1,000)	-	-	-	-	90	-
Net Cash flow	(1,000)	647	441	297	285	222	(48)
Discount@13%	1.000	0.885	0.783	0.693	0.613	0.543	0.480
Present value	(1,000)	572	346	206	175	120	(23)
Base case NPV	**396**						
Financing side effects:							
Base case NPV	396						
Tax shield	98						
Transaction costs	(20)						
APV	**473**						

WORKINGS

$B_a = B_e \times \underline{\ \ Ve\qquad\qquad}$

$V_e+V_d\ (1+t)$

B_a= 1.5 x 7,200
7,200 x 2,300(1-0.3)
B_a= 1.23

MV of equity = 3,000 x K2.4 = K7, 200million

Treasury bill (risk free rate) = 6.5% - 0.5% = 6%

Cost of equity (ungeared) = 6% + 1.23(5.7%) = 13%

Capital allowance (K'm)				
Year	WDV	Allowance	Tax relief@30%	Year available
0	1,000.00	500	150.00	1
1	500.00	125.00	37.50	2
2	375.00	93.75	23.44	3
3	281.25	70.31	21.09	4
4	210.94	52.73	15.82	5
5	158.20	39.55	11.87	6
5	118.65	-	-	
Scrap value	(90.00)	-	-	
Balance allowance	28.65	28.65	8.60	6

Transaction costs
New capital introduced = K1, 000m + transactions costs (2% of total amount raised)

K1, 000m will be 98% of total amount raised, so total new capital = K1000m
0.98
= K1, 020.4m
Transaction costs = K1, 020.4m – K1,000m = K20.4m

Tax shield

Interest rate = Bank MLR + 150 basis points = 6.5% + 1.5% = 8%

Annual interest = 8% of K1, 020.4m = K81.63m

Annual tax saving = K24.45m (30% of K81.63m)

Present value of tax shield = 24.45 x 3.993 = K97.78m

(b)

Benefits of interest rate swaps

Transaction costs
Transaction costs are low, being limited to arrangement fees, and potentially much lower than the costs of terminating one loan and taking out another.
Flexibility
Swaps are flexible, since they can be arranged in any size.
Credit ratings
Companies with different credit ratings can borrow in the market that offers each the best deal and then swap this benefit to reduce the mutual borrowing costs. This is an example of the principle of comparative advantage.
Capital restructuring
Swaps allow capital restructuring by changing the nature of interest commitments. This is helpful if, for example, a company will find it difficult to raise finance at favourable fixed rates.
Risk management
Swaps can be used to manage interest rate risk by swapping floating for fixed rate debt if rates are expected to rise.

Hazards of interest rate swaps

Risk of default
The swap is subject to counterparty risk**,** the risk that the other party will default leaving the first company to bear its obligations, unless the contract has been guaranteed through an intermediary.
Interest rate risk
If a company takes on a floating rate commitment, it may be vulnerable to adverse movements in interest rates. The commitment to the swap arrangements will also mean that a company committed to a fixed rate payment cannot take advantage of falls in interest rates.
Costs of hedging
The company will incur the costs of managing hedging arrangements.

SOLUTION THREE

Part (a)

Arguments for some of the board members concerns Gum-gum's exposure to fluctuations in the cost of materials or items because the currency movements is reduced by the fact that many of Gum-gums"s purchases will be for generic items that can be sourced from many different countries. That flexibility of supply means that will be able to switch to Zambian suppliers if the cost of importing from China or South Africa increases because of a currency movement.
Where item prices are driven by currency changes then Gum-gum"s competitors will be subject to many of the same pressures. For example, seasonal factors will affect the source of certain items in the course of the year.

Arguments against some of the board members' concerns Futures can be used to fix prices in advance, though, and Gum-gum may be taking the risk that competitors have fixed their input prices using derivatives. In that case there will be times when Gum-gum is uncompetitive.
The majority of Gum-gum"s customers maybe be major corporate or supermarket chains. Those companies are notorious for pressing suppliers to provide keen prices and they may refuse to accept cycles in Gum-gum"s costs. Supermarkets may be prepared to bully Gum-gum into accepting little or no profit in the short term when prices are high, in the knowledge that the markets will probably reverse in the future.

Conclusion
Currency risks do have the potential to be serious enough to threaten the continuation of the company. Having said that, the approach recommended by Gum-gum"s board involves relatively little in the way of transaction or management costs. If is a major importer from around the world then a comprehensive management of currency risks would require a sophisticated treasury system that would cost a great deal to staff. Economic risk is difficult to manage in the long term unless the company can create a natural hedge so that its cash flows tend to even out regardless of the value of the company"s home currency. Active management using financial instruments will really only delay the effects of price rises and may prevent Gum-gum from taking advantage of price reductions.

Part (b)

Gum-gum is due to pay R470,000, therefore, the relevant option would be the June Kwacha Put options. The hedge set up has been prepared on the following assumptions;

1. The premium is payable immediately using the current spot rate where appropriate
2. Any under hedged or over hedged amount will be traded (receivable or payable) on the open market at the time of closing the deal on 30th June

	@1.50	@1.55	@1.60
R470,000 in Kwacha	K313,333	K303,226	K293,750
No. of contract required	12.5	12.1	11.75
Available contracts – no partial	12	12	12
Amount covered (contracts x size)	K300,000	K300,000	K300,000
Amount covered in Rands	R450,000	R465,000	R480,000
Under/(over) hedged amount	R20,000	K5,000	(R10,000)
Premium cost at each price	R10,500	R17,550	R27,600
Premium cost in K@spot rate (1.5210)	K6,904	K11,538	K18,146
Under/(over) hedged amount in K	K13,624	K3,406	(K6,791)
Outcome at each exercise price;			
Amount hedged	K300,000	K300,000	K300,000
Under/(over) hedged amount in K	K13,624	K3,406	(K6,791)
Premium cost	K6,904	K11,538	K18,146
Net cost (Total amount on options)	**K320,528**	**K314,944**	**K311,355**

The preferable exercise prices would be ZAR 1.6 as this results in the lowest amount required to buy the R470,000 required to pay the supplier.

If the spot market on 30th June was ZAR 1.4680, the outcome on the market would be K320,163 before the premium cost. Therefore, it is better to exercise the option at sell the kwacha at ZAR 1.6 to get the required Rands.

SOLUTION FOUR

a)

Multinational companies are faced with different type risks. The issues raised above clearly indicates that BAG is faced with political and litigation risks. Frequent change of governments, restrictions on remittances and seizure of assets indicate some level of political risk. The pending enactment of law on environmental and consumer protection possesses litigation risks. Businesses that fail to comply with the law run the risk of legal penalties and accompanying bad publicity. Companies may also be forced into legal action to counter claims of allegedly bad practice that is not actually illegal. The issues of legal standards and costs have very significant implications for companies that trade internationally. Strategies that maybe used to mitigate these risks include:

1) Political risk

   i) Negotiations with host government

      BAG engage into negotiations with the host government generally to obtain a concession agreement. This would cover matters such as the transfer of capital, remittances and products, access to local finance, government intervention and taxation, and transfer pricing.

ii) Insurance
Engage insurance companies on the possibility of obtaining insurance cover to protect against seizure of assets by the host government. For example in UK the Export Credits Guarantee Department (ECGD) provides protection against various threats including nationalization, currency conversion problems, war and revolution.

iii) Production strategies
BAG may need to consider to strike a balance between contracting out to local sources (thus losing control) and producing directly (which increases the investment and hence increases the potential loss).Alternatively it may be better to locate key parts of the production process or the distribution channels abroad. Control of patents is another possibility, since these can be enforced internationally.

iv) Financial management
BAG may consider obtaining funds in local investment markets, these may be on terms that are less favourable than on markets abroad, but would mean that local institutions suffered if the local government intervened. However, it is important to check if the governments has placed limit the ability of multinationals to obtain funds locally.

v) Management structure
BAG may enter into a joint venture (ceding control) with local investors and obtaining profits by a management contract. If governments do intervene, multinationals may have to make use of the advantages they hold or threaten withdrawal. The threat of expropriation may be reduced by negotiation or legal threats.

2) Litigation risks

i) Compliance
BAG may need to consider the impact of compliance to the new law on its proposed investment. If ultimately the costs of compliance are higher, the company may relocate to a country where costs and regulatory burdens are lower.

ii) Good citizenship
One aspect BAG may consider of minimising problems from governmental intervention is social and commercial good citizenship, complying with best practice and being responsive to ethical concerns. Often what is considered good practice at present is likely to acquire some regulatory force in the future. In addition, compliance with voluntary codes, particularly those relating to best practice or relations with consumers, can be marketed positively.

iii) Other steps
BAG needs to take all possible steps to avoid the bad publicity resulting from a court action. This includes implementing systems to make sure that the company keeps abreast of changes in the law, and staff are kept fully informed. Internal procedures may be designed to minimise the risks from legal action. Litigation risks can be reduced by keeping abreast of changes, acting as a good corporate citizen and lobbying.

b)

A centralized treasury department should be able to evaluate the financing requirements of BAG International's group as a whole and it may be able to negotiate better rates when borrowing in bulk. The department could operate as an internal bank and undertake matching of funds. Therefore it could transfer funds from subsidiaries which have spare cash resources to ones which need them, and thus avoid going into the costly external market to raise funds.
The department may be able to undertake multilateral internal netting and thereby reduce costs related to hedging activity. Experts and resources within one location could reduce duplication costs.
The concentration of experts and resources within one central department may result in a more effective decision-making environment and higher quality risk monitoring and control. Further, having access to the BAG International group's entire cash funds may give the company access to larger and more diverse investment markets.

Decentralizing BAG International's treasury function to its subsidiary companies may be beneficial in several ways. Each subsidiary company may be better placed to take local regulations and customs into consideration. Giving subsidiary companies more autonomy over how they undertake their own fund management may result in increased motivation and effort from the subsidiary's senior management and thereby increase future income. Subsidiary companies which have access to their own funds may be able to respond to opportunities quicker and establish competitive advantage more effectively.

SOLUTION FIVE
Part (a)

Conflict between the objectives of shareholders and directors in a listed company is associated with the agency problem, which has three main causes. First, the objectives of shareholders and directors may be different. Second, there is asymmetry of information, so that shareholders have access to less information about the company than directors, making it hard for shareholders to monitor the actions and decisions of directors. Third, there is a separation between ownership and control, as shareholders and directors are different people.

One reason why small and medium-sized entities (SMEs) might experience less conflict between shareholders and directors than larger listed companies is that in many cases shareholders are not different from directors, for example in a family-owned company. Where that is the case, there is no separation between ownership and control, there is no difference between the objectives of shareholders and directors, and there is no asymmetry of information. Conflict between the objectives of shareholders and directors will therefore not arise.

Another reason why there may be less conflict between the objectives of shareholders and directors in SMEs than in larger listed companies is that the shares of SMEs are often owned by a small number of shareholders, who may be in regular contact with the company and its directors. In these circumstances, the possibility of conflict is very much reduced.

Part (b)

Factors to consider when choosing a source of debt finance

There are a number of factors that should be considered when choosing a suitable source of debt finance. Essentially a company should look to match the characteristics of the debt finance with its corporate needs.

Cost

MOMO Co should consider both issue costs and the rate of interest to be charged on the funds borrowed. The company should also consider the repayment terms. With a bank loan, for example, there may be an annual capital payment in addition to the annual interest payment. Additionally, some types of debt have early repayment penalties.

Maturity

The period over which the debt is taken should be matched against the period for which the company needs the finance and the ability of the company to meet the financial commitments associated with the debt finance selected. Another factor to consider is that short-term finance can be more flexible than long-term finance. If a company takes on long-term debt finance it takes on a long-term commitment to which it has a contractual obligation.

Financial risk

Debt will increase gearing and hence the financial risk of MOMO Co. The company should consider how gearing will change over the life of the debt finance selected and how the company will be viewed from a risk perspective by future investors.

Availability

The kinds of debt finance available to MOMO Co will depend upon the relative size of the company, its relationship with its bank and the capital markets to which it has access. It is likely that a bank loan, rather than any other kind of debt finance, will be selected by MOMO Co, since very few SMEs are able to issue traded bonds.

Factors to be considered by providers of finance

There are a number of factors that may be considered by providers of finance in deciding how much to lend to a company.

Risk and the ability to meet financial obligations

When considering the amount and the terms of the funds to be made available to MOMO Co, providers of debt finance will assess the ability of the company to meets its future financial obligations and the risk of the company. The previous record of the company can be used as a guide to the ability of its board of directors to manage its finances in a responsible and effective manner. The business plan of MOMO Co relating to the proposed business expansion will be carefully scrutinised by potential investors in order to make sure that it rests on reasonable assumptions and that the forecast cash flows can be achieved. This helps to reduce the uncertainty associated with the proposed expansion.

Security

The amount of funds made available to MOMO Co will also depend on the availability of assets to offer as security. Debt investors will expect security in order to reduce the risk of the investment from their point of view. If security is not available or is limited, MOMO Co will have to pay a higher rate of interest in compensation for the higher level of risk.

Legal restrictions on borrowing

Another factor to consider is whether there are any legal restrictions on the amount of debt that the company can take on, for example in existing debt contracts (restrictive or negative covenants), or in the company's memorandum or articles of association.

END OF SOLUTIONS

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}} \left(1 + r_e\right) - 1$$

The Black-Scholes option pricing model

$$c = P_a N(d_1) - P_e N(d_2) e^{-rt}$$

Where:

$$d_1 = \frac{\ln(P_a / P_e) + (r + 0.5s^2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

The Put Call Parity relationship

$$p = c - P_a + P_e e^{-rt}$$

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate
n = number of periods until payment

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·941	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·305	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

Standard normal distribution table

	0·00	0·01	0·02	0·03	0·04	0·05	0·06	0·07	0·08	0·09
0·0	0·0000	0·0040	0·0080	0·0120	0·0160	0·0199	0·0239	0·0279	0·0319	0·0359
0·1	0·0398	0·0438	0·0478	0·0517	0·0557	0·0596	0·0636	0·0675	0·0714	0·0753
0·2	0·0793	0·0832	0·0871	0·0910	0·0948	0·0987	0·1026	0·1064	0·1103	0·1141
0·3	0·1179	0·1217	0·1255	0·1293	0·1331	0·1368	0·1406	0·1443	0·1480	0·1517
0·4	0·1554	0·1591	0·1628	0·1664	0·1700	0·1736	0·1772	0·1808	0·1844	0·1879
0·5	0·1915	0·1950	0·1985	0·2019	0·2054	0·2088	0·2123	0·2157	0·2190	0·2224
0·6	0·2257	0·2291	0·2324	0·2357	0·2389	0·2422	0·2454	0·2486	0·2517	0·2549
0·7	0·2580	0·2611	0·2642	0·2673	0·2704	0·2734	0·2764	0·2794	0·2823	0·2852
0·8	0·2881	0·2910	0·2939	0·2967	0·2995	0·3023	0·3051	0·3078	0·3106	0·3133
0·9	0·3159	0·3186	0·3212	0·3238	0·3264	0·3289	0·3315	0·3340	0·3365	0·3389
1·0	0·3413	0·3438	0·3461	0·3485	0·3508	0·3531	0·3554	0·3577	0·3599	0·3621
1·1	0·3643	0·3665	0·3686	0·3708	0·3729	0·3749	0·3770	0·3790	0·3810	0·3830
1·2	0·3849	0·3869	0·3888	0·3907	0·3925	0·3944	0·3962	0·3980	0·3997	0·4015
1·3	0·4032	0·4049	0·4066	0·4082	0·4099	0·4115	0·4131	0·4147	0·4162	0·4177
1·4	0·4192	0·4207	0·4222	0·4236	0·4251	0·4265	0·4279	0·4292	0·4306	0·4319
1·5	0·4332	0·4345	0·4357	0·4370	0·4382	0·4394	0·4406	0·4418	0·4429	0·4441
1·6	0·4452	0·4463	0·4474	0·4484	0·4495	0·4505	0·4515	0·4525	0·4535	0·4545
1·7	0·4554	0·4564	0·4573	0·4582	0·4591	0·4599	0·4608	0·4616	0·4625	0·4633
1·8	0·4641	0·4649	0·4656	0·4664	0·4671	0·4678	0·4686	0·4693	0·4699	0·4706
1·9	0·4713	0·4719	0·4726	0·4732	0·4738	0·4744	0·4750	0·4756	0·4761	0·4767
2·0	0·4772	0·4778	0·4783	0·4788	0·4793	0·4798	0·4803	0·4808	0·4812	0·4817
2·1	0·4821	0·4826	0·4830	0·4834	0·4838	0·4842	0·4846	0·4850	0·4854	0·4857
2·2	0·4861	0·4864	0·4868	0·4871	0·4875	0·4878	0·4881	0·4884	0·4887	0·4890
2·3	0·4893	0·4896	0·4898	0·4901	0·4904	0·4906	0·4909	0·4911	0·4913	0·4916
2·4	0·4918	0·4920	0·4922	0·4925	0·4927	0·4929	0·4931	0·4932	0·4934	0·4936
2·5	0·4938	0·4940	0·4941	0·4943	0·4945	0·4946	0·4948	0·4949	0·4951	0·4952
2·6	0·4953	0·4955	0·4956	0·4957	0·4959	0·4960	0·4961	0·4962	0·4963	0·4964
2·7	0·4965	0·4966	0·4967	0·4968	0·4969	0·4970	0·4971	0·4972	0·4973	0·4974
2·8	0·4974	0·4975	0·4976	0·4977	0·4977	0·4978	0·4979	0·4979	0·4980	0·4981
2·9	0·4981	0·4982	0·4982	0·4983	0·4984	0·4984	0·4985	0·4985	0·4986	0·4986
3·0	0·4987	0·4987	0·4987	0·4988	0·4988	0·4989	0·4989	0·4989	0·4990	0·4990

This table can be used to calculate $N(d)$, the cumulative normal distribution functions needed for the Black-Scholes model of option pricing. If $d_i > 0$, add 0·5 to the relevant number above. If $d_i < 0$, subtract the relevant number above from 0·5.

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.7: PUBLIC SECTOR AUDITS AND ASSURANCE

THURSDAY 14 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

SECTION A

This question is compulsory and MUST be attempted.

<u>QUESTION ONE</u>

You have been assigned as Director of the audit at Cabinet office for the audit of expenditure at the Disaster Management and Mitigation Unit.

During the pre-engagement entry meeting, you seek to obtain understanding of the overview of the financial management process in the government.

You have been provided with the following information:

(1) The Republic of Zambia is a democratic state with a distinct separation of powers amongst the three arms of government namely the executive, legislature and judiciary. The President and members of parliament are elected by the people of Zambia during general elections which are held every five years.

(2) The people of Zambia expect the government to economically, efficiently and effectively manage public resources. In order to achieve this objective, the Republican President appoints Cabinet Ministers from the elected and nominated members of parliament. The Cabinet Ministers are in charge of the policy matters of every line ministry. In accordance with the Public Finance Act No. 15 of 2004, the Minister is, subject to the provisions of the Constitution mandated to manage, supervise, control and direct all matters relating to financial planning and the economic management of the nation.

(3) The President appoints Permanent Secretaries to spearhead the translation of government policy into action.

(4) The President also appoints the Secretary to the Treasury to be in charge of the National Treasury. The Treasury shall among many assignments coordinate and manage the national budget preparation process and exercise control over the implementation of the annual national budget, as well as promoting and enforcing transparency and effective management in respect of revenue, expenditure, assets and liabilities of ministries, Government departments and statutory corporations.

(5) The Secretary to the Treasury designates, in respect of each ministry or province, controlling officers who are the Chief Accounting Officers in respect of all public funds. Every controlling officer is charged with the duty of Planning and controlling the expenditure of public funds under their control.

(6) The second arm of government is the legislature also known as Parliament. It is headed by Speaker of the National Assembly. The Zambian parliament is made up of a number of parliamentary select committees among them the Public Accounts Committee. This Committee is appointed to review the reports of the Auditor General and receive responses from controlling officers on the observations contained in the Auditor General's reports. The committee further makes recommendations to the Secretary to the Treasury for his action.

(7) The Auditor General is the Head of the Supreme Audit Institution (SAI) and is appointed by the President subject to ratification by Parliament. This institution exists to provide quality audit services to government and other public entities with the view to promoting transparency and accountability in the management of public resources for the benefit of the Zambian people. In order to benefit from the best global practices of public audits, The Office of the Auditor General subscribes to and is a member of a global organization for Supreme Audit Institutions of member countries known as The International Organization of Supreme Audit Institutions (INTOSAI).

(8) This organization is responsible for the issue of public sector auditing standards known as ISSAIs. The INTOSAI has issued various declarations which are designed as guidelines and principles of effective public sector auditing. One such issue is the Lima Declaration which basically provides guidelines on how supreme audit institutions should operate.

The main objective of the Office of the Auditor General is to provide quality audit services to government and other public institutions for the benefit of the general citizenry.

The Office of the Auditor General is divided into divisions headed by Directors. One such division is one that deals with specialized audits including Information technology. This division was formed in response to the risks that come with increased use of information technology in government.

A majority of the audit team members on this assignment are new recruits and are not familiar with public sector audits and especially the importance and value of IT audits in government ministries and departments. You are aware that IT audits in your department need to be planned at the strategic, annual and team levels.

Required:

(a) Using information in the scenario, identify and explain the parties to the audit of cabinet office. (9 marks)

(b) Describe any five (5) guidelines to effective public sector auditing in the context of the Lima Declaration. (10 marks)

(c) Discuss the role of the Secretary to Treasury in the public sector audit cycle in the scenario. (2 marks)

(d) Explain the importance of a follow up audit in public sector audits. (3 marks)

(e) In relation to Information Technology (IT) audits:

(i) Describe the role of IT Audits in Financial, Compliance and Performance audits. (6 marks)

(ii) Briefly explain the planning of IT audits that should be carried out at the Strategic, Annual and Team levels by the Office of the Auditor General. (6 marks)

(iii) Explain the risks of not paying attention to cyber security in the Ministry of National Development Planning. (4 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

The government and other public sector institutions such as parastatals raise and spend huge sums of money annually in the performance of their duties. It is therefore important that such funds raised are prudently spent in the best interest of the general citizenry.

In Zambia, the Office of the Auditor General (OAG) is the Supreme Audit Institution. It conducts audits of public sector institutions. The OAG reports to the public accounts committee of parliament and the President of Zambia.

Annually the OAG conducts financial audits of government ministries and other institutions. You have been assigned to lead a team of auditors to conduct a financial audit of the Ministry of Chiefs and Traditional Affairs.

You are at the planning stage of the audit of the Ministry of Chiefs and Traditional affairs and you will be leading a team comprising largely of recently recruited auditors who are not familiar with public sector audits. During the pre-audit meeting with the audit team one of the newly recruited auditors wanted to know if the principles of using professional judgment and professional skepticism apply in public sector audits.

The audit team members also wish to know if the Internal Standards on Auditing used in the audit of private companies apply in public sector auditing.

The Ministry of Chiefs and Traditional Affairs is responsible for dealing with issues pertaining to all chiefs in the Republic of Zambia. The ministry has a complement of experts in various fields including accountants, engineers and a host of civil servants who perform various tasks. The Ministry of Chiefs and Traditional Affairs has an internal audit department.

Guidance in terms of operations is given by the laid down principles governing matters pertaining to chiefs. The yellow book contains details of budgets and budget lines for the ministry.

Ministry of Finance guidelines are used by the Ministry in managing the funds allocated to it. Payments are processed using the central payment and accounting system at the Ministry of Finance.

The scope of the work of a Supreme Audit Institutions (SAI) is much wider than that of auditors in the private sector whose main objective is to form an opinion on the financial statements. In addition to conducting financial audits, the SAI may carry out performance and compliance audits.

Required:

(a) Explain the meaning and relevance of professional judgment and professional skepticism in the context of public sector audits. (5 marks)

(b) Describe the matters that the audit team in the Ministry of Chiefs and Traditional Affairs will need to gain an understanding of as part of risk assessment. (5 marks)

(c) Explain the meaning of performance auditing in the public sector and state Two (2) principles of performance auditing. (5 marks)

(d) Explain the meaning of compliance auditing in the public sector and state Two (2) principles of compliance auditing. (5 marks)

[Total: 20 Marks]

QUESTION THREE

You are a Director responsible for audits in the Office of the Auditor General (OAG).

The President's office has requested you to conduct a financial and compliance audit of the Zambia Electric Supplies Corporation (ZESCO). This has been requested despite the fact that ZESCO has independent external auditors who conduct annual audits and reports to government who are the shareholders on behalf of the people.

In addition to conducting a financial audit you have specifically been requested to carry out a compliance audit dealing with expenditure and the use of funds meant for rural electrification.

The following additional information has been provided:

(1) ZESCO is owed substantial amounts of money by various entities, largely by Government Ministries who only pay for usage of electricity when funding from the Ministry of Finance is received. A schedule of all receivables has been provided.
(2) The company has an accounts department which maintains records of all documents such as invoices etc.
(3) The company has procedure manuals for its operations which are made available to all employees through their supervisors.
(4) The company has an internal audit department whose role, among others, is to evaluate the organisations' internal controls. A review of the previous year's management letter has revealed that the company has poor internal controls which cannot be relied upon. It is not uncommon for senior management to override controls that have been designed.
(5) The company uses an accounting package for the preparation of its financial statements and a general ledger is in place.

(6) Executive management is paid a bonus based on the performance of the company for a particular year.
(7) There is generally low morale amongst staff particularly at the lower level which comprises the majority of the workforce. This is because of poor conditions of service including poor remuneration for this category of staff.
(8) The regional offices keep large sums of cash, and banking is done once a week.
(9) The company stocks a wide range of inventory including small high value items and which have a ready market.

Required:

(a) Discuss the link between the International Standards on Auditing (ISAs) and the International Standards of Supreme Audit Institutions (ISSAIs). (2 marks)

(b) Discuss the responsibilities of the OAG and that of management with regards to fraud in accordance with the provision of ISSAI 1240 *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements.* (4 marks)

(c) Identify and explain the fraud risk factors that exist in the case scenario above. (6 marks)

(d) Explain giving suitable examples Four (4) methods that can be used to gather evidence in the financial audit of Zambia Electric Supplies Corporation. (8 marks)

[Total: 20 Marks]

QUESTION FOUR

Safe Water Ltd is a utility company wholly owned by the government. You are conducting the audit of the financial statements for the year just ended.

A material amount contained in the financial statements is that of receivables made up of a large number of small balances and a few large debts owed largely by government and quasi-government institutions.

You have been assigned by the Auditor General to conduct a financial audit for the year. You have decided to carry out a circularization of the receivables as a major audit procedure and you have been provided with a list of receivables as at that date. A material amount of the debt is over 120 days outstanding.

The following additional information has been provided to you:

(1) Safe Water Ltd buys all its water treatment chemicals from a semi government owned company. During the year under review, the two companies have traded with each other.
(2) At the period end there is an ongoing legal case in which Safe Water Ltd has been sued for failure to supply water to a manufacturing company. This resulted in loss of production and profitability for the manufacturing company, which is now seeking compensation.
(3) There was a fire in stores after the year end which destroyed inventory worth K230 000. This amount is material to the financial statements of Safe Water Ltd.
(4) The computer system of Safe Water Ltd broke down for four days before the period end. This resulted in the issuance of manual receipts which required rekeying in after the restoration of the system. Five days into the following year, the computer was still not working.

You have also been requested to conduct a performance audit of the services offered by Safe Water Ltd. The company has set standards in terms of the quality of water that it should supply. Daily records of water treatment chemicals used are kept and weekly laboratory tests of samples of water supplied are carried out by an independent laboratory. Official results of the sample tests are kept by the resident Water Engineer.

Required:

(a) Distinguish between positive and negative circularization of the receivables of Safe Water Ltd. (3 marks)

(b) Recommend, with justification, the method that you should use in circularizing the receivables of Safe Water Ltd. (2 marks)

(c) Suggest the types of balances that should be included in the sample of the receivables that you will circularize. (3 marks)

(d) Explain the inherent audit risks arising from each one of the matters (1) to (4) described in the scenario above. (4 marks)

(e) Explain what your audit response should be for each one of the audit risks you have identified in (d) above. (4 marks)

(f) Describe the audit work you will perform as part of the performance audit of Safe Water Ltd using the information given. (4 marks)

[Total: 20 Marks]

QUESTION FIVE

Government is the largest spender of the nation's resources which it collects through taxes. Parliament approved the annual budget and Spending ministries and agencies are required to ensure that their expenditure is within the approved budget and guidelines.

The annual budget for the Ministry of Health is the highest in terms of budgetary allocation. The bulk of the funds are meant for the procurement of essential drugs. Over the last three years, there has been a shortage of essential drugs in most health facilities despite the huge budget allocation.

A whistle blower alerted the nation by coming out publicly alleging that there are fraudulent activities in the procurement of drugs. These allegations were reported in both print and electronic media prompting the executive to call for a forensic investigation.

Preliminary investigations by law enforcement agencies revealed glaring cases where the purchase prices of drugs were being artificially inflated in the procurement process. This necessitated an investigation to be carried out by experts from the Forensic Investigation department of the Office of the Auditor General.

You work for the Office of the Auditor General and you have been assigned to lead a team of auditors to conduct a forensic audit of the procurement of drugs in the last three years. Quality control in the performance of work is paramount to any Supreme Audit Institution (SAI). This is because the conclusions drawn are based on the work that has been carried out. ISSAI 40 *Quality Control for SAIs* gives guidance to the SAI on matters relating to quality.

The procurement of drugs is currently undertaken by the Public Procurement Division of the government in conjunction with the Ministry of Health. Your investigation will focus on establishing whether tender procedures as laid down were followed, as well as interviewing staff at the Ministry and the Public Procurement Division.

A review of the conditions of service for procurement division staff shows that they are lowly paid considering the value of goods that they handle. It has come to your attention that they deal with representatives of competing pharmaceutical companies wishing to win supply contracts. It has further been observed that the controls over drugs purchased are weak resulting in overstocking.This led to the expiry of large quantities of drugs.

All documentation in the procurement system is kept by the procurement division in the office of the Chief Procurement Officer.

Required:

(a) Using the information in the scenario, briefly describe any four (4) stages in a forensic investigation assignment. (8 marks)

(b) Based on the information provided in the case above, evaluate the extent to which the following three E's have been achieved in the procurement process at the Ministry of Health:

(i) Economy (2 marks)
(ii) Efficiency (2 marks)
(iii) Effectiveness (2 marks)

(c) Explain any THREE (3) elements of quality control for audits of SAIs in accordance with ISSAI 40 *Quality Control for SAIs.* (6 marks)

[Total: 20 Marks]

END OF PAPER

CA 3.7 PUBLIC SECTOR AUDITS AND ASSURANCE SOLUTIONS

SOLUTION ONE

a) The three parties to an audit:

- **The Auditor**
  This is the Office of the Auditor General who assigns officers to carry out audits in the Ministries, Provinces and other spending agencies (MPSAs). The Supreme Audit Institution exists to enhance transparency and accountability in the collection of revenues and the use of public resources by providing independent third party assurance.

- **The responsible party**
  In most cases, this is the audited entity which is responsible for providing subject matter information and activities as well as addressing the recommendations in the audit report. In this case, the responsible party is the Disaster Management and Mitigation Unit which is the subject of the audit**.**

- **Intended users**
  This is the target for the auditors' report. This may include the people of Zambia in whose interest the Republican President and the members of parliament act. This class also includes those charged with governance of the audited entity.

b) Guidelines of the Lima declaration

- **Internal and External audit**- Each government ministry, department and entity needs to have its own internal audit. The external auditor should assess the effectiveness of internal audit.
- **Independence of SAIs**-An independent Supreme Audit Institution must perform its functions objectively and effectively. The SAI should have its functional or organizational independence to achieve this.
- **Independence of SAI members**-The independence of decision makers within the supreme audit institution should be protected.
- **Financial independence of the Supreme Audit Institution**-In order for the Auditor General to carry out its mandate, there is need for adequate financial support. This will enhance objectivity.
- **Powers of investigation**-The Auditor General's office should have access to all staff and records in order to effectively carry out an audit.
- **Audit staff**- all the audit employees should have adequate knowledge and competences to enable them conduct audits effectively.
- **Audit methods** – The SAI should audit in accordance with a self-determined program.
- **Method of reporting** – The SAI should give due consideration to the points of view of the audited entities on its findings.

c) **The role of the Secretary to the Treasury**
The Secretary to the Treasury is responsible for coordinating the budgetary process as well as receiving and acting on recommendations from the public accounts committee. The Secretary to the Treasury is responsible for following up on audit queries raised by Office of the Auditor General.

d) **The importance of a follow up audit**
This is the examination of corrective action taken by the audited entity for a responsible party. This is important on account that it increases the value of the audit process by strengthening the impact of the audit.

It also encourages audited entities to take audit recommendations more seriously.

e) **i. Application of IT audits during other types of public sector audits:**

- **Financial audit**
  In an environment like the Ministry of National Development Planning, a financial accounting IT system is inevitable as the auditor will be required trail accounting transactions up to the preparation of financial statement. The auditor will be required to test controls over input, processing and output

- **Compliance audit**
  Compliance auditors are concerned with the ministry's compliance with relevant laws and regulations. This may include assessing whether members of staff adhere to applicable IT laws and regulations as well as the IT system being compliant with all guidelines.

- **Performance audit**
  Government IT systems must be assessed in terms of economy, efficiency and effectiveness. This implies assessing the cost of the IT systems while maximizing utilization of IT resources without compromising the operation of the system. In terms of effectiveness, an evaluation as to whether the system has been implemented in a manner that enables the organization achieve its objectives.

(ii) Planning of IT audits at:

The strategic level:
The IT audit plan should form part of the overall plan of the Office of the Auditor General. The strategic IT plan will be for the long term and cover for periods ranging between 3-5 years. This will have targets and objectives for the audit of IT systems in government under its jurisdiction.

The Annul level:

The plans at this level are derived from the strategic plan. This will involve the selection of which specific IT systems or entities will be audited in the current year. A risk based approach will be used in order to prioritize and select suitable organizations or systems to audit.

The team level:

This plan is established by the SAI audit team in accordance with the annual IT audit plan. This will cover areas of significant risk identified in the annual plan and will comprise a detailed audit program. To be able to do this, the audit team needs to have an understanding of the entity being audited and the IT systems in use.

iii. Cyber security- Due to the advent of the internet and huge changes in communication technologies, organizations like the ministry of National Development planning may be victims of cybercrime.

Cybercrime includes:

- Malicious damage-Criminals may gain access and cause damage by deleting data and installing sophisticated programs. This may result in operational challenges in terms of planning and decision making.
- Data theft- Public sector entities such as the ministry in question holds very important and sensitive data which may be copied and used for criminal activities.
- Denial of access attacks-Criminals may deny the intended users access to the ministry's website. This may disrupt business.

SOLUTION TWO

a) **Professional judgment** – this is the use by the public sector auditor of the knowledge and skills obtained during training and work experience in the execution of the work carried out.

Relevance of use of professional judgment:

The use of professional judgment will be necessary in making decisions about:

- Materiality and audit risk
- The nature, timing and extent of audit procedures to be carried out to gather audit evidence.
- Evaluating whether sufficient audit evidence has been obtained.
- Evaluation of judgments made by management in applying the financial reporting framework applicable to the audited entity.
- Drawing conclusions from the audit evidence obtained.

Professional skepticism – is the ability to have a questioning mind and being alert for any contradictory evidence.

Relevance of use of professional skepticism:
This should be applied throughout the conduct of the audit and must be applied by all members of the audit team.

Professional skepticism is important in the following ways:

- Considering the integrity of management.
- Questioning of responses by management to the enquiries of the auditor.
- Revising risk assessment in light of changed circumstances and
- Being alert to audit evidence that contradicts other audit evidence obtained.

b) Auditors must gain an understanding of the following matters:

- The laws and regulations that apply to the ministry in question.
- Details in the yellow book that relate to the Ministry of Chiefs and Traditional Affairs.
- Contents of the procedural manuals in the ministry.
- Internal controls that exist within the ministry.
- The role of the internal audit department.
- Details of any statutory instruments issued by the minister responsible.

c) Meaning of performance auditing:

ISSAI 3000 gives the definition of performance auditing.

This is an independent, objective and reliable examination of whether government undertakings, systems, operations, programs, activities or organizations are operating in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement.

Fundamental principles of performance auditing: (ISSAI 300)

1. Audit objective in performance auditing – auditor should set clearly defined objectives for a performance audit that relates to the principles of economy, efficiency and effectiveness.

2. Audit approach in performance auditing – should state clearly which of the following approaches will be followed:

- A systems oriented approach with the aim of examining the functioning of management systems such as a financial management system under the ministry of finance.
- A result oriented approach – aimed at establishing whether the objectives have been achieved as intended or whether programs or services are operating as intended.
- A problem oriented approach – which examines and analyses the causes of particular problems or deviations from criteria.

3. Criteria in performance auditing – this is the basis against which actual performance is measured being the benchmark against which the subject matter is evaluated.

4. Audit risk in performance auditing- the risk that the auditor may reach an inappropriate conclusion and hence fail to add value for users.

5. Communication in performance auditing- this is communication with the entity being audited. It includes notification to the auditee of the audit objective, the audit questions and the subject matter. Usually this is achieved through a written engagement letter and other regular communications during the audit.

6. Materiality in performance auditing – should be determined during performance audits and should take into account the magnitude of its impact. Important to note that in performance audits, materiality may but need not be a primary concern for the auditor.

d) Meaning of compliance auditing:

A compliance audit is one conducted by a public sector auditor in order to gather sufficient appropriate evidence to conclude whether the information on a particular subject matter is in compliance, in all material respects, with particular audit criteria and subsequently report on the findings and conclusions.

Principles related to compliance auditing: (ISSAI 400)

1. Scope of a compliance audit, subject matter and criteria – these three must be established by the auditor. The scope will be decided by the auditor and should be clear enough in terms of the subject matter's compliance with the established criteria.
2. Understanding the entity – auditor should have an understanding of the entity and its operations and the existing procedures for achieving compliance.
3. Understanding the internal controls and the control environment – particularly those controls that focus on compliance with the criteria.
4. Risk assessment – in light of the criteria and the nature of the audit, the auditor needs to assess the risk of non-compliance in order to determine the nature, timing and extent of the audit procedures that should be undertaken.

5. Risk of fraud – which in compliance audits relates to abuse of public authority and also fraudulent reporting on compliance issues. The auditors should remain alert to any indications of fraud when carrying out their work.
6. Audit evidence – sufficient appropriate audit evidence should be gathered which will enable auditor make an appropriate conclusion.
7. Compliance audit reports – should be based on principles of completeness, objectivity, timeliness and a contradictory process.
8. Follow up – of instances of non-compliance previously reported on.

SOLUTION THREE

a) Link between ISAs and ISSAIs:

ISAs are international standards used in the audit financial statements in the private sector.

The ISAs have received international recognition including by the INTOSAI. The aim of the INTOSAI is to provide guidance to auditors of the public sector in the carrying out of public sector audits.

In as far as they are relevant to the public sector, INTOSAI has adopted the ISAs and only prefixed them with the digit 1. In other words the same auditing standards used in the private sector apply. For example ISA 700 under the private sector audits is ISSAI 1700 in public sector auditing.

b) Responsibilities for fraud:

ISSAI 1240 gives guidance on the responsibilities for fraud in a public sector audits.

Management's responsibility:

The primary responsibility for prevention and detection of fraud lies with management and those charged with governance of an entity.
It is their responsibility to place emphasis within the company for fraud prevention and also to establish a strong control environment.

OAG Responsibility for fraud:

The OAG is responsible for obtaining reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error.

The auditors should be aware of the fact that financial statements could be misstated due to fraud.

c) **Fraud risk factors in Zesco:**

- The fact that the company has poor internal controls is a fraud risk factor. Staff may take advantage of poor controls thinking that thy will not be caught.
- The overriding of controls by senior management is a fraud risk factor. Management has the ability to override controls and if members of management know that they won't be caught may motivate them to commit fraud.
- Performance based pay of the bonus is a fraud risk factor. Management can manipulate the financial statements with a view to meeting the set targets to enable them get the bonus.
- Poor working conditions and low morale is another fraud risk.
- Keeping large sums of money over prolonged periods of time is a fraud risk factor. Employees are poorly remunerated and so the temptation to misuse such funds is higher than when funds are banked promptly after receipt.
- The keeping of small high value items and the poor internal controls is a fraud risk factor. Employees may steal such items and sell them.

d) **Methods of gathering audit evidence in a financial audit in the public sector:**

Inspection:
Inspection involves the examination of documents or records in a client organization. It also includes physical inspection of items such as tangible non-current assets. In the financial audit of Zesco, inspections may include the checking of orders for authorization.

Observation:
This is where the auditor looks at a process being performed by others with the objective of confirming that the process is being carried out as it should be.
An example of observation could be the auditor's observation of inventory counting by the client staff of the performance of control activities.

External Confirmation:
This is done by way of the auditor seeking third party confirmation.

This method can be used to confirm account balances with the bank or confirming receivables account balances from a selection of customers.

Recalculation:
This involves checking the mathematical accuracy of documents and records by the auditor. For example when testing revenue, the auditor may check the calculation of invoice values on a sample of invoices.

Re-performance:
This involves the auditor executing a procedure or controls originally performed as part of the internal controls of the entity.
For example the auditor may re perform the bank reconciliation for a particular month.

Analytical procedures:
This involves evaluating and comparing financial and/or non-financial data for plausible relationships. It also involves the investigations of identified fluctuations and relationships that are not consistent with other relevant information or deviates from predicted amounts.

For example a significant increase in gross pay can be verified by comparing with changes in staff numbers during a period. One would expect that a significant increase in staff numbers will be matched by an increase in the gross pay.

Enquiry:
This method of gathering evidence is widely used in an audit of financial statements. It ranges from formal written enquires to oral inquiries of persons within and outside the entity.

For example the auditor uses the enquiry method when gaining an understanding of the entity and its environment.

SOLUTION FOUR

a) **Positive circularization:**
This is a form of circularization of receivables where the receivable is required to respond whether or not they agree with the balance being confirmed.

Negative circularization:
Under this method of circularization, the receivable is only expected to respond if they disagree with the balance being confirmed.

This works on the rebuttable presumption that if there is no response the balance is assumed to be correct.

b) **Recommended method for circularizing receivables:**

The nature of the business of Safe Water Ltd is that the company will have a large number of customers. The positive method of circularization is recommended to be used.

This method is preferred because there will be evidence by the auditor of responses and confirmations received. This is contrary to the negative form whereby non responses are assumed to be confirmation of balances which is not necessarily correct.

c) Types of balances that should be included in circularization:

A representative sample of accounts receivables including balances in the following categories:

- Accounts with nil balances.
- Accounts bearing credit balances.
- Accounts whose customers pay round sum amounts.
- Accounts with balances that have been written off during the year.
- Accounts with overdue balances.

d) Inherent risks in the following:

1. Related party transactions:

Dealings between two entities under the same control are related party transactions.

The accounting requirement is that related parties and related party transactions must be disclosed in the financial statements.

There is a risk that there is no disclosure of related party relationships and dealings with them in accordance with applicable accounting standards.

The risk in this case is that the auditor may not identify all related party relationships and transactions in some cases. The relationships are not always obvious.

2. Misstatement of provisions arising from legal case:

The legal case could result in the entity paying damages depending on the outcome of the case. Since the matter is not concluded at the period end an estimate of the liability would be required. The risk is that the provisions may be misstated because of the fact that the liability is an accounting estimate and requires management judgement.

3. Fire destroying inventory worth K230 000.00:

The risk arising from a fire that guts inventory post period end poses a risk that the entity may not treat the event correctly in line with relevant standards.

This gives rise to a non-adjusting event after the period end and so should not result in the financial statement figure for inventory being adjusted.

4. **Breakdown of computer system:**
   The risk that the breakdown of the computer system and reverting to manually raising the receipts is that revenue may be misstated. This could arise because of errors during the raising of manual receipts and also during the entering of the manual receipts into the computer system once it is restored.

e) Responses to risks identified in (d) above:

1. Enquire of management of the existence of related parties other than those identified.

   Obtain written representations from management with regards related party relationships and dealings.

   Throughout the audit be alert using professional skepticism and look out for any evidence of related party relationships and dealings.

2. Discuss with management on the provision that may have been made and check for the reasonableness of the provision.

   Consult the in-house legal person on their view on the possible outcome of the case.

   Consider engaging external legal expert for independent opinion on the possible outcome of the case and the estimated liability.

3. Confirm the treatment in the financial statements of the effect of the fire. In this case confirm that the inventory at the period end has not been adjusted in view of the fire.

4. Assess the control over the manual receipts raised and verify a sample for accuracy.

   Confirm that the manual receipts have been input correctly once the system is running. This will be done by following through the processed manual receipts into the computerized system.

   Note: parts (d) and (e) could have been answered simultaneously or in table form.

f) The objective of the service offered by Safe Water Ltd is to supply safe water to residents and the following audit work will be performed as part of the performance audit:
   - Obtain a sample of customers who use the services of safe Water and find out if they are satisfied with the services offered by the company.
   - Compare the water supplied during the year and compare with targets set for supply of water.
   - Examine the results of water testing for a period and compare actual results with expected results.
   - Confirm the competence of the organization carrying out the daily tests of water by inspecting their qualifications and experience.
   - Verify the cost of buying the water treatment chemicals to confirm whether they are bought at an economic price.

SOLUTION FIVE

a) Key stages of a forensic investigation:

1. Before carrying out a forensic investigation it is necessary for the forensic auditor to determine the scope and objectives of the investigation.
   This requires answers to some basic questions such as;
   - What is the nature of the fraud being investigated?
   - Who are involved?
   - What is the extent of the fraud in terms of monetary value?
   - What evidence is required and what reporting form will be required?

   In the case at hand:
   The objective is to establish how staff within the procurement division and those at the ministry have managed to carry out the fraud undetected during the last three years.

2. Understanding the organization and the allegations:
   Before embarking on the fraud investigation, it is necessary that the auditor has a clear understanding of the nature of the organization as well as the nature of fraud itself.

   In the case at hand:
   There is need to gain an understanding of the operations of the Ministry of Health and specifically matters relating to procurement. The roles played by the officials within the ministry and the procurement division. There is need to look out for any opportunities for fraud in gaining an understanding of the organization.

3. Securing and safeguarding financial and other information:
   Auditors will need to gather evidence which will help in establishing the facts on how the fraud was carried out. This evidence could be electronic or indeed hard copies such as invoices and other documentation.
   Staff being investigated will be motivated to cover up and destroy any such evidence.

   In the case at hand:
   There is need for the investigator to quickly move in and secure all important documents. In this case all documents used in the procurement of drugs are kept by the Chief Procurement Officer. These must be retrieved and kept securely and only returned at the conclusion of the investigation. Documents that may be kept by the finance department can also be retrieved for safe keeping.

4. Inspecting financial information and documents:
   Critically examining documents and identifying 'red flags' which are indicative of fraud having taken place. To do this the auditor should have the skills and required experience. Matters that should be looked into include signature forgeries, signs of tempering with documents, copies instead of original documents.

   In the case at hand:
   The auditor will need to critically examine the orders, documentation confirming receipt of the drugs as well as the supplier invoices. Minutes of the tender committee would also need to be examined because this is a key step in procurement of drugs.

5. Interviewing staff and third parties:
   This is an important element of the investigation and may result in confessions. This requires skills of interviews and interrogations.

   In the case at hand:
   The auditor may need to interview staff involved in procurement at the Ministry of Health and also staff from the procurement division.

6. Drawing conclusions:
   This is the outcome of the investigation. The investigator should be aware that the conclusion and report thereon may be passed on the investigating authorities and so the conclusions should be based on facts obtained and should not be biased.

In the case at hand:
The investigator will have to conclude based on evidence gathered whether there was fraud in the procurement of drugs and the people who are involved.

7. Producing the report:
A report will be the outcome of the investigation and the form of report will depend on the nature of the assignment. The report should be clear, easily understood and supported by evidence.

In the case at hand:
At the end of the investigation for alleged fraud in the procurement of drugs a report will need to be prepared and circulated as expected to the relevant authority.

b) **i.** **Economy –** this relates to the cost of undertaking an activity. Economy refers to minimizing of cost without ignoring quality**.**

In the case of the procurement of drugs it is clear that this has not been achieved because prices were inflated in order to perpetuate fraud by those responsible for procurement.

ii. **Efficiency –** This refers to comparing the outputs compared to the inputs of an activity. The higher the productivity for given resources the better.

In the case of the procurement of drugs this element has also not been fulfilled. Substantial sums of financial resources were allocated for the procurement of drugs but the outcome was far below the expectations because of the fraud.

Drugs are not available at the health facilities run by the government. Effectiveness refers to being able to meet the objectives of the activity in this case availability of drugs at health facilities.

iii. **Effectiveness** – Effectiveness is concerned with objectives and achievement of the objectives. It answers the question on whether the use of the resources results in achievement of the intended outcome or intended outputs.

In the case at hand, it is evident that the use of the funds for the procurement of drugs did not meet the intended outcomes and outputs. This is evidenced in the shortage of drugs in public sector hospitals which suffered as a result of the fraud.

c) Elements of quality control for an SAI:

1. **Leadership responsibilities for quality**
   SAI should establish policies and procedures which promote quality as part of the culture of the institution. This should be from the highest level of the institution.

2. **Relevant ethical requirements**
   SAI must have policies and procedures for ensuring that all staff comply with ethical requirements. Including rotation of staff, in order to reduce the risk of familiarity.

3. **Acceptance and continuation of audits to be carried out**
   SAI should have policies to ensure that the integrity of management is not questionable. It should be noted that SAIs largely do not have the discretion about the work they will carry out. Considering integrity helps the SAI decide how to deal with risk that will arise due to lack of integrity of management.

4. **Human resources**
   SAI should have policies and procedures to provide it with reasonable assurance that it has necessary resources with the requisite skills and competences to perform its duties.

5. **Engagement performance**
   Policies and procedures to ensure work was conducted in accordance with relevant standards. This entails supervision and a review of responsibilities of the work that has been carried out.

6. **Monitoring**
   There should be monitoring systems in place in order to give reasonable assurance to the SAI that quality control processes and procedures are relevant, adequate and operating effectively all the times.

END OF SOLUTIONS

CA ZAMBIA PROGRAMME EXAMINATIONS

ADVISORY LEVEL

CA 3.8: PUBLIC SECTOR FINANCIAL MANAGEMENT

FRIDAY 15 JUNE 2018

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

INSTRUCTIONS TO CANDIDATES

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

2. This paper is divided into TWO sections:
   Section A: One (1) compulsory scenario question.
   Section B: Four (4) Optional scenario Questions. Attempt any three (3) questions.

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

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

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

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

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

8. Present legible and tidy work.

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

10. Present Value and Annuity tables are attached at the end of this paper.

SECTION A

This question is compulsory and must be attempted.

QUESTION ONE

KTC district council is considering embarking on a capital project involving the rehabilitation of its guest house. The guest house was constructed in January 1967. The council has never had a risk management strategy since it was formed. Little or no rehabilitation has since been made on the guest house which is currently in a deplorable state. KTC is based in the Northern Province of Zambia. The profits from the guest house are meant to supplement service provision in the district.

KTC is expected to spend K1million on rehabilitation works. Fifty percent is expected to be paid before commencement of the works and the balance will be paid when the works are completed. The estimated period of rehabilitation works is twelve months. The estimated remaining useful life of the guest house is expected to increase from the current five years to fifteen years.

During a recent council meeting held at the civic centre council chamber management explained that the project is worthwhile because it is expected to reduce the cost of service provision. In his submission to the councilors, the Council Secretary (C.S) explained that the council has been subcontracting most of its service provision to private companies. He further submitted that after the guest house is complete, KTC will be able to repair the council tractor and grader which are both in a deplorable state .The repairs are expected to be completed a year after the opening of the guest house. The CS explained that KTC is currently spending huge sums of money on garbage collection and grading of roads in the district because of subcontracting the works. After the repairs of the tractor and the grader, the cost of service provision is expected to reduce by sixty percent from the current K15,000 per month.

The council is a beneficiary of the equalization grant from the Central Government. It is estimated that the completion of rehabilitation works will reduce the monthly grant allocation to KTC by 5%. The operating costs of the guest house are expected to increase from the current K15,000 per month to K18,000 per month. It is estimated that revenue of K70, 000 per month will be generated once the rehabilitation works are complete.

The guest house will be partly rehabilitated using savings from the capital projects component of the grant. The monthly grant received by KTC is approximately K100, 000 of which 20% is the capital component and the balance is for recurrent expenditure.

KTC uses the social time preference rate method to appraise its investments. Assume the time preference (p) is 5 and the marginal utility of consumption (u) is 20 while the annual growth rate in per capita consumption (g) is 5%.

During the full council meeting the councilors advocated for the leasing of the guest house to a private firm upon completion of the works. However the council chairman advocated for a concession arrangement.

Required:

Write a report to the KTC district council which should address the following:

(a) the evaluation of the proposed investment in the rehabilitation of the guest house using the Net Present Value method. (20 marks)

(b) the discussion of the nature of the leasing arrangement advocated for by the councilors in the full council meeting. (5 marks)

(c) the distinction between a concession arrangement and a leasing arrangement.

(7 marks)

(d) the distinction between Public and Private sector financial risk. (8 marks)

[Total: 40 Marks]

SECTION B

Attempt any THREE (3) questions in this section.

QUESTION TWO

(a) The Ministry of Finance is mandated by law to develop a budgeting system in all Ministries, Provinces and Other Spending Agencies (MPSAs). Currently, the government is using Activity Based Budgeting (ABB) except in the Ministry of General Education (MOGE) and Ministry of Higher Education (MOHE) where government has been piloting Output Based Budgeting (OBB) for the past three(3) years. It is envisaged that by the end of 2020 the government would have moved from Activity Based Budgeting to Output Based Budgeting.

Required:

(i) Explain the difference between Activity Based Budgeting and Output Based Budgeting. (8 marks)

(ii) Explain four (4) advantages that output based budgeting has over Activity based Budgeting. (4 marks)

(b) The Zambian government has in the recent past been experiencing challenges in revenue management. There has been revenue losses recorded resulting from delayed or unbanked collection, poor record keeping and failure to assess or collect revenue among others. This has resulted in most institutions charged with revenue collection failing to meet their targets. You are the Accountant General and the Minister of Finance has tasked you to improve revenue performance of the government.

Required:

Recommend four (4) revenue management control measures you would put in place to remedy revenue losses pointed out in this case.

(8 marks)

[Total: 20 Marks]

QUESTION THREE

United Bus of Lusaka (UBL) Plc is a publicly owned and funded passenger transport company based in Lusaka.

It is considering expanding its transport network to cover Livingstone, Copper belt and Kasama routes. The company plans to invest in three luxury buses, so that there will be one new bus for each route. The seating capacity is approximately 68 passengers per bus.

The capital budget required for this new investment is approximately K1.8million.

The treasury department of UBL Plc carried out an investment appraisal of the three projects over an estimated life span of 5 years for each bus and produced the following results:

ROUTE	PURCHASE COST OF BUS K	PRESENT VALUE OF RUNNING COSTS K	NET PRESENT VALUE K
Livingstone	700,000	250,000	120,000
Copper belt	600,000	200,000	89,000
Kasama	500,000	150,000	73,000
Total	1,800,000	600,000	282,000

The government grant available for the three projects is K1.6million. UBL Plc does not have sufficient funds to supplement the shortfall because it has been running on deficits lately.

During a senior management meeting, it was unanimously agreed to select two of the most profitable and most secure routes out of the three while the third route will be undertaken when the funds permit.

UBL Plc uses the social opportunity cost of capital of 3% to appraise its investments.

Assume that UBL Plc can invest its surplus funds into pension funds at 5% per annum to perpetuity. Alternatively the company can invest in 10% government bonds redeemable after 20 years at par.

Required:

As the finance manager of UBL Plc advise senior management on the best combination of projects taking into account sensitivity analysis of costs and the limited funds available for investment.

[Total: 20 Marks]

QUESTION FOUR

Assume you were one of the participants in the World Bank Public Expenditure Tracking Survey (PETS) in 2015 to examine education in Zambia.

Before conducting the survey you attended a workshop at which you were enlightened about performance measurement frameworks such as PETS. Some of the items discussed at the workshop concerning performance measurement frameworks include:

(i) Performance measurement frameworks are necessary because they provide governments, legislatures, citizens and those who provide financing with an overview of the Public Financial Management (PFM) system among other reasons.

(ii) The Public Expenditure and Financial Accountability (PEFA) Framework is seen as the pre-eminent framework from which to assess PFM systems. It is the most commonly used framework utilized to measure performance in PFM systems.

(iii) There are other frameworks such as the PETS that complement a PEFA assessment or provide information and support on areas that are not explicitly covered by it.

Required:

Using the knowledge and experience you acquired before and during the survey:

(a) Explain the necessity and importance of good performance measurement frameworks in assessing PFM Systems in Zambia. (6 marks)

(b) Discuss the reasons PETS may be more useful in examining PFM systems than more traditional systems such as PEFA. (8 marks)

(c) Identify the three (3) aspects of general education in Zambia evaluated by the World Bank in 2015 in its PETS assessment and highlight the conclusions.

(6 marks)

[Total: 20 Marks]

QUESTION FIVE

The National Airlines Corporation (NAC) is a 100% state owned airline based in the republic of Dem. It was established in 1999 under the National Airlines Act of Dem. The company currently owns and operates 10 aircraft. Its passenger aircraft fly to several countries such as the United Arab Emirates (UAE), Tanzania, Ethiopia, Malawi, Kenya and the United Kingdom.

In the recent past, Dem experienced a sharp rise in the number of people using air travel. The reason for the increase was due to the rise in both population and economic growth of Dem Republic. The other reason could be due to the higher safety levels of air travel compared to other forms of travel.

NAC is now considering investing in three additional aircraft to meet the increased demand for passenger air travel. The government has however not budgeted for the aircraft .NAC management has therefore been compelled to look at other sources of finance. It is now considering obtaining a foreign bank loan to finance the acquisition of the aircraft.

In spite of the increased air travel in Dem, NAC has consistently made losses in the last three years. This has been a cause of concern to the Ministry of Transport. However, the managing director of NAC said in a statement that the reason for the losses is due to understaffing. Most of the qualified employees who left NAC have not been replaced as the Ministry of Transport is currently not recruiting new staff. Consequently this affected negatively the delivery of the good service to the customer.

The government of Dem recently passed a law to compel all state owned enterprises to train their employees. This is due to the fact that a number of state owned companies in Dem have unqualified personnel.

Some of NAC staff will need to be trained in information technology (IT) courses as NAC recently contracted a private consultancy firm to develop and install a new IT system designed to make savings in the costs of service delivery to its customers.

Required:

(a) Discuss the different types of risks currently facing the National Airlines Corporation (NAC). (12 marks)

(b) Advise NAC management on the risk management strategies that they can use in order to counter the risks identified in (a). (8 marks)

[Total: 20 Mark]

END OF PAPER

Formulae

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d)\frac{V_d}{V_e}$$

Two asset portfolio

$$s_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

The Capital Asset Pricing Model

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

The asset beta formula

$$\beta_a = \left[\frac{V_e}{(V_e + V_d(1 - T))}\beta_e\right] + \left[\frac{V_d(1 - T)}{(V_e + V_d(1 - T))}\beta_d\right]$$

The Growth Model

$$P_o = \frac{D_o(1 + g)}{(r_e - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

$$WACC = \left[\frac{V_e}{V_e + V_d}\right]k_e + \left[\frac{V_d}{V_e + V_d}\right]k_d(1 - T)$$

The Fisher formula

$$(1 + i) = (1 + r)(1 + h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 x \frac{(1 + h_c)}{(1 + h_b)} \qquad F_0 = S_0 x \frac{(1 + i_c)}{(1 + i_b)}$$

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	10·368	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·255	10·575	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·134	11·348	10·635	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·004	12·106	11·296	10·563	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·865	12·849	11·938	11·118	10·380	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

CA 3.8 PUBLIC SECTOR FINANCIAL MANAGEMENT SOLUTIONS

SOLUTION ONE

a)

Year	Description	Amount	Discount Factor (6%)	PV
0	initial cost	(500,000)	1	(500,000)
1	initial cost	(500,000)	0.943	(471,500)
2-15	operating costs	(36,000)	8.769	(315,684)
3-15	reduction in Costs of service prov	108,000	7.879	850,932
2-15	reduction in grant	60,000	8.769	526,140
NPV				89,888

WORKINGS

1) Operating costs
   K20,000-K15,000=K5,000*12=K36,000
2) Grant k100,000 * 5% = 5000 *12=K60,000
3) Service provision k15000*60% = k9000*12 = K108,000
4) Cost of capital STPR = P + Ug
   5 + 20*0.05
   =5 + 1 = 6%
5) AF Year 2 = 1.833 less AF Year 15=9.712
   AF Yr 3 - 15=11.47-1.833=7.879
6) AF year 15 = 9.712 Less AF year 1 =0.943
   AF Year 2 – 20 = 9.712-0.943=8.769

   The reduction in the grant allocation will free up surplus funds which can be used by government for other developmental projects .The reduction is therefore a benefit to government and therefore to society as a whole. This will increase the GDP slightly as it will increase government spending. The monthly grant k100000*0.05=k5000 meant for KTC can now be channeled towards other government projects while KTC can use the revenue from the guest house to provide public services to the community. Our cost benefit analysis should include all relevant costs and benefits to society and government.
   The revenue from the guest house K70000 per month is not a relevant cash flow as KTC is a public entity and the revenue generated is used to provide public services to the community. The relevant cash flow is therefore the benefit to the community expected from the revenue generated.

b) The private firm (lessor) will be paying lease rentals to KTC to operate the guest house. It is a form of public private partnership (PPP).The private firm will then charge customers for

lodging and any other services provided at the guest. In this way KTC will be guaranteed a fixed income while the risk of a fall in demand will be borne by the private firm.
KTC will be responsible for ensuring the availability of the guest house and ongoing maintenance which it will fund from the lease rentals it will be receiving from the firm.
The benefit to KTC is that it might benefit from the expertise of the private sector firm if it is an expert in the hotel industry.

c) A concession is another method of public private partnership (PPP).Under this method KTC will transfer the long term right (perhaps 20 years remaining useful life) to run the guest house to a concessionaire. The concessionaire will also be given the right to finance the rehabilitation of the guest house. The concessionaire will generate revenue from operation of the guest house and will be required to pay a concession fee to KTC.A concession arrangement will transfer more risks to the private sector such as construction and demand fluctuations. As with leases a concession will expose KTC to the private sector expertise of a company which may be in the hospitality industry and in addition bring in private sector financing and investment.

d)

Risk management for the public sector is not very different to that of the private sector. However the difference between them implies a different approach. The main differences stem from:

i) the absence of profit motive in the public sector.
ii) the threat of business failure in the private sector.

Public sector organizations either provide policy advice and options to government or deliver on government policies and programs. The risk that public sector organization might face is anything that could harm their ability to deliver on government policies and programs or deliver outcomes to their clients. The decisions of public sector organization are not determined by profit motive. Therefore the theory that high risk projects should be undertaken as compensation for high profit (risk return trade-off) does not apply. Public sector organization are funded by government through public funds there the threat of business is very little if any. New capital can be injected if government sees fit. Private sector profit can be likened to private sector outcome. There is a social outcome which public sector organization aim at which should compensate any risks they take.

SOLUTION TWO

a) i. Outline the difference between Activity Based Budgeting and Output Based Budgeting.
• ABB links resources allocation to the activities required to be undertaken in order to achieve a desired output but OBB assigns resources to measurable result to be achieved. • ABB emphasis the relationship between activities and cost thereby producing much detail on overheads whereas OBB focus on the linkage between programme funding level and expected result of the programme. • ABB produces detail information on cost on each activity thereby making control cumbersome but OBB aggregates cost information at programme level rather than activity level. • ABB provides full costs of programmes and services which are more transparent and available for planning, budgeting and decision making whereas OBB consolidates the cost information thereby limiting transparency and availability of full cost information for planning, budgeting and decision making
ii) Explain four (4) advantages that output based budgeting has over Activity based Budgeting
• It provides a framework for measuring the performance of the MPSA expenditure programmes. • It enables effective management of resources to achieve government outcomes or objectives since the emphasis is on programmes attainment rather than a mere performance of activities • It promotes process accountability and transparency that enables the public to judge the fiscal stewardship of the managers. • It provides a specific linkage between resources allocation and strategic policy objectives of the MPSAs. That is, it establishes closer link between resources allocated and what has been done with it. • It makes budget evaluation and control much focus and conclusive. It becomes very easy to measure which programme outcomes are achieved and those that are not.
Describe four (4) revenue management control measures you would put in place to remedy revenue losses pointed out in this case.

Revenue management and control measures to remedy revenue losses.

i) Delayed or unbanked collection

- I would ensure that all revenues are banked immediately.
- One measure to achieve this is through arrangement with banks to facilitate direct deposit by the payers into the bank account.

ii) Failure to assess and collect revenue

- All revenue payers should be identified and levied appropriately.
- Revenue collectors should be trained and motivated to perform their duties efficiently.
- Electronic means should be used to effect revenue collection.

iii) Inappropriate use of value books

- Security and custody of the accountable documents should be ensured.
- Ensure that only approved accountable documents acquired from Accountant General is used.
- The head of finance should ensure proper custody of accountable documents and these documents should be issued out to only responsible staff. Proper records should be maintained for issue of value books.

iv) Poor recording keeping

- Responsible officer should be appointed for record keeping. The cash receipt book or transcript should be updated regularly.
- Implementing approved accounting software should be effective measure to improve record keeping process.

SOLUTION THREE

All figures in the tables are in K000

Sensitivity analysis

Sensitivity to:	RUNNING COSTS	INITIAL INVESTMENT
Livingstone	120/250 * 100=48%	120/700*100=17%
Copper belt	89/200 * 100=44.5%	89/600*100=15%
Kasama	73/150*100=49%	73/500*100=15%

SURPLUS FUNDS COMBINATIONS

1st combination	COST	2nd combination	COST	3rd combination	COST
Livingstone	700	Livingstone	700	Copper belt	600
Copper belt	600	Kasama	500	Kasama	500
Total	1300		1200		1100

SUMMARY

Combinations	Cost	grant	surplus	Average sensitivity	TOTAL NPV
1	1300	1600	300	31.1%	209
2	1200	1600	400	32.2%	193
3	1100	1600	500	30.9%	162

NPV ON INVESTMENT OF SURPLUS K000

Combination 1

Pension funds k300 * 5% =K15

K15/0.05=k500

Government bonds

		Discount factor	PV
Year 1 – 20 interest	10% * k300=k30	14.878	446.34
20 redemption	300	0.554	166.2
NPV			612.54

Combination 2

Pension Funds 400 * 5% =20

20/0.03=k667

Government bonds

		Discount factor	PV
Year 1 – 20 interest	10% *400 =k40	14.878	595.12
20 redemption	400	0.554	221.6
NPV			816.72

Combination 3

Pension funds 500 *5% = 25

25/0.03= k833.3

Government bonds

		Discount factor	PV
Year 1 – 20 interest	500 * 10%=50	14.878	743.9
20 redemption	500	0.554	277
NPV			1020.9

FINAL TABLE

Combination	COST	NPV -Pension funds or bonds	Average sensitivity
1	1300	612.54+209=821	31.18%
2	1200	816.72+193=1009	32.2%
3	1100	1020.9+162=1182	30.9%

CONCLUSION

From the final table it is clear that the best combination of routes(projects) is route 2 i.e. Livingstone and kasama as it has the highest combined NPV k1009,000 and the lowest sensitivity k32.2% compared to combination 1 & 3.

Sensitivity analysis is a measure of risk. It means that the costs of combination 2 must rise by at least 32.2% for the NPV to become negative.

SOLUTION FOUR

a)
PFM system assessment is important for a number of reasons:

1) It provides governments, legislatures, citizens and those who provide financing with an overview of the PFM system.
2) It gives those stakeholders an understanding of how this will affect PFM outcomes, including the delivery of public goods and services and fiscal sustainability.
3) It provides the foundation from which reforms can be planned and made.
   Assessing a PFM system at a given point in time not only gives a view of how the system is performing now, but also allows for comparison to be made both over a period of time and between different countries and jurisdictions.
   For such comparisons to be made however, it is necessary to have methodologies that can be consistently applied and replicated over time and in different countries regardless of their political and constitutional structure. Good PFM measurement frameworks provide such methodologies.

b)

Public Expenditure Tracking Surveys (PETS) are one of the frameworks used to assess Performance Management Systems (PFM).

Public expenditure tracking surveys (PETS) are micro-level tools whose fundamental aim is to improve accountability and the effectiveness of service delivery. They are particularly useful when increases in public spending do not appear to be leading to improvements in the delivery of services.

PETS are useful to those examining PFM systems as they can address a number of key questions that may be lacking in more traditional PFM assessment including:

1) What the performance and quality of public service delivery is so as to improve the effectiveness of public expenditure.
2) Where there are inefficiencies in public expenditure systems and service delivery mechanisms
3) Whether there are equity considerations that need to be addressed in public expenditure and service delivery across different regions, societal groups and urban/rural locations.
4) How effective are accountability mechanisms, particularly at local delivery levels.
5) Are special programs and expenditure allocations delivering as expected?
   While PEFA does not evaluate the extent to which public spending actually achieves policy objectives, or whether services are delivered in a manner that achieves value for money, the primary purpose of PETS is to provide such an evaluation. By its nature, however, PETS lacks the whole of government coverage of a PEFA assessment, with focus usually being placed on a specific service delivery area.

a) A PETS was conducted by the World Bank in 2015 examining education in Zambia. It evaluated three aspects of general education:

   1) Educational performance
   2) Distribution of general education public expenditure and school level financing in terms of equity, and
   3) Various education inputs, including physical facilities and quality of teachers.
      A key aim was to show the link between performance and inputs and to offer recommendations for improvement.
      The survey found that while access to education was slowly improving, actual learning results had not improved. There was also serious under investment in and management of critical inputs including text books and teachers. Key highlights included:

a) Learning scores had not improved since the first national learning assessment in 1999.
b) There was a significant shortage of text books due to lack of funding and supply management.
c) Teacher absenteeism was high and teacher subject knowledge was insufficient.

The survey noted that the following were associated with higher learning outcomes:

a) Access to a library, lower pupil-teacher ratios, and longer school days.
b) The presence of contract teachers, motivated teachers and those with strong subject knowledge.
c) Student access to text books and high levels of attendance.

SOLUTION FIVE

1)

a) Economic risks

Economic growth in Dem will raise private sector salaries. NAC will therefore be required to raise its salaries to attract staff.

b) Financial Risks

The foreign bank loan to be obtained by NAC may expose NAC to a number of financial risks such as:

i) Interest rate risk- if the loan is a variable rate loan. This is the risk that a rise in market interest rates will increase the cost of the loan and impact NAC profits negatively.
ii) Exchange rate risks- since the loan is denominated in a foreign currency a fall in the Dem currency relative to other foreign currencies will increase the cost of the loan and this may impact NAC profits negatively.

c) Capacity and Capability-Insufficient Staff Numbers to manage operations

The understaffing currently being experienced at NAC may require expensive short term private staff especially during peak periods when demand for air travel is high.

d) Legal/ regulatory-Compulsory training.

The new employment legislation requiring all state owned enterprises to train their staff may expose NAC to increased staff and training costs.

e) New projects- New IT system

The new IT system designed to make significant savings may not be delivered on time by the consultant firm. This may mean delay in savings being obtained from the new system.

2)

a) Transfer

NAC can transfer its risks through insurance. It can insure itself against losses in general e.g. as a result of increased interest rates, increased staff salaries and delayed savings due to delay in delivery of the IT system.

b) NAC can enter into hedging contracts against adverse movements in exchange rates and adverse movements in interest rates. E.g. forward contracts. Or forward rate agreement (FRA). Forward exchange contracts fix the exchange rate in advance at which foreign currency will be sold or bought. FRA's are contracts in which two parties agree on the interest rate to be paid on a notional amount at a specified future time. Therefore the interest rate is fixed in advance.

c) Corrective- designed to correct outcomes when they have been realized. E.g. the delay in IT system; NAC can include a contractual clause that allow delayed savings due to the delay in delivery of the system be recovered from the private consultancy firm.

d) Tolerate- assessment can be made that the risk can be tolerated without further action being taken or a decision is made that the risk cannot be directly addressed, but contingency plans can be put in place to mitigate the impact of the risk should it arise. E.g. compulsory training, economic risk may increase operating expenses which may lead to losses. However a contingency plan such as insurance against loss can be put in place to mitigate the impact of the loss.

NOTE; any other relevant explanations provided by candidates would also be acceptable.

END OF SOLUTIONS