



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 1: FINANCIAL ACCOUNTING

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A – (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

- 1.1 A sole trader, Mr Mundia's capital was K200,000. The net asset position at the year-end increased by K57,500. During the year, Mr Mundia withdraw K60,000 for his personal use.

His profit or loss during the year was

- A. K2,500 loss
- B. K117,500 profit
- C. K82,500 profit
- D. K140,000 profit

(2 marks)

- 1.2 Which of the following argument is in favor of using generally accepted accounting practice (GAAP) rather than IFRSs?

- A. They may tend towards rigidity in applying the rules.
- B. They oblige companies to disclose their accounting policies.
- C. They reduce variations in methods used to produce accounts.
- D. They are a less rigid alternative to legislation.

(2 marks)

- 1.3 A company uses the imprest system to control its petty cash, keeping a float of K1,000. Since the cash was last replenished, it had the following transactions:

- K210 reams of paper
- K160 cleaning materials
- K100 Taxi fare
- K240 cash receipt from employee for private phone call
- K170 cash refund to customer

How much should now be drawn from the bank?

- A. K880
- B. K640
- C. K400
- D. K600

(2 marks)

1.4 Manda is sole trader who sells goods to long-standing customers on credit. Chanda, a customer has credit balance of K3 000 brought down in the books of Manda. This means that

- A. Chanda owes Manda K3,000
- B. Chanda underpaid Manda by K3,000
- C. Manda owes Chanda K3,000
- D. Manda has paid Chanda K3,000

(2 marks)

1.5 A company's Plant and Equipment at cost account at 30 September 2020 is as follows:

<u>Plant and Equipment Account</u>			
	K'		K'
Balance b/d	143,200	Disposal	48,000
Bank-Additions	<u>51,800</u>	Balance c/d	<u>147,000</u>
	<u>195,000</u>		<u>195,000</u>

What opening balance should be included in the following period's trial balance for Plant and Equipment at cost account at 1 October 2020.

- A. K147,000 DR
- B. K195,000 DR
- C. K147,000 CR
- D. K195,000 CR

(2 marks)

1.6 The subscription ledger account had the following balances:

	01 Jan 2020	31 Dec 2020
	K'	K'
Subscriptions in arrears	3,000	1,500
Subscriptions on advance	6,000	4,500

During the year ended 31 December 2020 total subscriptions received were K150,000.

Calculate the amount of subscription to be taken to the Income and Expenditure account for the year ended 31 December 2020.

- A. K150,000
- B. K144,000
- C. K156,000
- D. K157,500

(2 marks)

- 1.7 A company values its inventory using the First-In, First-Out (FIFO) method. On 1 January 2020, the company had 1 000 units in inventory, valued at K7.5 each.

During the month of January the following transactions took place:

- January 5 Purchased 5 000 units at K8.00 each
- January 8 Sold 4 000 units at K11.25 each
- January 15 Purchased 4 500 units at K6.8 each
- January 20 Sold 5 000 units at K12.each

What is the value of the company's cost of sales during the month of January 2020.

- A. K62,100
- B. K67,900
- C. K66,000
- D. K70,000

(2 marks)

- 1.8 Buumba Banda, a sole trader prepared his draft end of year accounts. However, he has now realized that he did not adjust these for a prepayment of K840 and an accrual of K320.

How will Buumba Banda's profit and net assets be affected by including the prepayment and accruals?

Profit for the year will

Net assets will:

- | | |
|-----------------------|------------------|
| A. Increase by K1,160 | reduce by K1,160 |
| B. Increase by K520 | increase by K520 |
| C. Reduce by K520 | increase by K520 |
| D. Reduce by K1,160 | reduce by K520 |

(2 marks)

- 1.9 A business usually has a mark-up of 20% on cost of sales. During a year, its sales were K270,000. What was the cost of sales?

- A. K45,000
- B. K216,000
- C. K54,000
- D. K225,000

(2 marks)

1.10 A non-current asset (cost K100,000, depreciation K75,000) is given in part exchange for a new asset costing K205,000. The agreed trade-value was K35,000. The statement of profit or loss will include:

- A. A loss on disposal K10,000
- B. A profit on disposal K10,000
- C. A less on purchase of a new assets K35,000
- D. A profit on disposal K35,000

(2 marks)

[Total: 20 Marks]

SECTION B

Attempt any FOUR (4) questions out of FIVE (5) in this section.

QUESTION TWO

Chinyanta, a limited liability company produced the following trial balance at 31 October 2019:

	Dr	Cr
	K	K
Ordinary shares of K1 each		4,000
5% preference shares		1,000
Share premium		500
Revaluation reserves		675
Retained earnings at 1 November 2018		950
12% loan notes, repayable 2024		1,250
Land at valuation	2,475	
Premises at cost	1,750	
Depreciation to 1 November 2018		100
Plant and machinery at cost	1,100	
Depreciation to 1 November 2018		150
Patents and trade marks	1,000	
Inventory at 1 November 2018	1,050	
Trade receivables	4,375	
Cash in hand	10	
Trade payables		1,590
Bank		450
Administration expense	1,320	
Selling and distribution expenses	1,460	
Dividends paid	175	
Loan note interest paid	75	
Sales revenue		12,845
Purchases	8,725	
Carriage inwards	75	
Carriage outwards	90	
Returns outwards		170
	<u>23,680</u>	<u>23,680</u>

The following additional information at 31 October 2019 is available:

- (i) A physical inventory count reveals inventory cost of K970.
- (ii) Prepaid administration expenses amounting to K60 and prepaid selling and delivery expenses amounting to K140. Accrued administration expenses amounting to K85.

- (iii) Land is to be revalued at K2,750.
- (iv) The premises are to be depreciated at 4% per annum straight line. The plant and machine is to be depreciated at 10% per annum straight line.
- (v) Income tax of K200 is to be provided for the year.
- (vi) Treat 5% preference shares as part of equity.

Required:

- (a) Prepare statement of profit or loss for Chinyanta Ltd for the year ended 31 October 2019 in accordance with IAS 1 presentation of financial statements. (10 marks)
- (b) Prepare a Statement of Financial Position for Chinyanta Ltd as at October 2019. (10 marks)

[Total: 20 Marks]

QUESTION THREE

- (a) The following trial balance was extracted from the books of Nchanga Social Club as at the close of business on 31 December 2020.

Trial Balance

	Dr	Cr
	K	K
Accumulated Fund- 1 January 2020		4,240
Subscriptions received		5,840
Bar Inventory – 1 January 2020	2,140	
Wages of Part-time staff	4,380	
Secretary's salary	1,500	
Bar purchases	8,560	
Rent and rates	1,280	
Trade payables for bar supplies		880
Postage and stationery	440	
Fixtures and fittings at cost	1,800	
Accumulated depreciation on fixtures		360
Bar takings		12,740
Bank	3,640	
Insurance	280	
Sundry expenses	420	
Discount received		520
Cash in hand	140	
	<u>24,580</u>	<u>24,580</u>

Addition Information

- (i) Bar Inventory at 1 January 2020 was K2,300.
- (ii) No subscriptions were outstanding on 1 January 2020 but on 31 December 2020 subscriptions due were K100.

No subscriptions had been paid in advance.
- (iii) Wages accrued on 31 December 2020 were K240.
- (iv) Of the total wages, one third (1/3) is to be regarded as an expense of the Bar activities.
- (v) Rent and Rates prepaid at 31 December 2020 is K120.
- (vi) Provide additional depreciation on fixtures and fittings for K180.

Required:

- (i) Prepare Bar Trading Account. (3 marks)
 - (ii) Prepare Income and expenditure account for the year. (6½ marks)
 - (iii) Prepare a statement of Financial position for the club (5½ marks)
- (b) John Miti, a sole trader, on checking his accounting records on 31 December 2020, discovers that he has made the following errors:
- (i) A filling cabinet recently purchased for K575 had been charged in error to the general expenses account.
 - (ii) An amount of K860 for Machinery repairs had been debited to the Machinery (Asset) Account.
 - (iii) Discount allowed of K135 had been posted to the debit of Discounted Received Account.
 - (iv) When paying Jane Hara her account of K300, cash discount of K15 had been deducted in error. Jane Hara has subsequently disallowed the discount.
 - (v) A payment of K380 for Rates had been debited in error to the rent Account.

Required:

Prepare Journal entries in the books of John Miti to correct the above errors. No narrations are required. (5 marks)

[Total: 20 Marks]

QUESTION FOUR

The financial year of the Better Now Trading Company ended on 30 November 2019. You have been asked to prepare a Total Accounts Receivables account and a Total Accounts Payable Account in order to produce end-of year figures for Accounts Receivables and Accounts payable for the draft final account.

You have obtained the following information for the financial year from the books of original entry:

	K
Sales – cash	689,780
– credit	536,374
Purchases – cash	28,880
– credit	993,200
Total receipts	1,201,140
Total Payments	1,007,940
Discount allowed	11,040
Discount received	7,020
Refunds to cash customers	10,140
Balance in the sale ledger set off against the balance in the purchases ledger	140
Irrecoverable debts written off	1,560
Increase in the allowance for doubtful debts	180
Credit notes issued to credit customers	8,280
Credit notes issued to credit supplier	2,960

According to the audited financial statement for the previous year accounts receivable and payables as at 1 December 2018 were K53,110 and K86,900 respectively.

Required:

- (a) Prepare the Trade receivables control account for the year ended 30 November 2019. (9 marks)
- (b) Prepare the Trade payables Control Account for the year ended 30 November 2019. (8 marks)
- (c) Explain three (3) reasons why Accounting Systems are designed with a payable ledger control account and payables ledger account. (3 marks)

[Total: 20 Marks]

QUESTION FIVE

A Daka and B Phiri are in Partnership sharing profits and losses in the proportion of two thirds and one-third respectively. The following trial balance was extracted from their books at the close of business on 31 December 2020:

Trial Balance as at 31 December 2020

		K'	K'
Capital Accounts	A.Daka		25,000
	B.Phiri		15,000
Current Accounts	A. Daka		1,200
	B. Phiri		950
Drawings	A. Daka	6,000	
	B. Phiri	3,500	
Sales			69,950
Purchases		38,150	
Inventory – 1 January 2020		8,900	
Wages and salaries		14,300	
Trade receivables		19,150	
Trade payables			9,550
Office equipment		3,300	
Bank		22,800	
Cash in hand		400	
Discount received			850
Discount allowed		1,950	
Rent and rates		2,200	
Sundry expenses		<u>1,850</u>	
		<u>122,500</u>	<u>122,500</u>

Additional Information

- (i) Inventory at 31 December 2020 is valued at K10,600.
- (ii) Rent and rates prepaid at 31 December 2020 are valued at K300.
- (iii) Wages and salaries accrued at 31 December 2020 amount to K350.
- (iv) Office equipment is to be depreciated at 5% per annum on cost.
- (v) Interest is to be allowed on the capital accounts and drawings at the rates of 5% per annum.
- (vi) All entries in respect of drawings, interest on capital and drawings, and share of profits are to be made in the partners' current accounts.
- (vii) B. Phiri is paid salary of K1,810 per annum.

Required:

- (a) Partner's statement of profit or loss accounts for year ended 31 December 2020. (10½ marks)
- (b) Partners' current accounts for year ended 31 December 2020 (3½ marks)
- (c) Partners' statement of financial position as at 31 December 2020. (6 marks)

[Total: 20 Marks]

QUESTION SIX

The following list of account balances was extracted from the ledger of Takondwa Banda, a sole trader, as at 31 December 2020, the end of his financial year:

	Dr	Cr
	K	K
Capital as at 1 January 2020		633,000
Drawings	120,000	
Sales		2,011,000
Purchases	1, 250,000	
Property, at cost	600,000	
Accumulated Depreciation on property		100,000
Equipment at cost	400,000	
Accumulated Depreciation on equipment		190,000
Inventory, as at 1 January 2020	250,000	
Returns out		75,000
Wages and salaries	294,000	
Selling expenses	113,000	
17% long-term loan		150,000
Loan interest	25,500	
Administration expenses	88,500	
Trade payables		180,000
Trade receivables	190,000	
Bank	6,500	
Cash in hand	<u>1,500</u>	<u> </u>
	<u>3,339,000</u>	<u>3,339,000</u>

The following additional information as at 31 December 2020 is available:

- (a) Inventory as at the close of business has been valued at cost at K210,000.
- (b) Depreciation for the year ended 31 December 2020 has still to be charged as follows:
- Property: 2% per annum using the straight line method.
 - Equipment: 25% per annum using the reducing balance method.

(c) Wages is accrued by K6,000.

(d) An allowance for irrecoverable receivables of 4% on trade receivables need to be made.

Required:

(i) Prepare Takondwa Banda's Statement of Profit or Loss for the year ended 31 December 2020. (11 marks)

(ii) Prepare Takondwa Banda's Statement of Financial Position as a t 31 December 2020. (9 marks)

[Total: 20 Marks]

END OF PAPER

DA1 – FINANCIAL ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) Chinyanta statement of profit or loss for the year ended 31 October 2019.

	K	K
Sales		12,845
Less cost of sales:		
Opening inventory	1,050	
Purchases (8,725 + 75 – 170)	8,630	
Closing inventory	<u>(970)</u>	
		<u>8,710</u>
Gross profit		4,135
Less Expenses:		
Administration (1,320 – 60 + 85)	1,345	
Selling and distribution (1,460 – 140)	1,320	
Loan note interest (w2)	150	
Carriage outwards	90	
Depreciation (w1)	<u>180</u>	
		<u>(3,085)</u>
Net profit before tax		1,050
Income tax expense		<u>(200)</u>
Net profit for the year		<u>850</u>

(b) Chiyanta's statement of financial position at 31 October 2019.

	Cost	Accm Dep'n	Carrying Amount
	K		K
Non-current asset:			
Land (2,475 + 275)	2,750	-	2,750
Premises	1,750	170	1,580
Plant and machinery	1,100	260	840
Patents and trade marks	<u>1,000</u>	<u>-</u>	<u>1,000</u>
	<u>6,660</u>	<u>430</u>	<u>6,170</u>
Current assets:			
Inventory		970	
Trade receivables		4,375	
Prepayment (60 + 140)		200	
Cash		<u>10</u>	
			<u>5,555</u>
Total Assets:			<u>11,725</u>
Equity and liabilities			
Equity			
4000m ordinary K1 shares			4,000
1000m 5% K1 preference shares			<u>1,000</u>
			5,000
Share premium			500
Revaluation reserve (675 + 275 rev. gain)			950
Retained earnings (950 b/d + 850 profit – 175 dividend)			<u>1,625</u>
			8,075

Non-current liabilities:		
12% loan notes		1,250
Current liabilities:		
Trade payables	1,590	
Bank overdraft	450	
Accruals (85 + 75)w2	160	
Income tax	<u>200</u>	
		<u>2,400</u>
Total equity and liabilities		<u>11,725</u>

Workings

1. Depreciation

	K
Premises 4% x K1,750 =	70
Plant and machinery 10% x 1,100 =	<u>110</u>
	<u>180</u>

2. Loan interest

K1,250 @ 12% = K150
 K75 paid, so accrual for K75 is needed.

SOLUTION THREE

(a) **Nchanga Social Club's**

(i) Bar Trading Account for the year ended 31 December 2020

	K	K
Sales		12 740
Opening inventory	2 140	
Purchases	<u>8 560</u>	
	10 700	
Less closing inventory	<u>(2 300)</u>	(8 400)
Bar trading gross profit		4 340
Less Bar wages $1/3 \times (4\,380 + 240)$		<u>(1 540)</u>
Bar net profit		<u>2 800</u>

(ii) **Nchanga Social Club's**

Income and Expenditure Account for the year ended 31 December 2020

	K	K
<u>Income:</u>		
Subscriptions $(5\,840 + 100)$	5 940	
Bar net profit	2 800	
Discount received	<u>520</u>	9 260
<u>Expenditure:</u>		
Wages $2/3 \times (4\,380 + 240)$	3 080	
Salary of Secretary	1 500	
Rent and rates $(1\,280 - 120)$	1 160	
Postage and stationery	440	
Insurance	280	
Sundry expenses	420	
Depreciation expenses	<u>180</u>	<u>7 060</u>
Excess of income over expenditure		<u>2 200</u>

(iii) **Nchanga Social Club's**

Statement of Financial Position as at 31 December 2020

	K	K
<u>Non-current Asset:</u>		
Fixtures and Fittings $(1\,800 - 540)$		1 260
<u>Current Assets:</u>		
Bar inventory	2 300	
<u>Bank</u>	<u>3 640</u>	

Cash	140	
Prepaid Rent and Rates	120	
Subscriptions in Arrears	<u>100</u>	<u>6 300</u>
		<u>7 560</u>
<u>Represented by:</u>		
Accumulated fund at start	4 240	
Add excess of income over expenditure	<u>2 200</u>	6 440
<u>Current Liabilities:</u>		
Bar Trade payables	880	
Accrual wages	<u>240</u>	<u>1 120</u>
		<u>7 560</u>

(b) Journal Entries

		Dr	Cr
		K	K
(i)	Fixtures and Fittings <u>General expenses</u>	575	575
(ii)	Machine Repairs expenses <u>Machinery Account</u>	860	860
(iii)	Discount Allowed <u>Discount received</u>	135	135
(iv)	Discount Received <u>Trade payables</u>	15	15
(v)	Rates <u>Rent</u>	380	380

SOLUTION FOUR

(a) Trade Receivables Control Account

	K		K
Balance b/d	53,110	Cash ((1,201, 140 – 689,780)	511,360
Credit sales	536,374	Discount allowed	11,040
		Set-offs	140
		Irrecoverable debts	1,560
		Returns inwards	8,280
		Balance c/d	<u>57,104</u>
	<u>589,484</u>		<u>589,484</u>

(b) Trade Payables Control Account

	K		K
Cash (1,007,940 – 28 880)	979,060	Balance b/d	86,900
Discount received	7,020	Credit purchases	993,200
Set offs	140		
Returns outwards	2,960		
Balance c/d	<u>90,920</u>		
	<u>1,080,100</u>		<u>1,080,100</u>

- (c) (i) To ensure an arithmetical check on the accounting records.
- (ii) The agreement of the totals of individual accounts with that of the control account provides a check.
- (iii) If the control accounts and the ledger are kept by separate personal, then a check on their work and honesty is provided.

SOLUTION FIVE

A Daka and B Phiri's

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

		K'	K'
Sales			69 950
Opening inventory		8 900	
Purchase		<u>38 150</u>	
		47 050	
Less closing inventory		<u>(10 600)</u>	<u>(36 450)</u>
Gross profit			33 500
Discount received			<u>850</u>
			34 350
Wages and salaries (14 300 + 350)		14 650	
Depreciation on office furniture		165	
Discount allowed		1 950	
Rent and rates (2 200 – 300)		1 900	
Sundry expenses		<u>1 850</u>	<u>(20 515)</u>
			13 835
Add: Interest on drawings.	A Daka	300	
	B Phiri	<u>175</u>	<u>475</u>
			14 310
Less: Interest on capitals	A Daka	1 250	
	B Phiri	750	<u>(2 000)</u>
Partnerships salary	B Phiri		12 310
			<u>(1 810)</u>
Share of profits:	A Daka $\frac{2}{3} \times \frac{10\ 500}{1}$	7 000	10 500
	B Phiri $\frac{1}{3} \times \frac{10\ 500}{1}$	<u>3 500</u>	<u>(10 500)</u>
			—

(b)

	<u>Current Accounts</u>			<u>A Daka</u>	<u>B Phiri</u>
	<u>A Daka</u>	<u>B Phiri</u>		<u>A Daka</u>	<u>B Phiri</u>
	K'	K'		K'	K'
Drawings	6 000	3 500	Balances	1 200	950
Interest on drawings	300	175	Salary	-	1 810
Balances c/d	3 150	3 335	Interest on capitals	1 250	750
			Share of profit	<u>7 000</u>	<u>3 500</u>
	<u>9 450</u>	<u>7 010</u>		<u>9 450</u>	<u>7 010</u>

Statement of Financial Position as at 31 December 2020

	K'	K'
<u>Non-current Asset</u>		
Office equipment (3 300 – 165)		3 135
<u>Current Assets</u>		
Inventory	10 600	
Trade receivables	19 150	
Bank	22 800	
Prepaid rent	300	
Cash	<u>400</u>	<u>53 250</u>
		<u>56 385</u>
<u>Financed by</u>		
Partners' capitals -		
A Daka	25 000	
B Phiri	<u>15 000</u>	40 000
Current Accounts -		
A Daka	3 150	
B Phiri	<u>3 335</u>	6 485
<u>Current Liabilities</u>		
Trade payables	9 550	
Accrued wages	<u>350</u>	<u>9 900</u>
		<u>56 385</u>

SOLUTION SIX

(a) Takondwa Banda's

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

	K	K
Sales		2 011 000
Opening Inventory	250 000	
Purchases (1 250 000 – 75 000)	<u>1 175 000</u>	
	1 425 000	
Less closing Inventory	<u>(210 000)</u>	<u>1 215 000</u>
Gross profit		796 000
Less: Depreciation on Property	12 000	
Depreciation on Equipment	52 500	
Wages and salaries (294 000 + 6 000)	300 000	
Selling expenses	113 000	
Loan interest	25 500	
Administration expenses	88 500	
Allowance on Irrecoverables (0.04 x 190 000)	<u>7 600</u>	<u>599 100</u>
Net profit		<u>196 900</u>

(b) **Takondwa Banda's**Statement of Financial Position as at 31 December 2020

<u>Non-Current Assets</u>	Cost	Accum'd Depn	NBV
	K	K	K
Property	600 000	112 000	488 000
Equipment	400 000	242 500	157 500
			645 500
<u>Current Assets</u>			
Inventory		210 000	
Trade Receivables (1 900 000 – 7 600)		182 400	
Bank		6 500	
Cash		1 500	400 400
Total Assets			<u>1 045 900</u>
<u>Financed By</u>			
Capital			633 000
Net profit		196 900	
Less drawings		(120 000)	76 900
<u>Non-current Liability</u>			
17% Long-Term loan			150 000
<u>Current Liabilities</u>			
Trade Payables		180 000	
Accrued wages		6 000	186 000
Total Liabilities			<u>1 045 900</u>

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 15 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A mathematical/statistical formulae book **MUST** be provided to you.
Request for one if not given by the Invigilators.

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

SECTION A – (Compulsory)

Attempt all 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 A numerical description of the outcome of an experiment is called a

- A. Descriptive statistic
- B. Random variable
- C. Probability function
- D. Variance

(2 marks)

1.2 A situation in which a decision maker must choose between strategies that have more than one possible outcome when the probability of each outcome is unknown is referred to as

- A. Diversification
- B. Certainty
- C. Risk
- D. Uncertainty

(2 marks)

1.3 At what rate percent per annum will a sum of K7,200 become K36,000 in 10 years at simple interest?

- A. 40%
- B. 17.46%
- C. 4%
- D. 174.6%

(2 marks)

1.4 In regression analysis the variable that is being predicated is the

- A. Response, or dependent, variable
- B. Independent variable
- C. Intervening variable
- D. Is usually x

(2 marks)

1.5 The original investment which is principal plus interest earned is equal to?

- A. value of interest
- B. value of investment
- C. value of discounting
- D. value of compounding

(2 marks)

1.6 Measures of central tendency are usually located at the center of the distribution. The distribution of 30 students' allowances are shown in the table below:

ALLOWANCE	30 and < 40	40 and < 50	50 and < 60	60 and < 70
RANGE				
NUMBER OF	2	6	17	5
STUDENTS				

The mode of the students' allowances distribution is:

- A. K54
- B. K55
- C. K50
- D. K51

(2 marks)

1.7 A lab orders a shipment of 100 rats a year, from a rat supplier for experiments that the lab conducts. Prices for each yearly shipment of rats follow the distribution below:

Price	K1,000	K1,250	K1,500
Probability	0.2	0.3	0.5

How much should be the average lab budget for next year's rat orders assuming this distribution does not change?

- A. K3,582,800
- B. K6,890
- C. K1,325
- D. K1,325

(2 marks)

1.8 You receive K2,000 every month for 60 is 6.5% per month. What is the present value to you of this cash flow?

- A. K146,190.14
- B. K2,950.24

C. K99,104.04

D. K1,355.82

(2 marks)

1.9 The following are the incomes (in thousands of kwachas) for a sample of 9 households. 49 27 39 52 34 38 56 22 31.

Find the interquartile range for the data.

A. 20

A. 20.5

B. 21

C. 21.5

(2 marks)

1.10 During decision making process, a selection process can be classified into probability or non-probability. One of the probability selection techniques is:

A. Minimax technique.

B. Expectation technique.

C. Maximax technique

D. Maximini technique.

(2 marks)

[Total: 20 Marks]

SECTION B

Attempt any FOUR (4) questions in this section.

QUESTION TWO

- (a) (i) Define a random variable (2 marks)
- (ii) Under what circumstances would you expect a random variable, X , to have a binomial distribution? (3 marks)
- (iii) What is the mean and variance of the random variable X if it has a binomial distribution with parameters n and p ? (2 marks)
- (b) A member of parliament believes that 25% of all members of parliament on the Finance Committee will strongly support the tax proposal she wishes to advance. Suppose that this belief is correct and that five members of parliament are approached at random, what is the probability that
- (i) Exactly three will strongly support the proposal? (1 mark)
- (ii) At least one of the five will strongly support the proposal? (2 marks)
- (iii) A majority of the five will strongly support the proposal? (2 marks)
- (iv) What is the expected number of members of parliament who will strongly support the proposal? (1 mark)
- (v) Compute the variance of the members of parliament who will strongly support the proposal. (1 mark)
- (c) Mr. Banda wants to set up an education account for his child and would like to have K75,000 after 15 years. He finds an account that pays 5.6% interest, compounded semiannually, and he would like to deposit money in the account every six months.
- (i) How large must each deposit be in order to reach his goal? (3 marks)
- (ii) What is the total amount deposited (1 mark)
- (iii) How much interest is earned during this entire 15 years process? (2 marks)

[Total: 20 Marks]

QUESTION THREE

- (a) An accountant monitors the number of items produced per month by a company (x) together with the total production costs (y). The table below shows this data.

Number of Items, x , ('000)	Production Costs, y , (K'000)
21	40
39	58
48	67
24	45
72	89
75	96
15	37
35	53
62	83
81	102
12	35
56	75

Required:

- (i) Calculate the correlation coefficient (5 marks)
- (ii) Find the equation of the regression line (3 marks)
- (iii) What practical use could be made of the equation found in (ii) above? (2 marks)
- (iv) Suppose that the accountant knows that the estimated number of items for the following month is 94, what would he expect his production costs to be? (2 marks)
- (v) Calculate the coefficient of determination and interpret. (2 marks)
- (b) Mr. Chisenga deposited K25,850 into a savings account with an annual nominal interest rate of 6.8%. What is the amount in the account after four (4) years if the account
- (i) Compounds semiannually? (2 marks)
- (ii) Compounds daily? (2 marks)

(iii) Compounds continuously?

(2 marks)

[Total: 20 Marks]

QUESTION FOUR

- (a) A large car park has an area of 1400 square meters with space for x cars and y vans. Each car requires 14 square meters of space and each van requires 35 square meters of space. If there must be space for at least 50 vehicles and at least 20 vans. The company charges K20 for parking each car and K30 for parking each van.

Required:

Find the number of vans which give the owners of the park the maximum income and calculate this income. (12 marks)

- (b) A company is considering whether to spend K25,000 on an item of equipment, in order to obtain cash profits.

Year	Profits (kwacha)
2	10,000
3	12,000
5	12,500
7	8,000

The company requires a return of 12% p.a. compounded semi – annually.

Required:

Determine whether the project is worthwhile using NPV.

(8 marks)

[Total: 20 Marks]

QUESTION FIVE

- (a) A newsagent carried out a survey to gather general information about her customers and the readability of her magazines. The table below shows the number of words per sentence for a sample of 100 sentences taken from a magazine.

Words per sentence	1 - 5	6 - 10	11 - 15	16 - 25	26 - 45
Number of Sentences	18	32	22	14	14

Required:

- (i) Represent the data above by means of an accurate drawn histogram on a graph paper. (4 marks)
- (ii) Calculate the mean of the number of words per sentence in the sample. (3 marks)
- (iii) Calculate the standard deviation of the number of words per sentence in the sample. (5 marks)
- (c) A taxi service must replace cars every five years at a cost of K500,000. At 10% rate of interest.

Required:

Calculate

- (i) the size of the fund if K5,000 is deposited at the beginning of each month. (4 marks)
- (ii) the size of each quarterly payment necessary to meet this target. (4 marks)

[Total: 20 Marks]

QUESTION SIX

- (a) The probability distribution of the average income of a company in a week is

INCOME	500	600	700	800
PROBABILITY	0.1	0.3	0.4	0.2

Required:

- Calculate the mean value of the distribution. (5 marks)
- (b) The distribution of weight of animals at Joseph farm is given in the table below:

WEIGHT(kg)	NUMBER OF ANIMALS
10 and < 20	8
20 and < 30	15
30 and < 40	7
40 and < 50	6

Required:

Calculate:

- (i) Mean weight of the animals in the farm. (4 marks)
- (ii) Median weight of the animals in the farm. (6 marks)

- (c) There are 25 students who can play football, basketball or both. The number of those who play Football (F) is 15, those who play basketball (B) is 10 and those who play both is 8.

Required:

Calculate the probability of a student playing Football (F) or Basketball (B).

(5 marks)

[Total: 20 Marks]

END OF PAPER

DA 2 QUANTITATIVE ANALYSIS

SUGGESTED SOLUTIONS

SOLUTION ONE

1.1 B

1.2 D

1.3 A

1.4 A

1.5 B

1.6 B

1.7 C

1.8 C

1.9 D

1.10 B

SECTION B

SOLUTION TWO

(a)

- i. A random variable is a variable whose value is unknown or a function that assigns values to each of an experiment's outcome.
- ii. A random variable is binomial if the following conditions are met:
 1. There are fixed number of trials (n)
 2. Each trial has two possible outcomes: success or failure
 3. The probability of success (call it p) is the same for each trial.
 4. The trials are independent, meaning the outcome of one trial does not influence the outcome of any other trial.
- iii. Mean: $E(X) = np$
Variance: $Var(X) = np(1-p)$

(b) Here, $n = 5$, $p = 0.25$ and $q = 1 - p = 0.75$

- i.
$$P(X = x) = \binom{n}{x} p^x (1-p)^{n-x}$$
$$P(X = 3) = \binom{5}{3} (0.25)^3 (0.75)^2$$
$$= 0.0879$$
- ii.
$$P(X \geq 1) = 1 - P(X < 1)$$
$$= 1 - P(X = 0)$$
$$= 1 - \binom{5}{0} (0.25)^0 (0.75)^5$$
$$= 1 - 0.2373$$
$$= 0.7627$$
- iii.
$$P(X \geq 3) = P(X = 3) + P(X = 4) + P(X = 5)$$
$$= 0.0879 + \binom{5}{4} (0.25)^4 (0.75)^1 + \binom{5}{5} (0.25)^5 (0.75)^0$$
$$= 0.0879 + 0.0146 + 0.0010$$
$$= 0.1035$$
- iv. $E(X) = np = 5 \times 0.25 = 1.25$
- v. $Var(X) = np(1-p) = 5 \times 0.25 \times 0.75 = 0.9375$

(c)

- i. We are given $A = \text{K}75,000, n = 15(2) = 30$ and $r = \frac{0.056}{2} = 0.028$. We want to find R given by

$$R = A \left[\frac{r}{(1+r)^n - 1} \right]$$

$$\begin{aligned} R &= 75,000 \left[\frac{0.028}{(1.028)^{30} - 1} \right] \\ &= \text{K}1,628.19 \end{aligned}$$

- ii. The total amount deposited is
 $1,628.19(15)(2) = \text{K}48,854.60$
- iii. The total amount of interest earned during the entire 15 – year period is
Total interest = Account value – Total deposit
 $= \text{K}75,000 - \text{K}48,854.60$
 $= \text{K}26,145.40$

SOLUTION THREE

(a)
i.

x	y	x^2	y^2	xy
21	40	441	1600	840
39	58	1521	3364	2262
48	67	2304	4489	3216
24	45	576	2025	1080
72	89	5184	7921	6408
75	96	5625	9216	7200
15	37	225	1369	555
35	53	1225	2809	1855
62	83	3844	6889	5146
81	102	6561	10404	8262
12	35	144	1225	420
56	75	3136	5625	4200
$\sum x = 540$	$\sum y = 780$	$\sum x^2 = 30,786$	$\sum y^2 = 56,936$	$\sum xy = 41,444$

$$\bar{x} = \frac{\sum x}{n} = \frac{540}{12} = 45, \quad \bar{y} = \frac{\sum y}{n} = \frac{780}{12} = 65$$

$$SS_{xx} = \sum x^2 - \frac{(\sum x)^2}{n} = 30,786 - \frac{540^2}{12} = 6,486$$

$$SS_{xy} = \sum xy - \frac{(\sum x)(\sum y)}{n} = 41,444 - \frac{(540)(780)}{12} = 6,344$$

$$SS_{yy} = \sum y^2 - \frac{(\sum y)^2}{n} = 56,936 - \frac{780^2}{12} = 6,236$$

$$r = \frac{SS_{xy}}{\sqrt{SS_{xx}SS_{yy}}} = \frac{6344}{\sqrt{6486 \times 6236}} = 0.9975$$

ii. $\hat{\beta}_1 = \frac{SS_{xy}}{SS_{xx}} = \frac{6344}{6486} = 0.98$

$$\hat{\beta}_0 = \bar{y} - \hat{\beta}_1\bar{x} = 65 - 0.98(45) = 20.9$$

Therefore, the regression equation is given by

$$\hat{y} = \hat{\beta}_0 + \hat{\beta}_1x$$

$$\hat{y} = 20.9 + 0.98x$$

iii. This is a prediction equation. The practical use of this equation in this problem is that it can be used to predict or estimate the total production

costs given any number of items produced per month by the company. In other words, it can be used to predict the total production costs or determine whether the number of items produced per month by a company is actually related to the total production costs.

iv. $\hat{y} = 20.9 + 0.98x$
 $\hat{y} = 20.9 + 0.98(94)$
 $\hat{y} = 20.9 + 92.12$
 $\hat{y} = 113.02$
 $\therefore \hat{y} = \text{K}113,020$ (after multiplying by 1,000)

v. $r^2 = 0.9975^2 = 0.9950$

Interpretation:

99.5% of the variation in the total production costs can be attributed to the number of items produced per month by a company.

NOTE: r^2 is called the coefficient of determination.

(b) Here, we are given $P = \text{K}25,850$, $r = 0.068$ and $t = 1$.

i. $A = P \left(1 + \frac{r}{n}\right)^{nt}$
 $= 25,850 \left(1 + \frac{0.068}{2}\right)^{2(4)}$
 $= \text{K}33,777.29$

ii. $A = P \left(1 + \frac{r}{n}\right)^{nt}$
 $= 25,850 \left(1 + \frac{0.068}{365}\right)^{365(4)}$
 $= \text{K}33,929.51$

iii. $A = Pe^{rt}$
 $= 25,850e^{0.068(4)}$
 $= \text{K}33,930.37$

SOLUTION FOUR

(a) The linear programming problem is

Maximize $Z = 20x + 30y$

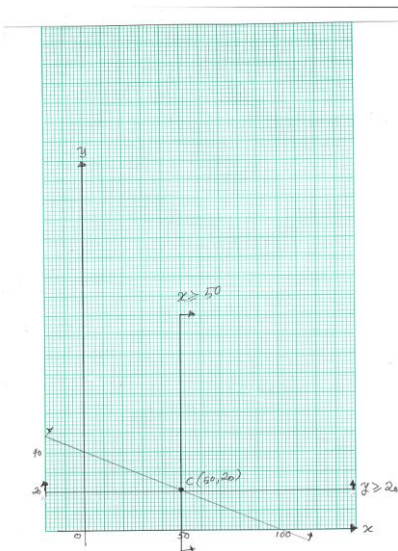
Subject to $14x + 35y \leq 1400$

$$x \geq 50$$

$$y \geq 20$$

Corner points	Profit
A (0,20)	600
B(50,0)	1 000
C(50,20)	1 600
D(0,0)	0

There is only one point which is the feasible solution (50,20) and the objective value function is 1600. See the graph below.

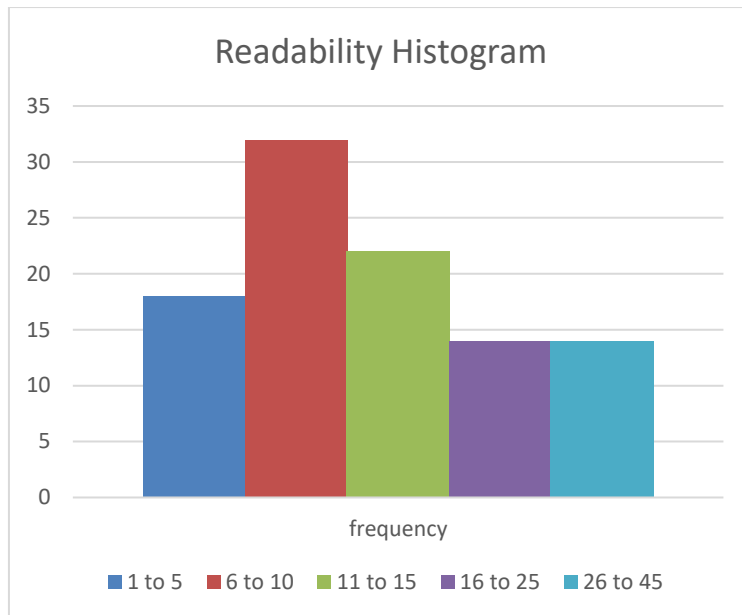


- (b) The interest is compounded semi – annually therefore, $r = \frac{12\%}{2} = 0.06$, the periods will be $n = 2 \times t$

$$\begin{aligned} NPV_c &= -25\,000 + 10\,000(1.06)^{-4} + 1200(1.06)^{-6} + 12\,500(1.06)^{-10} \\ &\quad + 8\,000(1.06)^{-14} \\ &= -25\,000 + 7\,920.94 + 8\,459.53 + 8\,812.01 + 3\,538.41 \\ &= K3\,730.89 \end{aligned}$$

Since $NPV > 0$, the project is worthwhile.

SOLUTION FIVE



	X	f	CF	fx	f(x-xbar) ²
1	5	3	18	54	2099.52
6	10	8	32	256	1076.48
11	15	13	72	286	14.08
16	25	20.5	86	287	628.46
26	45	35.5	100	497	6592.46
		100		1380	10411

i. **The mean:** $\frac{1}{n} \sum fx = \frac{1}{100}(1380) = 13.8$

iv. **Standard deviation**

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

$$s = \sqrt{\frac{10411}{100 - 1}} = 10.25$$

(b)

(i) Given $A_0 = 5000$, $\frac{i}{12} = \frac{0.1}{12} = 0.0083$, $t = 5 \times 12 = 60$ instalments.

$$\begin{aligned}V &= A_0 \left(1 + \frac{i}{12}\right) \frac{(1 + i/12)^t - 1}{i/12} \\&= 5000(1.0083) \frac{1.0083^{60} - 1}{0.0083} \\&= 389,986.56\end{aligned}$$

Not sufficient to meet the target of K500000

ii.

Given $V = 500000$, $\frac{i}{4} = \frac{0.1}{4} = 0.025$, $t \times 4 = 5 \times 4 = 20$ Payment intervals.

$$\begin{aligned}V &= A_0 \left(1 + \frac{i}{4}\right) \frac{(1 + i/4)^{t \times 4} - 1}{i/4} \\500000 &= A_0(1 + 0.025) \frac{1.025^{20} - 1}{0.025} \\500000 &= A_0(26.183) \\19096.16 &\end{aligned}$$

Quarterly payments of K19096.16 are required to meet the target.

SOLUTION SIX

(a) $E(X) = \sum xp(x)$ (1)
 $= 500(0.1) + 600(0.3) + 700(0.4) + 800(0.2)$ (1)
 $= 50 + 180 + 280 + 160$ (1)
 $= K670$ (2)

(b) (i) $\bar{x} = \frac{\sum fx}{\sum f}$

X	f	fx
15	8	120
25	15	375
35	7	245
45	<u>6</u>	<u>270</u>
	$\sum f = 36$	$\sum fx = 1010$ (1)

$$\bar{x} = \frac{1010}{36} \quad (1)$$

$$= 28.05 \text{ kg} \quad (2)$$

(ii)

CLASS	f	cf
10 < 20	8	8
20 < 30	15	23
30 < 40	7	30
40 < 50	6	36

$$\begin{aligned} \text{Median} &= LL + \left(\frac{\frac{\sum f}{2} - cf}{f} \right) (c) \\ &= 20 + \left(\frac{18-8}{15} \right) (10) \\ &= 20 + \frac{10}{15} \times 10 \\ &= 20 + 100/15 \\ &= 20 + 6.66 \\ &= 26.7 \text{ kg} \end{aligned}$$

(c) $n(F) = 15$ $n(B) = 10$ $n(F \cap B) = 8$

$$\begin{aligned} P(F \text{ or } B) &= P(F) + P(B) - P(F \cap B) \\ &= 15/25 + 10/25 - 8/25 \quad (1) \\ &= (15 + 10 - 8)/25 \quad (1) \\ &= (25-8)/25 \quad (1) \\ &= 17/25 \end{aligned}$$

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 3: BUSINESS ECONOMICS

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A - (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

1.1 To determine whether two (2) goods are substitutes or complements in consumption, an economist would estimate.....

- A. Price elasticity of demand
- B. Income elasticity of demand
- C. Cross elasticity of demand
- D. Price elasticity of supply

(2 marks)

1.2 Assuming beef and pork are substitutes in consumption, which of the following will result when the price of beef decreases?

- A. The demand curve for beef to shift to the left as consumers switch from beef to pork.
- B. The demand curve for beef will shift to the right as consumers switch from pork to beef.
- C. The demand curve for beef will remain unchanged since beef and pork are sold in separate markets.
- D. The demand curve for beef will shift to the left as consumers switch from pork to beef.

(2 marks)

1.3 Holding other things constant, which of the following would result when the government increases business taxes?

- A. Increase in aggregate demand and decrease aggregate supply
- B. Increase aggregate demand and increase aggregate supply
- C. Decrease aggregate demand and increase aggregate supply
- D. Decrease aggregate demand and decrease aggregate supply

(2 marks)

1.4 The Philips Curve depicts the relationship between

- A. Unemployment rate and interest rate

- B. Inflation and interest rate
 - C. Inflation rate and unemployment rate
 - D. Unemployment rate and the change in Gross National Product
- (2 marks)

- 1.5 A tariff levied on a good increases.....
- A. The quantity of the good imported
 - B. The ability of the foreign goods to compete with domestic goods
 - C. The exports of domestic goods by domestic producers
 - D. The prices of imported goods to domestic buyers
- (2 marks)

- 1.6 Which of the following formula is used to calculate the value of the money or credit multiplier?
- A. $1/MPS$
 - B. $1/MPC$
 - C. $1/Excess\ Reserves$
 - D. $1/Required\ Reserve\ Ratio$
- (2 marks)

- 1.7 Which one of the following is NOT a characteristic of a perfectly competitive market?
- A. Many small firms
 - B. Free entry into and exit from the market
 - C. A great variety of different products
 - D. Firms making only normal profits in the long –run
- (2 marks)

- 1.8 John lost his job due to poor performance of the Zambian economy following Covid-19 pandemic. The type of unemployment John faced can best be described as.....
- A. Cyclical unemployment
 - B. Seasonal unemployment
 - C. Structural unemployment
 - D. Frictional unemployment
- (2 marks)

- 1.9 Which of the following describes the major advantage of Limited Liability in business organizations?
- A. Shareholders are entitled to a fixed dividends
 - B. Shareholders enjoy high returns on their investment
 - C. Shareholders enjoy unlimited profit sharing
 - D. Shareholders' personal assets are shielded from liability claims
- (2 marks)

1.10 Calculate the marginal cost of labour for company X which pays K200 per hour per employee and all employees work maximum hours. The company employs 50 workers. The company would have to raise the wage rate to K 220 per hour.

- A. K20
- B. K44,000
- C. K1,220
- D. K11,220

(2 marks)

[Total: 20 Marks]

SECTION B

This section has two (2) parts: Part 1: Microeconomics and Part 2: Macroeconomics.

1. MICRO ECONOMICS: Attempt any two (2) questions out of the three (3) questions.

QUESTION TWO

(a) Define the following terms below:

- (i) Marginal product of labour (M_{ppl}) (2 marks)
- (ii) Diminishing marginal returns (2 marks)
- (iii) Minimum efficient scale (2 marks)

(b) Assume a hypothetical firm has the following information.

Units of labour	Total product	Average product	Marginal product
0	0		
1	2		
2	6		
3	14		
4	24		
5	32		
6	37		
7	40		
8	40		
9	38		

Required:

- (i) Complete the table above. (5 marks)
- (ii) At what number of workers do diminishing returns set in? Explain. (4 marks)
- (iii) Draw the long run average cost curve for a typical firm. (5 marks)

[Total: 20 Marks]

QUESTION THREE

(a) Using your knowledge of elasticity, answer the following questions:

- (i) Define the term 'price elasticity of demand' (2 marks)
 - (ii) With the aid of diagrams show and explain the extremes of elasticity of demand where there is perfect elasticity and perfect inelasticity. (6 marks)
 - (b) Explain why demand for salt is inelastic (2 marks)
 - (c) Using supply and demand curves:
 - (i) Explain what happens to equilibrium price and quantity of maize traded when government increases maize subsidy to small scale farmers in Zambia (5 marks)
 - (ii) Explain what happens to equilibrium price and quantity traded in a market when the price of a substitute good rises. (5 marks)
- [Total: 20 Marks]**

QUESTION FOUR

- (a) Large companies tend to be managed mostly by professional managers who have little ownership interest. This separation of ownership from control is known as principal-agent problem. Explain any two (2) reasons arising from the problem? (4 marks)
 - (b) Explain any three (3) internal economies of scale (6 marks)
 - (c) Outline any three (3) arguments for a monopoly industrial structure? (6 marks)
 - (d) Define monopsony and explain any three (3) conditions for monopsonistic purchasing arrangements. (4 marks)
- [Total: 20 Marks]**

2. MACRO ECONOMICS Attempt any two (2) questions out of three (3) questions.

QUESTION FIVE

- (a) Describe the three (3) approaches of measuring National Income. (9 marks)
- (b) A farmer grows a gallon of wheat & sells it to a miller for K15.00. The miller turns the wheat into flour & then sells the flour to a baker for K35.00. The baker uses the flour to bake cakes. The baker sells the cakes to households for K60.00. The households eat the cakes. What is the value added at each stages of production? (4 marks)
- (c) Jane has just graduated from college and is looking for her first job.

Required:

- (i) Describe the type of unemployment Jane is experiencing. (3 marks)
- (ii) Outline any two (2) costs associated with unemployment. (4 marks)

[Total: 20 Marks]

QUESTION SIX

Money supply is strictly controlled by the Bank of Zambia to ensure financial system and price stability.

Required:

- (a) Describe Open Market Operations as a Monetary Policy tool. (5 marks)
- (b) Explain how the Bank of Zambia uses Open Market Operations to increase or decrease money supply in Zambia. (6 marks)
- (c) Explain the three (3) conflicting objectives a bank manager may encounter in the operations and running of a commercial bank. (9 marks)

[Total: 20 Marks]

QUESTION SEVEN

The Zambian Kwacha has depreciated to reach the historical high of K21.00 per dollar. Economic commentators argue that the freely floating exchange regime has failed and there is need to substitute with a fixed exchange rate regime.

Required:

- (a) Distinguish between a floating exchange rate and a fixed exchange rate (4 marks)
- (b) State any three (3) advantages of a floating exchange rate system (6 marks)
- (c) State any three (3) disadvantages of a floating exchange rate system (6 marks)
- (d) State any two (2) measures that government can put in place to control the depreciating kwacha (4 marks)

[Total: 20 Marks]

END OF PAPER

DA 3: BUSINESS ECONOMICS

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a) Explain the following;

- i) The marginal product of labor is the change in output that results from employing an additional unit of labor.
- ii) Diminishing marginal returns is the decrease in the marginal (incremental) output of a production process as the amount of a single factor of production is incrementally increased, while the amounts of all other factors of production stay constant.
- iii) The minimum efficient scale (MES) is the lowest point on a cost curve at which a company can produce its product at a competitive price. At the MES point, the company can achieve the economies of scale necessary for it to compete effectively in its industry

b) Complete

- i) Compute AP and MP

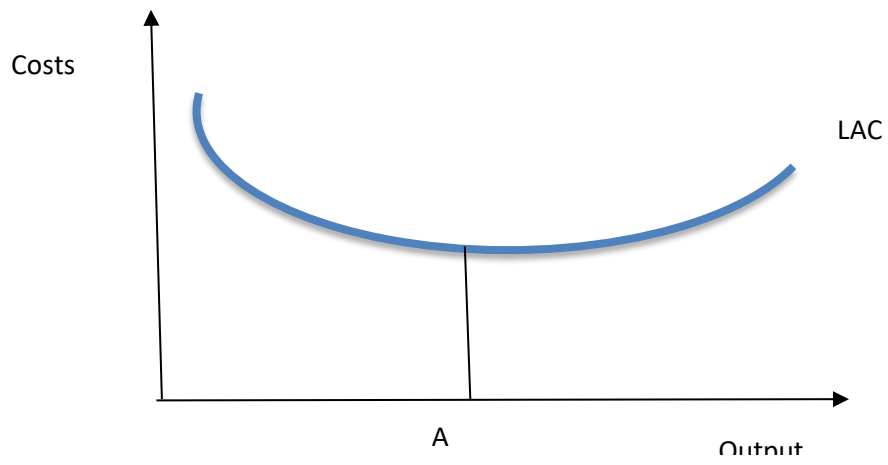
Units of labour	Total product	Average product	Marginal product
0	0	-	-
1	2	2	2
2	6	3	4
3	14	4.7	8
4	24	6	10
5	32	6.4	8
6	37	6.2	5
7	40	5.7	3
8	40	5	0
9	38	4.2	-2

- ii) At the 5th worker diminishing returns set in. First, when few workers are employed, adding extra workers will increase the output produced more than proportionally. Adding extra workers will continue to increase the output produced but less than proportionally. When 4 workers are employed, total output is 24. Adding an extra worker will increase output to 32, but this extra worker is adding less to the production than the previous worker (8 compared to 10). The efficiency of the workers starts to decrease. This is because, in the short run, the level of capital (the other input of production) is fixed and cannot be changed.

- iii) **LRAC**

iv)

The LAC curve has the typical U-shape. The minimum average cost of production is at point A



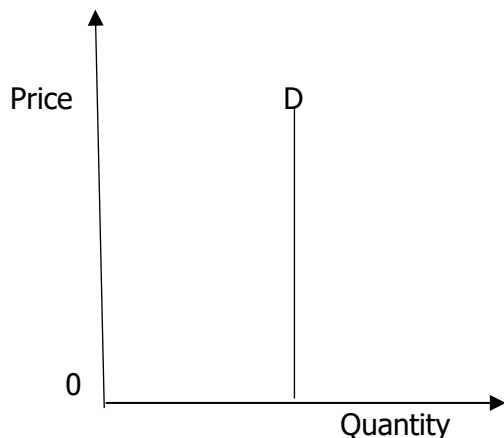
SOLUTION THREE

a) (i) **Price elasticity of demand.** This is a measure of the responsiveness of the quantity demanded to a change in price. Specifically, price elasticity of demand is the ration of the percentage change in quantity demanded to the percentage change in price.

(ii) **Perfectly elastic demand.** This is a condition in which a small percentage change in price brings about an infinite percentage change in quantity demanded. The demand curve is a horizontal straight-line. Consumers are very responsive to a change in price. Price elasticity of demand (E_d) = ∞ .

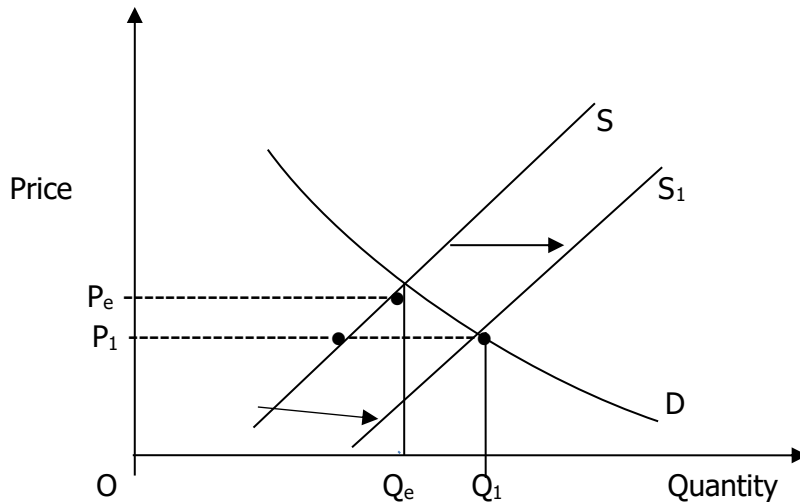


• **Perfectly inelastic demand.** This is when the quantity demanded does not respond to a change in price. The same quantity is demanded does not change as the price changes. For this reason, the demand curve is a vertical straight-line. Thus, elasticity of demand (E_d) = 0

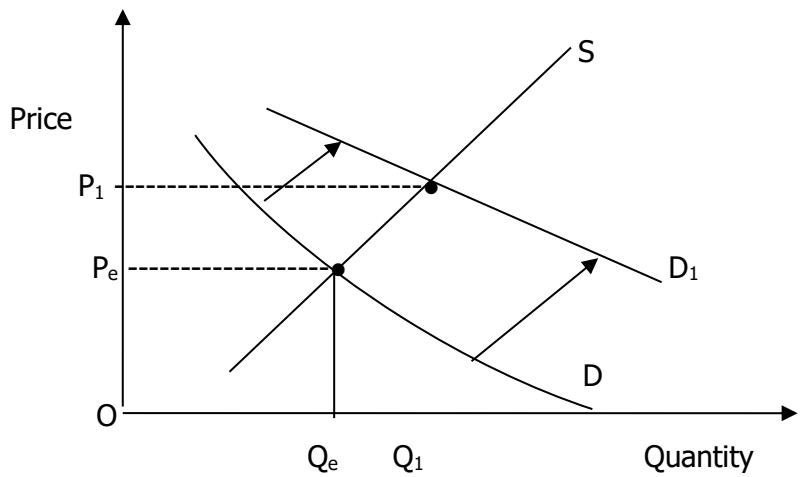


b) The demand for salt is inelastic because there are no good substitutes for salt and households spend a very small portion of their total in- come on this commodity. Even if the price of salt were to rise substantially, households would reduce their purchases of salt little.

- c) (i) In the diagram below, the market is initially in equilibrium at (price, output) combination (P_e, Q_e) . The increase in government subsidy will cause the supply curve to shift outwards leading to a new equilibrium with the lower price and higher output combination (P_1, Q_1) . This is because an increase in subsidy leads to a decrease in the cost of production for maize. Hence many farmers will afford to buy the inputs so that the supply curve shifts to the right as more maize will be produced.



- (ii) In the diagram below, the market is initially in equilibrium at (price, output) combination (P_e, Q_e) . The rise in the price of a substitute good will cause the demand curve to shift outwards leading to a new equilibrium with the higher (price, output) combination (P_1, Q_1)



SOLUTION FOUR

- (a) Reasons for the separation of ownership from control in large companies:
- (i) Limited liability structure does not give shareholders power to manage the company (unless they are also managers); their influence normally extends only to proposing and voting on resolutions at company meetings.
 - (ii) It is impracticable for a large number of shareholders to exercise managerial powers jointly; to be effective, power must be concentrated.
 - (iii) Many shareholders are not interested in being managers, and are content to employ professional managers, so long as their investment prospers.
 - (iv) Many organizations are so large or complex, or deal with such advanced technology, that they can only be managed effectively by well-qualified professionals.
- (b) Internal economies of scale:
- (i) Technical economies: These arise in production processes. Large undertakings can make use of larger and more specialized machinery. If smaller undertakings tried to use similar machinery, the cost would be excessive because the machines would become obsolete before their physical life ends, that is their economic life would be shorter than their physical life.
 - (ii) Marketing economies: large firms can make relative savings in distribution costs and advertising costs
 - (iii) Buying economies may be available, reducing the cost of material purchases through bulk purchase discount.
 - (iv) Organizational economies: When the firm is large, centralization of functions such as administration, R&D and marketing may reduce the burden of overheads (ie indirect costs of production) on individual operating locations.
 - (v) Financial economies: large firms may find it easier to borrow money than smaller firms and they may also obtain loan finance at more attractive rates of interest, due to their reputation and asset base.
- (c) Arguments for monopoly as an industry structure:
- (i) Monopolies may be needed to achieve maximum economies of scale, lower unit costs and marginal costs of production often translate into lower prices.
 - (ii) Monopolies can afford to spend more on research and development, and are able to exploit innovation and technological progress much better than small firms.
 - (iii) Monopolies may find it easier than small firms to raise new capital on the capital markets, so can finance new technology and new products which enhance growth.
 - (iv) The award of patent rights rewards firms which show entrepreneurial flair and innovation for the risks they have taken and the new products they have made.
- (d) Monopsonistic purchasing arrangements: monopsony is a market with many suppliers in which all purchasing is conducted by one powerful buyer. This enables the buyer to set the price.
- Conditions for monopsonistic purchasing arrangement
- (i) One sole buyer of the product: hence they are able to affect the price by their purchasing
 - (ii) Many sellers of the product: hence no individual seller can influence price.
 - (iii) Absence of alternative uses for the product

- (iv) Barriers of entry and exit to and from the market, hence producers cannot cease supply by making something else and alternative buyers cannot enter to eliminate supernormal profits of the buyer.

SOLUTION FIVE

a) Methods of measuring National Income

The Product (Output) Method:

The value added method/ product method is also known as the output method or inventory method. In this method, the sum total of the gross value of the final goods and services in different sectors of the economy like industry, service, agriculture, etc. is acquired for the current year by determining the total production that was made during the specific time period. Sometimes goods produced by one sector is further processed by another sector. These goods are termed as intermediate goods and are already included while determining the value of final goods. So, in order to avoid the problem of double counting of value of goods, the product method is further categorized into two approaches:

The Final Goods Approach; In this method, only the value of final goods and services are computed while estimating GDP, regardless of any intermediate goods and their processing. This method takes into account only those goods and services that purchased and consumed by the final consumers in the economy.

The Value Added Method; In the value added method of measuring national income, the value of materials added by producers at each stage of production to produce the final good is considered. The difference between the value of output and inputs at each stage of production is the value added.

GDP (gross domestic product) at market price = value of output in an economy in the particular year - intermediate consumption

At factor cost = GDP at market price - depreciation + NFIA (net factor income from abroad) - net indirect taxes

Income/Factor Income Method

Income method is also termed as factor income method or factor share method. Under this method, national income is measured as the total sum of the factor payments received during a certain time period.

The factors of production include land, labor, capital, and entrepreneurship. Individuals who provide these factor services get payment in the form of rent, wages/salaries, interest, and profit respectively. The total sum of income received by these individuals comprise the national income for a given period of time.

Besides these, there are professionals who employ their own labor and capital like advocates, doctors, barbers, CAs, etc. The income of these individuals are called mixed incomes and are also accounted for calculating the national income. However, income received in the form of transfer payments are not included.

Gross Domestic product (by factor incomes) = Income from people in jobs and in self-employment + Profits of private sector businesses + Rent income from the ownership of land.

Expenditure Method

The expenditure method measures the national income as the sum total of expenditures made by individuals on personal consumption, firms on private investments, and government authorities on government purchases.

Since incomes from production are earned as a result of expenditure made by other entities on the produced goods and services within the economy, the result of expenditure method should be same total as the product method. However, with an exception of avoiding intermediate expenditure in order to evade the problem of double counting, national income under expenditure method can be expressed as

$$\text{GDP} = C + I + G + (X - M)$$

b) Value added

Producers	Stage of production	Selling price (ZMK)	Cost price	Value added
Farmer	Wheat	15.00	0.00	15.00
Miller	Flour	35.00	15.00	20.00
Baker	Cakes	60.00	35.00	25.00
Total		110.00	50.00	60.00

c) Frictional unemployment.

i) Frictional unemployment is a type of unemployment that arises when workers are searching for new jobs or are transitioning from one job to another. It is part of natural unemployment and hence is present even when the economy is considered at full employment. For example, if you graduate from university, you can't necessarily expect to find a job straight away which matches your skills. Frictional unemployment will also occur when people are switching between jobs, either because they have been made redundant or are looking for new employment.

ii)

Costs of unemployment

For the individual, the greatest economic cost of unemployment is lost income. For the government, its lost revenue in form of taxes.

For society, the greatest economic cost of unemployment is the decrease in goods and services that occurs as a result of the unemployment.

SOLUTION SIX

- a) Open market operations are an **instrument of monetary policy** consisting of the sale or purchase of financial assets (mainly government securities) by the central bank to influence interest rates and the quantity of money.
- b) When the Bank of Zambia desires to **increase the money supply**, it **buys government securities on the open market** from an institution such as a bank. The central bank usually pays a bank for securities bought by increasing the cash reserves of the bank concerned via a book entry. The bank will now have excess reserves which it may use for credit extension and thus money supply increases.
In cases where the central bank wishes to **reduce the money supply**, it **sells government stock on the open market** thereby reducing the cash reserves of banks which in turn reduces money supply.
- c) Objectives of Commercial Banks are:
- **Liquidity:** Used to settle daily cash withdrawals from customers and to settle accounts with other commercial banks in the clearing system, but balances for these purposes earn no interest and are unprofitable. Banks have to make sound investment policy, by investing in assets that can be easily converted into cash.
 - **Profitability:** A commercial bank's profit is normally obtained from interest charged on assets minus interest paid on liabilities. Commercial banks have an objective of trading profitably like other commercial organizations. To pursue this objective they need to earn high interest rates. Therefore, they have to lend for a long term and to high-risk customers. This reduces the choice of liquidity and security.
 - **Security:** Commercial banks are expected to act prudently to safeguard the interests of depositors and shareholders; this however reduces opportunities for profitable lending.

SOLUTION SEVEN

- a) The differences between a floating and a fixed exchange rates are as follows:
A floating rate is one that the authorities allow to be set by the forces of supply and demand for currencies in the foreign exchange market, without any systematic government intervention.
- b) Advantages of floating exchange rates
- Governments do not have to spend or even hold foreign currency reserves
 - Balance of payments deficits or surpluses are automatically corrected. A deficit will result in the exchange rate falling; this will improve competitiveness, raise exports and restore equilibrium.
 - Governments need not adopt economic policies that may be undesirable for other reasons to maintain exchange rates.
 - Encourage efficient allocation of resources since exchange rates will reflect economic conditions.
- c) Disadvantages of floating exchange rates
- If exchange rates **appreciate too much** under a floating rate system, then **firms' international competitiveness** may be reduced, and output and employment may fall across the economy.
 - Uncertainty surrounding fluctuations in exchange rate could deter trade.
 - If **exchange rates fall too much, import prices**, and hence **inflation**, will rise.
 - **Currency risk** will be **maximized** under a system of floating exchange rates.
 - The freedom afforded governments by (c) in the advantages above may mean governments do not pursue domestic policies which they should
- d) A government can intervene in the foreign exchange markets in two ways as follows:
- It can sell its own currency in exchange for foreign currencies, when it wants to keep the exchange rate of its domestic currency low. The foreign currencies it buys can be added to the official reserves.
 - It can buy its own currency and pay for it with the foreign currencies in its official reserves. It will do this when it wants to keep the exchange rate high when market forces are pushing it down.
 - The government can also intervene indirectly, by changing domestic interest rates, and so either attracting or discouraging investors in financial investments which are denominated in the domestic currency.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

WEDNESDAY 15 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:

Section A: Ten (10) compulsory multiple choice questions. Five (5) on Information Technology and five (5) on Communication.

Section B: There are three (3) questions on **Information Technology**. Attempt any two (2) questions.

There are also three (3) questions on **Communication**. Attempt any (2) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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

SECTION A – (COMPULSORY)

Attempt all Ten (10) multiple choice questions.

QUESTION ONE

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

- 1.1 Which of the following statement best describes a botnet?
- A. Type of software used to test bugs in the software
 - B. A malicious software found on the internet
 - C. Computer devices connected to the internet used to control other computers on the internet
 - D. Operating system software which controls computer hardware
- (2 marks)
- 1.2 Which of the following is a feature of client server networks?
- A. Computers in a network have equal capabilities
 - B. Networked computers, one with server capabilities such as file and print services with server software communicating with a client software on a workstation.
 - C. Standalone computers with no processing power
 - D. Computers with huge processing power but with dumb terminals
- (2 marks)
- 1.3 Which of the following information systems is used by middle level managers?
- A. Expert systems
 - B. Enterprise systems
 - C. MIS
 - D. TPS
- (2 marks)
- 1.4 Excel is a common example of spreadsheet software. Another example is :
- A. Access
 - B. Lotus 1-2-3
 - C. Word perfect
 - D. A Macro
- (2 marks)
- 1.5 One of the fastest growing information technology services is E-commerce. However, one of the disadvantages of E-Commerce is:
- A. No working time limitation

- B. No geographical boundaries
- C. Shopping online, regardless of user status
- D. Segregates users based on access to internet

(2 marks)

1.6 Jane is listening to an interesting song on radio right now. What type of listening is this?

- A. Emphatic listening.
- B. Passive listening.
- C. Appreciative listening.
- D. Critical listening.

(2 marks)

1.7 Which of the following is an essential element of a very good report?

- A. It must have a lot of complex information.
- B. It must be accurate and clear.
- C. It must be clear, accurate and contain one subject matter.
- D. It must be accurate and complex.

(2 marks)

1.8 What is the role of the receiver in the communication process?

- A. To establish the purpose of communication.
- B. To select the appropriate medium of communication.
- C. To encode the message.
- D. To supply the desired response.

(2 marks)

- 1.9 State the characteristics of graphical communication.
- A. It easily summaries complex data into something understandable.
 - B. It is instant.
 - C. Feedback is instant.
 - D. It allows interaction. (2 marks)

- 1.10 Define the term agenda.
- A. An announcement of a meeting.
 - B. A list of items to be discussed in a meeting.
 - C. An invitation to attend a meeting.
 - D. A programme with time allocated for each item to be discussed in a meeting. (2 marks)

[Total: 20 Marks]

SECTION B

This section has two parts:

1. INFORMATION TECHNOLOGY
2. COMMUNICATION

1. INFORMATION TECHNOLOGY

ATTEMPT ANY TWO (2) FROM QUESTIONS: TWO, THREE AND FOUR

QUESTION TWO

As a ZICA graduate you have been employed by a farm establishment as an accountant. Study the given spreadsheet below and answer the following questions:

	C	D	E	F	G	H
1						
2	Day One					
3						
4	Product	Unit K	Quantity	Total K		
5	Cabbage	5.00	1,000			
6	Tomatoes	80.00	3,000			
7	Oranges	60.00	500			
8	Maize	150.00	2,000			
9						
10						
11	Day Two					
12						
13	Product	Unit K	Quantity	Total K		
14	Cabbage	5.00	2,000			
15	Tomatoes	80.00	3,000			
16	Oranges	60.00	500			
17	Maize	150.00	1,500			
18						
19						
20	Day Three					
21						
22	Product	Unit K	Quantity	Total K		
23	Cabbage	5.00	1,800			
24	Tomatoes	80.00	2,500			
25	Oranges	60.00	800			
26	Maize	150.00	1,100			
27						
28						
29						

Required:

- (a)
 - (i) Write formula to calculate daily Total Cost for maize on day one (1), Cabbage on day two (2) and Tomatoes on day three (3). (3 marks)
 - (ii) Write formula to calculate Total for all products for each of the three (3) days. (3 marks)
 - (iii) Assuming day Totals in question (a.) part ii above have been written in cells F10 for day one (1), F19 for day two (2) and F28 for day three (3), write a formula to calculate Total for all days i.e. the Grand Total. (4 marks)

- (b) An automated office is a modern-day office used by most office managers.
Describe at any three (3) basic activities of an automated office. (6 marks)
- (c) Operating system vendors and authors release operating system patches or version onto the market worldwide periodically. Despite an organization's current operating system functioning properly, organizations are encouraged to update their Operating Systems supplied by their Vendors.
State any two (2) reasons why it's important to update the Operating systems. (4 marks)

[Total: 20 Marks]

QUESTION THREE

Most of the accounting and sales work is now performed using computers. Critical Information technology knowledge to allow an accounting staff performs duties effectively is centered on hardware, software, electronic communication tools and databases.

Briefly explain each of the following terms:

- (a) Personal Digital Assistants (PDA) (4 marks)
 (b) Mainframe Computers (4 marks)
 (c) Optical Character recognition (OCR) (4 marks)
 (d) Privacy Violation (4 marks)
 (e) Teleconferencing (4 marks)

[Total: 20 Marks]

QUESTION FOUR

Computers regardless of their sizes handle large amounts of important data and information. Often these computers are linked together in a network. Archiving data is critical.

- (a) Explain the following terms.
 (i) Star topology (4 marks)
 (ii) Off-site backup (2 marks)
 (iii) Internal hard drive (2 marks)
- (b) Computer output is either displayed on different types of screens or printers.

Describe the following types of output devices.

- (i) Printer (4 marks)
 (ii) Plotter (4 marks)
- (c) Information systems are bringing many changes, including areas of decision making, obligations and appropriate guidelines.
Differentiate legal issues from ethical issues. (4 marks)

[Total: 20 Marks]

2. COMMUNICATION

ATTEMPT ANY TWO (2) FROM QUESTIONS: FIVE, SIX AND SEVEN

QUESTION FIVE

An audience can only get full value of information from an oral presentation if they listen effectively.

Required:

- (a) State the difference between hearing and listening. (2 marks)
- (b) State six (6) barriers to effective listening. (6 marks)
- (c) Explain how each barrier you have mentioned in your answer in (a) above can be minimized. (12 marks)

[Total: 20 Marks]

QUESTION SIX

You are a supervisor in a well-established organization that you work for. Recently you have observed that most of your junior staffs are in the habit of missing business meetings without any form of apology.

Required:

- (a) Explain why;
 - (i) A memo has no addresses. (2 marks)
 - (ii) A memo has no salutation and complimentary close. (2 marks)
- (b) State any two (2) functions of a memo. (2 marks)
- (c) Write a suitable memo to all staff in your department outlining this problem and highlighting the benefits of attending a meeting. (14 marks)

[Total: 20 Marks]

QUESTION SEVEN

Due to the recent outbreak of Covid-19, your organisation has been operating on half capacity. After a comprehensive survey and report, management has resolved to revert to full scale operations.

Required:

- (a) Write a standard letter to all members of staff requesting them to return to work in two (2) weeks' time. (12 marks)
- (b) Explain the following parts of a business letter:
 - (i) Subject line (2 marks)
 - (ii) Main body (2 marks)
 - (iii) Salutations (2 marks)
 - (iv) PP (2 marks)

[Total: 20 Marks]

END OF PAPER

DA 4 INFORMATION TECHNOLOGY AND COMMUNICATION

SUGGESTED SOLUTIONS

SOLUTIONS

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

SOLUTION TWO

	C	D	E	F	G	H
1						
2	Day One					
3						
4	Product	Unit K	Quantity	Total K		
5	Cabbage	5.00	1,000			
6	Tomatoes	80.00	3,000			
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18						
19						
20	Day Three					
21						
22	Product	Unit K	Quantity	Total K		
23	Cabbage	5.00	1,800			
24	Tomatoes	80.00	2,500			
25	Oranges	60.00	800			
26	Maize	150.00	1,100			
27						
28						
29						

- (a.) For each one of the following, write formulae to :
- Calculate daily total cost for maize on day one, Cabbage on Day two and day three

MAIZE ON DAY ONE :

=product(D8,E8) or =D8*E8

CABBAGE ON DAY TWO :

=product(D14,E14) or =D14*E14

TOMATOES ON DAY THREE :

=product(D24,E24) or =D24*E24

- a(ii). Calculate total for all products for each day

TOTAL DAY ONE : =sum(F5:F8) or =F5+F6+F7+F8

TOTAL DAY TWO : =sum(F14:F17) or =F14+F15+F16+F17

TOTAL DAY THREE : =sum(F23:F26) or =F23+F24+F25+F26

- a(iii). Calculate total for all days i.e the grand total

=sum(F10,F19,F28) or =F10+F19+F28

(b.) THREE (3) BASIC ACTIVITIES OF AUTOMATED OFFICE

- Data storage and retrieval: - Automated offices provide easy storage and retrieval data using computer systems
- Data Exchange: - provided by electronic communication systems such as email, collaborative software e.t.c
- Data management: - Automated office systems are used to manage data within the organisation and outside

(c.) REASONS FOR UPDATING OPERATING SYSTEMS

- Fix Security Holes. Have you ever been hacked? ...
- Improve System Stability. OS updates provide an overall fix to any outstanding issues...
- Get Latest Features. Service packs usually bring with them a host of new features and applications.
- Access Future Technology. Because your system is up-to-date it means it's ready for the latest technology enhancements. ...

SOLUTION THREE

i. PDA

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

ii. MAINFRAME

A mainframe computer, informally called a mainframe or big iron, is a computer used primarily by large organizations for critical applications, bulk data processing. A mainframe computer is larger and has more processing power than some other classes of computers, such as minicomputers, servers, workstations, and personal computers.

Mainframes are also used for **controlling transactions of money, maintain and process hundreds of millions of information**. Mainframe computers are used in most of the financial sectors for performing transactions processing, resource management etc. Car and flight manufacturers still manufacture products using mainframe computer.

iii. OCR (**Optical Character Recognition**)

It is a widespread technology to recognise text inside images, such as scanned documents and photos. OCR technology is used to convert virtually any kind of images containing written text (typed, handwritten or printed) into machine-readable text data.

iv. **PRIVACY VIOLATION**

Description. Mishandling private information, such as customer passwords or social security numbers, can compromise user privacy, and is often illegal.

Privacy violation takes place when sensitive information enters the program server/database and is illegally accessed by malicious attackers. Unprotected storage of user data. Most privacy violation occurs when passwords, login details and personal information used by the application are stored in plain-text format.

v. **TELECONFERENCING**

Teleconferencing definition is - the holding of a conference among people remote from one another by means of telecommunication devices (such as telephones or computer terminals).

SOLUTION FOUR

a.)

i) **STAR TOPOLOGY**

- Common feature in many home networks, generally involving a switch (hub)
- Each computer is connected to the hub using an independent cable
- Only one computer fails when a cable connecting it fails

ii) **OFF-SITE BACKUP**

These are backups kept away from the business or organization to avoid theft and natural hazards like fire onsite. Storage is on long-time. Sometimes special safe-storage companies are used

iii) **INTERNAL HARDDRIVE**

- Internal hard disks are in modern Personals, normally with sizes 500Gb to 1 TB
- Some are removable.
- Contents are generally software, pictures, videos and music. Operating systems are normally stored here

b.)

(iii) **PRINTER**

- Printers are out devices that give a hard copy result. There are two main types of printers; impact printers and non-impact printer. Impact printers make physical contact with stationery when printing while non-impact printers do not.

(iv) **PLOTTER**

- A *plotter* is a computer hardware device much like a printer that is used for printing vector graphics. Instead of toner, *plotters* use a pen, pencil, marker, or another writing tool to draw multiple, continuous lines onto paper rather than a series of dots like a traditional printer.

-

c.)

LEGAL ISSUES AND ETHICAL ISSUES

Legal standards are those standards that are set forth in governmental **laws**. **Ethical** standards are based on the human principles of right and wrong. The differences between them are these: **Legal** standards are based on written law, while **ethical**.

SOLUTION FIVE

- (a) The difference between hearing and listening is that hearing is passive while listening is active.
- (b) Barriers to effective listening include:
 - Noise
 - Having different perceptions
 - Language
 - Using wrong medium of communication
 - Information underload and over load
 - Lack of interest and concentration
 - Bad messages or speakers
 - Prejudice and interrupting the speaker
 - Bad listening practices
- (c) Ways to minimize the barriers
 - Noise try to concentrate on the discussions.
 - use simple language or an interpreter
 - use the correct medium of communication
 - provide enough information for the recipient to understand
 - Be interested in the subject matter
 - Do not interrupt the speaker unnecessarily.

SOLUTION SIX

- (a)
- i. A memo has no addresses because it is a document meant for internal communication and thus employees can easily be contacted by walking to their offices or by calling them using an internal phone system.
 - ii. A memo has no salutation and a complimentary close because the "To" replaces dear sir/ madam who is the recipient in this case and the "from" takes the place of yours faithfully or sincerely. Hence no need to indicate dear sir/madam and yours faithfully.
- (b)
- It can save as a notice
 - It can be used as a brief report

(c)

JMK LIMITED

Memorandum

Ref : JMK /105/ 21

To : All staff accounts department

From; The Assistant accountant

Subject: Failure to attend business meetings

It has come to management's attention that most staff especially in this department are in the habit of missing staff business meetings all the time. This development is very disappointing especially that in most cases no apologies are given in this case.

Kindly note that it is important to attend any meeting when you are requested to do so. There are many benefits of attending such meetings. Some of these benefits are:

- Instant feedback on any queries
- There is a potential for group synergy when staff meet
- The combined effort of the group can often generate better solutions than individuals working alone
- Everyone has an opportunity to participate in the affairs of the department.

You are therefore encouraged to attend every meeting that is called for. Your consideration in this matter will be appreciated.

Sender's signature

Sender's name

SOLUTION SEVEN

a. Letter

Bukoma General Dealers

P.O Box 27

Solwezi

Ref: Buk/11/21

Date: (any day during exams)

Amos Meleki

P.O Box 21

Solwezi

Dear sir,

RE: RETURN TO WORK

We would like to thank you for the patience and understanding during this trying time of the ongoing Covid-19 pandemic. We are pleased to inform you that we have resolved to invite you back to work starting on the ...(any date during exams).

In line with the guidelines from the Ministry of Health, the following changes have been made:

- No members of staff shall share an offices
- Daily temperature checks will be conducted upon arrival of all employees
- All members of staff shall wear masks all the time
- All physical meetings have been cancelled until further notice

All members are expected to observe these and any other guidelines aimed at preventing infections and spread of the virus.

If you have any questions, you are encouraged to contact the Human Resources office.

Lastly, we would like to thank you for your hard work and positive contribution to the organisation. If you have any questions about returning to work, please contact your supervisor.

Welcome back to work!

T.M

Teddy Mulonda (ED)

b. Parts of a Letter

- i. A subject line is an introductory part of a letter which states what the letter is all about. It tells the receiver the message the sender wants to convey.
- ii. The main body is the most important part of a letter as it contains the information the sender is communicating to the receiver.
- iii. A salutation is a general greeting used in a letter. It usually begins with 'Dear...,'.
- iv. PP is an abbreviation written before a person's name at the bottom of a business letter showing that they have signed the letter on behalf of someone else whose name appears before theirs.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 5: COST ACCOUNTING

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A – Multiple Choice

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

QUESTION ONE

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

1.1 Fixed costs are conventionally considered to be...

- A. Constant per unit of output
- B. Constant in total when production volume changes
- C. Outside the control of management
- D. Those affected by inflation

(2 marks)

1.2 Chisomo has established the following information regarding fixed overheads for the coming month.

Budgeted information:

Fixed overheads	K252,000
Labour hours	4,200
Machine hours	14,000
Units of production	7,000

Actual fixed costs for the month turned out to be K224,000

What will be the pre-determined overhead absorption rate?

- A. K16
- B. K18
- C. K36
- D. K60

(2 marks)

1.3 In a system of Activity Based Costing, 'activities' consist of the aggregation of many different tasks and are described by verbs associated with cost objects.

Which one of the following is not a typical example of support activities in a system of Activities Based Costing?

- A. Scheduling Production
- B. Setting-up of machines
- C. Inspection of items
- D. Cost pools

(2 marks)

- 1.4 During a period, 28,000 labour hours were worked at a standard cost of K10.40 per hour. The labour efficiency variance was K12,480 favourable.

How many standard hours were produced?

- A. 1,200
- B. 26,080
- C. 28,000
- D. 29,200

(2 marks)

- 1.5 Which of the following are true?

- I With FIFO, the inventory valuation will be very close to replacement cost.
- II With LIFO, inventories are issued at a price which is close to the current market value.
- III Decision making can be difficult with both FIFO and LIFO because of the variations in prices.
- IV A disadvantage of the weighted average method of inventory valuation is that the resulting issue price is rarely an actual price that has been paid and it may be calculated to several decimal places.

- A. I and II only
- B. I, II and III only
- C. I and III only
- D. I, II, III and IV

(2 marks)

- 1.6 Ganizani, a company in Chipata town employs two types of labour: skilled workers, considered to be direct workers, and semi-skilled workers considered to be indirect workers. Skilled workers are paid K18 per hour and semi-skilled K9 per hour. The skilled workers have worked 20 hours overtime this week, 12 hours on specific orders and 8 hours on general overtime. Overtime is paid at a rate of time and a quarter. The semi-skilled workers have worked 30 hours overtime, 20 hours for a specific order at a customer's request and the rest for general purposes. Overtime again is paid at time and a quarter. What would be the total overtime pay considered to be a direct cost for this week?

- A. K495
- B. K639
- C. K675
- D. K787.50

(2 marks)

1.7 Which one of the following is NOT a cost unit in the road, rail or air transport services?

- A. Passenger/mile or kilometre,
- B. Ton/mile,
- C. Tonne/kilometer
- D. Meal served/mile

(2 marks)

1.8 In process costing, a joint product is:

- A. A product which is produced simultaneously with other products but which is of lesser value than at least one of the other products.
- B. A product which is produced simultaneously with other products and is of similar value to at least one of the other products.
- C. A product which is produced simultaneously with other products but which is of greater value than any of the other products.
- D. A product produced jointly with another organisation.

(2 marks)

1.9 If the resource usage of a product is 10kg per unit and the resource price per kg is set at K10 per unit. The time it would take to produce 1 unit of the product is 3 hours and the hour rates for labour, variable overheads and fixed overheads are K12, K8 and K6 respectively.

The standard fixed overhead cost per unit is....

- A. 10kg@K10 per kilogram = K100
- B. 3 hours @ K6 per hour = K18
- C. 3 hours @ K8 per hour = K24
- D. 3 hours @ K12 per hour = K36

(2 marks)

1.10 Ndeke Construction Ltd makes up its accounts to 31 March each year. The following details have been extracted in relation to one of its contracts:

	K
Contract price	2,000,000
Value of work certified	1,500,000
Cost of work not certified	160,000
Cash received from client	1,440,000
Estimated cost of completion	135,000
Cost of work certified	1,065,000

The profit to be recognized in the income statement is

- A. K480,000
- B. K460,800
- C. K640,000
- D. K340,800

(2 marks)

[Total: 20 Marks]

SECTION B

There are five (5) questions in this section. Attempt any FOUR (4) questions

QUESTION TWO

Bobick Ltd manufactures plastic containers for the pharmaceutical industry. The factory, in which the company undertakes all its production, has two production departments namely: Cutting and Shaping and two service departments (Stores and Maintenance).

The information below was extracted from the company's budget for its financial year ended 31 March 2019.

Allocated Overhead Costs:

	K
Cutting Department (Cutting)	14,000
Shaping Department (Shaping)	16,000
Stores Department (Stores)	3,500
Maintenance Department (Maintenance)	2,800

Other Production Overheads:

	K
Factory rent	525,000
Factory building insurance	70,000
Plant & machinery insurance	39,000
Plant & machinery depreciation	58,500
Canteen subsidy	150,000

Direct Costs:

	K
Cutting Department	144,000
Shaping Department	210,000

The following additional information is also provided:

Basis	Cutting	Shaping	Stores	Maintenance
-------	----------------	----------------	---------------	--------------------

Floor area (square metres)	18,000	12,000	3,000	2,000
Value of plant & Machinery (K)	300,000	50,000	25,000	15,000
Number of stores requisitions	1,000	500	-	-
Maintenance hours required	2,700	2,000	300	-
Number of employees	34	60	4	2
Machine hours	12,000	2,200	-	-
Labour hours	9,000	15,000	-	-

Required:

- Explain what is meant by the term '**blanket overhead rate**' (3 marks)
- Prepare an overhead analysis sheet based on the above information. You must clearly state the basis used for any apportionments. (10 marks)
- Re-apportion the service department costs and calculate the most appropriate overhead rate for each department. (Rate should be calculated to two decimal places). (4 marks)
- State three (3) reasons why companies calculate pre-determined overhead absorption rates. (3 marks)

[Total: 20 Marks]

QUESTION THREE

Lukundo Limited manufactures a specialized storage accessory for automobile; the Storax, which is a type of pocket which can be easily fixed in the boot of any vehicle. The company has been in operation for two years and now that the production process has been established and refined, the directors have decided to focus on the income and costs arising from activities. The managing director has recently read an article about product costing and in particular, absorption and marginal costing and is keen to understand how this would affect company profits. The following information is available for the months of January and February 2021:

	July	August
Production (Units)	13,000	15,000
Sales (Units)	12,000	16,000
Direct materials	K29,250	K33,750
Direct Labour	K19,500	K22,500

Variable production overheads	K7,800	K9,000
Total selling and administrative expenses	K45,200	K57,600

Additional information:

1. For Lukundo Limited normal production capacity is 15,000 units per month.
2. Fixed production overheads are K29,400 per month.
3. The company sells the Storax for K20 each.
4. Total selling and administrative expenses include a fixed and variable element. The variable portion is incurred based on units sold.
5. At 31 December 2020, the company had no Storax accessories in its warehouse.

Required:

- (a) Prepare profit statements for Lukundo Limited for the months of January and February 2021 using:
- (i) Absorption costing (10 marks)
 - (ii) Marginal costing (8 marks)
- (b) Reconcile the profits calculated using Absorption costing to that calculated using Marginal costing. (2 marks)

[Total: 20 Marks]

QUESTION FOUR

- (a) Explain five (5) characteristics of Process Costing Systems. (5 marks)
- (b) The following data relates to process 2 of Muleli Ltd, a paint manufacturer for the financial year ended 31 December 2019.

At the beginning of the year, there were 800 units partly completed which had the following values:

	Values	Percentage
	K	complete
Input material (from process 1)	8,200	100
Material introduced	5,600	55
Labour	3,200	60
Overheads	2,400	45

During the period, 4300 units were manufactured from process 1 at a value of K46,500. Other Costs were:

	K
Material introduced	24,000
Labour	19,500
Overheads	18,200

At the end of the year, the closing WIP was 600 units which were at the following stages of completion:

Input material	100% Complete
Material introduced	50% Complete
Labour	45% Complete
Overheads	40% Complete

The balance of 4500 was transferred to finished goods.

Required:

- (i) Calculate the value of units transferred to finished goods and the value of WIP using the FIFO method. (8 marks)
- (ii) Prepare the Process 2 account using the FIFO method. (7 marks)

[Total: 20 Marks]

QUESTION FIVE

- (a) A company in Livingstone planned to produce 1,600 units of product Hihwaya during December 2020. The expected time to produce a unit of Hihwaya is five hours, and the monthly budgeted fixed overhead is K32,000. The standard fixed overhead cost per unit of product Hihwaya is therefore follows:

5 hours at K4 per hour = K20 per unit

Actual fixed overhead expenditure in December 2020 was K32,720. The labour force managed to produce 1,760 units of product Hihwaya in 5,400 hours of work.

Required:

Calculate the following variances.

- (i) Fixed overhead total variance (2 marks)
- (ii) Fixed overhead expenditure variance (3 marks)
- (iii) Fixed overhead volume variance (2 marks)
- (iv) Fixed overhead volume efficiency variance (3 marks)

(v) Fixed overhead volume capacity variance (3 marks)

- (b) In the month of December 2020, the external auditors raised a query over material Y usage in the production of Hihwaya whose standard direct material cost per unit is as follows.

10 kilograms of material Y at K14 per kilogram = K140.

During December, 1,760 units of Hihwaya were manufactured, using 15,840 kilograms of material Y which cost K213,840.

Required:

Calculate the following variances:

- (i) Direct material total variance (2 marks)
(ii) Direct material price variance (2 marks)
(iii) Direct material usage variance (3 marks)

[Total: 20 Marks]

QUESTION SIX

- (a) Chungu Ltd is a Zambian company based in Chingola Town. The company sells raw materials to different parts of Chingola town. Purchases and issues of raw materials during April, 2020 were as follows:

Date		Units	Unit price
1 April	Opening inventory	1,000	K5.00
5 April	Purchased	500	K6.00
9 April	Sold	200	n/a
14 April	Purchased	600	K5.50
21 April	Sold	1,200	n/a

Required:

Prepare the stores ledger card using:

- (i) First-in-First-out Method (FIFO) (5 marks)
(ii) Last-in-First-Out Method (LIFO) (5 marks)
(iii) Average Cost Method (AVCO) (5 marks)
- (b) Monthly demand for a product is 10,000 units. The purchase price is K10 per unit and the company's annual cost of finance is 15%. Warehouse storage costs per year are K2 per unit. The supplier charges K200 per order for delivery.

Required:

Calculate the Economic Order Quantity (EOQ)

(5 marks)

[Total: 20 Marks]

END OF PAPER

DA5 COST ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a) Blanket overhead rate

Blanket overhead rate are where a company calculates one overhead rate for the company as a whole. Example; A company budgets that its production overhead will be K200,000 in the forthcoming year and total budgeted machine hours are 50,000 and total budgeted labour hours are 25,000. The company's pre-determined overhead rate will equal $[K200,000/50,000 \text{ M/H}] = K4$ per machine hour if the company decided to absorb based on machine hours than labour hours. This method is not as accurate as using individual departmental overhead rates.

b) Overhead analysis sheet

Nature of cost	Basis of apportionment	Total K	Cutting Dept K	Shaping Dept K	Stores Dept K	Maint Dept K
Allocated	N/A	36,300	14,000	16,000	3,500	2,800
Apportioned; Rent	Floor area	525,000	270,000	180,000	45,000	30,000
Building insurance	Floor area	70,000	36,000	24,000	6,000	4,000
P & M insurance	Value of P & M	39,000	30,000	5,000	2,500	1,500
P & M Dept	Value of P & M	58,500	45,000	7,500	3,750	2,250
Canteen subsidy	No. of employees	150,000	51,000	90,000	6,000	3,000
		878,800	446,000	322,500	66,750	43,550

c) **Using Step-down method (all other applicable methods are also allowed)**

878,000	446,000	322,500	66,750	43,550		
	Maint Dept	Maint hours	23,517	17,420	2,613	(43,550)
	Stores Dept	Stores Req's	46,242	23,121	(69,363)	0
			<u>515,759</u>	<u>363,0410</u>	<u>0</u>	

Overhead absorption rate for cutting Dept : $515,759/12,000 \text{ hrs}$
= K42.98/machine hour

Overhead absorption rate for shapping Dept: $363,041/15,000 \text{ hrs}$
= K24.20/labour hour

d) **Reasons companies calculate pre-determined overhead rates;**

- In order to establish selling prices

- For inventory valuation purposes
- Facilitates the control process within an organization

SOLUTION THREE

a) i) **Profit statement using Absorption Costing**

	January		February	
	K	K	K	K
Sales Revenue			240,000	
	320,000			
Opening inventory		0		6,310
Cost of production	<u>82,030</u>		<u>94,650</u>	
		82,030		100,960
Closing inventory		<u>(6,310)</u>		<u>(0)</u>
	75,720		100,960	
Under/ (over) absorbed overheads		<u>3,920</u>		<u>0</u>
Cost of sales		<u>(79,640)</u>	<u>(100,960)</u>	
Gross profit		160,360		219,040
Total selling and administrative expenses			<u>(45,200)</u>	
	<u>(57,600)</u>			
Net profit			<u>115,160</u>	<u>161,440</u>

ii) **Profit statement using Marginal Costing**

	January		February	
	K	K	K	K
Sales Revenue				240,000
	320,000			
Opening inventory		0	4,350	
Marginal cost of production			<u>56,550</u>	<u>65,250</u>
			56,550	69,600
Closing inventory		<u>(4,350)</u>		<u>(0)</u>
Marginal production cost of sales		<u>(52,200)</u>	<u>(69,600)</u>	
Variable selling and administrative expenses			<u>(37,200)</u>	<u>(49,600)</u>
Contribution				150,600
	200,800			

Fixed production overhead costs	(29,400)	(29,400)
Selling and administrative expenses	<u>(8,000)</u>	<u>(8,000)</u>
Profit	<u>113,200</u>	<u>163,400</u>

b) **Reconciliation of profits**

January	February	
	K	K
Profits as per Absorption costing	115,160	161,440
Difference in inventory (1,000 units x K1.96)	<u>(1,960)</u>	<u>(1,000 units x K1.96)</u> <u>1,960</u>
Profits as per marginal costing	<u>113,200</u>	<u>163,400</u>

WORKINGS:

W1: Fixed Production overhead cost per unit

$$= \text{K}352,800 / (180,000 \text{ units}) = \underline{\text{K}1.96 \text{ per unit}}$$

W2: Production cost per unit

	K
Direct materials	2.25
Direct labour	1.50
Variable production overheads	<u>0.60</u>
Marginal Costing CPU	4.35
Fixed production overhead	<u>1.96</u>

Absorption Costing CPU 6.31

W3: Under /Over absorption of overheads

	January	February
Actual Fixed overheads	29,400	29,400
Overheads absorbed (13,000 units / 15,000 units x K1.96)	25,480	29,400
Over absorbed	<u>3,920</u>	<u>0</u>

SOLUTION FOUR

a) Characteristics of Process Costing System

- The maintenance of accurate records of units and plant units' produced and the cost incurred by each process.
- The average of the total costs of each process over the total production of that process, including partly completed units.
- Clearly defined process cost centres and the accumulation of all costs (Material, Labour and overheads) by the cost centres.
- The charging of the cost of the output of one process as the raw materials input cost of the following process.
- Clearly defined procedures for separating costs where the process produces two or more products (i.e. joint products) or where by- products arises during production.

b)

i. Calculation of effective units and cost per unit

Cost element	Completed units	Equivalent units in Closing WIP	Equivalent units in opening WIP	Total equivalent production	Total costs K	Cost per unit K
Input material	4,500	600	800	5,100	46,500	10.814
Material introduced	4,500	300	440	5,160	24,000	5.505
Labour	4,500	270	320	5,090	19,500	4.545
Overheads	4,500	240	440	5,180	18,200	4.155

Closing Stock Valuation (600 units)

Input Material = 100% complete = $600 \times K10.814 = 6,488$

Material Introduced = 50% complete = $300 \times K5.505 = 1,651$

Labour = 45% complete = $270 \times K4.545 = 1,227$

Overheads = 40% complete = $240 \times K4.155 = \underline{997}$

10,363

ii) Process 2 Account (FIFO Method)

		Units	K	
Units	K			
Opening WIP		800	19,400	Transfer to Finished goods 4,500
117,237				

Transfer from process 1	4,300	46,500	Closing WIP	600
10,363				
Material introduced		24,000		
Labour		19,500		
Overheads		18,200		
	<u>5,100</u>	<u>127,600</u>	<u>5,100</u>	<u>127,600</u>

Goods Transferred (4500)

Cost b/f 19,400

DM 360 X 5.505 = 1,981.8

DL 320 X 4.545 = 1,454.4

O/H 440 X 4.155 = 1,828.2

5,266.7

Started and completed (3,700 x 25.019) 92,570.3

117,237

SOLUTION FIVE

(a) Calculation of fixed overhead costs variances

K			
	(i)	1,760 units should have cost x K32	35,200
	But did cost	<u>32,720</u>	
	Total fixed overhead expenditure variance	<u>2,480 (F)</u>	
		K	
	(ii)	Budgeted Overheads	32,000
	Actual overheads	<u>32,720</u>	
	Fixed Overheads Expenditure variance	<u>720 (A)</u>	
	(iii)	Budgeted volume	1,600 units
	Actual volume	1,760 units	
	Volume variance in units	160 units (F)	
	Valued at standard OAR/unit	<u>x K20</u>	
	Fixed Overhead Volume Variance	<u>K3,200 (F)</u>	
	(iv)	1,760 units should have taken X 5 hours	8,800 hrs
	But did take	5,400 hrs	
	Efficiency variance in hours	3,400 hrs (F)	
	Valued at standard OAR/hr	<u>x K4</u>	
	Fixed overhead efficiency variance	<u>K13,600 (F)</u>	
	(v)	Budgeted capacity (1,600 units x 5hrs)	8,000 hrs
	Actual capacity	5,400 hrs	
	Capacity variance in hrs	2,600 hrs	
	Valued at standard rate per hour	<u>x K4</u>	
	Fixed overhead capacity variance	<u>K10,400 (A)</u>	

(b) Calculation of materials cost variances

K			
	(i)	1,760 units should have cost x K140	246,400
	But did cost	<u>213,840</u>	
	Total direct material cost variances	<u>K32'560 (F)</u>	
		K	
	(ii)	15,840kgs should have cost x K14	221,760
	But did cost	<u>213,840</u>	
	Material price variance	<u>7,920 (F)</u>	
	(iii)	1,760 units should have used x 10kgs	17,600kgs
	But did use	15,640kgs	
	Usage variance in kgs	1,760kgs	
	Valued @standard price/kg	<u>x K14</u>	
	Material Usage Variance	<u>K24,640 (F)</u>	

SOLUTION SIX

a)

i. Stores ledger card using First-in-First-Out Method (FIFO)

DATE	DETAILS	PURCHASES		ISSUES			Balances	
		Units	Unit price	Units	Unit price	Value	Units	Value
1 April	Opening	1,000	K5.00				1,000	5,000
			5,000					
5 April	Purchases	500	K6.00				500	3,000
			3,000					
							1,500	8,000
9 April	Sold			200	K5.00		(200)	(1,000)
					1,000			
							1,300	7,000
14 April	Purchases	600	K5.50				600	3,300
			3,300					
							1,900	10,300
21 April	Sold			800	K5.00			
					4,000			
				400	K6.00			
					2,400			
				1,200			(1,200)	(6,400)
					6,400			
30 April	Closing						700	3,900

ii. Stores ledger card using Last-in-First-Out Method (LIFO)

DATE	DETAILS	PURCHASES		ISSUES			Balances	
		Units	Unit price	Units	Unit price	Value	Units	Value
1 April	Opening	1,000	K5.00				1,000	5,000
			5,000					
5 April	Purchases	500	K6.00				500	3,000
			3,000					
							1,500	8,000
9 April	Sold			200	K6.00		(200)	(1,200)
					1,200			
							1,300	6,800
14 April	Purchases	600	K5.50				600	3,300
			3,300					
							1,900	10,100

21 April	Sold		600	K5.50	
			3,300		
			300	K6.00	
			1,800		
			300	K5.00	(1,200)
			1,500		(6,600)
30 April	Closing				700
					3,500

iii. **Stores ledger card using Average Cost Method (AVCO)**

DATE	DETAILS	PURCHASES			ISSUES			Balances		
		Units	Unit price	Value	Units	Unit price	Value	Units	Unit price	Value
1 April	Opening	1,000	K5.00					1,000	K5.00	
		5,000						5,000		
5 April	Purchases	500	K6.00					500	K6.00	
		3,000						3,000		
								1,500	K5.33	
								8,000		
9 April	Sold				200	K5.33		(200)		
					1,066			(1,066)		
								1,300		6,934
14 April	Purchases	600	K5.50	3,300				600		3,300
								1,900	K5.39	
								10,234		
21 April	Sold				1,200	K5.39				
					6,468					
								(1,200)		
								(6,468)		
30 April	Closing							700		
								3,766		

b) **Economic Order Quantity (EOQ)**

Annual Demand (D) = 10,000 Units x 12 Months = 120,000 Units

Ordering cost per Order = K200

Holding cost per unit per year = K2 + (15% X K10) = K3.5

$$\text{EOQ} = \sqrt{\frac{2 \times \text{K}200 \times 120,000 \text{ units}}{\text{K}3.5}}$$

= **3,703 Units**

END OF SOLUTIONS



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

LEVEL ONE

DA 6: BUSINESS LAW

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A- (Compulsory)

Attempt all ten (10) multiple choice questions

QUESTION ONE

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

1.1 Which one of the following is as a result of judge made law?

- A. Precedents
- B. Nolle prosequi
- C. Act of Parliament
- D. Case stated

(2 marks)

1.2. Which one of the following does not amount to employment termination?

- A. Redundancy
- B. Unfair dismissal
- C. Picketing
- D. Dismissal

(2 marks)

1.3 Which of the following is true regarding binding precedent and persuasive precedent?

- A. Courts don't value persuasive precedents in Zambia
- B. Persuasive precedents are made by parliament
- C. Judges are moved more by binding precedents as opposed to persuasive Precedents
- D. Judges are quiet and learned they link both to stare decisis.

(2 marks)

1.4 Which one(s) is and/or are the highest courts in Zambia?

- A. Constitutional court and High court
- B. Magistrate and Subordinate courts
- C. Constitutional court and Supreme Court

D. None of the above

(2 marks)

1.5 Which of the following has nothing to with agency law.

- A. Ostensible authority
- B. Apparent authority
- C. The agent must act in his best interest,
- D. None of the above.

(2 marks)

1.6 What amounts to consideration in a Sale of Goods Contract?

- A. Price
- B. Money paid
- C. Anything of value exchanged
- D. Goods

(2 marks)

1.7 Which one is not true concerning partnership law?

- A. Zambia developed its own partnership law
- B. Two (2) or more people can form a partnership
- C. The Death of partner dissolves a partnership
- D. None of the above

(2 marks)

1.8 What is referred to as damage under negligence in the law of Tort..?

- A. Compensation
- B. Damages
- C. Injury or loss
- D. Proximate cause

(2 marks)

1.9 What is the effect of a counter offer?

- A. It transforms an offer into an invitation to treat
- B. It results into acceptance of an offer
- C. It revokes an offer
- D. It amends the invitation to treat

(2 marks)

1.10 What amounts to summary dismissal?

- A. Wrongful dismissal
- B. Unfair dismissal
- C. Termination of an employee's contract as a result of gross misconduct without notice.
- D. Termination of an employee's contract based on lack of financial capacity to pay.

(2 marks)

[Total: 20 Marks]

SECTION B

There are five (5) questions in this section. Attempt any four (4) questions.

QUESTION TWO

- (a) Discuss the distinction between law of torts and law of contract. (5 marks)
- (b) Discuss what determines compensation of damage in law of contract and law of torts. (2 marks)
- (c) In employment law, what are some of the duties of an employer to the employee and those of the employee to the employer? (8 marks)
- (d) What is wrongful dismissal? (5 marks)

[Total: 20 Marks]

QUESTION THREE

Ms. Fridah, runs a transport business called Tamanga buses ltd, she has properly instructed her employees not to over speed or rather not to drive over 80km/h. One day One Joze, a bus driver for Ms. Fridah, whilst driving decided to drive at 100km/h in order to arrive early at a certain named bus station in Lusaka, to be the first to pick customers as he was informed by one of his conductors that there are 10 shorts (10 would be passengers). In trying to drive fast he negligently collided with Braun Hatonbo's Toyota vits, Braun decides to approach Ms Fridah for the damage caused to his vehicle and he was told by Ms Fridah, 'I have instructed my bus driver not to drive over 80km/h. It is not my fault, go wherever you want, I won't pay you a single coin'. Braun is confused as he just bought the vehicle.

Required:

- (a) Explain to Ms. Fridah why she has to fix Braun's car (10 marks)
- (b) List the rights of a permanent employee (10 marks)

[Total: 20 Marks]

QUESTION FOUR

- (a) Explain the importance of the Sales of Goods Act 1893. (10 marks)
- (b) List the things that must exist for a partnership to subsist from the definition of a partnership. (10 marks)

[Total: 20 Marks]

QUESTION FIVE

- (a) Distinguish between '*agency by necessity*' and '*agency by holding out*'. (10 marks)
- (b) (i) List five (5) general defences in Tort. (5 marks)
(ii) Briefly explain each of the defences you have listed above. (5 marks)

[Total: 20 Marks]

QUESTION SIX

- (a) Explain the circumstances under which supervening incapacity occurs under a contract. (4 marks)
- (b) Identify the ways in which an offer can be terminated. (10 marks)
- (c) Define law. (2 marks)
- (d) Identify the ways in which delivery of goods can be done in contract of Sale. (4 marks)

[Total: 20 Marks]

END OF PAPER

DA6 BUSINESS LAW

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

(a) In contract liability arises by agreement of the parties. Here parties agree to bind themselves to the terms and conditions of the contract where, if a breach arises the aggrieved party is entitled to sue for damages arising from the breach. In contract damages are always liquidated meaning, the aggrieved party is able to determine how much they have lost due to the breach and are therefore able to sue on the liquidated damages. In tort normally compensation is not based on pure economic loss, but it is linked to bodily injury. There is no need of having a pre-existing contractual relationship. The amount for damages is normally higher in tort, i.e. exemplary damages. A person cannot claim for compensation in contract unless it can be established there was a pre-existing contractual relationship. A claim for purely financial loss can succeed in the law of contract. Damages may also be liquidated under the law of contract. In tort liability arises by imposition of the law. The law of torts through negligence has imposed a general duty of care that all individuals owe others to ensure they do not do something that would bring about injury to others or omit to do something which omission, would lead to others suffering damage. In tort damages are unliquidated meaning it is not readily ascertainable or quantifiable how much damage has been suffered until determined by the courts. In tort ***Donoghue v Stevenson*** [1932] is instructive.

(b) The principle of damage in tort is unliquidated and the plaintiff sues to be taken to the position they would have been had they not suffered the damage. In tort therefore the plaintiff always looks to being restituted to their original position before suffering damage. Conversely in contract the principle of damage operates on expectation of benefit from the contract where the plaintiff would be aware of how much they were to realize from the contract had it been performed without a breach. In contract therefore the plaintiff is suing to be taken to where they would have been had the contract been performed.

(c) Employers duty towards employees:

- (i) Duty to pay wages
- (ii) Duty to exercise reasonable care towards employees
- (iii) Duty to provide grievance procedure
- (iv) Duty of mutual trust and confidence towards employees.

Employees' duty towards employers:

- (i) Duty to obey instructions
- (ii) Duty to adapt to working conditions stipulated by employer
- (iii) Duty to exercise due care when performing employment duties
- (iv) Duty of good faith in executing employment duties.

(d) Dismissal which is wrongful relates to whether an employee has been dismissed from employment with the contractual procedures for dismissal followed. Therefore,

where the employer fails to follow procedures laid down for dismissing an employee then the dismissal is wrongful. ***Reine Engineering Co. Ltd v Baker*** is instructive on that. The plaintiff a director was employed under a contract of service. According to the contract, he was to be given notice of termination of contract. However, the board of directors dismissed him with immediate effect when he refused to resign upon being asked to do so. He brought an action for wrongful dismissal.

SOLUTION THREE

- a) The legal issue is to explain to Fridah, the reasons she is liable to fix Braun's car. Vicarious liability is the principal in law that allocates a blame on a third party where the person that caused the fault or negligent act stands in a special relationship with the person who is deemed to be liable. Looking at the facts Fridah had prohibited her drivers to drive the buses at a certain speed unknown to her one of her drivers drove the bus at a very high speed and negligently collided with another. In the case of *Limpus v London General Omnibus*, it was held that ; even if it is strictly prohibited to do work in a certain way, if it was done within the course of employment the employer is liable. From the case what must be noted to apply the principle of vicarious liability is ; was the employ working within the hours of work; was he/she using the company property. If the aforementioned are answered in the affirmative then the employer is liable. In application to the law cited above it therefore appears that as the driver to Fridah was using the company vehicle and negligently collided the employer is liable to fix Mr. Braun's car. It matters not that the employer had prohibited certain acts from being done by the employees.
- b) – right to claim gratuity upon completing the contract
- _ Right to two leave days in every month of work
 - _ right to a medical scheme provided for under the company
 - Right to be paid every month
 - Right to a sick or compassionate leave which

SOLUTION FOUR

- a) The Sale of Goods Act 1893, provides for a smooth running of business and protects both the buyer and the seller. The Act has achieved this through a number of provisions and rules as follows; the Act, has provided for categories of goods and how to treat the goods for example ascertained goods, a sale involving ascertained goods the risk and property in goods passes with the sale however, with unascertained goods the passing of the property and risk in goods depends on those goods being ascertained if there is something that must be done for the goods to be ascertained the property in goods will pass upon the goods being put in that condition. Further every sale by sample the bulk should correspond to the sample. The Act, also provides for the special treatment of conditions in such a contract as the breach a condition entitles the innocent party to repudiate the contract.
- b) _ there must be a business
_ the business must be an undertaking in common
_ the purpose to do business must be for making profits

SOLUTION FIVE

(a) The distinction between *agency by necessity* and *agency by holding out* is as follows: Agency by necessity may arise by operation of law in situations of pressing need or emergency. It becomes necessary in order to preserve the property or interests of the principal. Thus the agent becomes an agent because of the situation he finds himself in. For him/her to be an agent of necessity; there must be an emergency, the agent must have no practical way of communicating with the principal, the agent must act in good interest of the principal, and the action taken must be reasonable and prudent in the circumstances.

On the other hand, *agency by holding out*, also known as *agency by estoppel* arises when the words or conduct of the principal give an impression to third parties that the agent has authority, when in fact not. Thus if those third parties who heard or saw the principal make such impressions, act on that and deal with the agent, the principal will be estopped (denied) from refusing that he did not create that impression to third parties and will be bound by the agent's transactions with those third parties. This agency is created by the principal to the third parties, whilst agency by necessity is created by an emergency.

(b) (i) The list of *Five defences in Tort* would include: Consent; Contributory negligence; Statutory or common law justification; Necessity and Illegality.

(ii) *Consent (volenti non fit injuria)* – This is a defence in tort where the injured consents to the taking of the risk e.g. in football, undertaking a surgery, etc. The consent must be voluntary and freely undertaken, for it to be a good defence by the wrong doer.

Contributory negligence – This is a defence where the injured part partly contributed to his injury. The effect of this is a reduction in the amount of damages to be awarded to the injured party, reason being that he also contributed to his injuries.

Statutory or common law justification – This is a defence where one's acts are covered by statute or common law. For example, injuries incurred in resisting an arrest may not be compensated as the police officers would have been doing their work as authorized by statute/law.

Necessity – This defence comes into play where it was necessary to cause the injury in order to prevent a greater harm. The action must be a reasonable action.

Illegality – This defence states if the act from which the injured party seeks compensation is illegal, he must be prevented from benefiting from it as it would be against the law or public policy. For example, allowing such an injured party to benefit from proceeds of crime may perpetuate the crime, must be stopped from benefitting.

SOLUTION SIX

- a) This is the loss of capacity after making an offer. The offer will terminate and a good example is when the offeror becomes mentally disordered.
- b) An offer terminates in following ways;
 - Revocation
 - Counter offer
 - Lapse of time
 - Rejection
 - Death
- c) Set of rules which regulates human conduct
- d) Goods may be delivered in the following ways'
 - Physical Transfer of goods
 - Physical transfer of tittle
 - Physical transfer of means of control
 - Attornment.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 7: PRINCIPLES OF MANAGEMENT

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:
Section A: One (1) Compulsory question.
Section B: Five (5) Optional Questions. Attempt any four (4) questions.
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8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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SECTION A – COMPULSORY

Answer all Ten (10) multiple choice questions

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

QUESTION ONE

1.1. One student of Principles of Management (DA7) commented 'the introduction of the systematic use of goal setting and rewards to motivate employees was introduced and propelled by one of the classical scholar. Identify the classical scholar as commented by this student

- A. Frederick Winslow Taylor
- B. Max weber
- C. Elton Mayo
- D. Henri Fayol

(2 marks)

1.2 In what order do managers typically perform the managerial functions?

- A. Organising, planning, controlling, leading
- B. Organising, leading, planning, controlling
- C. Planning, organising, leading, controlling
- D. Planning, organising, controlling, leading

(2 marks)

1.3 Which one of the following is **NOT** one of Drucker's five guiding principles of management?

- A. Making people's strengths effective and their weaknesses irrelevant.
- B. Enhancing the ability of people to contribute.
- C. To operate the organisation's status system.
- D. Integrating people in a common venture by thinking through, setting and exemplifying the organisational objectives, values and goals.

(2 marks)

- 1.4 What are the three interpersonal roles of managers?
- A. Figurehead, leader and liaison
 - B. Spokesperson, leader, coordinator
 - C. Director, coordinator, disseminator
 - D. Communicator, organiser, spokesperson
- (2 marks)
- 1.5 Which one is **NOT** a recognised key skill of management?
- A. Conceptual skills
 - B. Human skills
 - C. Technical skills
 - D. Writing skill
- (2 marks)
- 1.6 Which one of the following is **NOT** a characteristic of a bureaucratic organisation?
- A. Authority
 - B. Regulations
 - C. Command structure
 - D. Change
- (2 marks)
- 1.7 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)
- 1.8 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)

1.9 The Hawthorn Studies are most associated with which writer?

- A. Henri Fayol
- B. Mary Parker Follett
- C. Elton Mayo
- D. Frederick Taylor

(2 marks)

1.10 When a manager monitors the work performance of workers in his department to determine if the quality of their work is 'up to standard', this manager is engaging in which function?

- A. Planning
- B. Controlling
- C. Organising
- D. Leading

(2 marks)

[Total: 20 Marks]

SECTION B

There are Five (5) questions in this section. Attempt any FOUR (4) questions.

QUESTION TWO

- (a) Explain the importance of the following principles of management in an organization.
- (i) Subordination of individual interests to the general interest. (2 marks)
 - (ii) Stability of tenure of personnel. (2 marks)
 - (iii) Initiative (2 marks)
 - (iv) Unity of direction (2 marks)
- (b) Explain the importance of the following skills for a manager and organization.
- (i) Technical. (4 marks)
 - (ii) Conceptual. (4 marks)
 - (iii) Social skills. (4 marks)

[Total: 20 Marks]

QUESTION THREE

- (a) List the four (4) characteristics of an ideal bureaucracy argued by Weber. (8 marks)
- (b) Define efficiency and effectiveness as viewed by Chester Barnard. (12 marks)

[Total: 20 Marks]

QUESTION FOUR

There are several different types of organisations that may be established by someone who wishes to start and then run a business. They include among others sole proprietorship, partnership, private limited companies, public limited companies etc.

Required:

- (a) Define sole proprietorship and state four (4) main features of this type of business (6 marks)
- (b) Explain what a partnership agreement is and outline six (6) comprehensive pitfalls of partnerships. (14 marks)

[Total: 20 Marks]

QUESTION FIVE

Managers that are considered to be effective have the ability to motivate those they work with to behave in a specific, goal-directed way. Motivation can also emanate from within an employee with a passion and desire to work and produce results. This kind of motivation is self-driven by an employee in order to elevate his feelings to accomplish.

Required:

- (a) What is motivation? In your answer also state the two (2) typologies of Motivation. (5 marks)
- (b) State and outline any five (5) main ideas of the pioneers of motivation theories. (10 marks)
- (c) One prominent scholar stated that motivation attempts to explain why individuals choose to follow certain courses of action in organizations. State the name of this scholar and the theory, including the aspects for the strength of an individual's motivation. (5 marks)

[Total: 20 Marks]

QUESTION SIX

One scholar observed and commented that 'a business organisation should have a formal strategy that shows what the business is trying to achieve and how it will co-ordinate its efforts. Within the organisation there are several layers or levels of strategy. For this reason, large companies usually have formal strategic plan, whereas small business might not need one'. Modern organisation has clearly stated mission, vision, goals and objectives.

Required:

- (a) What is a strategy and highlight the three (3) levels of strategy. (6 marks)
- (b) Objectives are more detailed, specific targets of performance that are specific, measurable, attainable, realistic and time bound (S.M.A.R.T.) Describe the five (5) functions for objectives. (10 marks)
- (c) Distinguish between the mission and the vision of an organisation. (4 marks)

[Total: 20 Marks]

END OF PAPER

DA7 PRINCIPLES OF MANAGEMENT

SUGGESTED SOLUTIONS

SOLUTION ONE

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

SOLUTION TWO

a) The importance of the following principles of management is as follows:

- i. **Subordination of individual interest to the general interest.** The interest of the organization should come before individual or group interests. An organization should not allow itself to be subject to the selfish interests of a group or individual.
- ii. **Stability of tenure of personnel.** It takes time for an individual to get used to a new job and to do it well. Employees should therefore be kept in the same job for a reasonably long time and should not be moved continually from one job to another.
- iii. Managers need certain skills in order to be efficient and effective in their work positions. Explain how the following skills may be of help to a manager.
- iv. **Initiative.** Employees at all levels in the organization will perform with more enthusiasm and energy if they are allowed to use their initiative in the work that they do.
- v. **Unity of direction.** in order to provide for unity of action, coordination and focusing of effort, there should be on plan and the same objective for everyone engaged in a particular activity or project.

b) The following may help managers in the following ways:

Technical skills

Managers should have technical competence in the aspects of business that they manage. Many managers acquire a professional qualification, in order to learn technical skills in areas such as accounting, human relations management, marketing, purchasing and engineering. Senior managers also need to develop management skills in planning and control.

Conceptual skills

Managers need to be able to see and understand the complexities of the business and its environment, and to see the various ways of dealing with a problem or achieving an objective. The ability to reach solutions in business calls for conceptual skills operations of the organization including external factors. The ability to reach solutions involves decision making skills.

Social skills: skills in dealing with people

Much of the work of the manager involves dealing with other people, including subordinates, superiors and managers in other departments. A manager requires excellent skills in people management for a variety of reasons:

- a. A manager leads a group of employees and needs to create a motivated team. He needs to persuade subordinates to do what he asks of them, and to do their work efficiently. This requires people skills: a boss cannot rely simply on giving orders and expecting them to be carried out in dealing with managers in other departments, a manager needs to develop a good relationship based on respect and trust, in order to obtain their help and cooperation
- b. In dealing with customers and suppliers, managers need negotiating skills. Success in negotiating often depends on building a relationship of trust.

SOLUTION THREE

- a) The following are the characteristics of an ideal bureaucracy argued by Weber:
- i. There should be a hierarchy of authority, from top management down to the workers at the bottom. Information should flow up the chain of command and instructions and directions should pass down the chain.
 - ii. A bureaucracy should operate in an impersonal and impartial way.
 - iii. Technical competences.
 - iv. Written rules of conduct.
 - v. There should be division of labor and specialization of work.
 - vi. The promotion of individuals within the organization should be based on their achievement. Weber argued that the ideal bureaucracy will perform successfully
- b) The following is the definition of effectiveness and efficiency as viewed by Barnard Chester:
- Barnard viewed effectiveness as relating to the ability of individuals to form the system to achieve stated goals. This requires individuals to remain committed to achieving the intended purpose of the system (organization).
 - Barnard's definition of efficiency concerns the ability of the system (organization) to satisfy the needs and motives of the individuals which make up the system. In essence for an organization to succeed cooperation must be achieved through satisfying the motivations of individuals (workers) and the meeting of organizational goals.
 - Barnard recognized that in order to achieve continued co-operation that the management within organizations must adequately communicate with workers to encourage them to remain with the organization. Barnard also highlighted the need for managers to develop the means by which the needs of individual workers can be satisfied in exchange for their acceptance of organizational goals. The creation of such an environment is the responsibility of management.

SOLUTION FOUR

a)

- This is a business that is owned by one person
- A type of business owned only by one person and is personally responsible for its debts.

Main features of this type of business

- The business is owned by only one person, who provides all the capital that is needed to set it up
- The owner runs the business themselves and take their rewards from profits that the business makes
- It is the simplest type of business organisation to set up
- The owner works in the business but may be assisted by some workers or the family members
- Sole proprietorship is personally liable for all the debts of their business. If the business cannot pay what it owes, the Sole proprietor is liable and must make the payment from his/her personal assets outside the business.
- Sole proprietorship is usually small, although some can be large.

b)

A **partnership agreement** is a legal document that states in writing and sets out the purpose and objectives of the business, the way in which the profits of the business will be shared between the partners, the right of each partner and their obligation to the business.

SIX comprehensive pitfalls of partnership

- Decisions may be delayed by disagreements among partners. Strong disagreement may lead to the break-up of the partnership
- Partners also have unlimited liability for the unpaid debts of the business and are therefore personally liable for the debts of the partnership. Their personal assets may be at risk
- Unless the business is much profited, the restricted number of partners limits the amount of capital that the business can raise for expansion. This is because any new capital, unless it comes from the partners themselves.
- The number of partners is limited to a maximum of 20. This restricts the ability of the partnership to raise capital only in stances of professional partners.
- The loss of a partner through death or resignation may disrupt the business.

- A decision by one partner may be binding on all the other partners even if it is a bad decision. This can make a partnership business risky when one or more of the partners have poor business sense.

SOLUTION FIVE

a) **Motivation** is the reason for people's direction of their actions, willingness and goals. Extrinsic and intrinsic motivation.

Motivation is "a pleasurable or positive emotional state resulting from the appraisal of one's job experiences". Extrinsic and intrinsic motivation.

Motivation represents 'those psychological processes that cause the arousal, direction, and persistence of voluntary actions that are goal directed. Extrinsic and intrinsic motivation.

NOTE: marks can also be awarded provided answers fail within the syllabi and recommended readings

b)

- Abraham Maslow-Hierarchy of Needs
- Frederick Herzberg- Two Factor theory
- Victor Vroom-Expectancy theory
- Douglas McGregor-Theory X and Y
- David McClelland-Theory of Needs
- Likerts-Organisational management styles
- John Stacey *Adams-Equity theory*
- Locke and Latham-Goal setting theory
- Clayton Alderfer – ERG theory: Existence needs, relatedness needs and growth needs
- Burrhus Frederic Skinner-Reinforcement theory

c)

Victor Vroom-Expectancy theory

Expectancy (E), Instrumentality (I), and Valence (V).

SOLUTION SIX

(a) A **strategy**, therefore, is a road map of actions that is drawn up to fulfil a company's mission, goals, and objectives.

A **strategy** is a course of action that is intended to achieve a specified objective with resources that are allocated to it.

A **strategy** is the direction and scope of an organisation over the long term which achieves advantages in a changing environment, through its configuration of resources and competence with the aims of fulfilling stakeholder expectations.

Levels of strategy

- Corporate strategy
- Business strategy
- Functional or operational strategy

NOTE: marks can also be awarded provided answers fall within the syllabi and recommended readings

(b)

P-Planning: Objectives define what a plan is about and what it should be trying to achieve.

R-Responsibility: Objectives define the responsibilities of managers and departments

I-Integration: Objectives should support one another and be consistent with each other, so that the activities and efforts of different department are properly integrated.

M-Motivation: Managers need to know what their objectives are before they can be motivated to achieve them. Objectives must be created for all areas of performance.

E-Evaluation: performance is assessed by comparing actual results with objectives (targets) and where appropriate control measures can be taken

(c) **Mission** is the organisation's overriding purpose; it reflects the values or expectations of stakeholders and answers the question 'what business are we in?' WHILE a **Vision** or strategic intent is the future state desired by the organisation's strategist. They aim to guide the organisation's collective aspiration towards it.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 8: FINANCIAL REPORTING

MONDAY 13 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A

Both questions in this section are compulsory and must be attempted.

QUESTION ONE

On 1 April 2020, Kondwa Plc acquired 80% of Dala Plc.'s equity shares in a share exchange of 4 shares in Kondwa Plc for every 2 shares in Dala Plc. The market price of Kondwa Plc and Dala Plc shares at the date of acquisition were K4.60 and K5.70 respectively.

In addition, Kondwa Plc. agreed to pay a further amount to Dala Plc. on 1 April 2021 that was contingent upon the post-acquisition performance of Dala Plc. the fair value of this contingent consideration was assessed by Kondwa Plc. at 1 April 2020 to be K8.4 million, but by 31 March 2021, the fair value had been reassessed to be K9.072 million.

Kondwa has not recorded the share exchange and contingent consideration in its separate financial statements.

On 1 October 2020, Kondwa Plc. also acquired 35% of the equity shares of Yamiko Plc. paying K3 in cash per acquired share and issuing K200 8% loan note for every 100 shares acquired in Yamiko Plc. All consideration regarding acquisition of shares in Yamiko Plc. has been recorded by Kondwa Plc.

The summarized financial statements of the three (3) companies at 31 March 2021 are as follows:

	Kondwa Plc. K'000	Dala Plc. K'000	Yamiko Plc. K'000
Non current assets			
Property, Plant and Equipment	58,500	32,300	27,000
Investments	<u>16,000</u>	<u>-</u>	<u>-</u>
Total non current assets	<u>74,500</u>	<u>32,300</u>	<u>27,000</u>
Current assets			
Inventories	20,740	5,340	8,000
Trade receivables	16,460	7,860	6,400
Bank	<u>-</u>	<u>2,350</u>	<u>2,850</u>
Total current assets	<u>37,200</u>	<u>15,550</u>	<u>17,250</u>
Total assets	<u>111,700</u>	<u>47,850</u>	<u>44,250</u>
Equity and liabilities			
Equity shares of K1 each	40,000	12,000	8,000
Share premium	14,600	-	-
Retained earnings:			
At 1 April 2020	16,800	17,200	25,000
For the year ended 31 March 2021	<u>12,000</u>	<u>4,000</u>	<u>4,500</u>
Total equity	<u>83,400</u>	<u>33,200</u>	<u>37,500</u>

Non current liabilities

8% loan notes	11,000	6,500	2,000
Deferred tax payable	<u>6,100</u>	<u>3,050</u>	<u>2,750</u>
Total non current liabilities	<u>17,100</u>	<u>9,550</u>	<u>4,750</u>

Current liabilities

Trade payables	8,200	3,000	1,200
Bank overdraft	600	-	-
Taxation payable	<u>2,400</u>	<u>2,100</u>	<u>800</u>
Total current liabilities	<u>11,200</u>	<u>5,100</u>	<u>2,000</u>
Total equity and liabilities	<u>111,700</u>	<u>47,850</u>	<u>44,250</u>

The following information is relevant:

- (i) At the date of acquisition, the carrying amount of Dala Plc.'s property, plant and equipment was equal to its fair values with an exception of Dala Plc's Building which had a fair value of K6 million more than its carrying value. Dala Plc has not yet adjusted its non-current assets as a result of the fair value exercise. The remaining life of the building, on the date of acquisition was 20 years. Dala Plc. uses straight line depreciation for its buildings assuming nil residual value.
- (ii) Kondwa Plc sells goods to Dala Plc and Yamiko at 30% profit margin. Below is a summary of the recorded transactions for the year ended 31 March 2021 and balances as at 31 March 2021:

	Kondwa Plc. Plc. K'000	Dala Plc K'000	Yamiko K'000
Sales to Yamiko Plc.	6,000		
Sales to Dala Plc.	12,000		
Purchases from Kondwa Plc.		11,800	
Purchases from Kondwa Plc.			6,000
Receivable from Dala Plc.	1,800		
Receivable from Yamiko Plc.	700		
Payable to Kondwa Plc.			700
Payable to Kondwa Plc.		1,400	

On 25 March 2021, Dala Plc. remitted to Kondwa Plc. cheques which were not received by Kondwa Plc. until 8 April 2021. This payment accounted for the remaining difference between Kondwa Plc.'s receivables and Dala Plc.'s payables besides goods in transit. Further, a quarter of the goods, out of those dispatched to Dala Plc. and received by Dala Plc. were in inventory at 31 March 2021 while half of the goods sold by Kondwa to Yamiko had been sold to third parties.

- (iii) Kondwa Plc.'s policy is to value the non controlling interest at fair value at the date of acquisition. For this purpose, the share price of Dala Plc. at acquisition date should be used as a reasonable representation of the fair value of the shares held by the non-controlling Interest.
- (iv) Impairment tests conducted on 31 March 2021 revealed that the carrying amount of investment in Yamiko Plc. was impaired by K800,000 and goodwill on acquisition of Dala Plc. was impaired by K1,900,000.

- (v) The other investments of Kondwa are equity investments designated as fair value through profit or loss investments. At 31 March 2021, they had a fair value of K3.5 million.

Required:

- (a) Prepare the consolidated statement of financial position for the Kondwa plc. group as at 31 March 2021. (20 marks)
- (b) Define 'control' per *IFRS 10 'Consolidated Financial Statements'* providing indicators of control in Group of companies. (5 marks)

[Total: 25 Marks]

QUESTION TWO

The draft trial balance below relates to Nsamba limited as at 30 September, 2019

	DR K'000	CR K'000
Revenue (Note i)		290,000
Bank Interest	1,500	
Deferred tax asset (Notes iv)	112,000	
Retained Loss 1 October, 2018	142,000	
Share Capital K1 each		300,000
Share Premium		50,000
Property at Cost (Land K60m, Buildings K140m)	200,000	
Plant and Equipment at cost	120,000	
Accumulated depreciation:		
Buildings		35,000
Plant and Equipment		20,000
Trade receivables	28,000	
Bank		10,000
Trade payables		20,000
Cost of Sales	150,000	
Income tax	10,000	
Administration Expenses	17,000	
Distribution costs	11,000	
10% Loan		50,000
Loan Interest Paid	2,500	
Research and development	20,000	
5% Redeemable Preference shares		100,000
Investment shares in Bahati Limited	30,000	
Inventory 30 September, 2019	31,000	
	875,000	875,000

The following notes are relevant:

- (i) Included within the figure for revenue is a K25 million which relates to goods which Nsamba Plc sold on behalf of Dube Plc a foreign company based in South Africa. Nsamba Plc is entitled to 20% commission on all goods sold on behalf of Dube Plc. Nsamba Plc had only transferred K18 million of the K25 million to Dube Plc as at 30 September, 2019. The K18 million above has been included in the cost of sales figure of Nsamba Plc.
- (ii) On 30 September, 2019 the Directors decided to revalue property to K250 million (K80 million Land, K170 million buildings).
- Company policy requires that buildings should be depreciated on a straight-line basis at 5% per annum and that plant and equipment should be depreciated at 20% on a reducing balance basis.
- All depreciation, amortization and research costs are to be charged to cost of sales.
- (iii) The Directors have estimated that they would be allowed a tax credit of K7 million in the current year. The amount of tax in the trial balance represents an over/under provision from previous year's tax assessment. Nsamba Plc Tax base exceeds the carrying amount of net assets by K310 million. The income tax rate in Nsamba's jurisdiction is 35%.
- (iv) The research and development expenditure includes a K15 million spent on a joint project with BMM Innovations a renowned consultancy firm on the development of a new product. On 30 September 2019, commercial viability for the development project had not been achieved. On 1 April 2019, Nsamba Plc managed to obtain a license to produce a different product which had passed clinical trials at a cost of K5m and was subject to amortization over a period of five (5) years. Production of this product only began on 1 October, 2019.
- (v) The investment in shares in Bahati Limited had a fair value of K29m on 30 September 2019. No adjustment in respect of the change above has been made to the financial statements. Nsamba Limited has classified the investment in shares in Bahati Limited as a FVTPL asset in accordance with IFRS 9.
- (vi) There were no dividends paid during the year.

Required:

- (a) Prepare the statement of profit or loss and other comprehensive income for Nsamba Plc for the year ended 30 September, 2019. (15 marks)
- (b) Prepare a statement of financial position for Nsamba Plc as at 30 September, 2019 (10 marks)

[Total: 25 Marks]

SECTION B

Attempt two (2) questions only from this section.

QUESTION THREE

Chokwe Ltd is a manufacturer and distributor of electrical goods to both business and individual customers who may be local or foreign based. Chokwe Ltd has several outlets from which its products are distributed. The Directors of Chokwe Ltd have recently observed the slow down in business in the year ending 30 September 2020 which they believe is as a result of the effects of COVID 19 pandemic that has seen business activities go down. This has led the Directors to embark on a number of cost saving measures, including reduction in employee numbers, disposal of some excess non-current assets, investing in development of efficient production methods.

The following are financial statements of Chokwe Ltd for the two (2) years ended 30 September 2019 and 2020

Statements of financial position as at 30 September:

	2020	2019
	K'000	K'000
Revenue	7,840	9,610
Cost of sales	<u>(5,242)</u>	<u>(5,878)</u>
Gross profit	2,598	3,732
Administrative expenses	(635)	(890)
Distribution costs	<u>(442)</u>	<u>(584)</u>
Profit from operations	1,521	2,258
Finance costs	<u>(312)</u>	<u>(98)</u>
Profit before tax	1,209	2,160
Income tax	<u>(223)</u>	<u>(405)</u>
Profit for the year	<u>986</u>	<u>1,755</u>

Statement of financial position

	2020	2019
	K'000	K'000
Assets		
Non current Assets		
Property, Plant & Equipment	6,520	8,427
Development Expenditure	<u>670</u>	<u>—</u>
Total non current assets	<u>7,190</u>	<u>8,427</u>
Current assets		
Inventories	840	533
Trade receivables	708	642
Bank	<u>206</u>	<u>54</u>
Total current assets	<u>1,754</u>	<u>1,229</u>
Total assets	<u>8,944</u>	<u>9,656</u>

Equity and liabilities

Ordinary share of K1 each	2,200	1,700
Share premium	675	552
General reserve	1,800	-
Retained earnings	<u>608</u>	<u>3,422</u>
	<u>5,283</u>	<u>5,674</u>
Non current liabilities		
8% loan notes	2,876	1,896
Current liabilities		
Trade payables	305	287
Taxation	<u>480</u>	<u>1,799</u>
Total current liabilities	<u>785</u>	<u>2,086</u>
Total equity and liabilities	<u>8,944</u>	<u>9,656</u>

The extract from the statement of changes in equity for the year ended 30 September 2020 is as follows:

Retained earnings

	K'000
Retained earnings b/f	3,422
Profit for the year	986
Transfer to general reserve	(1,800)
Dividends paid	<u>2,000</u>
Retained earnings c/f	<u>608</u>

The following ratios have been calculated for Chokwe Ltd. for the year ended 30 September 2019:

Gross profit margin	38.8%
Operating profit margin	23.5
Return on capital employed	34.3%
Current ratio	0.60:1
Quick ratio	0.3:1
Inventory days	52 days
Receivables days	24 days
Payables days	18 days
Gearing (debt/debt +equity)	25%
Interest cover	23 times

The following additional information is relevant:

- (i) In March 2020, Chokwe Ltd completed the development of an improved and more efficient production method that would save the company huge production costs partly in the current accounting period and in periods to come.
- (ii) Due to reduced activity level, in August 2020 management of Chokwe Ltd decided to dispose of non-current assets with a carrying value of K1.5 million for 1.9 million on grounds that it was excess at the time. The resulting gain has been recorded in administrative expenses.
- (iii) Due to the COVID 19 pandemic, most of Chokwe Ltd business customers went on temporary closure of their businesses, adversely reducing the demand for electrical goods from Chokwe Ltd. This forced Chokwe Ltd to scale down its workforce in March 2020.
- (iv) The report from the marketing department shows that in the current year, 60% of all customers that did business with Chokwe Ltd are individuals and 40% are businesses.
- (v) During the year to 30 September 2020, Chokwe Ltd paid dividends of K2 million.

Required:

- (a) Calculate the ratios for the year ended 30 September 2020 equivalent to those provided above for the year ended 30 September 2019.
(10 marks)
- (b) Analyse the financial performance and financial position of Chokwe Ltd co for the year ended 30 September 2020 in comparison to year ended 30 September 2019.
(15 marks)

[Total: 25 Marks]

QUESTION FOUR

Pang'ono Ltd. is in transport business. Demand for transport services has increased tremendously to the extent of Pang'ono failing to meet the demand of the various client needs. As a measure to increase capacity, Pang'ono has decided to lease assets.

- (a) (i) On 1 January 2020, Pang'ono Ltd. entered into the following lease agreements:

Leased a motor vehicle at a rental of K200,000 per annum with rentals payable in advance commencing on 1 January 2020. The primary lease term is three years with an optional secondary term of two years. Pang'ono Ltd. is certain to continue leasing the motor vehicle in the secondary period. Pang'ono Ltd. incurred direct costs of K37,575 and received a cash incentives of K7,000 from the lessor for entering into the lease contract.

The motor vehicle is expected to have a useful economic life of seven (7) years with no residual value. The interest rate implicit in the lease is 8% per annum.

The lease contract does not provide for the transfer of ownership of the motor vehicle at the end of the lease term to Pang'ono Ltd. (8 marks)

- (ii) Pang'ono Ltd. Leased personal computers for four years commencing on 1 March 2020. Pang'ono Ltd. paid initial deposit of K600,000 on 1 March 2020 and was to pay annual rental of K250,000 in arrears commencing 28 February 2021. However, Pang'ono Ltd has been exempted by the lessor from paying rent for one year out of the four years lease term. The directors of Pang'ono have decided to treat the lease of personal computers as a lease of low value items in accordance with IFRS 16. (7 marks)

Required:

Explain the accounting treatment of each of the above leases in the books of Pang'ono, for the year ended 31 December 2020 in accordance with the provisions of IFRS 16 leases.

- (b) Pang'ono Ltd.'s assistant accountant has advised management that the estimated tax expense for the current year ending 31 December 2020 is K456,000. However, she previously ignored deferred tax. At 1 January 2020, there was under provision of current tax of K90,000 and Pang'ono Ltd. had deferred tax liability of K180,000 at the same date. However, as at 31 December 2020, Pang'ono Ltd. had temporary taxable differences of K800,000. During the current year, non-current assets were revalued upwards by K240,000 (included in the temporary taxable difference) on which deferred tax is applicable. Other movements on deferred tax are taken to the profit or loss. Pang'ono Ltd.'s tax rate is 35%

Required:

Explain and show the impact of the above transactions on the financial statements of Pangóno Ltd. for the year ended 31 December 2020. (7 marks)

- (c) Briefly explain functional currency in accordance with IAS 21 Foreign currency transactions. (3 marks)

[Total: 25 Marks]

QUESTION FIVE

- (a) Global financial reporting frameworks come in two broad categories: rules and principle-based frameworks. The importance of a financial reporting framework in the modern world cannot be overemphasized because accountants should achieve consensus on the fundamental issues affecting their profession including the recognition, measurement and disclosure of the elements of the financial statements.

If accountants are agreed on the basic principles that underpin financial reporting, public confidence in accounting work can be greatly enhanced. To this day, the attainment of a single comprehensive financial reporting framework remains a wish rather than reality.

Required:

Explain five (5) differences between rules based and a principle based financial reporting systems. (10 marks)

- (b) The objective of IAS 41- agriculture is to establish the principles of accounting for agriculture activity the management of the biological transformation of biological assets into agriculture produce. The standard aims to promote uniformity in the treatment of biological assets.

Required:

- (i) Explain the difference between a biological asset and agriculture produce. (2 marks)
- (ii) Describe a bearer plant and explain its accounting treatment. (3 marks)
- (c) IAS 10 events after the reporting date contains the requirements for when events after the end of the reporting period should be adjusted for in the financial statements. The standard further gives guidance on how to deal with adjusting and non-adjusting events.

Zumba Plc is faced with five events after the reporting date and they need professional advice on how to treat these in the financial statements for the year ended 30 September, 2018. Zumba Plc's financial statements were only approved on 15 December, 2018.

- (i) On 2 October, 2018, a fire gutted one of the warehouses belonging to Zumba Plc and goods worth K1.5 million were destroyed in the infernal
- (ii) Inventory worth K0.5m purchased on 25 September 2018 was written down to K0.3 million on 1 October, 2018 because of depressed consumer demand.
- (iii) A fraudulent scam involving the credit controller and the Finance Manager was discovered to have taken place between 1 and 25 August 2018. The total loss resulting from the fraud is K3.5 million. The loss was discovered on 20 October 2018.
- (iv) On 5 November 2018, one of Zumba's key customers who owed K5 million has filed for bankruptcy and the prospect of receiving any receipts from this customer is possible but unlikely.
- (v) The local currency of Zumba's country has depreciated against major currencies and this means that Zumba will have to pay twice the price of its imported inventory. The Finance Director of Zumba Plc estimates that this development will cost the company K1.7 million.

Required:

Advise Zumba Plc on the appropriate treatment of the events above in accordance with the provisions of IAS 10 events after the reporting date. (10 marks)

[Total: 25 Marks]

END OF PAPER

DAS FINICIAL REPORTING

SUGGESTED SOLUTIONS

SOLUTION ONE

a) **Kondwa plc group consolidated statement of financial position as at 31 March 2021**

	K'000
Non-current assets	
Goodwill (W2)	73,300
Property, plant and equipment(58,500+32,300+5,700 (W4))	96,500
Investments (W7)	3,500
Carrying amount of investment in Yamiko Plc. (W3)	<u>13,673</u>
Total non current assets	<u>186,973</u>
Current assets	
Inventories (20,740 + 5,340 +200 – 945)	25,335
Trade receivables (16,460 + 7,860 -200-1,600)	22,520
Bank (0 + 2,350)	<u>2,350</u>
Total current assets	<u>50,205</u>
Total assets	<u>237,178</u>
Equity and liabilities	
Equity shares of K1 each (40,000 + 19,200 (W10))	59,200
Share premium (14,600+69,120 (W10))	83,720
Retained earnings (W6)	29,796
Non controlling interest ((W8)	<u>14,040</u>
Total equity	<u>186,756</u>
Non current liabilities	
8% loan notes (11,000 + 6,500)	17,500
Deferred taxation (6,100 + 3,050)	<u>9,150</u>
Total non current liabilities	<u>26,650</u>
Current liabilities	
Trade payables (8,200 +3,000 + 200 – 1,600)	9,800
Bank overdraft (600 – 200 cash in transit (W11))	400
Contingent consideration (W9)	9,072
Current tax payable (2,400 + 2,100)	<u>4,500</u>
Total current liabilities	<u>23,772</u>
Total equity and liabilities	<u>237,178</u>

Workings (note that three zeros are knocked off all workings figures)

1. Group structure

Kondwa Plc.



Dala Plc.	Yamiko plc
2. Goodwill on acquisition of Dala Plc.	
Purchase consideration:	
Share exchange (80% x 12,000/2 x 4 x 4.6)	188,320
Contingent consideration	8,400
Fair value of NCI (20% x 12,000 x 5.7)	<u>13,680</u>
	110,400
Less fair value of net assets acquired:	
Share capital	12,000
Pre acquisition retained earnings	17,200
Fair value adjustment p Buildings	<u>6,000</u> (35,200)
Gross goodwill	75,200
Less impairment loss of goodwill	<u>(1,900)</u>
Net goodwill	<u>73,300</u>
3. Carrying amount of investment in Yamiko	
Cost of investment:	
Cash (35% x 8,000 x K3)	8,400
Loan note (35% x 8,000/100 x K200)	5,600
Plus Kondwa Plc.'s share of Yamiko (35% x 2,250)	788
Less PUP (sale by Kondwa to Yamiko (W5))	(315)
Less impairment loss of investment in Yamiko	<u>(800)</u>
	<u>13,673</u>

4. Fair value adjustments			
	At acquisition	movement	at reporting
Buildings	6,000	(300)*	5,700

Depreciation = 6,000/20 years = 300

5. Provision for unrealized profit

- i) On sales by Kondwa Plc. to Dala Plc.
 Goods in transit = 30/100 x K200 = 60
 Goods received = 30/100 x (1/4 x 11,800) = 885
945
- ii) On sales by Kondwa to Yamiko
 30/100 x (1/2 x 6000) = 900 x 35% = 315

For parent associate intra-group trading, only parent's share of associate PUP will be adjusted for in consolidated financial statements hence the 315.

6. Group retained earnings

	Kondwa Plc.	Dala Plc	Yamiko Plc
Per question	28,800	21,200	29,500
Less pre-acquisition retained earnings		(17,200)	(27,250)
Additional depreciation – buildings (W4)		(300)	2,250
PUP – Kondwa to Dala (W5)	(945)	3,700	
PUP – Kondwa to Yamiko (W5)	(315)		
Increase in fair value contingent consideration(672)			
Kondwa's share of Yamiko PARE(35% x 2,250)	788		
Kondwa's share of Dala's PARE (80% x 3,700)	2,960		
Fair value gain of equity instrument (W7)	1,500		
Impairment loss of goodwill (80% x 1,900)	(1,520)		

Impairment loss of CA of invest. In ass.	<u>(800)</u>
Group retained earnings	<u>29,796</u>

7. Equity instrument in Kondwa Plc.

Fair value of Financial asset at 1 April 2020 (16,000-14,000)	2,000
Fair value gain	<u>1,500</u>
Fair value @ 31 March 2021	<u>3,500</u>

8. Non controlling interest

NCI at acquisition	13,680
NCI share of Dala post acquisition Ret Earnings(29% x 3,700)	740
NCI share of impairment loss (20% x 1,900)	<u>(380)</u>
	<u>14,040</u>

9. Contingent consideration at reporting date:

Fair value of Contingent consideration at acquisition	8,400
Movement to retained earnings(bal fig.)	<u>672</u>
Fair value of contingent consideration at reporting	<u>9,072</u>

10. Share exchange values

No of shares issued by Kondwa Plc. = $80\% \times 12,000 / 2 \times 4 \text{ shares} = 19,200$
 To share capital = K19,200 (19,200 shares x \$1)
 To share premium K69,120 (19,200 shares x K3.6)

11. Intra-group balance cancellations

- i) Goods in transit = Dr group inventory 200 Cr Group payables 200
 PUP on goods in transit = Dr Group ret earnings 60 Cr Group inventory 60
 - ii) Cash in transit: Dr Group cash 200 Cr Group receivables 200
 - iii) Cancellations: Dr group Payables 1,600 Cr Group receivables 1,600
- b) According to IFRS 10 consolidated financial statements, 'control is the power to govern the financial and operating policies of an entity so as to obtain benefit from its activities'.

Control is presumed to exist where the investor owns more than half (> 50%) of the voting power of the other entity.

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

- i) Where the investor has power to govern the financial and operating policies of the investee under a statute or agreement.
- ii) Where the investor has power to appoint or remove the majority of the board of directors or equivalent governing board of the investee company.
- iii) Where the investor has power to cast the majority of votes at meetings of the board of directors or equivalent body.

- iv) Where the investor has power over more than half the voting rights by virtue of an agreement with other investors.

SOLUTION TWO

Nsamba Plc Statement of profit or loss for the year ended 31 December, 2019

	K'000
Revenue (190,000-20,000)	270,000
Cost of Sales (W1)	<u>(174,000)</u>
Gross profit	96,000
Distribution costs	(11,000)
Administration Expenses	(17,000)
Loss on financial assets (29000-30000)	<u>(1,000)</u>
Operating profit	67,000
Finance costs [(50,000*10%)+(100000*5%)+1500]	<u>(11,500)</u>
Profit before tax	55,500
Tax (7000-10000-7000-3500)	<u>(6,500)</u>
Profit for the year	49,000
Other Comprehensive income	
Revaluation surplus (W2)	<u>92,000</u>
Total comprehensive income	<u>141,000</u>

Nsamba Plc Statement of financial positions as at 31 December, 2018

	K'000
Non-current assets	
Property plant and equipment	330,000
Investment in Bahati	29,000
Development expenditure	5,000
Differed tax asset (310,000*35%)	<u>108,500</u>
	472,500
Current assets	

Inventory	31,000
Receivables	28,000
Tax credit	<u>7,000</u>
Total current assets	<u>66,000</u>
Total assets	<u>538,500</u>
Equity and liabilities	
Shares Capital K1 each	300,000
Share premium	50,000
Revaluation surplus	92,000
Retained losses (- 142000+49000)	<u>(93,000)</u>
	<u>349,000</u>
Non-current liabilities	
5% preference shares	100,000
10% Loan notes	<u>50,000</u>
	<u>150,000</u>
Current liabilities	
Trade payables	20,000
Owing to Dube (25000-5000- 18000)	2,000
Bank overdraft	10,000
Interest accrued	2,500
Preference dividend accrued	<u>5,000</u>
	<u>39,500</u>
Total equity and liabilities	<u>538,500</u>

-

W1 Cost of Sales	K'000
TB	150,000
Transfer to Dube Limited (Note i)	(18,000)
Depreciation	
Buildings (140,000*5%)	7,000
Plant and Equipment (120,000- 20,000)*20%	20,000
Research costs	15,000
	<u>174,000</u>
W2 property plant and equipment	K'000
Property B/f	200,000
Accumulated depreciation	(35,000)
Year's charge	(7,000)
CV of property at year end	<u>158,000</u>
Revaluation (B/f)	92,000
Revalued amount	<u>250,000</u>
Plant and equipment CV (120000-20000)	100,000
Depreciation (100000*0.2)	(20,000)
CV at year end	<u>80,000</u>
Property plant and equipment	<u>330,000</u>

SOLUTION THREE

a) Calculation of ratios

ITEM	FORMULAR	SUBSTITUTION	YEAR END 30 SEPT 2020 RATIO	YEAR END 30 SEPT 2019 RATIO
GROSS PROFIT MARGIN	GROSS PROFIT REVENUE X 100	2,598/7,840 X 100	33.1%	38.8%
OPERATING PROFIT MARGIN	OPERATING PROFIT/REVENUE X 100	1,521/7,840 X 100	19.4%	23.5%
RETURN ON CAPITAL EMPLOYED	OPERATING PROFIT/CAPITAL EMPLOYED X 100	1,521/5,283 +2,876 X 100	18.6%	34.3%
CURRENT RATIO	CURRENT ASSETS/CURREN T LIABILITIES	1,754/785	2.23	0.60:1
QUICK RATIO	CURRENT ASSETS – INV/CURRENT LIABILITIES	1,754-840/785	1.16:1	0.3:1
INVENTORY DAYS	INVENTORY/COS T OF SALES X 365 DAYS	840/5,242 X 365	58 DAYS	52 DAYS

RECEIVABLES DAYS	RECEIVABLES/RE VENUE X 365 DAYS	708/7,840 X 365 DAYS	33 DAYS	24 DAYS
PAYABLES DAYS	PAYABLES/COS X 365	305/5,242 X 365	21 DAYS	18 DAYS
GEARING	DEBT/DEBT+EQU ITY X 100	2,876/2,876+5,28 3 X 100	35%	25%
INTEREST COVER	OPERATING PROFIT/INTERES T EXPENSE	1521/312	4.9 TIMES	23 TIMES

b) Financial performance

Profitability:

All the profitability ratios deteriorated in the current year 2020. The revenue declined by 18.4% in 2020. This may have been due to Chokwe co customers mostly business customers whose businesses closed down in the current year due to reduced business activities following the outbreak of the COVID 19 pandemic. Further, Chokwe co. may have been tempted to reduce the selling prices of the electrical goods so as to boost the declining demand especially that the majority of customers that did business with Chokwe co. were personal customers (60% of them) whose financial standing is generally poor.

The gross profit margin in 2020 is less than the previous year by 5.7% points. This may have been due to declining revenue following reduced demand or marking down prices of goods.

The operating profit margin has declined from 23.5% to 19.4% basically for the same reasons that led to decreased gross profit margin. If anything, the real operating profit margin in 2020 is worse than 19.4% (14.3% [$1,521-400/7,840 \times 100$]) as it has been boosted by the profit on disposal of non current assets of K400,000 (K1.9 million – K1.5 million) recorded in administrative expenses. It is unlikely that increased operating expenses led to decreased operating profit margin as the operating expenses to revenue ratio decreased in 2020 compared to 2019 from 15.3% to 13.7%.

The primary profitability ratio, the return on capital employed (ROCE) has decreased from 34.3% to 18.6% in 2020. This is same pattern as operating profit margin. The same reasons pointing to decrease in operating profit margin do point to decrease in ROCE. Furthermore, had Chokwe co not disposed of its NCAs and had there been no incurrance of development expenditure, the denominator would have been more by K830,000 (K1.5m-K0.67m) thereby decreasing ROCE to 16.9%. it is therefore concluded that these two one off transactions raised the ROCE artificially.

In addition, its important to note that the effect of development expenditure incurred in 2020 has not yet had positive impact on Chokwe co.'s performance as project was merely completed half way through the accounting period to 30 September 2020. It is hoped that when the more efficient methods of production are implemented for some time, the cost to sales ratios that stand at an increase from 61.2% to 66.9% will reverse and other profitability ratios will improve as well.

Financial position

Liquidity ratios

Both current and quick ratios have shown an improvement in 2020 compared to 2019. Current ratio increased by 1.69 points to 2.23 and quick ratio increased by 0.9 points to 1.20. This is partly attributed to a large cash injection of K1.9 million in 2020 arising from the disposal of NCA as well as arising from the increase in both inventory and receivables. While current and quick ratios of 1:1 is ideal, the changes to 2.23 and 1.2 may not be very good but a sign of inefficiency in working capital management of failure to sell goods on time and failure to collect cash from credit customers on time. This is evidenced by the increase in inventory days from 52 days in 2019 to 58 days in 2020 and increase in receivables days from 24 days in 2019 to 33 days in 2020. For Chokwe co., inefficient management of working capital is likely a contributing factor to high inventory and receivables days.

The cash balance has increased in 2020 from K54,000 to K206,000 partly due to disposal of NCAs, then more loans acquired in the current year as well as proceeds from the sale of shares. These sources of funds may have helped with payments of dividends of K2,003 in the current year. However, it does not present well for cash management to pay out dividends that are well in excess of profit for the year and the low cash balance currently.

Gearing ratios

The gearing ratio itself has risen in the current year by 10% points from 25% to 35%. This is as a result of more loans that were issued by Chokwe co during 2020 to cushion the negative impact of poor cashflows from working capital management. Further, Chokwe's rising loans may have been timely as it embarked on development of more efficient production methods that needed further finance.

As a result of increased finance through loans, finance costs have increased by 218% with decreasing profitability, thereby causing decrease in interest cover from 23 times to 4.9 times.

Conclusion

The performance of Chokwe co has generally deteriorated in 2020 compared to 2019 as indicated by all profitability ratios and gearing ratios. The little improvement in current and quick ratios are as a result of the one off transactions such as share issue, disposal of NCAs, loan acquisition etc. working capital management was poor leading to increased inventory and receivables days hence inability to settle short term obligations of payables.

SOLUTION FOUR

- a) i) The motor vehicle is a Right of Use Asset obtained under lease arrangement hence it will require to be capitalized by Pangóno Ltd. at its present value of future payments plus any payment made at inception, that is;

the asset will initially be recognized @ **K898,000 (w2)** and subsequently depreciated using the shorter of useful life and lease term which in this case is five years. This is because the lease contract does not provide for possible transfer of ownership of asset to the lessee at the end of the lease term.

The lease term has two different periods, that is, primary period of three years and secondary period of two years. Due to certainty by lessee to continue leasing asset for the optional secondary term, the precise years to be taken for lease term is five, and this is shorter than the useful life of the asset, hence used for depreciation. Depreciation expense of **K179,600 (W2)** will therefore be charged to the statement of profit or loss for the year ended 31 December 2020. The carrying amount to be taken to the statement of financial position as at the same date will be **K718,400 (W2)**.

Meanwhile, the initial measurement of the lease liability is **K662,425 (W1)** with subsequent measurement split into non current liability and current liability of **K515,419** and **K200,000** respectively (W4). Finance cost of **K52,994** will be charged to profit and loss for the year.

Summary of financial statement entries for the year

Profit and loss

Finance cost	52,994
Depreciation expense	179,600

Summary of statement of financial position

Non current assets

ROUA	718,400
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Non current liability

Lease obligation	515,419
------------------	---------

Current liability

Lease obligation	200,000
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- ii) low value assets do not get capitalized by the lessee but an appropriate value of a rental charge needs to be recognized in the statement of profit or loss each year on a prorate basis.

For Pangóno Ltd., total amount payable over the entire four year period would be:

Deposit	600,000
Annual rental (x4 yrs)	1,000,000
Less rent free	(250,000)
	1,350,000/ 4 years K337,500 per annum payable.

As Pang'ono Ltd. leased the personal computers effective 1 March 2020, only **K281,250 (337,500 x 10/12)** will be expensed in profit or loss for the year ended under review.

Further, at 31 December 2020, total of **K600,000** only would have been paid, which is in excess of amount payable by K318,750 (600,000 – 281,250) to be taken as current asset in the statement of financial position.

Summary of financial statement entries

Profit or loss	
Lease rental	281,250

Statement of financial position

Lease rental prepaid	318,750
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- b) The current tax under provision in the previous year reduces the current tax charge to profit and loss to **K150,000 (240,000-90,000)**. The deferred tax liability in total at 31 December 2020 would be **K280,000 (35% x 800,000)**. This is compared with the deferred tax liability **of K180,000** at the beginning, giving the total movement of **K100,000** (expense). Of the total movement in deferred tax, K84,000 (35% x K240,000) relates to revaluation gain of non current assets while the balance of **K16,000** will be a charge to the profit and loss.
- c) According to IAS 21 Foreign currency transactions, a functional currency is a currency of the country in which the company is located and in which they carry out most of their transactions. In addition, functional currency is currency that influences sales prices for goods and services an entity deals in. it is the currency that influences labour, material and other costs of providing goods and services.

WORKINGS

1. PV of future lease payments

Year 1	$200,000/1.08^1 = 185,185$
Year 2	$200,000/1.08^2 = 171,468$
Year 3	$200,000/1.08^3 = 158,766$
Year 4	$200,000/1.08^4 = 147,006$
	<u>662,425</u>

2. Initial measurement of Cost of ROUA

Initial measurement of liability (W1)	662,425
+ direct costs	37,575
- Incentives	(2,000)
+ initial rental at commencement	<u>200,000</u>
Total	<u>898,000</u>

3. Depreciation of ROUA

$898,000/5 \text{ years} = 179,600$
<u>CA 718,400 (898,000 – 179,600)</u>

4. Lease obligations table

	Bal b/f	rental	subtotal	interest	bal c/f
Year ended 31/12/20	-	-	662,425	52,994	715,419
Year ended 31/12/20	715,419	(200,000)	515,419	41,234	556,653

SOLUTION FIVE

- a) The four bases of measurements according to the IASB's Conceptual Framework for financial reporting are as follows:

Historic cost

Historic cost would typically reflect the cost of acquiring or creating an asset or taking on a liability, with both measures being adjusted for transaction costs. Over time, historical cost is further adjusted to reflect for example the consumption of an asset or the fulfilment of part or all of a liability. It is described as an entry value.

Current cost

Assets are carried at the amount of cash that would have to be paid if the same or an equivalent asset was acquired currently. Liabilities are carried at the amount of cash that would be required to settle the obligation currently.

Fair value

Fair value for example reflects a price that would be received or paid for selling an asset or transferring a liability from the perspective of market participants.

Present value

Assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate. Liabilities are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities.

b) i) Historic cost	K'000
Cost	6,750
Less 6 years dep'n (10% \times 6750 \times 6 yrs)	<u>(4,050)</u>
Carrying amount at 31 March 2020	<u>2,700</u>

ii) Current cost	K'000
Cost	6,900
Less 6 yrs dep'n (10% \times 6,900 \times 6 yrs)	<u>(4,140)</u>
	<u>2,760</u>

iii) Fair value	
Sales value	4,000
Less costs to sell	<u>(600)</u>
Net fair value	<u>3,400</u>

iv) Present value			
	Cash flows	discount factor	Present value
Year 1	2,150,000(2500-350)	0.926	1,990,900
Year 2	1,550,000	0.857	1,328,350

Year 3	1,900,000	0.794	1,508,600
Year 4	2,200,000	0.735	<u>1,617,000</u>
Total as building value			<u>6,444,850</u>

c) Five disadvantages of historic cost accounting

- Carrying amount of non current assets is often substantially below the current value.
- As carrying amounts of assets will be lower, depreciation expenses will be unusually low in such a way that calculated profits will be overstated.
- The effect of increasing prices of goods in general is not taken into account and hence value tends to be understated. This means customers benefit while suppliers lose out.
- The overstatement of profit and understatement of assets prevent a meaningful calculation of ROCE.
- All statement of profit or loss expenses do not reflect the current value of assets consumed hence profit is overstated.

SOLUTION FIVE

a) Differences between rules based and principle-based accounting frameworks

Rules based framework

- Uses detailed (prescriptive cook book) rules as a guide in the treatment of financial transactions and events.
- Rules tend to be rigid or inflexible. They are designed to address specific situations.
- Rules are meant to be applied with little or no usage of judgement.
- Rules require full compliance with stipulated provisions. Non-compliance with one rule may not be acceptable here.
- In cases of litigation, the Accountant under a rules-based framework can be easily exonerated if it is proven that adequate compliance with rules was achieved.
- Rules based framework may not be responsive to changes in the economic environment.
- Depending on interpretation, rules can promote fraudulent reporting partly because of emphasis on compliance rather than the provision of reliable information.

Principle based framework

- Employs principle-based approach to the treatment of financial transactions and events.
- Principles tend to be flexible and can be applied in different but similar circumstances.
- Principles leave the preparer of financial statements with enough room to use judgement in areas where an applicable standard may prove to be insufficient.
- In a principle-based framework, preparers can comply or explain why a standard or provision was not applied.
- An Accountant who is using principle-based accounting standards may find it difficult to defend themselves in litigation cases because their final decision on the treatment of a business transaction is heavily influenced by their professional judgement.
- Principle based frameworks tends to be open to progressive ideas of accounting.
- Principles are thought to be harder to circumvent because emphasis is placed on the commercial reality of a financial transaction.

Part (b) (i)

- IAS 41 agriculture defines a biological asset as a living plant or animal. Example of biological assets include a living cow, living pig, maize plant before harvest etc.
- Agricultural produce is the harvest product of the entity's biological assets, for example, milk and coffee beans.

Part (b) (ii)

- Bearer plants are plants which are expected to be used by an entity for agriculture produce for more than one accounting period. (e.g. orange tree, lemon tree) bearer plant
- A bearer plant is normally used in the production or supply of agricultural produce and is expected to bear fruit for more than one period. This plant has a remote likelihood of being sold or disposed.
- Such plants resemble in many ways property plant and equipment. The plant is not held for sale but is rather held for the production of agriculture produce.
- Further, IAS 41 states that the produce of a bearer plant must be measured at FV and the bearer plant itself (trunk, vine) should be measured at either cost or fair value.

Part C

- The loss of inventory worth K1.5 million resulting from the fire is not an adjusting event for the reporting period ended 30 September, 2018. This loss should be recognised in the year ended 30 September, 2019. However, a disclosure of fire accident to be made in the notes to accounts for year ending 2018.
- The inventory write-down of K0.5 million is an adjusting event as there is evidence of its existence on 30 September, 2018. This loss should be recognised in the financial statements for the year ended 30 September, 2018.
- The loss of K3.5 million resulting from fraudulent activities which took place in the reporting period is to be treated as an adjusting event and recognised as such in the financial statements.
- The irrecoverable debt of K5 million is an adjusting event as it relates to a receivable balance held at the year end.
- Losses resulting from forex movements are normally treated as non-adjusting events. Therefore, the K1.7 million loss will be recognised in the year ended 30 September, 2018.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 9: MANAGEMENT ACCOUNTING

TUESDAY 14 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:

Section A: There are two (2) compulsory questions.
Section B: There are three (3) questions. Attempt any two (2) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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

SECTION A – TWO (2) COMPULSORY QUESTIONS

Attempt Both questions in this section.

QUESTION ONE

- (a) Twin Pam Limited a small company situated in the city of Lusaka wishes to calculate an operating budget for the forthcoming period. Information regarding products, costs and sales levels is as follows:

Product	W	Y
Materials required:		
A (Kg)	3.0	4.5
B (Litres)	1.5	6.0
Labour hours required:		
Skilled (hours)	6.0	3.0
Semi-skilled (hours)	3.0	7.5
Sales level (units)	3,000	2,250
Opening inventory (units)	150	200

Closing inventory of materials and finished goods will be sufficient to meet 10% of demand. Opening inventory of material A was 450 kg and for material B was 1,500 litres. Material prices are K15 per kg for material A and K10.50 per litre for material B. Labour costs are K18 per hour for the skilled workers and K12 per hour for the semi-skilled workers.

Required:

Prepare the following budgets:

- | | | |
|-------|---------------------------------------------|-----------|
| (i) | Productions (units) | (2 marks) |
| (ii) | Materials usage (kgs and litres) | (3 marks) |
| (iii) | Materials purchases (kgs, litres and value) | (3 marks) |
| (iv) | Labour (hours and value) | (2 marks) |
- (b) Petauke Limited has recently spent some time researching and developing a new product for which they are trying to establish a suitable price. Previously they have used cost plus 25% to set the selling price.

The standard cost per unit has been estimated as follows:

	K
Direct materials	
Material T (6kg @K3.75 per kg)	22.50
Material P (1.5kg @K10.50 per kg)	15.75
Direct labour (3 hours @ K9.75 per hour)	29.25
Fixed overheads (3 hours @ K1.75 per hour)	<u>5.25</u>
Standard cost per unit	<u>72.75</u>

Required:

Calculate the suitable cost plus prices using:

- (i) Full cost plus pricing (3 marks)
- (ii) Marginal cost plus pricing (3 marks)
- (iii) State two (2) advantages and two (2) disadvantages of each of the pricing methods above. (4 marks)
- (iv) Explain two (2) possible pricing strategies that could be adopted in pricing the product by Petauke Limited. (5 marks)

[Total: 25 Marks]

QUESTION TWO

The summarized Statement of Income and Expenditure for Majoza PLC for the previous year is as follows:

	K'000	K'000
Sales (50,000 units)		1,000
Direct materials	350	
Direct wages	200	
Fixed production overheads	200	
Variable production overheads	50	
Administrative overheads	180	
Fixed selling and distribution overheads	120	<u>1,100</u>
Profit/(loss)		<u>(100)</u>

At a recent board meeting the directors discussed the year's results, following which the chairman asked for suggestions to improve the situation.

Required:

Evaluate the following alternative proposals and to comment on each:

- (a) Pay salesmen a commission of 10 % of sales and thus increase sales to achieve break-even point. (4 marks)
- (b) Reduce selling price by 10%, which it is estimated would increase sales volume by 30%. (3 marks)
- (c) Increase direct wage rates from K4 to K5 per hour, as part of a productivity pay deal. It is hoped that this would increase production and sales by 20%, but advertising costs would increase by K50,000. (4 marks)

(d) Increase sales by additional advertising of K300,000, with an increased selling price of 20%, settling a profit margin of 10%. (Comment to include the calculation of the revised sales volume). (8 marks)

(e) Explain five (5) limitations of breakeven analysis. (6 marks)

[Total: 25 Marks]

SECTION B

There are **THREE (3)** questions in this section. Attempt any two (2) questions.

QUESTION THREE

Easy Cycle (EC) Ltd produces and sells three types of bicycle; Mountain, Sports and Eagle, using highly qualified and skilled workforce. The company is in its second year of operation and has no system in place to provide information for planning, control and performance measurement.

Recently, the Managing Director attended a workshop on the benefits of a standard costing system in an organization such as EC Ltd and has now ordered its implementation.

The sales and contribution for the company's three types of bicycle in the previous year were as follows:

Budgeted data:

Bicycle	Sales volume Units	Sales revenue K	Variable costs K	Contribution K
Mountain	1,200	900,000	456,000	444,000
Sports	1,680	1,344,000	756,000	588,000
Eagle	1,920	1,248,000	633,600	614,400

Actual results:

Bicycle	Sales volume Units	Sales revenue K	Variable costs K	Contribution K
Mountain	1,310	930,000	458,500	471,500
Sports	1,890	1,587,600	869,400	718,200
Eagle	1,800	1,242,000	612,000	630,000

Required:

(a) Calculate the following variances:

- (i) Total sales price variance (3 marks)
- (ii) Total sales volume contribution variance (3 marks)
- (iii) Total sales mix contribution variance (4 marks)

- (iv) Total sales quantity contribution variance (4 marks)
- (b) Describe how standard costing operates. (6 marks)
- (c) Outline five (5) objectives of a standard costing system. (5 marks)

[Total: 25 Marks]

QUESTION FOUR

Munzuma Plc, a machine intensive manufacturing company situated in the Southern province of Zambia intends to introduce a high technology product in response to the market dynamics. Major proportion of the product’s cost will depend on the decisions made early in its lifecycle. The product will face competition from four major brands already on the market.

The Managing Director, Mr Sifuniso Dube, has just attended a seminar organized by ZICA which covered modern management accounting techniques such as lifecycle costing, JIT system, backflush and throughput accounting etc. He now wishes to implement the knowledge acquired in order to maximise return over the product’s lifecycle.

Required:

- (a) Explain four (4) ways Munzuma Plc can maximise the return over its product’s life cycle. (8 marks)
- (b) Describe eight essential elements of JIT system. (12 marks)
- (c) State possible ways of improving throughput accounting ratio of a product. (5 marks)

[Total: 25 Marks]

QUESTION FIVE

BMK Ltd is a Zambian company that sells goods solely within Zambia. The recently appointed Management Accountant of BMK Ltd has been investigating the working capital management of the company and has gathered the following information:

Inventory management

The current policy is to order 100,000 units when the inventory level falls to 35,000 units. Forecast demand to meet production requirements during the next year is 625,000 units. The cost of placing and processing an order is K250, while the cost of holding a unit in stores is K0.50 per unit per year. Both costs are expected to be constant during the next year. Orders are received two weeks after being placed with the supplier. You should assume a 50- week year and that demand is constant throughout the year.

Accounts receivable management

Domestic customers are allowed 30 days' credit, but the financial statements of BMK Ltd shows that the average accounts receivables period in the last financial year was 75 days. The Management Accountant also noted that bad debts as a percentage of sales, which are all on credit, increased in the last financial year from 6% to 10%.

Required:

- (a) Identify the objective of working capital management and discuss the conflict that may arise between them. (5 marks)
- (b) Calculate the cost of the current ordering policy and determine the saving that could be made by using the economic order quantity model. (10 marks)
- (c) Discuss ways in which BMK Ltd could improve the management of domestic accounts receivables. (10 marks)

[Total: 25 Marks]

END OF PAPER

DA 9 MANAGEMENT ACCOUNTING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Prepare of budgets

(i) Production Budgets (units)

Product	W	Y
	Units	Units
Sales	3,000	2,250
Less opening inventory	(150)	(200)
Add closing inventory	<u>300</u>	<u>225</u>
Production budget	<u>3,150</u>	<u>2,275</u>

(ii) Material Usage Budget (Kgs and Litres)

Product	Material A Kgs	Material B Litres
W (3,150 units)	x 3kgs = 9,450	x 1.5kg = 4,725
Y (2,275 units)	x 4.5 kgs = <u>10,237.5</u>	x 6 kgs = <u>13,650</u>
	<u>19,687.5</u>	<u>18,375</u>

(iii) Material Purchases Budget (Kgs, Litres and value)

	Material A Kgs	Material B Litres
Usage Budget	19,687.5	18,375
Less opening inventory	(450)	(1,500)
Add closing inventory	<u>1,968.75</u>	<u>1,837.50</u>
Purchases in quantity	21,206.25	18,712.50
Price	K15/kg	K10.50/ltr
Purchases cost (K)	<u>318,093.75</u>	<u>187,125.00</u>

(iv) Labour Budget (Hours and Value)

Product	Skilled Hours	Unskilled Hours
W (3,150 units)	x 6 hrs = 18,900	x 3 hrs = 9,450
Y (2,275 units)	x 3hrs = <u>6,825</u>	x 7.5 hrs = <u>17,062.5</u>
Total Hours	25,725	26,512.50
Rate per hour	x K18	x K12
Labour Costs	<u>K463,050</u>	<u>K318,150</u>

(b) (i) Full cost plus pricing

	K
Direct material T	22.50
Direct material P	15.75
Direct labour	29.25
Fixed overheads	<u>5.25</u>
Total costs	72.75
Profit @25%	<u>18.19</u>
Selling price	<u>90.94</u>

(ii) Marginal cost plus pricing

	K
Direct material T	22.50
Direct material P	15.75
Direct labour	<u>29.25</u>
Variable costs	67.50
Profit @25%	<u>16.89</u>
Selling price	<u>84.39</u>

(iii) Advantages and disadvantages of full cost plus pricing and marginal cost plus pricing include:-

Full cost plus pricing

Full cost-plus pricing is a method of deciding the sales price by adding a percentage mark-up for profit to the full cost of the product. The benefits of this pricing approach include:-

- Quick, simple and cheap
- Logical approach
- Cover all of its fixed costs and make a profit

The disadvantages of full cost plus include:-

- It fails to recognize a profit-maximizing combination of price and demand.
- Uncompetitive prices in free market economy
- Budgeted output volume needs to be established
- A suitable basis for overhead absorption must be selected

Marginal cost plus pricing

Marginal cost-plus pricing, also called mark-up pricing, involves adding a profit margin to the marginal cost of the product. The benefits of this pricing method are:-

- It is a simple and easy method to use.
- The mark-up percentage can be varied and adjusted to reflect demand conditions.

- It draws management attention to contribution, and the effects of higher or lower sales volumes on profit.

Disadvantages of marginal cost plus pricing are:-

- Sufficient attention is NOT paid to demand conditions, competitors' prices and profit maximization.
- It ignores fixed overheads and sales volumes in the pricing decision.
- It completely ignores the possible effect of the selling price on the level of demand.

- (iv) Two possible pricing strategies that could be adopted in pricing the product by Petauke limited are penetration pricing and skimming.

Penetration Pricing

Penetration pricing is a policy of low prices when a product is first launched in order to obtain strong demand for the product as soon as it is launched on the market. Low prices should encourage bigger demand

Price skimming

Price skimming involves charging high prices when a new product is first launched on the market, in order to maximize short-term profitability. Initially there is heavy spending on advertising and sales promotion to encourage sales demand. As the product moves into the later stages of its life cycle (growth, maturity and decline), progressively lower prices are charged.

SOLUTION TWO

Workings	(K'000)
Sales	1,000
Variable costs	<u>600</u>
Contribution	400
Fixed costs	<u>500</u>
Profit /Gloss	(100)

Unit selling price = K20 (K1m/50,000)

Unit variable cost = K12 (600,000/50,000)

Unit contribution = K8

(a) Sales commission will be K2 per unit, thus reducing the contribution per unit to K6. The break-even point will be 83,333 units (K500,000/K6) or K1,666,666 sales value.

This requires an increase of 67% on previous sales and the company must assess whether or not sales can be increased by such a high percentage

(b) A 10% decrease in selling price will decrease the selling price by K2 per unit and the revised unit contribution will be K6

	K
Revised total contribution (65,000 x K6)	390,000
Less fixed costs	<u>500,000</u>
	(110,000)

The estimated loss is worse than last year and the proposal is therefore not recommended

(c) Wages will increase by 25% that is from K200,000 to K250,000 causing output to increase by 20%

	K
Sales	K1,200,000
Direct materials and variables	
Overheads	480,000
Direct wages	<u>250,000</u>
Contribution	470,000
Less fixed costs	<u>550,000</u>
Less fixed costs profit/loss	(80,000)

This represents a better situation of K20,000 on last year's loss of K100,000

(d) Revised selling price = K24

Let X = Revised sales volume

Therefore, sales revenue less (variable costs + fixed costs) = profit

$$24X \text{ less } (12X + 800,000) = 0.1 (24X)$$

$$\text{Therefore, } 9.6 X = 800,000$$

$$\text{Therefore, } X = 83,333 \text{ units}$$

Clearly this proposal is preferable since it is the only proposal to yield a profit. However, the profitability of increasing sales volume by approximately 67% plus the risk involved from increasing fixed costs by K300,000 must be considered.

(e) Limitations of breakeven:

- It assumes that fixed costs are the same in total at all levels of output.
- It assumes that variable costs per unit are same at all levels of output
- Sales price are assumed constant at all levels of activity.
- Production and sales are assumed to be the same.
- It assumes that only one product is produced and sold or a constant mix

SOLUTION THREE

(a) Sales variances

(i) Total sales price variance

	Mountain K	Sport K	Eagle K
Actual sales should have been (1,310 x K750: 1,890 x K800: 1,800 x K650)	982,500	1,512,000	1,170,000
But was	<u>930,000</u>	<u>1,587,600</u>	<u>1,242,000</u>
Sales variance	<u>52,500 (A)</u>	<u>75,600 (F)</u>	<u>72,000 (F)</u>
Total sales price variance		<u>K95,100 (F)</u>	

(ii) Sales volume margin variance

	Mountain	Sports	Eagle
Budgeted sales units	1,200	1,680	1,920
Actual sales units	<u>1,310</u>	<u>1,890</u>	<u>1,800</u>
Sales volume variance(units)	110	210	120
X standard margin per unit (K)	<u>370</u>	<u>350</u>	<u>320</u>
Sales volume margin variance (K)	<u>40,700 (F)</u>	<u>73,500 (F)</u>	<u>38,400 (A)</u>
Total sales volume contribution variance		<u>K75,800 (F)</u>	

(iii) Sales mix contribution variance

Total quantity sold	(1,310 + 1,890 + 1,920)	Bicycles <u>5,000</u>
Budgeted mix for actual sales:		
Mountain	<u>1,200</u> x 5,000 4,800	1,250
Sport	<u>1,680</u> x 5,000 4,800	1,750
Eagle	<u>1,920</u> x 5,000 4,800	2,000
		<u>5,000</u>

	Mountain	Sports	Eagle
Actual quantity in standard mix	1,250	1,750	2,000
Actual quantity in actual mix	<u>1,310</u>	<u>1,890</u>	<u>1,800</u>
Difference	(60)	(140)	200
X standard contribution per unit (K)	<u>370</u>	<u>350</u>	<u>320</u>
Sales mix contribution variance (K)	<u>22,200 (F)</u>	<u>49,000 (F)</u>	<u>64,000 (A)</u>
Total sales mix contribution variance		<u>K7,200 (F)</u>	

(iv) Sales quantity contribution variance

	Mountain	Sports	Eagle
Actual sales in standard mix	1,250	1,750	2,000
Standard sales in standard mix	<u>1,200</u>	<u>1,680</u>	<u>1,920</u>
Difference	50	70	80
X standard contribution per unit (K)	<u>370</u>	<u>350</u>	<u>320</u>
Sales quantity margin variance (K)	<u>18,500</u> (F)	<u>24,500</u> (F)	<u>25,600</u> (F)
Total sales quantity contribution variance		<u>K68,600</u> (F)	

(b) Standard costing is most suited to an organization whose activities consist of a series of repetitive operations and input required to produce each unit of output can be specified. It involves the following:

- Recording of the standard costs for the actual output for each operation for each responsibility centre.
- Tracing actual costs to each responsibility centre.
- Comparing standard and actual costs.
- Investigating variances and taking corrective action where appropriate.
- Monitoring and adjusting standards to reflect changes in standard usage and/or process.

(c) Objectives of standard costing include:

- Providing a prediction of future costs that can be used for decision-making.
- Providing a challenging target which individuals are motivated to achieve.
- Providing a reliable and convenient source of data for budget preparation'
- Acting as a control device by highlighting those activities that do not conform to plan and thus alerting managers to those situations that may be out of control and in need of corrective action.
- Simplifying the task of tracing costs to products for profit measurement and inventory valuation purposes.

SOLUTION FOUR

- (a) In order for Munzuma Plc to maximise the return over its product's life cycle, the following steps may be appropriate:
- (i) Product costs should be designed out: At the product design or development stage, a careful design of the product will cut down on the costs since between 70% and 90% of the product's lifecycle costs are determined by the decisions made early in the life cycle. Careful manufacturing and following the due process will further keep cost to a minimum over the life cycle.
 - (ii) Minimize the breakeven time: A short breakeven time is critical in keeping an organization liquid. Funds for development of further products will be made available the sooner the product is launched and the quicker the payback is met.
 - (iii) Maximise the length of the life span: The product life cycle is primarily determined by actions of management and competitors. When the product reaches the maturity stage, generally demand slows down. At this stage management should become keen in minimizing elasticity. Therefore, product have to be differentiated in order to maintain their position in the market and new users for the mature product need to be found to keep demand high.
 - (iv) Minimise the time to market: Minimise the time from conception to product launch so as to get it to the market place as soon as possible.
- (b) Essential elements of JIT system
- (i) Flexible resources: Its necessary to have a multifunctional labour force. These are employees who are versatile and adequately able to handle pressure.

There is also need to have general purpose machines in order to have a flawless system.
 - (ii) Cellular layouts: dissimilar machines must be grouped together in manufacturing cells to produce a family of parts. Work should flow in one direction through a cell.
 - (iii) Pull production system: Raw materials and parts need to be bought as near as possible to the time they are required, using small frequent deliveries against bulk contracts.
 - (iv) Kanban production control: A pull system where production or movement of the next batch of material is not started until the user signals a need for it.
 - (v) Small-lot production: This requires less space and capital investment and enables easier detection of quality problems.
 - (vi) Quick set-ups: Machine set-ups are non-value-added activities as such should be reduced or even eliminated.

- (vii) Uniform production: All parts of the productive process should be operated at a speed which matches the rate at which the final product is demanded by the customers.
 - (viii) Quality at the source: In order to have continuous production flow and avoid late deliveries to customers, production management should seek to eliminate scrap and defective units during production. They should also avoid the need for reworking of units.
 - (ix) Total productive maintenance: Preventative maintenance is critical in production to keep machines fully maintained. This enhances reliability and promptness of the productive systems without unforeseen delays and breakdowns.
 - (x) Supplier networks: The responsibility for quality of goods lies with the supplier in a JIT environment. It is therefore important that a close relationship with suppliers is maintained.
- (c) Throughput accounting ratio of a product can be improved by:
- (i) Increasing the selling price. This should be carefully done to avoid tough price competition resulting in low sales.
 - (ii) Identifying the bottleneck and improving efficiency at the bottleneck possibly through workflow optimization and more training.
 - (iii) Reducing factory costs. This requires investigations to determine possible ways of making cost savings like outsourcing certain aspects.
 - (iv) Reducing material cost by seeking cheaper alternative suppliers without compromising quality as this can affect the quality of the final product and may increase the risk of breakdown in production.
 - (v) Bulk purchasing where cost savings from bulk purchase discounts are not outweighed by the cost of holding inventory.

SOLUTION FIVE

a) The objective of working capital management is profitability and liquidity. The objective of profitability supports the primary financial management objective, which is shareholders wealth maximization. The objective of liquidity ensures that companies are able to meet their liabilities as they fall due, and remain in business.

However, funds held in form of cash do not earn a return, while near- liquid assets such as short- term investments earn only a small return. Meeting the objective of liquidity will therefore conflict with the objective of profitability, which is met by investing over the longer term in order to achieve higher returns.

Good working capital management therefore needs to achieve a balance between the objectives of profitability and liquidity if shareholder wealth is to be maximized.

b) Cost of current ordering policy of BMK Co

Ordering cost = $K250 \times (625,000/100,000) = K1, 563$ per year.

Weekly demand = $625,000/50 = 12,500$ units per week

Consumption during 2 weeks lead time = $12,500 \times 2 = 25,000$ units

Buffer stock = $35,000 - 25,000 = 10,000$ units

Average stock held during the year = $10,000 + (100,000/2) = 60,000$ units

Holding cost = $60,000 \times K0.50 = K30, 000$ per year

Total cost = $K1,563 + K30,000 = \mathbf{K31,563}$ per year.

Economic order quantity = $((2 \times 250 \times 625,000)/0.5)^{1/2} = 25,000$ units.

Number of orders per year = $625,000/25,000 = 25$ per year.

Ordering cost = $K250 \times 25 = K6, 250$ per year

Holding cost = $0.50 \times (10,000 + 12,500) = K11,250$ per year

Total cost of EOQ- based ordering policy = $K6, 250 + K11, 250 = \mathbf{K17, 500}$ per year.

Saving for BMK Co by using EOQ based policy = $K31, 563 - K17, 500 = \mathbf{K14, 063}$ per year.

b) The information gathered by the management accountant of BMK Co indicates that two areas of concern in the management of domestic accounts receivable are the increase of bad debts as a percentage of credit sales and the excessive credit period taken by credit customers.

Reducing bad debts

The incidence of bad debts, which has increased from 6% to 10% of credit sales in the last year, can be reduced by assessing the creditworthiness of new customers before offering them credit and BMK Co needs to introduce a policy detailing how this should be done, or review its existing policy, if it has one, since it is clearly not working very well. In order to do this, information about the solvency, character and credit history of new clients is needed. This information can come from a variety of sources, such as bank references, trade references and credit reports from credit reference agencies. Whether credit is offered to the new customer and the terms of the credit offered can then be based on an explicit and informed assessment of default risk.

Reduction of average accounts receivable period

Customers have taken an average of 75 days credit over the last year rather than the 30 days offered by BMK Co. i.e. more than twice the agreed credit period. As a result, BMK Co will be incurring a substantial opportunity cost, either from the additional interest cost on the short-term financing of accounts receivable or from the incremental profit lost by not investing the additional finance tied up by the longer average accounts receivable period. BMK Co needs to find ways to encourage accounts receivable to be settled closer to the agreed date.

Assuming that the credit period offered by BMK Co is in line with that of its competitors, the company should determine whether they too are suffering from similar difficulties with late payers. If they are not, BMK Co should determine in what way its own terms differ from those of its competitors and consider whether offering the same trade terms would have an impact on its accounts receivable. For example, its competitors may offer a discount for early settlement while BMK Co does not and introducing a similar accounts receivable problem, BMK Co could take the initiative by introducing more favorable early settlement terms and perhaps generate increased business as well as reducing the average accounts receivable period.

BMK Co should also investigate the efficiency with which accounts receivable are managed. Are statements sent regularly to customers? Is an aged accounts receivable analysis produced at the end of each month? Are outstanding accounts receivable contacted regularly to encourage payment? Is credit denied to any overdue accounts seeking further business? Is interest charged on overdue accounts? These are all matters that could be included by BMK Co in a revised policy on accounts receivable management.

END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 10: TAXATION

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

Taxation table for paper DA 10 – Taxation (2021 Examinations)

Income Tax

Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%

Mineral Royalty

Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% on norm value
Cobalt and Vanadium	8% of 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%
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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%
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Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

Presumptive Taxes

Turnover Tax	4%
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Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day
	K	K
From 64 passengers and over	10,800	29.60
From 50 to 63 passengers	9,000	24.70
From 36 to 49 passengers	7,200	19.70
From 22 to 35 passengers	5,400	14.80
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.90
Less than 12 passengers and taxis	900	2.50

Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%
Rate of Tax on Realised Value on a transfer of Intellectual Property	5%

Value Added Tax

Registration threshold	K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover)	16%

Customs and Excise

Customs and Excise duties on used motor vehicles

Motor vehicles for the transport of ten or more persons, including the driver	Aged 2 to 5 years		Aged over 5 years	
	Customs duty	Excise duty	Customs duty	Excise duty
	K	K	K	K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	Aged 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	16,058	13,917	8,564	7,422

exceeding 1500 cc				
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

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%
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Excise Duty:

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%
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SECTION A

Attempt BOTH questions in this section.

QUESTION ONE

Pink plc is Zambia resident company engaged in manufacturing. The company was listed on the Lusaka Securities Exchange in 2018. The company's summarised statement of profit and loss for the year ended 31 December 2021 is as follows:

		K
	Notes	
Sales revenue		2,524,700
Cost of sales	(1)	<u>(956,720)</u>
Gross profit		1,567,980
Distribution and selling costs	(2)	(325,600)
Administrative expenses	(3)	<u>(426,700)</u>
Profit from operations		815,680
Investment income	(4)	350,000
Finance costs	(5)	<u>(75,600)</u>
Profit before Tax		1,090,080
Income Tax expense	(6)	<u>(381,528)</u>
Profit for the year		<u>708,552</u>

The following information is also available:

Note 1: Cost of Sales

	K
Opening inventory	264,800
Purchases	584,000
Depreciation	205,920
Loss on sale of plant	13,500
Closing inventory	<u>(111,500)</u>
	<u>956,720</u>

Note 2: Distribution and selling costs

These include:

	K
Gifts of Pink plc calendars each costing K80 each	20,200
Entertaining customers	146,100
Entertaining members of staff	80,800
Advertising expenses (TV and newspaper)	54,800
Repairs of delivery vans	<u>23,700</u>
	<u>325,600</u>

Note 3: Administrative Expenses

These include:

	K
Wages and salaries	333,600
Penalty for late payment of provisional income tax	34,800
Accountancy and audit fees	22,700
Loan to former employee written off now recovered	(22,300)
Increase in General provision for bad debts	12,800
Trade debts written off	<u>45,100</u>
	<u>426,700</u>

Note 4: Investment income

This includes:

	K
Royalties (net)	72,675
Rental income (net)	85,000
Dividends (net)	95,425
Bank interest (net)	<u>96,900</u>
	<u>350,000</u>

Withholding tax was deducted at source each case, where applicable.

Note 5: Finance costs

These comprise:

	K
Interest on debentures	28,000
Interest on loan notes	37,300
Interest on bank overdrafts	<u>10,300</u>
	<u>75,600</u>

The debentures and loan notes were issued in order to fund the purchase of fixed assets.

Note 6: Income tax expense

This represents provisional income tax paid by the company during the year 2021.

Note 7: Implements plant and machinery

The company had the following assets as at 1 January 2021

	Income tax value	Original cost
	K	K
Mitsubishi light truck	90,000	120,000

Toyota Hilux Double cab van (3000cc)	135,000	225,000
Office equipment	45,000	90,000
Manufacturing equipment	90,000	180,000
Toyota Allion (2000cc)	64,000	80,000

The company disposed of the Toyota Allion car for K90,000 during 2021 and replaced it with a Toyota crown saloon car costing K110,000.

The Toyota Hilux above is used as a personal to holder vehicle for the Marketing Director, whilst the Toyota Allion is used by the Finance Director as a personal to holder vehicle

The company provided free residential accommodation to its Managing Director. The rental market value of the house is K10,000 per month. The Managing director's annual salary is K720,000.

Required:

- (a) Calculate the maximum capital allowances claimable by the company for the tax year 2021. (7 marks)
- (b) Calculate the taxable profit of the company for the tax year 2021. (11 marks)
- (c) Compute the company income tax payable for the tax year 2021. (7 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) Explain what constitutes emoluments from employment. (2 marks)
- (b) Explain any four (4) tests the Zambia Revenue Authority uses to distinguish employees from independent self-employed contractors. (8 marks)
- (c) Paul Chisanga is a talented computer specialist who has regularly been changing employers. He was recently employed by Chongo Limited since October 2019, but resigned on 31 May 2021 to take up another exciting vacancy with Chibwantu Limited as from 1 July 2021.

At Chongo Limited, Paul Chisanga was entitled to an annual salary of K300,000, housing allowance and transport allowance of 15% and 5% of basic salary respectively. Chisanga was also paid a monthly medical allowance of K1,500. On his resignation, Paul Chisanga received a gratuity of K118,750, repatriation pay of K28,000 and leave pay amounting to K39,600. Paul Chisanga's contributions to NAPSA were in all cases of his employment, computed as 5% of his basic salary. The pay as you earn deducted from his salary for the tax year 2021 amounted to K81,200. He also paid an annual professional subscription of K7,600 and school fees for his children amounting to K18,900.

At Chibwantu Limited, Paul Chisanga was entitled to an annual salary of K500,000, housing and transport allowances of 20% and 15% of basic salary respectively. The company also paid Paul Chisanga a monthly medical allowance of K2,800. Chisanga was also entitled one month's leave pay per annum and pay as you earn deducted from his salary for the tax year 2021 amounted to K95,100. The company also provided Chisanga with a personal to holder Toyota Crown having a cylinder capacity of 3500cc and a fuel allowance of K800 per month was paid to Chisanga at the beginning of each month.

Required:

Calculate the income tax payable by Paul or refundable to Paul in tax year 2021.

(15 marks)

[Total: 25 Marks]

SECTION B

There are **THREE (3)** questions in this Section. Attempt any **TWO (2)** questions.

QUESTION THREE

- (a) The Zambia Institute of Chartered Accountants (ZICA) has adopted the IESBA's Code of Ethics for Professional Accountants and all members of ZICA must comply and apply these principles.

Required:

- (i) Explain the importance of the code of ethics to tax and financial consultants. (4 marks)
- (ii) Briefly explain the meaning of Integrity, Objectivity and Professional competence and due care as fundamental principles as outlined in the code of ethics. (9 marks)
- (b) Joseph Kazembe has been in business for many years as a wholesaler preparing his accounts annually to 31 December each year. The net profit as per statement of profit or loss for the year ended 31 December 2021, amounted to K425,000. This profit was from a turnover of K1,945,000. The net profit figure was arrived at after taking into account the following:
- (1) Other income received by Joseph which included bank interest amounting to K4,500 (gross), rental income of K13,000 (gross), royalties amounting to K40,000 (gross) and dividends of K10,000 (gross). Withholding tax had been deducted at source in each case where applicable.
 - (2) Depreciation of non-current assets amounting to K13,400.
 - (3) Motor vehicle expenses amounting to K17,600. The motor vehicle expenses were incurred in respect of Joseph Kazembe's privately owned motor car which is used for both business and private purposes. It has been agreed with the Commissioner General that the business use of the motor Car is 45%.
 - (4) General expenses amounting to K162,500. These included K47,100 for repairs to a newly acquired non-current assets in order to put them in a usable state, increase in general provision for irrecoverable debts amounting to K21,200. The balance constitutes revenue expenses which are allowable for tax purposes.
 - (5) Salaries and wages amounting to K85,200. These included the annual nominal salary for Joseph Kazembe of K31,100; and his nephew's annual salary amounting to K25,000. Other employees in his business, holding the same position as his nephew are paid annual salaries of K19,000 each. The balance of the salaries and wages are all employees' salaries.

Other information

Capital allowances on qualifying assets, including the motor car referred to in note (3) above, have been agreed to be K72,300.

Required:

- (i) Calculate the taxable business profits for the tax year 2021. (8 marks)
- (ii) Calculate the amount of income tax payable by Joseph for the tax year 2021. (4 marks)

[Total: 25 Marks]

QUESTION FOUR

HTG Limited is a company engaged in manufacturing. The company registered for VAT in 2019. The following information relates to the month of April 2021:

- (1) Sales were made up of the following:

	K
Exempt sales	150,000
Zero-rated sales	250,000
Standard-rated sales	<u>1,010,000</u>
	<u>1,410,000</u>

45% of the standard-rated sales were made to non-registered customers.

- (2) Purchases comprised of the following:

	K
Exempt purchases	70,000
Zero-rated purchases	100,000
Standard-rated purchases	<u>430,000</u>
	<u>600,000</u>

50% of the standard-rated purchases were from non-registered suppliers.

- (3) Standard rated operating expenses which comprised of the following:

	K
Entertaining customers	40,000
Entertaining employees	21,000
Utility bills for the director's accommodation	39,000
Motor vehicles servicing	23,000
General overheads	<u>112,000</u>
	<u>235,000</u>

- (4) The company bought manufacturing equipment at a cost of K139,200 (VAT inclusive), Computers at a cost of K13,920 (VAT inclusive) and Motor car at a cost of K174,000 (VAT inclusive).

- (5) Unless stated otherwise all of the above figures are exclusive of VAT.

Required:

- (a) Explain the differences between exempt supplies and zero-rated supplies. (3 marks)
- (b) Explain three (3) advantages and two (2) disadvantages of accounting for VAT using the cash accounting scheme (receipt basis). (5 marks)
- (c) Explain any five (5) obligations of a VAT registered trader. (5 marks)
- (d) Calculate the amount of VAT payable by the company for the month of April 2021. You should indicate using a zero (0) all the items on which VAT is not chargeable and irrecoverable. (12 marks)

[Total: 25 Marks]

QUESTION FIVE

- (a) The role of Taxation in any economy cannot be over-emphasized. In order to enhance tax collection, the operation a taxation system requires rules and regulations. These rules and regulations essentially constitute what is commonly known as Tax Law. Tax laws make tax policy legally enforceable.

Required:

- (i) Explain the four (4) sources of tax law and other regulations in Zambia. (4 marks)
- (ii) Explain six (6) functions of taxation in Zambia. (6 marks)
- (b) The Zambia Revenue Authority (ZRA) administers a number of tax types and some of these taxes are not well understood by the business community especially, in rural areas where information is scarce. The ZRA however, has put in place a taxpayer education program which ensures that taxpayers are well educated on tax matters. One of the taxes administered by the ZRA is Property Transfer Tax.

Required:

- (i) Explain what constitutes 'Property' for property transfer tax purposes. (5 marks)
- (ii) Explain how the realised value of property is determined. (4 marks)
- (c) In February 2021, Mr John Mulenga imported a seven (7) year old second hand Mazda Light Truck having a gross weight of 20 tonnes from Japan at a cost of US\$2,100. Other incidental costs included US\$3,600 for freight charges, US\$600 for insurance costs up to Nakonde. Transport costs from Nakonde to Kabwe were US\$400. The exchange rate ruling was K21 per one US\$

Required:

- (i) Calculate the value for duty purposes of the truck. (2 marks)
- (ii) Calculate the total import taxes paid by Mulenga on the importation of the truck. (4 marks)

[Total: 25 Marks]

END OF PAPER

DA 10 TAXATION

SUGGESTED SOLUTIONS

SOLUTION ONE

PINK PLC.

COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2021

Capital Item	Cost/ITV K	Allowance K
<u>Mitsubishi Light Truck</u>		
ITV b/f	90,000	
Wear and tear allowance @ 25% x K120,000	<u>30,000</u>	30,000
ITVc/f	<u>60,000</u>	
<u>Toyota Hilux</u>		
ITV b/f	135,000	
Wear and tear @20% of K225,000	<u>45,000</u>	45,000
ITV c/f	<u>90,000</u>	
<u>Office equipment</u>		
ITV b/f	45,000	
Wear and tear @25% x K90,000	<u>15,000</u>	15,000
ITV c/f	<u>30,000</u>	
<u>Manufacturing equipment</u>		
ITV b/f	90,000	
Wear and tear @50% x 180,000	<u>90,000</u>	90,000
ITV c/f	<u>NIL</u>	
<u>Toyota Allion</u>		
ITV b/f	64,000	
Disposal proceeds restricted to Original cost	<u>(80,000)</u>	
Balancing charge	<u>(16,000)</u>	(16,000)
<u>Toyota crown</u>		
Cost	110,000	
Wear and tear @20% x K110,000	<u>22,000</u>	22,000
ITV c/f	<u>88,000</u>	
Total		<u>186,000</u>

b) PINK PLC

PINK PLC ADJUSTED BUSINESS PROFIT FOR THE TAX 2021

	K	K
Net profit before tax		1,090,080
Add disallowable:		
Depreciation	205,920	
Loss on sale of plant	13,500	
Entertaining customers	146,100	
Penalty for late payment	34,800	
Increase in general provision	12,800	
Interest on loan notes	37,300	
Interest on debentures	28,000	
Personal to Holder cars:		
Toyota Hilux	40,000	
Toyota Allion	30,000	
MD" s provision of free accommodation K720,000 x30%	<u>216,000</u>	
		<u>764,420</u>
		1,854,500
Less		
Royalties	72,675	
Rental income	85,000	
Dividends	95,425	
Bank interest	96,900	
Loan to former employee written off	22,300	
Capital allowances	<u>186,000</u>	
		<u>(558,300)</u>
Adjusted business profit		<u>1,296,200</u>

c) PINK

COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K
Adjusted business profit	1,296,200
Investment income:	
Royalties	85,500
Bank interest	<u>114,000</u>
Total taxable income	<u>1,495,700</u>
Company Income tax @35%	523,495
Less provisional income tax	(381,528)
WHT-Royalties K85,500 x 15%	(12,825)
Bank Interest K114,000 x 15%	<u>(17,100)</u>
Income tax payable	<u>112,042</u>

SOLUTION TWO

(a) Taxation of employment

Emoluments refer to all the payments that an individual receives by reason of being an employee and such payments include wages and salaries, bonuses, overtime, leave pay and allowances and include any advantage accrued as a result of holding an office.

(b) The Zambia Revenue Authority (ZRA) would consider several factors in establishing whether someone is employed or self-employed.

(1) **Type of contract**

If there is a **contract of service**, it will indicate the existence of a legal relationship of master and servant. A **contract for services** will indicate the existence of self-employment.

The contract may be written or it may be oral. Where the contract is a written one, a copy should be obtained and the contents of that particular contract should be studied. In the case of oral contracts, the parties to the contract should be interviewed to establish what has been agreed upon.

Care should still be taken when examining written contracts, as they are not likely to contain all the relevant points. It is always important to use several other methods of gathering the relevant information.

(2) **Work performance**

Employees must perform the duties assigned to them themselves, while the self-employed may hire other people to perform the work for them.

If a person does not have a right to hire helpers, that is likely to lead to the conclusion that there is employment. The self-employed persons will normally have a right to hire their own helpers.

In contracts of service, personal performance is always required, while in the case of contracts for services there may be personal performance or there may not be one. In other words, personal performance is not normally a must in contracts for services.

(3) **Control**

The work of an employee is controlled by the employer who will normally stipulate working hours, the place at which the duties are to be performed, how the work is to be performed and other conditions.

A self-employed person will decide when to perform the duties and how to perform them.

Where there is an absence of the right of control, employment may still be present.

In certain employments, it is not usually possible for the employer to tell the employee what to do, when to do it and the place at which that is to be done.

(4) Payment and financial risk

Employees are paid an agreed salary on a monthly or weekly basis and incur no form of financial risk. In order to earn an extra sum, employees will have to work overtime. Also, employees are going to get any other additional pay or variation in pay if they meet a set target in which case they will receive a bonus or a commission.

Employees do not assume any form of financial risk and they cannot profit from sound financial management.

Self-employed persons are normally paid a proportion of the contract price based on the amount of work performed. They will also bear the full financial risk of their business. If they manage their affairs well, they are going to profit from them.

Care is required in handling certain types of employment as the absence of financial risk will not always indicate that there is employment.

The fact that a casual worker runs the risk of being unable to find work when a particular engagement ceases is not relevant to the determination of whether employment exists or not.

(5) Place of work

Employees will normally be told where the duties are to be performed. This is normally at the employer's premises or at the premises of the client.

In most employment, the premises from which the duties are to be performed are those of the employer.

Self-employed persons will perform the duties at a place of their choice.

If the person performing duties can only do so at the employer's chosen premises, then that person is an employee. If the person can choose a place from where to perform the duties, that person is self-employed.

(6) Tools and equipment

An employer will provide the tools and equipment which the employees are to use. However, the fact that the employer does not provide the tools and equipment will not be conclusive. In certain types of employment, the employees will normally be required to provide their own tools and equipment.

Self-employed individuals will provide their own tools and equipment.

(7) Correction of work

Employees will normally rectify any faulty work during the normal working hours and they will still be paid for those hours.

Self-employed persons will rectify any faulty work outside the contract time and they will not be paid for that extra work.

If the person performing duties is not paid for the time spent on correcting work, then that person is self-employed. On the other hand, if the person is paid for the time spent on correcting work, then that person is an employee.

(8) Engagement and dismissal

The employer will take on and dismiss employees. The employer will have a right or power to terminate the contracts of employment by giving the employees appropriate notice.

A self-employed person will normally enter into a contract with a client specifying the beginning and end. The contract normally ends when the work has been performed completely and accurately.

(9) Insurance

Employers will normally provide insurance cover for the actions of their employees. This is because they are vicariously liable for the offences committed by their employees.

Self-employed persons will have to provide for their own insurance needs. The hirer is not vicariously liable for the offences committed by the hired self-employed contractors.

If the person who is performing the duties takes insurance cover personally, then that person is self-employed. But, if insurance cover is not taken by the person performing the duties personally, then that person is an employee. The employer will have taken insurance cover on behalf of that employee.

(10) Exclusivity

Employees normally work for only one employer. A self-employed person will normally work for a number of clients.

(11) Integration Test

The courts will also consider whether an individual's activity is fully integrated within the organisation. This were the case, it would be difficult for an individual to prove that they are self-employed.

(c) PAUL CHISANGA
INCOME TAX PAYABLE FOR THE TAX YEAR 2021

Details	Workings	Amount K
Salary:		
- Chongo Limited	300,000 x 5/12	125, 000
- Chibwantu Limited	500,000 x 6/12	250,000
Housing Allowance:		
- Chongo Limited	15% of K125,000	18,750
- Chibwantu Limited	20% of K250,000	50,000
Transport Allowance		
- Chongo Limited	5% x 125,000	6,250
- Chibwantu Limited	15% x 250,000	37,500
Medical expenses Allowance:		
- Chongo Limited	1, 500 x5	7,500
- Chibwantu Limited	2,800 x 6	16,800
Leave pay – Chongo Limited		39,600
Fuel allowance- Chibwantu	800 x 6	<u>4,800</u>
Total income		556,200
Less professional subscription		<u>(7,600)</u>
		<u>548,600</u>
Tax computation:		<u>Tax</u>
<u>Taxable amount</u>	<u>Tax rate(%)</u>	<u>Amount</u>
First K48,000	0	0
Next K9,600	25	2,400
Next K25,200	30	7,560
Excess K465,800	37.5%	<u>174,675</u>
Less PAYEE:		184,635
- Chongo Limited	81,200	
- Chibwantu Limited	<u>95,100</u>	<u>(176,300)</u>
Income tax payable		<u>8,335</u>

SOLUTION THREE

(a) **Ethics**

- (i) The importance of the code of ethics to tax and financial consultants.
Professional codes of ethics are intended to guide the individual behavior of professional accountants because Accountants hold position of trust, and people rely on them and their expertise.
A distinguishing mark of the accountancy profession is its acceptance of the responsibility to act in the public interest. The public interest is considered to be the collective wellbeing of the community of people and institutions the professional accountant serves, including clients, lenders, governments, employers, employees, investors, the business and financial community and others who rely on the work of professional Accountants.
(2 marks per valid point up to 4 marks)

- (ii) Integrity
Members must be honest and straightforward in their professional and business relationships. The principles of honesty and integrity impose an obligation on the practitioner to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.
This means that a member providing tax services shall ensure that their own personal tax obligations and those of any associated entities for which the member is responsible are properly discharged.
(1 mark per valid point up to 3 marks)

Objectivity
Members should not allow bias, conflict of interest or undue influence of others to override their objective judgment of tax matters. Members shall be impartial and not allow prejudice, conflict of interest or influence of others to override their objective judgement in relation to tax matters. In situation where a member is required to act as an advocate for a client when representing or assisting them before tribunals or courts of law, the member shall ensure that the client is aware that the member has an obligation not to mislead the Court or Tribunal and to safeguard their professional objectivity.
(1 mark per valid point up to 3 marks)

Professional competence and due care
Members should maintain professional knowledge and skill at a level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and shall act diligently and in accordance with

applicable technical and professional standards when providing professional services.t

This means that members engaged in providing tax services shall maintain professional competence and take due care in the performance of their work.

(1 mark per valid point up to 3 marks)

(b)	(i)	JOSEPH KAZEMBE	
		TAXABLE BUSINESS PROFITS FOR THE TAX YEAR 2021	
		K	K
		Net profit as per accounts	425,000
		Add:	
		Depreciation	13,400
		Motor expenses: 17,600 x 55%	9,680
		Repairs to newly acquired assets	47,100
		Increase in general provision	21,200
		Joseph Kazembe's salary	31,100
		Excess salary paid to the niece (25,000 – 19,000)	<u>6,000</u>
			<u>128,480</u>
			553,480
		Less:	
		Bank interest	4,500
		Rental income	13,000
		Royalties	40,000
		Dividends	10,000
		Capital allowances	<u>72,300</u>
			<u>(139,800)</u>
		Taxable business profit	<u>413,680</u>

(i)	JOSEPH KAZEMBE	
	PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2021	
		K
	Adjusted business profit	413,680
	Add:	
	Royalties	<u>40,000</u>
	Taxable income	<u>453,680</u>
	Computation	
	First K48,000 @0%	0
	Next K9,600 @25%	2,400
	Next K25,200 @30%	7,560
	Balance K370,880 @37.5%	<u>139,080</u>
	Income tax liability	149,040
	Less:	

WHT- Royalties (K40,000 x 15%)	<u>(6,000)</u>
Income tax payable	<u>137,040</u>

SOLUTION FOUR

- (a) The following are the differences between exempt supplies and zero-rated supplies:
- (1) A trader dealing in zero-rated supplies is a taxable trader whereas the trader dealing in exempt supplies is not a taxable supplier for the purposes of VAT.
 - (2) A trader dealing in zero-rated supplies may be permitted to register for VAT whereas a trader dealing in exempt supplies cannot be permitted to register for VAT.
 - (3) A trader dealing in zero-rated supplies may claim input VAT incurred on purchases and expenses whereas a trader dealing in exempt supplies cannot claim input VAT.

- (b) The following are the advantages and disadvantages of accounting for VAT under the cash accounting scheme:

Advantages

- (1) Output VAT is only paid once cash has been received from the customers
- (2) Bad debts relief occurs automatically since VAT is only accounted for once cash has been received.
- (3) It is easy to prepare the VAT returns since only the cash book is needed to do this.

Disadvantages

- (1) Input VAT can only be claimed once payment has been made to the suppliers of goods and services.
- (2) This scheme is not open to all kind of traders. It is restricted to those traders who are in construction sector only.

- (c) The following are the obligations of the VAT registered trader

- (1) Display the VAT registration certificate
- (2) Issue tax invoices meeting all the features required by the law
- (3) Submit returns and pay VAT on the relevant due dates
- (4) Advise the Zambia Revenue Authority of any changes in the business. Eg. Address, type of supply and change of owners.
- (5) Allow the Zambia Revenue Authority inspectors to enter the business premises and inspect the goods and records.
- (6) Maintain proper accounting records and retain them for a minimum period of six (6) years.

- (d) HTG LIMITED

COMPUTATION OF VAT PAYABLE FOR THE MONTH OF APRIL 2021

Output VAT	K	K
Exempt sales		0
Zero-rated sales		0
Standard-rated sales (K1,010,000 x 16%)		<u>161,600</u>
		161,600
Input VAT		
Exempt purchase	0	
Zero-rated purchases	0	

Standard-rated purchases (K430,000 x 16% x 50%)	34,400	
Entertaining customers	0	
Entertaining employees	0	
Utility expenses	0	
Motor vehicle servicing (K23,000 x 16%)	3,680	
General overheads (K112,000 x 16% x K1,260,000/K1,410,000)	16,014	
Motor car	0	
Computers (K13,920 x 4/29)	1,920	
Manufacturing equipment (K139,200 x 4/29)	<u>19,200</u>	
		<u>(75,214)</u>
VAT payable		<u>86,386</u>

SOLUTION FIVE

(a) Tax law and functions of taxation

(i) The sources of tax law include:

- (1) **Statutes or Acts of parliament**-Statutes are laws enacted by parliament. Statutes make it legal for taxes to be levied.
- (2) **Statutory instruments** - These are form of delegated registration issued by a government minister. They have the same effect as statutes.
- (3) **Case Law** – Judges cannot make tax law. Decided cases in taxation will assist with the interpretation of particular statutes which relates to the specific circumstances of a case.
- (4) **Practice notes** – These are issued by the Zambia Revenue Authority to indicate the ZRA's interpretation of statute. They cannot however, be cited as a source of law.

(ii) Taxation is the process through which the central government raises revenue to meet public expenditure. The functions of taxation include:

- (1) **To raise revenue for the central government**- The main function of taxation is to raise public revenue for the central government that goes towards the financing of the National Budget and provision of public goods for the benefit of all citizens of the country.
- (2) **Redistribution of wealth**-Taxes are used by government to redistribute income from higher to lower income households and thus remove the apparent inequalities that income is bound to bring among the Country's citizenry i.e. the Government will generally collect higher taxes from the rich through progressive tax systems and redistribute the funds collected to the poor and thus prevent the poor from getting poorer and the rich getting richer at the expense of the poor.
- (3) **Influencing economic activity in the country (Economic regulation)** - taxes are used to influence economic activity in the country. This can be done through giving tax incentives such as capital allowances to individuals and institutions that engage in activities that contribute towards economic growth and encouraging savings through imposition of low rates of withholding taxes on investment income.
- (4) **To act as a fiscal tool to curb the effects of inflation**- taxes ultimately reduce the disposable incomes of the taxpayers and this in turn reduces their propensity to spend thus reducing the quantity of money in supply in the economy at any given time.
- (5) **To protect the local Zambian industries from unfair foreign competition**- The tariffs levied on imported goods aim at raising the prices of those goods that come from low production cost Countries and as such would put local industries at a disadvantage in terms of pricing if no taxes were levied on them.
- (6) **Maintaining the well-being of the environment**- Taxes are used to maintain the well-being of the environment by imposing heavy taxes on income

and gains arising from activities which are not friendly to the environment such as those contributing to global warming, pollution etc.

(b) Property transfer tax and presumptive taxes

The term 'property' for property transfer tax purposes is taken to mean,

- (1) Any Land in the Republic of Zambia (including any building on the land)
- (2) Buildings, structures, or other improvements thereon; and
- (3) Any shares issued by a company incorporated in Zambia that is not listed on the Lusaka Stock Exchange.
- (4) Mining rights
- (5) Intellectual property

(i) Realised Value of Land and Buildings

The realised value of property is the price at which it could, at the time of its transfer, reasonably have been sold on the Open Market as determined by the Commissioner General and is generally taken as the higher of the Contract price agreed by the transferor and transferee and the open market value.

(ii) Realised Value of shares

The realised value of shares is the higher of the open market value of those shares as determined by the Commissioner General and the nominal value of those shares

(iii) Realised Value of mining rights

The realised value of mining rights is the higher of the value of those rights as determined by the Commissioner General and the actual price of the rights.

(iv) Realised Value of mining righ

The realised value of intellectual property is the higher of the value of the intellectual property as determined by the Commissioner General and the actual price of the intellectual property.

(c) Customs and excise duty

(i) Value for duty purposes	US\$
Cost	2,100
Freight	3,600
Incidental costs	<u>600</u>
CIF	<u>6,300</u>
VDP for customs: US\$ 6,300 x K21	
	= K132,300

(ii) Computation of Customs and excise duties as well as VAT :

	Values	Taxes
VDP	132,300	

Customs duty	<u>11,744</u>	11,744
	144,044	
Excise duty	<u>9,004</u>	9,004
	153,048	
VAT at 16%	24,488	24,488
Surtax charge		<u>2,000</u>
Total import taxes		<u>45,236</u>

END OF SOLUTIONS



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

LEVEL TWO

DA 11: PRINCIPLES OF AUDITING

THURSDAY 16 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A-TWO (2) COMPULSORY QUESTIONS

Attempt BOTH questions in this section.

QUESTION ONE

You are Audit Senior in Platinum & Co a firm of Chartered Accountants appointed as auditor for Mamba Milling Company Ltd (MMC).

MMC operates a milling plant with forty branches. One of its corporate objectives is to produce mealie meal of the best quality at an affordable price. It has an internal audit department which is based at the Head Office which makes regular visits to the company warehouses.

The company operates a computerized central invoicing system and inventory and asset control systems which are restricted by the use of passwords. All significant expenditure is authorized by the Head Office. All branch managers are involved in the setting of budgets and cash flow forecasts.

Among other duties as outlined in the Company's Act, you are required as external auditors to document and keep a record of audit procedures performed, relevant audit evidence obtained and conclusions reached. In addition the Audit Senior emphasised that attention be paid to the procedures used when identifying and assessing the risks of material misstatements in the financial statements of MMC.

You received audit working papers from an Audit Assistant for review after concluding the audit of MMC. Details from the working papers are given below:

1. A sales invoice amounting to K2,000 was omitted from the sales day book. The amount of sales revenue for the year ended 2020 amounted to K25,000. The matter was considered material but not pervasive. The audit assistant recommended an adverse opinion.
2. MMC has twenty-five warehouses around the country which are used as storage facilities for maize stocks before transporting it to the milling plant in Lusaka. Despite MMC being a market leader and previously enjoying a large market share, the company is experiencing pressure on its liquidity position due to increased competition and increasing operational costs. This has resulted in the company being in arrears on most of its payables.

The company informed the auditors that it was unable to pay the full audit fee for this year and insisted that the auditors should attend inventory counts at only five out of twenty-five warehouses this year. The auditors concluded that evidence obtained was considered to be insufficient to the extent that it was both material and pervasive. The audit assistant recommended a qualified opinion in this case.

3. An inventory count at 5 warehouses was conducted in accordance with inventory count instructions. After the count, the audit revealed a number of misstatements

such as that the cost was used as a basis for valuing inventory which was higher than the net realizable value. As a result, the inventory at the end of year was overstated. The matter was both material and pervasive. A disclaimer of opinion was recommended.

4. The rent and rates account was overstated by K700 and the matter was considered to be material but not pervasive. A qualified opinion was recommended.
5. A review of the section on subsequent events of the working papers showed that there was no evidence of work that was performed by the Audit Assistant. When questioned he responded that the opinion will be based on the figures in the financial statements as at the period end. It is clear from the response by the Audit Assistant that he does not understand the requirements of ISA 560 *Subsequent events* which give guidance on the responsibilities of the auditor with regards subsequent events.

Required:

- (a) Explain, giving reasons, the appropriateness of each of the four (4) audit opinions suggested by the Audit Assistant. (8 marks)
- (b)
 - (i) Explain the meaning and relevance of subsequent events in an audit of financial statements. (3 marks)
 - (ii) Explain the *active* and *passive* duties of the auditor in the audit of financial statements. (4 marks)
- (c) List four (4) steps to be undertaken by your firm to assess the risks of material misstatements in the financial statements of MMC. (4 marks)
- (d) Explain six (6) reasons why external auditors need to keep audit documentation. (6 marks)

[Total: 25 Marks]

QUESTION TWO

- (a) Gypsy Ltd is a company that supplies all types of bearings to the mining companies. The company was privately owned until recently when it obtained a listing of its shares on the local stock exchange.

Gypsy Ltd has an internal audit department under the supervision of the Chief Internal Auditor who reports to the Director of Finance.

The Board of Directors of Gypsy Ltd comprises five shareholders, the Chief Executive Officer, the Finance Director and the Purchasing Director. In view of the fact the company is now a publicly listed company; it is required to adhere to the listing requirements one of which is for the company to have a Board of Directors that comprises a mixture of executive and non-executive directors. It is also a

requirement that the now listed company should put in place an audit committee from amongst the board members.

Required:

- (i) Explain the meaning of non-executive directors and the role that they will play in the board of directors of Gypsy Plc. (4 marks)
 - (ii) Explain five (5) roles of the proposed audit committee of Gypsy Plc. (5 marks)
- (b) Soon after listing on the local stock exchange, Gypsy Plc. called for an extraordinary general meeting. The main reason for the meeting was that the company needed to appoint auditors to audit its financial statements.

The meeting could not agree on the appointment of auditors. This was because the minority shareholders did not understand why the company should appoint external auditors when the company has in place an internal audit department. The main problem arose when setting the auditor remuneration which the minority shareholders felt was excessive and a waste of resources unless the internal audit department is disbanded.

It was resolved the issue of appointing external auditors should be put on hold until when a report of consultants is presented to the general meeting. The minority shareholders reminded the extraordinary general meeting that their interests must be protected.

You work for the firm of consultants engaged to report to the general meeting the need to appoint external auditors.

Required:

- (i) Explain five (5) differences between internal and external audit. (10 marks)
- (ii) Explain four (4) types of assignments that are normally performed by an internal audit department. (6 marks)

[Total: 25 Marks]

SECTION B

There are THREE (3) questions in this section. Attempt any TWO (2) questions

QUESTION THREE

Chindele Ltd manufactures and sells a variety of bathing soaps and hand sanitizers. The raw materials are procured locally from a large number of small suppliers. As part of the interim audit work, three (3) weeks prior to the company year-end, you tested the inventory, bank and cash, and payroll systems.

Inventory system:

The inventory system includes the functions of inventory ordering and purchasing, receiving goods into stores, storing inventory and controlling levels of inventory. No inventory count is carried out since the system is computerized and management is satisfied with its operation. Valuation of inventory is performed automatically using first in first out (FIFO) method.

Bank and cash system:

The company has a small Finance Department which comprises the Chief Accountant, Payroll Accountant, Cashier, Secretary and Driver. The Chief Accountant is responsible for management accounting and financial reporting. The Payroll Accountant currently reports to the Human Resource Officer. The Cashier is a young lady who holds a Diploma in Accounting.

The Cashier is responsible for the overall cash and bank systems, which mainly involves receipting, banking, payments and bank reconciliations. She is hardworking and trustworthy. All the bank reconciliations are up to date.

Payroll system:

When a person is engaged, a personnel record card is prepared by the Human Resource Officer showing full personal particulars, previous employment, medical category, social security number and wage rate. All relevant payroll details are communicated in writing to the Payroll Accountant. The payroll system is maintained on a standalone computer to avoid manipulation of payroll details. It was assessed by the audit team as reliable. The company pays its staff by cash or by bank transfer. The Payroll Accountant manually extracts the net pay for each employee from the system and prepares a list using the excel spreadsheet which is used to prepare payroll cheque.

The Engagement Partner instructed you to use test data and generalized audit software throughout the audit. The firm wants to automate all the audit processes in the next two (2) years.

Your firm recently recruited a Training Manager from Zimbabwe. He is currently preparing a training manual for Junior Auditors and has requested you to prepare notes on conflict of interest between members and clients and how it can be resolved.

Required:

- (a) Explain how a conflict of interest can arise and how it can be resolved. (3 marks)
- (b) Explain the mechanisms by which auditors are regulated in Zambia. (6 marks)
- (c) Identify and explain four (4) deficiencies in the control systems of Chindele Ltd and suggest suitable improvements. (10 marks)
- (d) (i) Explain what is meant by generalized audit software and give three (3) examples of how it can be used in the audit of financial statements. (4 marks)
- (ii) Describe the use of test data in the audit of internal controls for the payroll system in Chindele Ltd. (2 marks)

[Total: 25 Marks]

QUESTION FOUR

Lion Traders Ltd operates a parts store. The company has expanded its branch network from one to eight branches in the last five years. The Board of Directors comprises, Mr. Mateo Tembo the owner as Chairman and Managing Director. Other members are his two sons who also work as Chief Accountant and Human Resources Director respectively.

Recently, the company saw growth potential in certain parts of the country and wanted to establish new branches but they could not do so due to limited financial resources. The Managing Director applied to the Industrial Development Bank for a loan but could not be granted as the financial statements that were submitted were not audited because the previous auditors resigned. Despite the audit firm having been auditors for over a year now, the Managing Director seemed not to understand the duties and rights of external auditors.

Your firm has been appointed auditor of Lions Traders Ltd. At one of the planning meetings, the engagement partner emphasised to the audit team on the need to observe professional ethics throughout the audit. He was concerned particularly with the following issues:

1. That one of the sons to the Managing Director of Lions Traders Ltd. was a school mate to a senior auditor in your firm.
2. The Chief Accountant of Lion Traders Ltd went on study leave for one (1) year. During this period, one of the auditors was asked to compile financial statements at a fee without informing the audit firm.
3. The chairman of Lion Traders Ltd was worried that the bank declined to grant the company a loan unless financial statements were audited. Due to the urgency of the matter, he asked the Engagement Partner to come up with a favorable opinion in order for the company to be granted a loan. He stated that there will be no need to maintain your firm as auditor if a favorable opinion is not guaranteed

As result, a newly recruited Audit Assistant was asked to be in charge of Lions Traders Ltd.'s audit.

4. One of the Audit Trainees gave an interview to a journalist who wanted to know if there were any future investment plans for Lions Trader Ltd. and how such were expected to be financed. It was discovered through the public media when the story came out that it was the audit trainee who gave an interview without permission of the client's management.
5. It was revealed the wife of the audit senior operates a canteen that supplies meals to workers at Lions Traders Ltd. The capital of the canteen business was contributed by the auditor's wife and the Managing Director's wife.

Required:

- (a) Identify and explain two (2) weaknesses in the governance structure of Lion Traders Ltd. (4 marks)
- (b) Explain four (4) rights and four (4) duties of your firm during the audit of Lions Traders Ltd. (8 marks)
- (c) Explain three (3) fundamental ethical principles that your firm needs to abide with during the audit of Lion Traders Ltd. (3 marks)
- (d) Identify and explain four (4) threats and one (1) fundamental ethical principle in the audit of the financial statements of Lion Traders Ltd. (10 marks)

[Total: 25 Marks]

QUESTION FIVE

Builders Warehouse Ltd is a company that runs hardware stores with an annual turnover of K370 m. Management at each branch consists of Stores Manager, an Accountant and Human Resources Officer. It is expected that management at Builders Warehouse Ltd will perform their duties as agents and show accountability in accordance with good cooperate governance requirements. The company has been operating without a Board of Directors for one year since the dissolution of the previous board.

The company has a centralized stores system and purchase orders are made by a Procurement Officer based at the Head Office. Each branch receives their stocks from the central stores but at times is allowed to make minimal purchases without prior authorization from Head Office. It has a policy of transferring stock from one shop to another without proper documentation. In addition, the company does not have a list of registered suppliers. In order to reduce the costs involved in the procurement of goods, management suggested that each branch can buy from any suppliers even if they are not registered.

The company management is in a hurry to increase sales. Some customers who were given goods on credit have not paid back resulting in bad debts amounting to K20 m. About 80% of credit sales were to one big customer that did not have previous dealings with the

company. The company has no internal audit function and monitoring of internal control is left to branch managers who have no accounting experience. Senior management wants to set up an internal audit department but do not see the need now.

In the last two years, the company faced competition from cheap imports of hardware from East Africa. This has resulted in the loss of a significant market share and a reduction in liquidity and profitability. In order to increase the company's cash flows and profitability, the company postponed the appointment of external auditors in order to cut costs and relied on the work being performed by its accountants.

A new Board of Directors was put in place which recommended that external auditors should be appointed in order to increase the oversight role in accordance with the company Act of 1994.

Beams Chartered Accountants was appointed auditor of Builders Warehouse Ltd and is expected to carry out its first audit for the year ended 31 December 2020. You have been tasked by the Engagement Partner to draw an audit strategy and an audit plan. The audit team comprises a student of accountancy on internship who is not sure as to the audit procedures to be performed.

Required:

- (a) Identify five (5) weaknesses in the internal controls of Builders Warehouse Ltd. (5 marks)
- (b) Explain the terms *agency* and *accountability* in relation to the work of management of Builders Warehouse Ltd. (4 marks)
- (c) Explain six (6) factors management should consider when assessing the need for an internal audit function. (6 marks)
- (d) Suggest five (5) audit procedures to be carried on bad debt figure of K20m. (5 marks)
- (e) Explain any five (5) matters to be considered when preparing an audit strategy for Builders Warehouse Ltd. (5 marks)

[Total: 25 Marks]

END OF PAPER

D11 PRINCIPLES OF AUDITING

SUGGESTED SOLUTIONS

SOLUTION ONE

(a) Appropriateness of suggested opinions:

1. An adverse opinion is expressed when an auditor discovers that a matter is both material and pervasive. In the case above, the materiality of the sale invoice that was omitted was 0.008% (K200/K25, 000). This is material but not pervasive. In addition this is below the threshold of ½ % or 0.05% in relation to sales revenue benchmark. In this case, the appropriate audit opinion should be a qualified opinion.

A qualified opinion is expressed when auditor discovers that a matter is material but not pervasive. This can be in cases where there is insufficient audit evidence and the matter is material but not pervasive. In the scenario, only 5 depots have been visited by the auditor. This means that the evidence collected and verified is insufficient, on which an opinion should be based. Therefore the appropriate audit opinion should have been a disclaimer of opinion.

2. A disclaimer of opinion is expressed when the auditor discovers insufficient audit evidence and the matter is material and pervasive. Therefore, the appropriate audit opinion should have been an adverse opinion as the matter is both material and pervasive.
3. An auditor can express a qualified opinion when a matter is material and not pervasive, this is the case regarding rent and rates that was misstated. Therefore the auditor was correct to express a qualified opinion as the matter was considered material but not pervasive.

(b) (i) **Meaning and relevance of subsequent events:**

Subsequent events are events that occur between the period end of a client company and the date that the audit report is signed and any facts that may come to the attention of the auditor after the audit report date.

Identifying and evaluating subsequent events is important for the auditor. The events may give evidence of conditions that existed at the period end and thus require that the financial statements should be amended in view of the fact that the audit report has not been signed. At the year end there are situations where some figures are not certain and may only become certain subsequent to the period end.

IAS 10 *Events after the reporting period* deals with the accounting treatment of subsequent events in the financial statements.

(ii) Active and passive duties of the auditor:

ISA 560 *Subsequent events* gives guidance on the responsibilities of the auditor regarding subsequent events.

Between the period end and the date on which the audit report is signed, the auditor has an **active duty** to perform audit procedures with a view to identifying subsequent events. The objective of the audit procedures is to confirm correct accounting treatment in the financial statements by management.

After the signing of the audit report, the auditor has a passive duty with regards events that take place. Management is responsible to inform the auditor of any matter that has relevance on the audit and the audit report. If the auditor becomes aware of any matter of concern after the date of signing the audit report, he will need to discuss the matter with management and find out how management hopes to deal with the matter.

- (c) Steps to be undertaken when assessing the risks of material misstatements:
- (i) Identify risks throughout the process by obtaining an understanding of the entity and its environment.
 - (ii) Assess the identified risks and evaluate whether they relate more pervasively to the financial statements as whole.
 - (iii) Relate the risk to what can go wrong at the assertion level.
 - (iv) Auditors need to consider the likelihood of the risk causing a material misstatement.
- (d) The reasons why external auditors need to keep audit documentation are as follows:
- (i) It provide evidence of the auditor's basis used to arrive at an audit opinion.
 - (ii) It provides evidence the audit was planned and performed in accordance with ISAs and other legal and regulatory requirements.
 - (iii) It also helps the engagement team to plan and perform the audit.
 - (iv) It assist the team members responsible for supervision to direct, supervise and review audit work.

- (vi) It enables the team to be accountable for its work and for future reference.
- (vi) It allows a record of matters of continuing significance to be retained.
- (vii) It enables the conduct of quality control reviews and inspections (both internal and external).

SOLUTION TWO

(a) (i) **Meaning of non-executive directors:**

Non-executive directors are those directors on the board that have no executive responsibilities in running the company. They are independent of the entity on whose board they sit except that of being board members.

The roles of non-executive directors:

- They bring to bear their experience in their respective fields for the benefit of the company on which they are board members.
- They bring their objectivity in providing oversight on management because they have no other interest and they have nothing to fear when debating in the board of directors.
- They sit on committees such as the audit committee and the remuneration committee where independent non-executive directors are required to sit. If executive directors sat on these committees this could give rise to self-interest resulting in the lack of objectivity.
- Independent non-executive directors will give an objective assessment on the performance of the Chief Executive Officer and other executive directors when evaluating the performance of the board of directors.

(ii) **Roles of proposed audit committee:**

1. The audit committee will enhance the credibility of the financial statements prepared by the management of Gypsy Ltd.
2. The statutory auditors may bring matters of concern experienced during the audit to the attention of the audit committee for resolution of such matters.
3. The committee will appraise the rest of the board of directors on matters concerning financial statements.
4. The Finance Director will take matters of concern that may arise due to disagreement with the Chief Executive Officer for resolution.
5. The internal audit department which currently reports to the Finance Director will report to an independent audit committee with regards the work that it carries out.
6. The audit committee will evaluate the independence of the statutory auditors and where necessary take measures to ensure the statutory auditor remains independent of the company.
7. The audit committee may assist in the appointment of the external auditors and make recommendations to the annual general meeting.

(b) (i) **Differences between internal and external audit:**

1. Relationship:

Internal auditors are employees of the company and they are not independent of it. In this respect they lack objectivity in carrying out their work.

External auditors are independent of the company. They are appointed by the shareholders and the only connection with the company is that of client auditor relationship. Because of this

independence the external auditor will be more objective in carrying out the audit.

2. Scope of work:

The scope of work for **internal auditors** is determined by management and is much wider than that of external auditors. For example they will carry out financial audits and operational audits with an objective of ensuring value for money of the company operations.

The scope of the work of **external auditors** is determined by statute and is restricted to the financial statements. All the work that the external auditor performs will aim at providing sufficient appropriate evidence that the financial statements are not materially misstated.

3. Reporting:

Internal auditors report to management and those charged with governance. In most cases the reports of internal audit are internal and not available to the public.

External auditors report to the shareholders and their reports are publicly to other interested parties in the case of listed companies.

4. Objective:

The **internal audit** work is designed to **add value** and to improve the operations of the organization.

The work of **external auditors** is performed to enable the auditor form an **opinion** on the financial statements.

5. Planning & collections of evidence:

The approach to audits by **internal auditors** is mainly procedural rather than risk. In carrying out their work they obtain evidence by interviewing staff and inspection of documents.

External auditors follow a risk based approach putting more audit efforts in areas with the highest risk that financial statements will be misstated.

(ii) Types of audits performed by internal audit:

1. Internal auditors can perform information technology audits to examine the integrity of the information system used by the company.
2. Internal auditors will carry out investigations as they arise in the company particularly those arising from fraud.
3. Internal auditors will evaluate the internal controls in the company to assess their effectiveness or lack thereof.
4. Internal auditors will perform financial and operational audits and report on the outcome of the audits making appropriate recommendations to management.

SOLUTION THREE

(a) Conflict of interest between members and clients arise when audit members compete directly with a client's competitor or have a joint venture or similar business with a client's competitor. This can threaten objectivity and independence of auditors.

[Award 1½ for explaining conflict of interest]**How to resolve conflict of interest:**

Members should decline

Members should decline an engagement that give rise to conflict of interest and should evaluate interest arising from conflict of interest. They should also notify conflict issues and obtain the client consent.

(b) Mechanisms by which auditors are regulated in Zambia

In Zambia, the regulation of auditors (and accountants in general) is the responsibility of the Zambia Institute of Chartered Accountants (ZiCA). The Accountants Act 2008 sets out the following responsibilities of ZiCA:

- Regulation of education and training of accountants.
- Provision for the setting of ethical, auditing and accounting standards.
- Making and investigation of disclosures in the public interest.
- Defining professional misconduct and providing for disciplinary procedures for the accountancy profession.

(c)

Internal control deficiency	Explanations	Recommendations
(1) The Cashier is responsible for receipting, payments, banking and bank reconciliations.	The bank reconciliations are not reliable since the Cashier is not independent as she has overall responsibility for cash and bank. It is possible for her to conceal or even fail to report any issues that could reflect badly upon her.	An independent senior person, such as the Chief Accountant should be responsible for bank reconciliations. Chindele Ltd can even consider employing a qualified accountant for this task.
(2) The Payroll Accountant reports to the Human Resource Officer.	It is unlikely that the Human Resource Officer has the required competence, experience and skills to effectively supervise the Payroll Accountant. Therefore errors and possibly frauds in the payroll stated may not be picked up.	The Payroll Accountant should report to the Chief Accountant.
(3) The Payroll Accountant manually	Errors (or even frauds) in the net pays could be made	The payroll system should be modified so that it includes a

extracts the net pay for each employee from the system and prepares a list using the excel spreadsheet which is used to prepare payroll

when this extract is made, resulting in underpayments or overpayments to employees.

facility for producing a listing for the net pays automatically.

- (4) No inventory count is carried out. Management may not know whether inventory is in good condition, has been stolen etc. This could have an adverse impact especially on production and cash flows. Inventory counts should be carried out to ensure inventory is in good condition and has not been stolen.
- (5) The computer automatically values the inventory using first in, first out (FIFO) method. There is no check on the computer valuations and no one ensures inventories are valued in line with IAS 2 *Inventories* guidance using the lower of cost and net realizable value (NRV). It is likely that inventories could be overstated. The Chief Accountant should ensure that the valuation of inventories is at the lower of cost and net realizable value (NRV). In addition, manual computation should be made for a sample of inventories to gain assurance that the computer is calculating amounts correctly.

(d) (i) Generalized audit software and examples

Generalized audit software is audit software which allows auditors to perform tests on computer files and databases. Examples of its use include:

- Reading and extracting data from a client's systems for further testing.
- Selecting data that meets certain criteria.
- Performing arithmetic calculations on data.
- Facilitating audit sampling.
- Producing documents and reports.

(d) (ii) Test data

Test data can be used in the audit of internal controls for the payroll system in Chindele Ltd by entering data (e.g. payroll inputs for dummy employees) into Chindele Ltd.'s payroll system, and comparing the results obtained with pre-determined results.

SOLUTION FOUR

(a) Weakness in the governance structure of Lion Traders Ltd

- (i) The Managing Director is also the chairman. There will not be any segregation of duties and it will be difficult to have credible checks and balances since the other members of the board are his sons. It will be difficult to have fair and balanced discussions during the meetings.

- (ii) Two of the chairman's sons being Chief Accountant and human Resources Directors respectively. The accountant will not be able to follow proper laid down procedure of accounting. Integrity will be compromised as he is likely to be dictated to by the chairman who is the parent. The other son being a human resources manager will not be able to make critical decisions that are independent as he may choose members of staff who may not be qualified. The following are the rights of auditors:
 - (i) Access to records: they have a right of access at all reasonable time to accounting records, and other records including registers of the company.
 - (ii) Information and explanations: auditors have a right to enquire from the company's officers such information from the officers as they think necessary to perform their duties as auditors.
 - (iii) Attendance and notices of general meetings : they have a right to attend any general meeting and the right to receive notices of and other communication relating to such meetings which the members of the company is entitled to receive.
 - (iv) Right to be heard at general meetings: they have the right to be heard at general meetings that they attend on any part of the business that concerns them as auditors, notwithstanding that they retire at the meeting or a resolution to remove them from office is passed at that meeting.

The following are the duties of the auditors:

- (i) Compliance with legislation: they should consider whether financial statements have been prepared in accordance with the company act 1994.
- (ii) Adequate accounting records and returns: they should consider whether adequate records, other records and registers have been kept and returns adequate for the purpose of audit received from branches not visited by the auditor.

- (iii) Truth and fairness of accounts: they should consider whether a true and fair view is given of the state of the company's affairs at the end of its financial year (balance sheet), of the company's profit or loss for the financial year (profit and loss account), and the state of affairs and profit or loss of the company and its subsidiary.
 - (iv) Agreement of accounts: they should consider whether the accounts are in agreement with accounting records and returns.
- (c) The following are fundamental ethical principles that need to be followed during the audit of Lion Traders Ltd:
- (i) Professional behavior- auditors need to comply with relevant laws and regulations and avoid any action that discredits the profession. Their behavior should be above board and not contrary to their profession.
 - (ii) Integrity –external auditors should be straightforward and honest in their dealings with the client in all professional business relationships.
 - (iii) Objectivity –external auditors should not allow biasness, conflict of interest or undue influence of others to override professional or business judgment.
 - (iv) Confidentiality- external auditors should be able to respect confidential information acquired as a result of professional and business relationships and, therefore not to disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, or use the information for the advantage of the professional accountant or third parties.
 - (v) Professional competence and due care-they should maintain professional knowledge and skill at the level required to ensure that a client receives competent professional services based on current developments in practice , legislation and techniques and act diligently and in accordance with applicable technical and professional standards.

(d) **The four threats and safeguards are explained in the table below**

Threat	Safe guard
<p>(i) Familiarity threat: the son to director being a school mate to senior auditor. This will compromise the objectivity and independence of the senior auditor.</p>	<p>-There is a need to rotate Senior Auditors.</p> <p>-obtain second partner reviews and independent quality control reviews.</p>
<p>(ii) self-review-compiling financial statements for the client. Objectivity will be lost if auditors will be</p>	<p>-Using staff members other than audit team members to</p>

required to audit financial statements that are prepared. carry out work reviews.

(iii) intimidation threat-the auditor has been informed that unless they provide unmodified opinion, they will not be re-appointed. -disclose to the audit committee the nature of the intimidation
-remove specific affected individual from the firm

(iv) Self –interest- the auditor and managing directors by wife running a business venture of a canteen. -the interest auditor’s wife and that of the managing director need to dispose of their business interests.

-the audit member concerned should also be removed from the audit team.

-auditors are not expected to divulge confidential information to third parties without authority from the client.

Fundamental professional ethical matter is Confidentiality.

The junior auditor disclosed information to the media without permission from client and keeping the matter to him self

SOLUTION FIVE

- (a) The following are the weaknesses in the internal control:
- (i) Operating without board of directors - this is a weakness in that important decisions such as purchases of non-current assets may be made without any approval. Further certain appointments such as those of auditors and other important positions will not be made on merit. This can lead to a weakness in internal controls.
 - (ii) Stock movements- the company does not have a proper system of recording the movement of stocks. Therefore there is a possibility that employees can take stock for their personal gain.
 - (iii) No list of suppliers has been maintained- there is a possibility that some members of staff can even create their own companies and begin to supply goods and get the payments. There is a chance goods that have not been supplied can be paid for.
 - (iv) Supplying 80% to customers with whom the company has not dealt with before. This also shows a weakness in the credit control system of the company as failure to settle payments can lead to liquidity problems for the company.
 - (v) Lack of internal auditor- the lack of an internal audit function can be a serious weakness. There is no monitoring of internal controls and a possibility of fraudulent accounting is highly possible.
 - (vi) The postponement of the appointment of external auditors- the company management wants to save money by delaying the appointment of external auditors. This is a weakness as there will not be an oversight on the affairs of the company. The shareholders will not be presented with financial statements that show true and fair view.
- (b) (i) Agency – It means management has been entrusted with the responsibility of running of the company on behalf of shareholders. As agents, they are not supposed to transact without prior authority from the principal who are the shareholders.
- (ii) Accountability- This refers to the quality or state of being accountable, that is being required or expected to justify actions and decisions. It suggests an obligation or willingness to accept responsibilities for one's decision.
- (b) The following are factors to be considered when establishing the need for an internal audit function are :
- (i) Builders Hardware should consider the cost implication of their decision as the audit staff will have to be paid salaries and other requirements.
 - (ii) The company should predict if there will be savings in audit fees if they establish an internal audit function.
 - (iii) The complexity of scale of Builders Ware Ltd should be assessed before establishing an internal audit function.

- (iv) They should also consider the ability of current management to carry out assignments that can be carried by internal auditors.
 - (v) They should also consider the option of outsourcing internal audits in case it can be the cheapest option.
 - (vi) The perceived needs of management for assessing risks and internal controls
 - (vii) The pressure from external stakeholders to establish an internal audit department.
- (d) Audit procedures for bad debts:
- (i) Obtain the list of specific debts and examine in conjunction with correspondence with from lawyers and other debt collecting agents.
 - (ii) Obtain a debtors age analysis and review in order to verify if those written off are within the period set for writing off bad debts.
 - (iii) Auditors should obtain the balances of amounts written off and verify if they agree with the amounts written off in the Income statement.
 - (iv) Recalculate and verify the previous balances on debtors accounts to confirm if the debtors balances have been reduced to avoid a misstatement.
 - (v) Excessive discounts that could result in getting goods in bulk should be examined should be verified if they are the ones applied.
 - (e) Matters to be considered when preparing an audit strategy:
 - (i) Characteristics of the engagement -these include financial reporting framework, industry framework, expected audit coverage and scope of work.
 - (ii) Reporting objectives ,timing of the audit and nature of communications -this will include entity's time table for reporting , organisation of meetings with management and those charged with governance and discussions with management and those charged with governance
 - (iii) Significant factors , preliminary engaging activities , and knowledge gained on other engagements.-it includes determination of materiality , results of previous audits , need to maintain professional skepticism and areas with high risks of misstatements
 - (iv) Nature, timing and extent of resources-selection of an engagement team .assignment of work to team members and engagement budgeting.
 - (v) Testing internal controls in order to assess the strength and weaknesses and confirm if they operating effectively.

END OF SUGGESTED SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 12: GOVERNANCE AND COMPANY LAW

FRIDAY 17 SEPTEMBER 2021

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

INSTRUCTIONS TO CANDIDATES

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

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

SECTION A - TWO (2) COMPULSORY QUESTIONS.

Attempt both questions.

QUESTION ONE

Mr Mwelwa is the Managing Director of a newly formed company known as Melvin Ltd Company. There are two other directors in the newly formed company, one in charge of finance and the other in charge of all administrative issues. Melvin Ltd is specialised in supplying of safety gear to different organisations that contract them to supply goods. Three months ago, Mr Mwelwa won a tender to supply protective gear to one of the biggest mines in the North Western Province of Zambia worth millions of dollars and the duration of the contract is three (3) years.

Mr Mwelwa considered the value of the contract and on second thoughts, decided not to disclose the actual contract price, but discloses a lesser amount to the other two directors. He decides to register a small company which he has sub-contracted to supply the protective clothing to the mines. The supply of the goods has been progressing well and the other two directors are well pleased with this development as it has contributed to the profitability and expansion of the newly formed company. However, Mr Mwelwa has been hit with suspected Covid-19 pandemic and has since been quarantined awaiting to be discharged by the medical officials. In his absence, the director in charge of administration has been tasked to man his office. One day as he was sifting through some documents in the office to his surprise, he comes across the original contract between the mining company and Melvin Ltd which indicates the actual contractual price.

Mr. Regan decides to inform the other Directors who is the director finance and they decide to take legal action against Mr. Mwelwa.

Required:

- (a) Advise the other directors on the signs of poor corporate governance in their company. (8 marks)
- (b) Based on facts above, what action can they take against Mr Mwelwa? (8 marks)
- (c) If such activities were to continue in Melvin company this can lead to the collapse of the company, which can place the company under liquidation. Distinguish between Members' Voluntary Winding Up and Creditors' Voluntary Winding Up. (9 marks)

[Total: 25 Marks]

QUESTION TWO

West East Holistic School LTD (WEHS) is a primary and secondary school established in 2010. At inception, the school appointed Nana as its managing director, and co – opted Buba and Kama as part of the Board of Directors. The three (3) Directors were named as such in the application for incorporation form. The school’s enrolments and cash inflow kept on rising until one (1) year ago when it started facing challenges.

The past one year Kama has not been well and not been able to attend any of the Directors’ meetings. The Managing Director has proposed that he should be removed from the position of Director on account of his absence from meetings for a long time.

Required:

- (a) Would the Managing Director’s proposal to remove Kama be justified? Explain your answer with the aid of case law or statute. (6 marks)
- (b) Buba has also been acting as a Sales Manager and gets a commission for acting as such. He is so good in that capacity that, he has helped the school make profits in the first five (5) years and had been getting his commission payment for this extra duty. However, this was not done with the consent of the company. Should he remain in his position or vacate the office? Support your answer. (6 marks)
- (c) The school has been experiencing financial difficulties the past one year owing to a huge debt it got for infrastructure development. It is now failing to pay its teachers, failing to meet its statutory obligations and failing to pay the huge debt it owes its secured creditors like banks. The creditors including teachers have met to decide on the appointment of a liquidator.
 - (i) Kapembwa, a grade four (4) teacher would want to know as to whether the liquidator they will appoint and the current Directors will run the school together. Explain your answer. (4 marks)
 - (ii) The Companies Act requires that liquidators should be registered with Patents and Companies Registration Agency (PACRA). Explain three (3) reasons for the rationale for registration of liquidators. (9 marks)

[Total: 25 Marks]

SECTION B

There are THREE (3) questions in this section. Attempt any TWO (2) questions.

QUESTION THREE

Barotse Canning Ltd is a company based in Western Province of the Republic of Zambia. The company cans and makes mango juice from the organically grown mangoes across the region. Having recorded successful scores in the last few years, the Directors have decided that 'the company must go public' and a prospectus must be prepared and that some shares can be issued on a discount. To come up with a prospectus, the company decided to engage Yutanga and Associates a firm of Chartered Accountants and Auditors. In their signed prospectus, Yutanga and Associates stated that "Barotse Canning Ltd has consistently been making an average profit of K20 million per annum the past three years'. Last week, based on the auditor's report, however, the Directors of Barotse Canning Ltd issued out the prospectus, without their knowledge of this statement from Yutanga and Associates, and all the shares have been subscribed based on it. The Directors have now received the report from the auditors and have realized that the K20 million per annum profit was false as the company only made an average profit of K2 million per annum the past three (3) years.

Required:

- (a) What did the Directors mean when they decided that the, 'the company must go public? (10 marks)
- (b) Would the Directors of Barotse Canning Ltd and or Yutanga and Associates be liable for the misstatement about the profits? (8 marks)
- (c) Can Barotse Canning Ltd be successful in issuing new shares at a discount? Support your answer. (7 marks)

[Total: 25 Marks]

QUESTION FOUR

Write brief and concise notes on the following:

- (a) Perpetual succession character of a company. (5 marks)
- (b) Shares as 'personal and movable property' in an incorporated company. (5 marks)
- (c) Nature of an agency relationship in the Director – shareholder relationship. (5 marks)
- (d) 'Stakeholders theory' as regards company Board of Directors' actions in Corporate Governance. (5 marks)
- (e) Major Corporate Governance codes in Zambia. (5 marks)

[Total: 25 Marks]

QUESTION FIVE

Ngosa and Mainza, a prominent business couple in Lusaka are considering converting their sole trader brief case business into a limited company or a partnership. However, they seem

not to agree on two (2) things firstly, the aspect of separate legal personality Mainza on one hand alludes that once their business entity is converted into a limited company the courts will be the one controlling the company on the other hand Ngosa the wife asserts that the concept excludes them from liability. Secondly, the couple have second thoughts about a partnership Mr. Mainza asserts that the law requires a lot of things for a business to be considered a partnership as a result they are too small to convert their business entity into a partnership as they do not meet the requirements by law.

Required:

- (a) In light of the aforementioned scenario explain to the couple, the principle of law on separate legal personality with reference to the case of **Salomon v Salomon [1897]**. (15 marks)
- (b) Clearly explain to the couple, the essential elements of a partnership. (10 marks)

[Total: 25 Marks]

END OF PAPER

DA12 GOVERNANCE AND COMPANY LAW

SUGGESTED SOLUTIONS

SOLUTION ONE

- (a) Corporate governance is the system through which organizations are directed and controlled. The signs of poor corporate governance are as follows:
- Domination by a single individual, in this case Mr. Mwelwa was dominating most of the activities of MELVIN Ltd.
 - Lack of involvement of the board. It is clear that Mr Mwelwa was doing things single handed without involving the board.
 - Misleading accounts and information. Mr Mwelwa gave his colleagues misleading information about the transaction.
 - Accounts and audits, there is also lack of proper internal controls as the company would not have detected the false information had it not been for Mr Mwelwa's illness.
- (b) Mr Mwelwa as managing director of the company is in a fiduciary relationship with the company. This relationship is a relationship based on good faith, trust and honesty. Some of the core duties that arise in this relationship are the duty to act honestly; duty to disclose and duty to avoid a conflict of interest. From Mr Mwelwa's conduct, it is evident that he is in breach of his fiduciary duties and as such, the company can sue him to recover its money; claim damages or even terminate his contract with the company.
- (c) A members' voluntary winding up, the directors have to make the declaration of solvency confirming that the company will be able to pay all its debts. While a creditor's voluntary winding up occurs where the shareholders resolve to put the company into liquidation, but cannot make a declaration of solvency. Within 24 hours of the passing of the resolution to wind up the company, the shareholders must convene a meeting with the creditors. At this meeting, either the shareholders or the creditors can appoint the liquidator. While a members voluntary winding up occurs where the shareholders of the company pass a resolution

SOLUTION TWO

(a) Directors can vacate their offices in many ways such as death, disqualification, resignation, absence from meetings, etc. The other two directors want to have Kamu removed from the position of director for non-attendance of meetings. Section 210 of the Companies Act provides that 'an office of director shall be vacant if the director is absent from meetings of directors held during a period of six months, without the consent of the other directors'. However, in the case of ***Re: London and Northern Bank, Macks Claim, (1900)***, it was held that a director who was sick and could not attend meetings had not vacated his office.

Thus, in the case at hand, Kama should not be removed as his absence is due to sickness. The action of the other two directors would not be justified.

(b) Section 210 of the Companies Act provides that a director who holds any office of profit under the company, except that of managing director or principal executive officer, without the consent of the company by ordinary resolution, must vacate his office.

The office of sales manager is an office of profit as he gets a commission. Since his appointment was without the consent of the company, he must vacate office or seek consent from the company who will decide whether to keep him there or not.

(c) (i) Once a liquidator has been appointed, all of the powers of directors cease and the liquidator has broad powers to do 'all that is necessary for winding up the affairs of the company and distributing its assets' to the creditors, (Section 289(1)). Thus in the case of West East Holistic School Ltd, the directors will not run the school with the new liquidator, they have to vacate their offices. (Correct explanation/application = 4 marks)

(ii) The rationale for accreditation and registration of liquidators is to ensure that the conduct of liquidators was consistent with international standards, to reduce on fraud, ensure that only persons who have certain qualifications would be appointed to such positions. The rationale can be summarized as follows:

- To enable the public to know whether a person is prohibited or restricted from acting as liquidator.
- To help the public access information and restriction applying to a person being considered for a position of a liquidator.

- To facilitate the administrative, disciplinary and other functions under the Companies Act.

SOLUTION THREE

(a) By the directors of Barotse Canning Ltd saying 'the company must go public' they meant that they needed to turn the company into a *public limited company*. This means that there shall be no restriction on the number of shareholders it can have, shares would be sold publicly on the stock exchange, and the shares would be freely transferable.

The company will now need to make a statutory declaration of compliance that the nominal value of allotted share capital is not less than the authorized minimum (1 million kwacha). It will need to be issued with share certificate before it can start trading as a public limited company.

Thus what the directors are saying that the company will have to cease being a private limited company and must be turned into a public limited company, this will allow more shareholders and more capital to the business, etc.

(b) When issuing out a prospectus care must be taken to ensure that only true and correct information is put there. Experts like accountants, auditors, etc are duty bound to make true and fair statements about the status of a company. They must disclose all material facts failure to do that they would be liable to any person who suffers loss as a result of the untrue statement or omission, (Section 129(1) and (2) of the Companies Act.

Further, the directors would also be liable as any person who participates in the publication of a prospectus which has misstatements is liable unless he or she relies on the defences provided for under section 129 (3) of the Companies Act, such as not being aware of the wrong information included in the prospectus.

Thus both the experts (Yutanga and Associates and the directors of the company) would be liable provided the new subscribers relied on that 'false information' of making K20 million instead of the actual K2 million per annum. The subscribers will need to prove damage as a result of that statement for them to be compensated

(c) A company is not allowed to issue shares at a discount. This so because the liability of shareholders in an event that the company is wound up is limited to the amount of shares they have subscribed for and giving them a discount would disadvantage the unpaid creditors out there. In the case of ***Ooregum Gold Mining Company of India Ltd v Roper (1892)*** it was held that a company cannot issue shares at a discount as that would defeat the whole purpose of limited liability in a company.

Thus the directors would not be successful in issuing the shares at a discount as this would be against the law. Doing so would make shareholders liable only to an amount less than what they subscribed, disadvantaging the creditors in an event of winding up of the company.

SOLUTION FOUR

(a) '*Perpetual Succession*' character of a company means that a company has a continuous existence and can outlive its original members and new members will come on board. Continuity of the company does not depend on the continuity of its shareholders. The company lives on until when it is wound up or struck off the register.

(b) Shares as '*personal and movable property*' means that shares in a company can be transferable from one shareholder to another. They are freely transferable and can be sold and purchased in a share market. However, transfer is only done in accordance with the articles of a company.

(c) The '*Nature of an agency relationship in the director – shareholder relationship*' is such that the directors are agents of the shareholders through the company and not individual shareholders. They have been engaged to run the company on behalf of shareholders, thus they have a fiduciary duty to exercise their powers as agents in the best interest of the company (which is in fact best in fact for the benefit of shareholders).

(d) '*Stakeholder theory*' as regards to the actions of the board of directors means the board must take into account the interests of other stakeholders, i.e. those who have an interest or are affected by what the company does. The board must take account of the legitimate expectations and interests of stakeholders when making decisions. The stakeholders could include employees, customers, shareholders, government, pressure groups, etc.

(e) There are three major corporate governance codes in Zambia:

- LuSE (Lusaka Stock Exchange) corporate governance codes which is aimed at ensuring that all listed companies should have a code of corporate practices and conduct in place.
- Bank of Zambia (BoZ) Corporate governance code aimed at all banks and financial institutions, which ensures that all banks and financial institutions adhere to the code and protect customers' money.
- Zambia Institute of Directors (IoD) corporate governance codes aimed at ensuring adherence to the principles of corporate governance in the private and public sector.

SOLUTION FIVE

(a) The principle of the law established in the case is that, when a company is incorporated it company stands alone from its sponsors and has legal capacity to sue or be sued in its own name. Upon incorporation, the company is liable for its debts and sponsors cannot be answerable for the company's debts and cannot be treated as one with the company.

The brief facts in **Salomon v Salomon [1897]** is that Salomon sold his leather business to a company he formed and was the principle shareholder. He was paid for the shares, in part, by a debenture on the company. Within a year the company went bankrupt and, as a secured creditor he was entitled to be paid first. Other creditors sued contending that Salomon and the company were one and could therefore not be entitled to be paid for the debenture. The court held that Salomon and the company were separate legal personalities and Salomon as a secured creditor could be paid first.

(b) A Partnership is a relationship of two or more people who come together with a common purpose of carrying on business with a view to profit. It is important that for a partnership to qualify, there must be a common agenda. Therefore where persons purport to form a partnership but with different agendas, it cannot qualify for one.

There are three elements pre-requisite for a partnership to be formed being:

(i) There must be more than one person. Therefore, a sole trader cannot be qualified as a partnership as the first pre-requisite is that there must be more than one person in the business for it to be considered a partnership.

(ii) There must be a common agenda between the intending partners. Where two or more persons purport to form a partnership but of different business agendas, such cannot be considered a partnership for purposes of section 1(1) Partnership Act. Therefore, it would be qualified to a partnership where two persons with different professions one a lawyer and another a medical doctor or accountant forming a firm and call it a partnership when their trades are not in common.

(iii) The last element for a partnership to exist is that it must be with a view to profit. Therefore, where a purported partnership is established and its main aim of that of charity work or being an NGO or any non-profit making organization then such would not qualify to be called a partnership. It does not however mean that when a partnership is not making a profit because business may not be good then it ceases to be a partnership but that the

intention of the partners should have as one of the main reasons, to make a profit in the course of business.

END OF SOLUTIONS