DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS
LEVEL ONE

DA 1: FINANCIAL ACCOUNTING
$\qquad$

MONDAY 11 DECEMBER 2023
TOTAL MARKS - 100; TIME ALLOWED: THREE (3) HOURS

## INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to carefully study the examination paper 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 have 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 Government produces financial reports regarding the sources and application of public funds. Which of the following is NOT a user of public sector financial reports?
A. Central government
B. Company shareholders
C. International funding organizations
D. Taxpayers

2 Which of the following statements is/are true?

1. The directors of a company are ultimately responsible for the preparation of financial statements, even if the majority of the work on them is performed by the finance department.
2. If financial statements are audited, then the responsibility for those financial statements falls on the auditors instead of the directors.
3. There are generally no laws surrounding the duties of directors in managing the affairs of a company.
A. 1 only
B. 1 and 2 only
C. 1, 2 and 3
D. 1 and 3 only

3 Which of the following statements about accounting concepts and the characteristics of financial information are correct?

1. The concept of accruals requires transactions to be reflected in the financial statements once the cash or its equivalent is received or paid.
2. Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements.
3. Based on faithful representation, it may sometimes be necessary to exclude material information from financial statements due to difficulties establishing an accurate figure.
A. 1 only
B. 1 and 2 only
C. 2 only
D. 2 and 3 only

4 Mikalile trading Ltd 's furniture account maintained at historical cost at 31 December 2023 is as follows:

|  | FURNITURE - COST |  |  |
| :--- | :--- | :--- | :--- |
|  | ZMW |  | ZMW |
| Balance b/d | 301,000 | Disposal | 170,000 |
| Additions | $\underline{241,900}$ | Balance c/d | $\underline{372,900}$ |
|  | $\underline{542,900}$ |  | $\underline{542,900}$ |

What opening balance should be included in the following period's trial balance for furniture - cost at 1 January 2024?
A. K542,900 DR
B. $\mathrm{K} 542,900 \mathrm{DR}$
C. K372,900 CR
D. K372,900 DR

5 A company pays rent quarterly in arrears on 1 January, 1 April, 1 July and 1 October each year. The rent was increased from K60,000 per year to K80,000 per year as from 1 October 2022.

What rent expense and accrual should be included in the company's financial statements for the year ended 31 January 2023?

## Rent expense

K
A. 66,667
B. 66,667
C. 65,000
D. 65,000

## Accrual

K
13,333
6,667
6,667
13,333

Which one of the following is not a purpose of a receivable's ledger control account?
A. A receivables ledger control account provides a check on the overall accuracy of the personal ledger accounts.
B. A receivables ledger control account ensures the trial balance balances.
C. A receivables ledger control account aims to ensure there are no errors in the personal ledger.
D. Control accounts help deter fraud.
(2 marks)

7 The cash book for OG engineering Ltd shows a bank balance of K11,350 overdrawn at 31 March 2023. It is subsequently discovered that a standing order for K250 has been entered twice, and that a dishonoured cheque for K900 has been debited in the cash book instead of credited.

What is the correct bank balance?
A. K10,200 overdrawn
B. K12,000 overdrawn
C. K12,500 overdrawn
D. K12,900 overdrawn

8 A suspense account shows a credit balance of K5,000. Which of the following could be due to?
A. Omitting a sale of K5,000 from the sales ledger
B. Recording a purchase of $K 5,000$ twice in the purchases account
C. Failing to write off a bad debt of K5,000
D. Recording rentals paid of K4,500 by debiting the bank account and crediting the rental account

9 Which of the following is the correct definition of an adjusting event after the reporting period?
A. An event that occurs between the reporting date and the date on which the financial statements are authorised for issue that provides further evidence of conditions that existed at the reporting date.
B. An event that occurs between the reporting date and the date on which the financial statements are authorised for issue that provides evidence of conditions that arose subsequent to the reporting date.
C. An event that occurs after the date the financial statements are authorised for
issue that provides further evidence of conditions that existed at the reporting date.
D. An event that occurs after the date the financial statements are authorised for issue that provides evidence of conditions that arose subsequent to the reporting date.

10 Which one (1) of the following statements correctly describes the contents of the Statement of Profit or Loss?
A. A list of ledger balances shown in debit and credit columns.
B. A list of all the assets owned and all the liabilities owed by a business.
C. A record of income generated and expenditure incurred over a given period.
D. A record of the amount of cash generated and used by a company in a given period.
[Total: $\mathbf{2 0}$ Marks]

## SECTION B

## There are FIVE (5) optional questions in this section. Attempt any FOUR (4) questions.

## QUESTION TWO

(a) Thomas Mali, a sole trader, drafted his accounts for the year ended 31 December 2022. The balance at bank, according to the cash book, was a debit of K17,893.60.

Subsequently the following discoveries were made:
(1) Cheque number 6276 dated 3 November 2022 for K6,216.80 in favour of G. Langa had been correctly recorded in the bank statement, but included in the cash book payments as K6,036.80.
(2) Bank charges of K5,573.20 had been entered in the bank statement on 23 December 2022, but not included in the cash book.
(3) The recently received bank statement shows that a cheque for K586.20 received from T. Daka and credited in the bank statement on 9 December 2022 was dishonoured and debited to the bank statement on 26 December 2022. The only entry in the cash book concerning this cheque was upon its receipt on 8 December 2022.
(4) Cheque number 7145 for K 302 had been recorded twice as a credit in the cash book.
(5) Amounts received and recorded in the cash book in the last few days of December 2022, totalling K37,912; were only included on the bank statement on 3 January 2023.
(6) Cheques drawn-out during December 2022 amounting to $\mathrm{K} 7,916$ were not presented for payment to the bank until mid-January 2023.
(7) Traders' credit transfers totalling K4,202 had been processed by the bank statement on 26 December 2022, but not yet recorded in the cash book.
(8) A standing order payment of K300 for 15 December 2022 to a newspaper company had been recorded in the bank statement but not in the cash book.

## Required:

(i) Updated Cash book (Bank columns); clearly showing the adjusted balance.
(ii) Prepare a Bank reconciliation statement for the month of December 2022.
(4 marks)
(b) A trial balance had an excess of Debits over credits of K8,800. A suspense account was opened to make it balance. It was later discovered that:

1. The discount allowed balance of $K 6,000$ and the discount received balance of K14,000 had both been entered on the wrong side of the trial balance. The other entries for these errors were correctly posted.
2. An item of $K 5,000$ had been omitted from the sales records i.e. the sales day book.
3. The purchase ledger control account balance of K67,572 had been included in the trial balance as K74,772.
4. No entries had been made for depreciation charge for the year of K18,000.

## Required:

(i) Draw up journal entries to correct the errors listed above.
(ii) Prepare the suspense account.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

B. Daka started trading as a sole trader on 1 January 2022. He does not keep a double entry book keeping system. He has already summarized the bank account shown below. All transactions involving money pass through his business bank account.

## B. Daka's Bank summary for the year ended 31 December 2022.

|  | K | K |  |
| :--- | :--- | :--- | ---: |
| Capital introduced | 20,000 | Rent of premises | 18,000 |
| Trade Receivables | 103,200 | Trade payables | 35,360 |
|  |  | Travel expenses | 8,400 |
|  | General expenses | 7,000 |  |
|  |  | Equipment rental | 4,000 |
|  |  | payments | 48,000 |
|  |  | Drawings | $\underline{2,440}$ |
|  |  | Balance | $\underline{123,200}$ |
|  |  | c/d |  |

## Additional Information

- B. Daka transferred his own vehicle to the business on 1 January 2022 valued at K24,000 for business use.
- The vehicle is to be depreciated at $25 \%$ on a reducing balance basis.
- On 31 December 2022, trade receivables owed Daka K13,600
- On 31 December 2022, K4,780 was owed to trade payables. During the year, the total supplies were K44,800; while returns outwards were K4,660
- The bank summary includes a payment of K3,600 for rent of premises for the period 1 January 2023 to 31 March 2023.
- During January 2023, a payment of K540 was made for electricity used during the period 1 November 2022 to 31 January 2023. Electricity is charged to general expenses.


## Required:

(a) Prepare the following ledger accounts, as at 31 December 2022, clearly showing balances carried forward, if any,
(i) Capital account.
(ii) Trade receivables control account
(iii) Trade Payables control account
(2 marks)
(iv) Allowance for Depreciation on motor vehicles account
(v) Rent expenses account
(11/2 marks)
(vi) General expenses account
(2 marks)
(b) Prepare a trial balance from Part "a" answer.
(c) B. Daka has just discovered that one of his customers has gone out of business and owes him K1,160. This amount is included in the closing trade receivables figure. B. Daka knows he will not be able to recover any of the debt.

## Required:

(i) Draft the journal entry required to account for this. Include a narrative
(ii) Explain why it is important for businesses to account for irrecoverable debts.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

You are the Accountant of Blame, Shame and Steme Partnership and have been given the following information relating to the firm for the year ended 31 December 2022:
(i) Net profit K166,650
(ii) Interest to be charged on capitals Blame K4,500, Shame K3,000, Steme K2,250.
(iii) Interest on drawings: Blame K600, Shame K450 Steme K300
(iv) Salaries: Shame K30,000 and Steme K37,500
(v) Profits are shared as follows:

| Blame | $70 \%$ |
| :--- | :--- |
| Shame | $20 \%$ |
|  | $10 \%$ |

(vi) Current account balances:

| Blame | K27,900 |
| :--- | :--- |
| Shame | K14,190 |
| Steme | K12,300 |

(vii) Capital account balances:

| Blame | K150,000 |
| :--- | :--- |
| Shame | K75,000 |
| Steme | K37,500 |

(viii) Drawings:

| Blame | K58,500 |
| :--- | :--- |
| Shame | K40,650 |
| Steme | K25,200 |

## Required:

(a) Prepare the Partnership profit or loss appropriation account for the year ending 31 December 2022.
(b) Prepare the Partners' capital and current accounts as at 31 December 2022.
(10 marks)
(c) Explain three (3) main types or classification of business entities.
[Total: 20 Marks]

## QUESTION FIVE

(a) Michael Banda is a sole trader who has not kept proper books of accounts. At 1 January 2022, his statement of affairs was as follows:

| Details | K |
| :--- | ---: |
| Cash | 1,050 |
| Bank | 23,500 |
| Fixtures | 14,000 |


| Inventory | 91,000 |
| :--- | ---: |
| Trade Receivables | 133,000 |
| Trade Payables | 63,500 |
| Van (at valuation) | 34,000 |
| Prepaid expenses | 3,000 |

During the year to 31 December 2022, his drawings amounted to K161,000; while the prize won from the Lottery of K38,000 was put into the business. Further, extra fixtures were bought for K4,500.

At 31 December 2022, his assets and liabilities were:

Cash K950; Bank overdraft K9,100; Inventory K119,500; Trade payables K47,100; Accrued expenses K1,850; Van to be valued at K27,200; Trade receivables K147,200, Prepaid expenses K2,300.

Michael Banda's depreciation policy for his business is a fixed charge of K2,000.

## Required:

Prepare a Statement to show the profit or loss made by Michael Banda for the year ending 31 December 2022. NB. Please clearly show all your necessary workings.
( $151 / 2$ marks)
(b) A business has a memorandum Receivables ledger and a Trade receivables control account, which is part of the double entry. The closing balance on the Trade receivables control account is K30,182.

## The following errors were discovered.

(i) A receivable paid $\mathrm{K} 2,000$ in cash. This has been correctly recorded in the memorandum Receivables ledger, but no entries have been made in the Trade receivables control account.
(ii) Returns Inwards of K7,000 have been recorded in the memorandum Receivables ledger, but not the Trade receivables control account.
(iii) One page of the Sales day book has been under cast by K200.
(iv) When a sales invoice for $\mathrm{K} 1,900$ was entered in the memorandum Receivables ledger, the figures were transposed and shown as K9,100.

## Required:

Prepare a corrected Trade receivables control account.

## QUESTION SIX

Twende Cricket Club assets and liabilities as at 31 March 2022 were as follows:

|  | K'000 |
| :--- | ---: |
| Buildings | 230,000 |
| Equipment | 3,000 |
| Subscriptions in arrears | 1,200 |
| Cash at Bank | 2,100 |
| Bar inventory | 1,500 |
| Payables for bar supplies | 1,300 |
| Subscription in advance | 1,000 |

Receipts and payments summary for the year ended 31 March 2023 were:

## K'000

## Receipts

Subscriptions $\quad 1,800$
Bar takings 1,600
Competition fees 1,000
Lease of cricket ground 1.400

## Payments

Payables for bar supplies $\quad 3,800$
Equipment 1,500
Ground maintenance 2,200
Insurance 2,400
Rate $\quad 1,100$
Electricity 1,300

The following information was also made available as at the end of 31 March 2023:

1. Bar inventory $\mathrm{K} 1,800,000$
2. Payables for bar supplies $K 1,700,000$
3. Subscriptions in advance K900,000
4. Insurance paid included a prepayment up to 30 June 2023
5. Depreciation equipment K 450,000

## Required:

(a) Accumulated funds as at 1 April 2022.
(b) A Statement of profit or loss for the bar.
(c) Twende's Cricket Club Income and expenditure account for the year ended 31 March 2023.
(7 marks)
(d) Twende's Cricket Club Statement of financial position as at 31 March 2023.
[Total: $\mathbf{2 0}$ Marks]

## END OF PAPER

## DA 1: FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SECTION B

## SOLUTION TWO

(a)(i)

Thomas Mali's Adjusted Cash Book

|  | K |  | K |
| :---: | :---: | :---: | :---: |
| Balance b/f | 17,893.60 | (1) Under cast error (6,216.8- | 180.00 |
| (4) Error double | 302.00 | 6,036.8) | 5,573.20 |
| posting | 4,202.00 | (2) Bank charges | 586.20 |
| (7) Direct credits |  | (3) Dishonoured cheque | 300.00 |
|  |  | (8) Standing order | 15,758.20 |
|  | $\underline{22,397.60}$ | Adjusted Balance |  |
|  |  |  | $\underline{\underline{22,397.60}}$ |

(ii)

## Bank Reconciliation statement

| Adjusted Cash Book Balance | $15,758.20$ |
| :--- | ---: |
| Add Unpresented cheques | $7,916.00$ |
|  | $23,674.20$ |
| Less outstanding cheques | $\underline{(37,912.00)}$ |
| Balance as per bank statement (overdraft) | $\underline{(14,237.80)}$ |

(b) (i) Journal Entries

Dr
Cr


|  |  |  |
| :--- | :---: | :---: | :---: |
|  |  | $\underline{\underline{7,200}}$ |
|  | $\underline{\underline{28,000}}$ | $\underline{\underline{28,000}}$ |

## SOLUTION THREE

a) (i) Capital account

(ii)

Trade Receivables control account

(iii)

Trade payables control account

| Dec. | Bank | 35,360 | Dec. | Purchases (Bal. | 44,800 |
| :--- | :--- | ---: | :--- | :--- | :--- |
| 31 | Purchases Returns | 4,660 | 31 | fig.) |  |
| Dec. | Balance | $\underline{4,780}$ |  |  | $\underline{44,800}$ |
| 31 | c/d | $\underline{44,800}$ |  |  |  |
| Dec. |  |  |  |  |  |
| 31 |  |  |  |  |  |

(iv) \begin{tabular}{l}
Allowance for depreciation on motor vehicles account <br>
\hline

$|$

\hline
\end{tabular}

(v) Rent Expenses Account

| Dec. | Bank | 18,000 | Dec. <br> 31 | Profit or Loss <br> 31 <br> 18,000 | 14,400 <br> Bec. <br> 31 <br> c/d |
| :--- | :--- | ---: | :--- | :--- | ---: |

(vi)

General Expense Account

| Dec. <br> 31 | Bank | 7,000 | Dec. <br> 31 | Profit or Loss <br> Balance c/d $(540$ <br> $\div 3)$ | 6,820 <br> 7,000 |
| :--- | :--- | ---: | :--- | :--- | ---: |
|  |  | $\underline{7,000}$ |  |  |  |

b) B. Daka's

Trial Balance as at 31 December 2022

|  | Dr | Cr |
| :--- | ---: | ---: |
| Capital | K | K |
| Bank |  | 44,000 |
| Trade Receivables | 2,440 |  |
| Rent | 13,600 |  |
| Trade payables | 18,000 |  |
| Purchases Returns |  | 4,780 |
| Purchases |  | 4,660 |
| Travel expenses | 44,800 |  |
| General expenses | 8,400 |  |
| Rent for equipment | 7,000 |  |
| Drawings | 48,000 |  |
| Motor vehicles | 24,000 |  |
| Sales | $\underline{170,240}$ | $\underline{116,800}$ |
|  |  |  |
|  |  | $\underline{170,240}$ |

c) (i) Journal Entry

Dr $\quad \mathrm{Cr}$
Irrecoverable Receivables
Trade Receivables
Being irrecoverable debt written off
(ii) The essence of accounting is to produce financial statements which show a true and fair view as well as aid effective decision making, primarily by shareholders.

The practice of accounting for irrecoverable debts also complies with the long standing accounting convention of prudence; so that the value of the business is not necessarily overstated by failure to recognize irrecoverable debts.

## SOLUTION FOUR

## (a) Blame, Shame and Steme

## Appropriation Account for the year ending 31 December 2021.

|  | K'000 | K'OOO $^{\prime} \mathbf{0 0 0}$ | K'000 $^{\prime} \mathbf{0 0 0}$ |
| :--- | ---: | ---: | ---: |
| Non-profit b/d |  |  | 166650 |

Add: Interest on drawings:
Blame 600
Shame 450
Steme $\quad \underline{300}$
1350
168000
Less: Interest on capital:
Blame 4500
Shame 3000
Steme $\underline{2250}$
9750
Salaries: Shame 30000
Steme 37500
(77 250)
90750
Balance of profits

Shared: Blame 70\%
63525
Shame 20\% 18150
Steme 10\% $\underline{9075}$
90750
(b) Partners' Capital and Current accounts

| Blame, Shame and Steme's Capital Accounts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blame | Shame | Steme | Blame | Shame | Steme |
| K | K | K | K | K | K |
|  |  |  | 150,000 | 75,000 | 37,500 |

## Blame, Shame and Steme's Current Accounts

| Blame | Shame | Steme | Blame | Shame Steme |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{K}$ | $\mathbf{K}$ | $\mathbf{K}$ | $\mathbf{K}$ | $\mathbf{K} \quad \mathbf{K}$ |


| Drawing $12,300$ | 58,500 | 40,650 | 25,200 | Balances b/d | 27,900 | 14,190 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int on drawing $30,000$ | $\begin{array}{r} 600 \\ 37,500 \end{array}$ | 450 | 300 | Salary | - |  |
| Balances c/d | 36,825 | 24,240 | 35,625 | Int on Cap. | 4,500 | 3,000 2,250 |
|  |  |  |  | Profit sharing | 63,525 | 18,150 9,075 |
|  | 95,925 | 65,340 | 61,125 |  | 95,925 | 65,340 |
| 61,125 |  |  |  |  |  |  |
|  |  |  |  | Balances b/d | 36,825 | 24,240 |

(c) Sole traders are individuals who carry-on business independently, i.e. they work for themselves e.g. shopkeepers, plumbers, hairdressers. They invest their wealth into a business which they own and manage.

Partnership occurs when two or more people decide to run a business together in common with a view to profit; e.g. medical practitioners, legal practitioners etc.

Limited liability companies are incorporated to take advantage of limited liability status of their owners. This means that while sole traders and partners are personally liable for the amount owed by their businesses, shareholders of a limited liability company are only held responsible for the amounts to be paid for their shares.

## SOLUTION FIVE

(a) Statement of Banda's profit or loss for the year ended 31st ${ }^{\text {st }}$ December 2022
Profit $=$ Closing capital + Drawings - Capital introduced - Opening capital

$$
\begin{aligned}
& =255,600+161,000-38,000-233,050 \\
& =K 147,400 .
\end{aligned}
$$

w1 Opening Journal

|  | Dr | Cr |
| :---: | :---: | :---: |
|  | K | K |
| Cash | 1,050 |  |
| Bank | 23,500 |  |
| Fixtures | 14,000 |  |
| Inventory | 91,000 |  |
| Accounts Receivables | 130,000 |  |
| Van | 34,000 |  |
| Prepaid expenses | 3,000 |  |
| Accounts Payables |  | 63,500 |
| $\therefore$ Capital at start |  |  |
|  | 296,550 | $\underline{233,050}$ |
|  |  | $\underline{\text { 296,550 }}$ |

w2 Closing Journal

|  | Dr | Cr |
| :--- | ---: | ---: |
| Cash | K | K |
| Inventory | 950 |  |
| Fixtures (14,000 + 4,500-2,000) | 119,500 |  |
| Van | 16,500 |  |
| Accounts Receivables | 27,200 |  |
| Prepaid Expenses | 147,200 |  |
| Accounts Payable | 2,300 |  |
| Bank overdraft |  | 47,100 |
| Accrued Expenses |  | 9,100 |
| $\quad \therefore$ Capital at close |  | 1,850 |
|  | $\underline{313,650}$ | $\underline{255,600}$ |
|  |  | $\underline{313,650}$ |

(b) Trade Receivables Control Account

|  | K |  | K |
| :---: | :---: | :---: | :---: |
| Balance b/f | 30,182 | (i) Cash | 2,000 |
| (iii) Error of under cast | 200 | (ii) Returns inwards | 7,000 |
|  |  | Adjusted Balance | 21,382 |
|  | 30,382 |  | 30,382 |

## SOLUTION SIX

a) Twende's Cricket Club Accumulated funds as at 1 April 2021

## K'000

## Assets

Buildings 230,000
Equipment 3,000
Subscriptions in arrears 1,200
Cash at Bank 2,100
Bar inventory 1,500

## Less Liabilities:

Payables for bar supplies $\quad(1,300)$
Subscription in advance
Accumulated funds
$(1,000)$
235,500
b) Twende's Statement of profit or loss for the year ended 31 March 2022

|  | $\mathrm{K}^{\prime} 000$ | $\mathrm{~K}^{\prime} 000$ |
| :--- | :---: | ---: |
| Bar takings |  | 1,600 |
| Less cost of sales: |  |  |
| Opening inventory | $\mathbf{1 , 5 0 0}$ |  |
| Purchases (W1) | $\underline{4,200}$ |  |
| Total inventory | $\underline{(1,800)}$ |  |
| Less closing inventory |  | $\underline{(3,900)}$ |
| Cost of sales |  | $\underline{(\underline{2,300})}$ |

c) Twende's Cricket Club

Income and Expenditure a/c for the year ended 31 March 2022
K'000 K'000
Income
Subscriptions (W2) 700
Competition fees 1,000
Lease of Cricket grounds $\quad 1,400$
Total income
3,100
Less Expenditure
Loss on Bar sales (w) 2,300

Current Assets
Closing inventory ..... 1,800
Insurance prepaid ..... 480
Total Assets ..... 236,3302,280
Equity and liabilities
Accumulated funds ..... 235,500
Less Deficit: ..... $(6,170)$229,330
Current liabilities
Payables for bar supplies ..... 1,700
Subscription in advance ..... 900
Bank overdraft (12,300-7,900) ..... 4,400
7,000
Total equity and liabilities ..... 236,330
END OF SOLUTIONS

# DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS 

$\qquad$
LEVEL ONE
$\qquad$
DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 13 DECEMBER 2023

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

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7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.
10. A mathematical standard formula book must be provided to you. Request for one if not given by the Invigilator.

## 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 The annual precipitation data of a city is normally distributed with mean and standard deviation as 1500 mm and 150 mm , respectively. The probability that the annual precipitation will be less than 1350
A. 0.3414
B. 0.1587
C. 0.8343
D. 0.6587
1.2 Mrs. Bwalya wanted to deposit K150 a month in an account bearing 4\% interest compounded quarterly. It is for her 6 -year old son, who would cash it when he starts his college education at the age of 18 . How large will the son's education fund be?
A. K27,550.00
B. $K 48,518.85$
C. K79,804.77
D. K33,209.00
1.3 The number of passengers in an aeroplane is considered to be:
A. Discrete data
B. Continuous data
C. Random data
D. Probability data
1.4 The time series components comprises all the following except:
A. Seasonal variation.
B. Trend.
C. Cyclical variation.
D. Seasonal index.
1.5 A firm has the following probability distribution for its prices it charges shown below:

| Price | K 250 | K300 | K350 |
| :--- | :--- | :--- | :--- |
| Probability | 0.3 | 0.2 | 0.5 |

what is the expected price?
A. K900
B. K310
C. K9,000
D. K6,500
1.6 JAZ clothing store has a promotion week, all prices are reduced by $20 \%$. Find the total cost of buying a shirt and a suit originally costing K580 and K2,560, respectively.
A. K628
B. K116
C. K464
D. $K 2,512$
1.7 The distribution marks obtained by a sample of 5 students is $45 \%, 55 \%, 60 \%, 62 \%$ and $70 \%$.

The standard deviation of the marks obtained is:
A. 58.4
B. 85.3
C. 9.2
D. 292
1.8 Indicate which of the following is an example of seasonal variation
A. Recovery in business
B. Sudden death of a head of state
C. A fall in birth rate
D. The sale of air condition
1.9 If $A$ and $B$ are two events such that $P(A / B)=0.1, P\left(A / B^{C}\right)=0.6$ and $P(B)=0.3$ . Find $\mathrm{P}\left(\mathrm{B} / \mathrm{A}^{\mathrm{C}}\right)$.
A. 0.490
B. 0.06
C. 0.42
D. 0.03
1.10 Two council workers shared money by dividing it into the ratio $4: 5$ and the largest part is $K 8000$. Find the smallest part.
A. K4800
B. K6450
C. K6200
D. K6400

## SECTION B

## There are FIVE (5) questions in this section.

## Attempt any FOUR (4) questions.

## QUESTION TWO

(a) A questionnaire asks shareholders of a company to state whether they consider the Chairman's salary to be too high, about right, or too low. Excluding shareholders who have no opinion, the probabilities of answers from a randomly selected shareholder are as follows:

Too high 0.95
About right 0.03
Too low 0.02
What is the probability that if three (3) shareholders are selected at random:
(i) They will all answer "too high"?
(ii) Exactly two (2) will answer "too high"?
(iii) Exactly two (2) will give the same answer?
(b) A consultation team decided to venture into a project requiring an initial outlay of K225,000 which is guaranteed to produce a return of K300,000 in four (4) years' time. Use the following methods to decide whether this investment is worthwhile if the prevailing market rate is $7 \%$ compounded annually.
(i) Net present value
(ii) Internal rate of return
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

An investor wanted to assess the impact of advertising products on the internet. He spent money on different online platforms advertising his product. The following table shows the amount spent and the subsequent quantities of goods sold.

| Advertising cost (thousands of Kwacha (X) | 13 | 12 | 15 | 19 | 20 | 21 | 25 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Goods sold $(\mathrm{Y})$ | 10 | 8 | 20 | 16 | 35 | 45 | 60 | 80 |

## Required:

(a) Draw the scatter plot of the above data.
(b) Fit the regression modely $=a+b x$.
(c) Determine the selling price of the house if the assessed value was K40,000.
(d) Calculate the Pearson coefficient of correlation and interpret the result appropriately.
(4 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

(a) An organization is manufacturing products $\mathrm{P}_{1}$ and $\mathrm{P}_{2}$. The profit per tonne of the two (2) products are K 50 and K 60 respectively. Both the products require processing in three types of machine. The following table indicates the available machine hours per week and the time required on each machine for one tonne of $P_{1}$ and $P_{2}$.

| Profit per <br> tonne | Product 1 <br> K50 | Product 2 <br> K60 | Total available <br> machine <br> hours/week |
| :--- | :---: | :--- | :--- |
| Machine 1 | 2 | 1 | 300 |
| Machine 2 | 3 | 4 | 509 |
| Machine 3 | 4 | 7 | 812 |
|  |  |  |  |

(i) Formulate this product mix problem in the linear programming.
(ii) Solve the problem using the graphical method.
(10 marks)
(b) The table below is about a portfolio consisting of assets I and II.

|  | Asset I | Asset II |
| :--- | :---: | :---: |
| Expected return | $3 \%$ | $12 \%$ |
| Standard deviation | $4.9 \%$ | $5.5 \%$ |
| Coefficient of variation | 1.63 | 0.46 |

(i) Using the standard deviation test which of the two assets in riskier.

Explain your answer.
(ii) Using the coefficient of variation test, which of the two assets is riskier? Explain your answer.
(2 marks)
(iii) Which test is more reliable? Explain your answer.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FIVE

(a) Two (2) judges at a fete placed the ten entries for the 'best fruit cake' competition in order as follows (1 denotes first, etc.)

| Entry | A | B | C | D | D | E | F | G | H | I |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Judge <br> $(x)$ | 9 | 2 | 3 | 1 | 4 | 10 | 8 | 6 | 7 | 5 |
| Judge <br> $(y)$ | 2 | 6 | 9 | 1 | 4 | 8 | 10 | 3 | 5 | 7 |

## Required:

(i) Is there a linear relationship between the rankings produced by the two judges? Use spearman's rank correlation coefficient formula'

$$
r_{s}=1-\frac{6 \sum d^{2}}{n\left(n^{2}-1\right)}
$$

(8 marks)
(ii) Plot briefly on the nature of the relationship between $x$ and $y$, i.e. judge 1 vs judge 2.
(b) The following information has been supplied by the sales department- (sales are in units)

| Year | Quarter |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 |
| 2005 | 100 | 125 | 127 | 102 |
| 2006 | 104 | 128 | 130 | 107 |
| 2007 | 110 | 131 | 133 | 107 |
| 2008 | 109 | 132 |  |  |

## Required:

Calculate a four (4) quarterly moving average of the above series, estimate the trend and seasonal variations. Use the multiplicative model.
(9 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) The weekend earnings of a group of casual workers is recorded. The results, in kwacha, are shown in the stem and leaf diagram below:

| Stem | Leaf |  |  |  |  |  |  | Key:2/1 means 21 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $\begin{array}{llllll}2 & 2 & 3 & 5 & 7\end{array}$ |  |  |  |  |  |  |  |  |  |  |
| 3 | $\begin{array}{lllllllllllll}1 & 2 & 6 & 7 & 7 & 7 & 8 & 8 & 8 & 8 & 9 & 9\end{array}$ |  |  |  |  |  |  |  |  |  |  |
| 5 | $\begin{array}{lllllllll}0 & 0 & 0 & 0 & 4 & 5 & 6 & 7 & 8\end{array}$ |  |  |  |  |  |  |  |  |  |  |
|  | 15 |  |  |  |  |  |  |  |  |  |  |

## Required:

Find any outliers
(b) Mulenga want to set up an education account for her child and would like to have K1,500,000 after 20 years. She finds an account that pays $8.5 \%$ interest, compounded semi - annually, and she would like to deposit money in the account every six (6) months. How large must each deposit be in order to reach her goal? marks)
(c) The time between arrivals of cars at Puma service station is defined by the following probability distribution.

| Time between arrivals (min) | Probability |
| :--- | :--- |
| 1 | 0.15 |
| 2 | 0.03 |
| 3 | 0.40 |
| 4 | 0.15 |
|  | 1.00 |

## Required:

Simulate the arrival of cars at the service station for ten (10) arrivals, and compute the average time between arrivals. Use the following random numbers: 59986717 445110215141.

## END OF PAPER

## DA 2: QUANTITATIVE ANALYSIS SUGGESTED SOLUTIONS

## SOLUTION ONE

$1.1 \quad \mathrm{~B}$
1.2 A
1.3 A
1.4 D
1.5 B
1.6 D
1.7 C
1.8 D
1.9 A
1.10 D

## SECTION B

## SOLUTION TWO

(a)
i) $\quad P(T H$ and $T H$ and $T H)=0.95 \times 0.95 \times 0.95=0.857$
ii) $\quad C(3,2) \times 0.95^{2} \times 0.05=0.135$
iii) $\quad\left(C(3,2) \times 0.95^{2} \times 0.05\right)+\left(C(3,2) \times 0.03^{2} \times 0.97\right)+\left(C(3,2) \times 0.02^{2} \times 0.98\right)$ 0.139
(b)
i) The present value of K300000 in three years' time, based on a discount rate of $7 \%$, is
found by setting $S=300000, t=4$ and $r=7$ in the formula

$$
P=S\left(1+\frac{r}{100}\right)^{-t}
$$

This gives

$$
P=K 300000(1.07)^{-4}=228868.56
$$

The NPV is therefore

$$
K 228868-K 225000=3868.56
$$

The project is to be recommended because this value is positive.
ii) To calculate the IRR we use the formula:

$$
S=P\left(1+\frac{r}{100}\right)^{t}
$$

We are given $S=300000, P=225000$ and $t=4$, so we need to solve

$$
\begin{gathered}
300000=225000\left(1+\frac{r}{100}\right)^{4} \\
\frac{4}{3}=\left(1+\frac{r}{100}\right)^{4} \\
1+\frac{r}{100}=\left(\frac{4}{3}\right)^{\frac{1}{4}}
\end{gathered}
$$

Hence;

$$
\frac{r}{100}=1.075-1=0.075
$$

and so the IRR is $7.5 \%$. The project is therefore to be recommended because this value exceeds the market rate of $7 \%$.

## SOLUTION THREE

a)

b)

| $x$ | $y$ | $x^{2}$ | $x y$ | $y^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 8 | 10 | 169 | 130 |
| 12 |  |  | 96 | 100 |
|  | 20 | 225 | 300 | 40 |
| 15 | 16 | 361 | 304 | 256 |
| 19 | 35 | 400 | 700 | 1225 |
| 20 | 45 | 441 | 945 | 2025 |
| 21 | 60 | 625 | 1500 | 3600 |
| 25 | 80 | 900 | 2400 | 6400 |
| 30 | $\sum y=274$ | $\sum x^{2}=3265$ | $\sum x y=6375$ | $\sum y^{2}$ |
| $\sum x=155$ |  |  |  | $=14070$ |

$b=\frac{\sum x y-\frac{\sum x \sum y}{n}}{\sum x^{2}-\frac{\left(\sum x\right)^{2}}{n}}$
$=\frac{6375-\frac{(155)(274)}{8}}{3265-\frac{(155)^{2}}{8}}$
$=\frac{1066.25}{261.875}$
$\approx 4.07$
$a=\bar{y}-b \bar{x}$
$=\frac{274}{8}-(4.07)\left(\frac{155}{8}\right)$
$\approx-44.61$
Therefore the required answer is $\hat{y}=-44.61+4.07 x$
c) $\hat{y}=-44.61+4.07 x=-44.61+4.07(40)=118.19$

The selling price will be K118 190
d) Correlation coefficient $r$ is

| $\sum_{=155} x$ | $\sum y=274$ | $\sum x^{2}=3265$ | $\sum x y=6375$ | $\sum y^{2}$ |
| :--- | :--- | :--- | :--- | :--- |
| $=14070$ |  |  |  |  |

$$
\begin{gathered}
r=\frac{\sum x y-\frac{\sum x \sum y}{n}}{\sqrt{\left(\sum x^{2}-\frac{\left(\sum x\right)^{2}}{n}\right)\left(\sum y^{2}-\frac{\left(\sum y\right)^{2}}{n}\right)}} \\
\frac{6375-\frac{155 \times 274}{8}}{\sqrt{\left(3265-\frac{155^{2}}{8}\right)\left(14070-\frac{(274)^{2}}{8}\right)}} \\
=\frac{1066.25}{\sqrt{(261.875)(4685.5)}}=\frac{1066.25}{\sqrt{1227015.3125}}
\end{gathered}=0.963
$$

## SOLUTION FOUR

(a)
(i) Let $x_{1}=$ the number of units of product $P_{1}$ to be produced $x_{2}=$ the number of units of product $P_{2}$ to be produced Maximize $\mathrm{Z}=50 x_{1}+60 x_{2}$
Subject to $2 x_{1}+x_{2} \leq 300$

$$
\begin{aligned}
& 3 x_{1}+4 x_{2} \leq 509 \\
& 4 x_{1}+7 x_{2} \leq 812
\end{aligned}
$$

where $x_{1}, x_{2} \geq 0$
(ii) $2 x_{1}+x_{2}=300$

Table of values

| $x_{1}$ | 0 | 150 |
| :--- | :--- | :--- |
| $x_{2}$ | 300 | 0 |

$3 x_{1}+4 x_{2}=509$
Table of values

| $x_{1}$ | 0 | 170 |
| :--- | :--- | :--- |
| $x_{2}$ | 127 | 0 |

$4 x_{1}+7 x_{2}=812$
Table of values

| $x_{1}$ | 0 | 203 |
| :--- | :--- | :--- |
| $x_{2}$ | 116 | 0 |

## GRAPH

## SEE GRAPH PAPER ATTACHED TO HARD COPIES

$$
\begin{array}{ll}
\mathrm{Z}=50 x_{1}+60 x_{2} \\
\mathrm{~A}(0,116), & \mathrm{Z}=50(0)+60(116)=6,960 \\
\mathrm{~B}(60,85), & \mathrm{Z}=50(60)+60(85)=8,100 \\
C(135,25), & \mathrm{Z}=50(135)+60(25)=8,250 \\
D(150,0), & \mathrm{Z}=50(150)+60(0)=7,500
\end{array}
$$

$E(0,0), \quad Z=50(0)+60(0)=0$

The optimal solution is given by the point $C(135,25)$
i.e. $x_{1}=135$
$x_{2}=25$
$\mathrm{Z}_{\text {max }}=\mathrm{K} 8,250$
(b)
(i) Based on the standard deviation, asset II has a higher standard deviation (5.5) than asset I (4.9) and therefore asset II is riskier.
(ii) Based on the coefficient of variation of variation test, asset I has a higher coefficient (1.63) than asset II (0.46) so asset I is riskier
(iii) The coefficient of variation is more reliable. This is because the expected returns of the two assets are widely dissimilar. So the standard deviation cannot be used as a basis of the comparison.

## SOLUTION FIVE

(a) (i) Construct the following table

| Entry | A | B | C | D | E | F | G | H | I | J | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Judge <br> 1 | 9 | 2 | 3 | 1 | 4 | 10 | 8 | 6 | 7 | 5 |  |
| Judge <br> 2 | 2 | 6 | 9 | 1 | 4 | 8 | 10 | 3 | 5 | 7 |  |
| $d$ | 7 | -4 | -6 | 0 | 0 | 2 | -2 | 3 | 2 | -2 | 0 |
| $d^{2}$ | 49 | 16 | 36 | 0 | 0 | 4 | 4 | 9 | 4 | 4 | 126 |

$$
r_{s}=1-\frac{6 \sum d^{2}}{n\left(n^{2}-1\right)}=1-\frac{6(126)}{10(100-1)} \approx 0.764
$$

Since $r_{s}=0.764$ is greater than .5 , we can conclude that, there is a strong positive linear relationship between the two judges. They tend to agree in their scoring.
(ii)
(b) Construct the table below

| Year $(t)$ | Sales $(y)$ | Four moving <br> total (4MT) | Four centered <br> moving total <br> $(4 \mathrm{CMT})$ | Seasonal <br> variation $\frac{\hat{y}}{y}$ |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 100 |  |  |  |
| 2 | 125 |  |  |  |
|  | 127 | 454 |  | 1.11 |
| 3 | 102 | 458 | 114 |  |
|  |  |  | 114.875 | .89 |
| 4 | 104 | 461 |  |  |
| 5 | 128 | 464 | 115.625 | .90 |
| 6 | 130 | 492 | 119.5 | 1.06 |
| 7 |  |  |  |  |
|  | 107 | 475 | 120.875 | 1.08 |
| 8 |  | 478 |  |  |
|  |  |  |  |  |


| 9 | 110 |  | 116.625 | .94 |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 455 |  |  |
| 10 | 131 |  | 114 | 1.15 |
|  |  | 457 |  |  |
| 11 | 133 |  | 117 | 1.14 |
|  |  | 479 |  |  |
| 12 | 107 |  |  |  |
| 13 | 109 |  |  |  |
| 14 | 132 |  |  |  |

We calculate the seasonal variations

| Year | 1 | 2 | 3 | 4 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2005 |  |  | 1.11 | .89 |  |
| 2006 | .90 | 1.06 | 1.08 | .90 |  |
| 2007 | .94 | .1 .15 | 1.14 |  |  |
| Average <br> seasonal <br> variations | 0.97 | 1.105 | 1.11 | 0.895 |  |
| Adjusted <br> seasonal <br> variations | 0.9 | 1.1 | 1.1 | 0.9 | 4 |

## SOLUTION SIX

(a)
(i) $\quad Q_{1}=\frac{1}{4}(n+1)^{\text {th }}$ value

$$
\begin{aligned}
& =\frac{1}{4}(29+1)^{\text {th }} \text { value } \\
& =7.5^{\text {th }} \text { value }
\end{aligned}
$$

So, we pick the $8^{\text {th }}$ value
$\therefore Q_{1}=36$
$Q_{3}=\frac{3}{4}(n+1)^{\text {th }}$ value
$=\frac{3}{4}(29+1)^{t h}$ value
$=22.5^{\text {th }}$ value

So, we pick the $23^{\text {rd }}$ value.
$\therefore Q_{3}=44$

Upper fence $=Q_{3}+1.5\left(Q_{3}-Q_{1}\right)$

$$
\begin{gathered}
=44+1.5(44-36) \\
=44+12 \\
=56
\end{gathered}
$$

Lower fence $=Q_{1}-1.5\left(Q_{3}-Q_{1}\right)$

$$
\begin{aligned}
& =36-1.5(44-36) \\
& =36-12 \\
& =24
\end{aligned}
$$

Any value which is bigger than the upper fence (56) or smaller than the lower fence (24) is considered to be an outlier. Therefore, 22, 22, and 23 are smaller than the lower fence, so these are outliers.
(b) Given the following information, $S=1500000, r=8.5 \%, m=2$, and we looking for the periodic payment $R$,

In the amount formula of an annuity, we substitute the given figures to get

$$
1500000=\mathrm{R}\left[\frac{\left(1+\frac{.085}{2}\right)^{40}-1}{\frac{.085}{2}}\right]
$$

Make $r$ the subject of the of the formula
$1500000=R(100.8228291)$, dividing both sides by 100.8228291 , we get
$R=K 14877.58$, i.e., we must deposit K14 877.58 every six months in order to have K1.5m in the account after 20 years.
(c)

We construct the cumulative probability to generate the random number intervals

| Time between <br> arrivals (min) | Probability | Cumulative <br> probability | Random number <br> interval |
| :--- | :--- | :--- | :--- |
| 1 | .15 | .15 | $00-14$ |
| 2 | .30 | .45 | $15-44$ |
| 3 | .40 | .85 | $45-84$ |
| 4 | .15 | 1.00 | $85-99$ |
|  | 1.00 |  |  |

Simulate the arrival of cars at the service station for 10 arrivals, and then we compute the average time between arrivals

| Number of arrivals | Random number | Time between arrivals <br> $(\mathrm{min})$ |
| :--- | :--- | :--- |
| 1 | 59 | 3 |
| 2 | 98 | 4 |
| 3 | 67 | 3 |
| 4 | 17 | 2 |
| 5 | 44 | 2 |
| 6 | 51 | 3 |
| 7 | 10 | 1 |
| 8 | 21 | 2 |
| 9 | 51 | 3 |
| 10 | 41 | 2 |

Average time between arrivals $\bar{x}=\frac{\sum x}{n}=\frac{3+4+3+2+2+3+1+2+3+2}{10}=\frac{25}{10}=2.5$ minutes

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS
$\qquad$
LEVEL ONE

DA 3: BUSINESS ECONOMICS

TUESDAY 12 DECEMBER 2023
TOTAL MARKS - 100; TIME ALLOWED: THREE (3) HOURS

## INSTRUCTIONS TO CANDIDATES

1. You have fifteen (15) minutes reading time. Use it to carefully study the examination paper 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 are indicated against each question.

1 All the combinations of goods and services that can be produced if all of Society's resources are used efficiently are represented on an economy's
A. Production possibility frontier.
B. Resource availability diagram.
C. Factors of production statement.
D. Allocative allotment graph.

2 If John experiences a decrease in his income, then we would expect John's demand for:
A. Each good he purchases to remain unchanged.
B. Normal goods to decrease.
C. Luxury goods to increase.
D. Inferior goods to decrease

3 When we say that the competitive firm is a price taker, we mean that:
A. The output of the firm is too small to influence the market price of the product.
B. The firm's management doesn't know what price to set, so it just charges what other firms are charging.
C. The firm is following a price leader.
D. The firm produces less output to set a higher price.

4 When an increase in the firm's output reduces its long-run average total cost, it achieves:
A. Economies of scale.
B. Diseconomies of scale.
C. Constant returns to scale.
D. Variable returns to scale.

5 The number of people unemployed equals:
A. The number of people employed minus the labor force.
B. The labor force plus the number of people employed.
C. The labor force minus the number of people employed.
D. The number of people employed divided by the labor force.

Minimum wage is an example of a price $\qquad$ , and results in a $\qquad$ of labor.
A. floor; surplus
B. ceiling; surplus
C. floor; shortage
D. ceiling; shortage

7 If a country can produce a good at a lower opportunity cost, that country $\qquad$ in producing that good.
A. Has a comparative advantage
B. Has an absolute advantage
C. Experiences no diminishing returns
D. Experiences no marginal costs

8 Suppose that the consumption function is given by $\mathrm{C}=500+0.8 \mathrm{Y}$ and investment is $\mathrm{I}=500$. The equilibrium level of income is;
A. 2,500
B. 1,000
C. 5,000
D. 4,000

9 The total quantity of an economy's final goods and services demanded at different price levels is represented by;
A. The aggregate supply curve.
B. The aggregate demand curve.
C. The phillips curve.
D. The aggregate expenditure function.

10 A currency depreciation will begin to improve the trade balance immediately;
A. If the demand for imports and exports are inelastic.
B. If the demand for imports and exports are elastic.
C. If both imports and exports decrease
D. None of the above

## SECTION B

## This section has TWO (2) PARTS. Part 1 Microeconomics and Part 2 Macroeconomics.

## 1. MICROECONOMICS

## Attempt any two (2) questions out of the three (3) questions.

## QUESTION TWO

Consider the following supply schedule.

| Price (ZMW) | Quantity supplied |
| :--- | :--- |
| 2 | 25 |
| 4 | 35 |
| 6 | 45 |
| 8 | 55 |
| 10 | 65 |
| 12 | 75 |

(a) Plot the supply curve on a graph.
(b) Suppose there is an increase in the cost of raw materials and the causes the quantity supplied to reduce by 15 units at all prices. Plot a new supply curve.
(c) Outline any three (3) determinants of supply, other than cost of raw materials.
(d) Calculate the price elasticity of supply for a price change from K4 to K8.
(e) List any two (2) determinants of price elasticity of supply.
[Total: 20 Marks]

## QUESTION THREE

(a) Distinguish between the short run and the long run in computing costs of production.
(4 marks)
(b) Explain the importance of the distinction between the short run and the long run to a firm.
(4 marks)
(c) Nyambe runs a small pottery firm. He hires one helper at K12,000 per annum, pays annual rent of K5, 000 for his shop, and materials cost K20,000 per year. Nyambe has K40,000 of his own funds invested in equipment (pottery wheels, kiln and so forth) which could earn him K4,000 per year if alternatively invested. Nyambe has been offered K15,000 per year to work as a Potter for a competitor. He estimates his entrepreneurship skills are worth K3,000 per year. The total annual revenue from the pottery sales is $\mathrm{K} 72,000$.

## Required:

(i) Calculate Nyambe's explicit costs.
(ii) Calculate Nyambe's implicit costs.
(iii) Calculae Nyambe's accounting profit.
(3 marks)
(iv) Calculate Nyambe's economic profits.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

(a) List any three (3) advantages and any three (3) disadvantages of sole trader type of business.
(b) Outline any three (3) differences and two (2) similarities between perfect competition and monopolistic competition.
(5 marks)
(c) Suppose a profit- maximizing firm operating under conditions of perfect competition, with market price at K50, has the following cost function:

$$
T C=10+5 q^{2}
$$

(i) Determine the revenue function.
(ii) Determine the profit function.
(iii) Determine the maximizing level of output and the profit.
(d) Explain the term 'Allocative Efficiency'.

## 2. MACROECONOMICS

## Attempt any TWO (2) questions out of the three (3) questions from FIVE TO SEVEN. QUESTION FIVE

(a) Explain any three (3) uses of national income statistics.
(b) Suppose an economy is described by the following equations: $c=100+0.75 Y_{d}$ and I = K300.
(i) Determine the equilibrium level of income.
(ii) Calculate the consumption level at this level of income.
(2 marks)
(iii) Calculate the consumption level at this level of income
(2 marks)
(iv) Suppose net exports are introduced and they amount to K100. Determine the new national income equilibrium.
(2 marks)
(c) Calculate the value of the multiplier and explain it.

## QUESTION SIX

All modern Governments are expected to manage their national economies to some extent. People generally assume that government action can support or hinder the growth of prosperity in their country and look to their government for serviceable macroeconomic policies.
(a) Discuss the effect of unanticipated inflation have upon:
(i) Individuals who are retired and living on a fixed income.
(ii) Debtors.
(iii) Creditors.
(b) Explain how indexation protect one from the redistribution effect of inflation?
(c) Outline any three (3) differences between direct tax and indirect tax, giving one (1) example of each.

## QUESTION SEVEN

(a) Money serves the same functions in international trade as it does in the domestic economy. However, the basic problem in international trade is to create acceptable standards of value from various currencies maintained by separate countries.

## Required:

(i) Explain how a strong Zambian kwacha would encourage Zambians to import goods from other countries.
(4 marks)
(ii) Outline any four (4) factors that influence the exchange rate, in general.
(b) Outline any four (4) benefits of international trade to a country like Zambia.
(8 marks)
[Total: $\mathbf{2 0}$ Marks]

## END OF PAPER

DA 3: BUSINESS ECONOMICS SUGGESTED SOLUTIONS
SOLUTION ONE
1.1 A
1.2 B
1.3 A
1.4 A
1.5 C
1.6 A
1.7 A
1.8 C
1.9 B
1.10 B

## SOLUTION TWO

a) Plot the graph

b) A reduction in supply at all prices is reflected by a shift of the supply curve from S1 to S2 as shown below

c) Determinants of supply

- Production cost: Since most private companies' goal is profit maximization. Higher production cost will lower profit, thus hinder supply. Factors affecting production cost are: input prices, wage rate, government regulation and taxes, etc.
- Technology: Technological improvements help reduce production cost and increase profit, thus stimulate higher supply.
- Number of sellers: More sellers in the market increase the market supply.
- Expectation for future prices: If producers expect future price to be higher, they will try to hold on to their inventories and offer the products to the buyers in the future, thus they can capture the higher price.
d)

Price elasticity of supply

$$
\begin{gathered}
\text { Pes }=\frac{\text { chnage in } Q}{\text { change in } P} \times \frac{P}{Q} \\
\frac{55-35}{8-4} \times \frac{4}{35} \\
=\mathbf{0 . 5 7}
\end{gathered}
$$

e) Determinants of price elasticity of supply

- The length of the production period
- The availability of spare capacity
- The ease of accumulating stocks
- Ease of switching production
- Market entry barriers
- Time scale


## SOLUTION THREE

(a) The short run is a period of time when one factor of production, e.g plant is fixed while other factors of production are variable. This means that the firm experiences both fixed costs and variable costs.
In contrast, in the long run, there are no fixed factors. The firm only experiences variable cost as there are no fixed costs.
(b) The distinction is very important to producers. It allows them to make proper plant utilization decisions. In the short run producers of a product are able to change the quantities of some but not all the resources they employ. It is a period too brief to allow the firm to vary its plant capacity but long enough to permit the change the level at which the plant capacity can be used. In the long run, the firm can increase the plant capacity
(c) Nyambe:
(i) Explicit costs are payments a firm must make to an outsider to obtain a resource. These costs are salary for the helper, shop rent and material cost. Thus, K12,000 + K5,000 + K20,000 = K37,000.
(ii) Implicit costs are monetary income a firm sacrifices when it employs a resource it owns to produce a product rather than supplying a resource on the market; it is the opportunity cost. The costs cover foregone interest, foregone salary and entrepreneurial reward. Thus, $K 4,000+K 15,000+K 3,000=\mathbf{K 2 2 , 0 0 0}$
(iii) Accounting profit is the difference between total revenue and explicit costs $=$ K $72,000-\mathrm{K} 37,000=\mathbf{K 3 5 , 0 0 0}$
(iv) Economic profit is the difference between total revenue and explicit costs plus implicit costs $=\mathrm{K} 72,000-(\mathrm{K} 37,000+\mathrm{K} 22,000)=$ K13,000.

## SOLUTION FOUR

(a) Advantages and disadvantages of sole trader

Advantages

- It requires little capital to set up.
- Self-interest acts as an incentive to work.
- Regular customers and suppliers are known.
- Owner can make quick business decisions.


## Disadvantages

- There is unlimited liability.
- Difficult to raise capital.
- Holidays or illnesses cause problems.
- Lack of continuity after the death of the owner.
- Lack of division of labour


## (b) Perfect competition and Monopolistic competition

## Differences

- Under perfect competition, each firm produces and sells a homogeneous product. On the other hand, there is product differentiation under monopolistic competition.
- Price, under perfect competition, is determined by the forces of demand and supply for the entire industry. Every firm has to sell its product at that price. On the other hand, every firm has its some control over the price under monopolistic competition.
- Geometrically, the demand curve (AR) of a firm is perfectly elastic under perfect competition and the marginal revenue (MR) curve coincides with it. As against this, the demand curve of a firm is elastic and downward sloping under monopolistic competition and its corresponding MR curve lies below it.
- Another difference between the two market situations relates to their size. In the long-run, competitive firms are both allocative and productive efficient, but under monopolistic competition, the firms are not.


## Similarities

- The number of firms is large both under perfect competition and monopolistic competition.
- In both the market situations, firms can earn super-normal profits or incur losses in the short-run. But in the long-run, firms earn only normal profit.
- They both experience is free entry and exit in the industry.
(c)
i) Total Revenue $=$ Price $X$ Quantity $\mathbf{T R}=\mathbf{5 0 q}$
ii) Profit $=$ Total Revenue - Total Cost

$$
\text { Profit }=50 q-\left(10+5 q^{2}\right)
$$

iii) Profit maximizing occurs where $M R=M C$.

Given, $M C=10 q$, and under perfect competition, $M R=$ Price $=K 50$
Therefore, $M R=M C=50=10 q$

$$
Q=5
$$

Profit=TR -TC
$50 q-10+5 q^{2}$
$(50 \times 5)-10+(5 \times 25)$
250-135
115
(d) Allocative Efficiency is the level of output at which a good or service's cost $(P)$ is equal to its marginal cost ( MC ) of production ( $\mathrm{P}=\mathrm{MC}$ ). It is obtained when goods and services are distributed in response to consumer requests. One can reach the allocation efficiency if those goods and services' marginal cost and marginal utility are equal.

## SOLUTION FIVE

## (a) Uses of national income

- The main use is to assess the performance of an economy over a year. It is used as an indicator of a growing or a contracting economy, Economic growth or lack of it is assessed using the national income figures.
- The figures are used to indicate the overall standard of living, especially after dividing by the total population in a country to calculate the per capital income.
- This enables comparisons to be made between different countries. To ascertain which are rich and which ones are poor countries.
- To assist the government in managing the economy, using Keynesian demand management.
- The trade or Economic cycles depend on the national income figures. The figures are also used to estimate future movements.
(b)
(i) The equilibrium level of income is calculated by

$$
\mathrm{Y}=\mathrm{C}+\mathrm{I}
$$

$$
Y=(K 100+0.75 Y)+K 300
$$

$$
Y=400+.75 Y
$$

$$
0.25 Y=400
$$

$$
\text { Y = K1, } 600 .
$$

(ii) Consumers will consume

$$
\begin{aligned}
& C=100+0.75 Y \\
& =\mathbf{K 1}, \mathbf{3 0 0}
\end{aligned}
$$

(iii) They will save

$$
\begin{aligned}
& S=-100+0.25 Y \\
& =\mathbf{K} \mathbf{3 0 0}
\end{aligned}
$$

(iv) We now add K100 net exports to the equation

$$
\begin{aligned}
& Y=(K 100+0.75 Y)+K 300+K 100 \\
& Y=500+.75 Y \\
& .25 Y=500 \\
& \mathbf{Y}=\mathbf{K 2}, \mathbf{0 0 0}
\end{aligned}
$$

(v) The Multiplier $=1 / 1-\mathrm{MPC}$
$=1 / 0.25$
$=4$
(c) The logic behind the multiplier is that an increase in autonomous expenditure becomes income for people, who then spend a fraction of the increase as determined by the marginal propensity to consume. In turn, this increase in consumption becomes income for another group of consumers who spend a fraction of the increase. These rounds of spending go on and on, with each successive round becoming smaller. The multiplier process can also work in reverse, starting with a decrease in autonomous expenditure.

## SOLUTION SIX

(a) The effect of inflation on:
(i) Unanticipated inflation lowers the real income of those on a fixed income. An increase in the price level reduces the purchasing power of a fixed nominal income; the result is the purchase of fewer goods and services.
(ii) Debtors benefit from unanticipated inflation since the kwachas they pay back have less purchasing power.
(iii) Creditors (lenders), on the other hand, lose from unanticipated inflation since the kwachas they are repaid purchase fewer goods and services.
(b) Indexation ties money payments to a price level so that the sum of money payments rises proportionately with the price level. For example, a K20,000 salary would increase to K22,000 when the monetary payments of K20,000 are indexed and there is a 10 percent increase in the price level.
(c) Taxation

- Direct taxes are levied on income while indirect taxes are levied on expenditure.
- Indirect taxes are regressive while direct taxes can be progressive.
- A direct tax is paid direct by a person to the Revenue authority while an indirect tax is collected by the Revenue authority from an intermediary
- Direct taxes are also usually unavoidable while indirect taxes cannot be avoided, generally.

Examples of direct taxes are income tax, corporation tax, inheritance tax, capital gain tax. Examples of indirect taxes include Value Added Tax (VAT), Excise duty

## SOLUTION SEVEN

(a) Exchange rate
(i) A strong kwacha would encourage Zambians to import goods because they will be cheaper in kwacha terms, holding other things constant.
(ii) Factors that influence the exchange rate include:

- Relative inflation rate: A country which has high levels of inflation to its trading partners will have a depreciating currency. Therefore the higher the rate of inflation relative to other countries the rise will be in the exchange rate.
- Relative interest rates: A country with higher interest rates, ceteris paribus, will have an appreciating currency. This is because higher interest rates will attract foreigners to make their portfolio investments in the domestic economy. However, for them to make this investment, they need to buy the domestic currency. This increases the demand for the domestic currency hence it appreciates.
- Central bank monetary policy: The government through the Central Banks can strongly influence the exchange rate. This is mainly done by use of official reserves.
- Speculation: Speculation is the act of buying and selling things when they are cheaper with the hope of selling them later when they become expensive. The speculation can also influence the exchange rate strongly than there activities.
- Expectation: People expectations regarding the movement in the exchange rate can influence the actual movement
(b) The following are the benefits of international trade:
- It enables a country to get what she cannot produce herself
- It provides citizens with a greater variety of goods
- It makes countries to specialize in goods in which they have greatest advantage over others. This specialization allows countries to produce goods in greater volume and probably at cheaper prices (Economies of scale)
- It enables a country to dispose of her surplus goods
- It allows the movement of people between countries thus promoting understanding

During times of calamities (natural disasters) such as floods, drought, etc, international trade enables countries to obtain relief supplies swiftly from other countries.

# DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS <br> LEVEL ONE <br> DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION 

$\qquad$
WEDNESDAY 13 DECEMBER 2023

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 correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks are indicated against each question.
1.1 In a ... topology, all devices are connected to the same cable.
A. Star
B. Ring
C. Star
D. Bus
1.2 Consider the Excel cell reference below:

B\$7
State what will happen when it is copied in a formula to another cell
A. The cell reference will not change
B. The column will change the row will remain the same
C. The row will change the column will remain the same
D. Both row and the column will change
(2 marks)
1.3 The accountant wishes to estimate the likely effect on profits of a decrease in entry price by examining the consequences of estimated increases in the number of people using it. What would be a suitable software package to aid him with the calculations?
A. An expert system
B. A spread sheet
C. A presentation graphics package
D. A maths package
1.4 Which one below is an example of a data quality principal
A. Easy to Read
B. Clear
C. Easy to find
D. Timeliness
1.5 Match the correct definition to the terms below:

| Term | Definition |
| :--- | :--- |
| 1. Big Data | (i) A repository of structured and unstructured from various sources <br> data stored in large quantity and can be accessed at a high speed. |
| 2. Block <br> Chain | (ii) A pool of structured data stored with minimum redundancy and <br> able to be accessed by different applications. |

3. Database (iii) A data stored and linked to each other and able to be updated instantly as transactions are created by users in the dataset.

Which one below shows the correct match?
A. 2 and (i)
B. 3 and (iii)
C. 1 and (i)
D. 2 and (iii)
1.6 In which order should work experience be stated in a Curriculum Vitae?
A. In the order of excellence
B. In reverse chronological order
C. Chronologically
D. In any order
1.7 Which of the following patterns of communication provide faster communication in an organisation?
A. Chain and $Y$
B. Wheel and network
C. Wheel and chain
D. Network and chain
1.8 What does the phrase 'terms of reference' mean in report writing?
A. It identifies the writer of the report
B. It is the short version of the report
C. It states what the report is attempting to cover
D. It states who authorized the writing of the report
1.9 Which of the following is the most obvious attribute of visual communication?
A. It lasts long in one's memory
B. It can only be used by literate people
C. It is associated with the blind
D. It is mostly appropriate with the deaf
1.10 Which of the following is NOT a factor to consider when refusing to give permission to a junior staff?
A. The refusal must be polite
B. The refusal must not be ambiguous
C. The refusal must be firm
D. The refusal must be ambiguous

## SECTION B

## This section has two (2) parts:

## 1. INFORMATION TECHNOLOGY

## 2. COMMUNICATION

## 1. INFORMATION TECHNOLOGY

## Attempt any TWO (2) from questions: TWO, THREE AND FOUR QUESTION TWO

(a) The world has transformed the way human beings communicate between each other due to the emergence of Information Communication Technology (ICT). A construction firm has employed you as a Financial Director to head its finance department. The organisation has a private network that is also connected to the Internet.

## Required:

Explain the following risks with the organization's information system.
(i) Phishing attacks (2 marks)
(ii) Denial of service attack (2 marks)
(iii) Hackers.
(2 marks)
(iv) Ransom ware
(b) Describe the following types of network topology stating how data moves from one device to the other.
Explain the following risks with the organization's information system.
(i) Star topology.
(ii) Ring topology.
(iii) Bus topology.

## QUESTION THREE

(a) In today's consumer centric market, organisations have to evaluate data to understand the customer's desires in order to develop and shift their strategies accordingly with this in mind, accurate and current data is essential.

State any five (5) benefits of having good data quality of information system in an organisation.
(b) Explain the following features of a spreadsheet
(i) Function.
(ii) Conditional formatting.
(c) Use the table below to answer questions that follow:

| $\triangle$ | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 |  |  |  |  |  |
| 17 |  |  |  |  |  |
| 18 |  | Exchange rate K |  |  |  |
| 19 | Exchange rate | 18.2 |  |  |  |
| 20 | amount US\$ | 25.5 | 300 | 422.32 | 400.27 |
| 21 | Amount K | 464.10 | 5,460.00 | 7,686.22 | 7,284.91 |
| 22 |  | absolute reference formular |  | abst ute ref | fe formula |

(i) Indicate differences between absolute and relative referencing.
(ii) Show absolute reference formula to calculate kwacha equivalent from dollar using exchange rate in cell B19.
(iii) Demonstrate by use of a formula for relative referencing how you achieve the same results.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

(a) Michael Porter grouped various activities that contribute to the organization's value chain.
State four (4) ways a well-designed Accounting Information System can contribute to the organisation's value chain.
(b) Describe the following type of computers:
(i) Supercomputers.
(ii) Microcomputers.
(c) List two (2) features of MS Windows operating system

## 2. COMMUNICATION

## Attempt any TWO (2) questions from questions: FIVE, SIX and SEVEN

## QUESTION FIVE

You are the chairperson of a committee which looks into the issues of debt collection in an organisation. In a meeting, you appoint Ms. Banda as secretary for the day. However, she is not familiar with meeting procedures and conventions and has never prepared minutes before ever since she was employed.

## Required:

(a) Explain to Ms. Banda any four (4) rules governing meetings.
(b) Outline any six (6) duties of a secretary in a business meeting.
(c) Explain the following meeting terminologies:

| (i) | Adjourn. | (2 marks) |
| :--- | :--- | ---: |
| (ii) | Convene. | $(2$ marks) |
| (iii) | Consensus | $(2$ marks $)$ |
| (iv) | Committee | $(2$ marks $)$ |
| (v) | Deliberation | (2 marks) |

[Total: 20 Marks]

## QUESTION SIX

Every Friday, Mary is required to write a report on the activities of her department. However, one morning she woke up to a rude shock when she found her printer stolen. Thieves had broken into the office and destroyed the locking system. Mary was asked by her manager to thoroughly investigate the issue and write a report which should include recommendations to ensure that such an occurrence does not repeat itself.

## Required:

(a) What kind of report was Mary asked to write every Friday?
(b) What kind of report was she asked to write when her computer was stolen?
(c) Imagine you were Mary, write a formal report as instructed by the manager. On the stolen printer.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SEVEN

Listening is active process that plays a very important role in effective communication. In an organisation, it can be used in different situations such as meetings and receiving instructions. It can also be used in any other situations that require note making.

## Required:

(a) Explain any five (5) qualities of a good listener.
(10 marks)
(b) Outline any five (5) guidelines to effective note-making.

## END OF PAPER

## DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION SUGGESTED SOLUTIONS

## SOLUTION ONE

1.1 D
$1.2 \quad \mathrm{~B}$
1.3 B
1.4 D
1.5 C
1.6 B
1.7 B
1.8 D
1.9 A
1.10 D

## SOLUTION TWO

(a) Risks with the organisation's information system
(i) Phishing attacks

This involves an external attacker gaining authorised access to the email and solicits the employee to give out confidential information
(ii) Denial of service attack

It entails an attacker sending out massive information on the company network in the process clogging internet traffics rendering company network to be unusable
(iii)Hackers

These are attackers who attempts to gain access to the company servers using unauthorised means.
(iv)Ransom ware

The type of malicious software which encrypts company information and demands for payment in order to have the information decrypted.
(b) Types of network topology stating how data moves from one device to the other
(i) Star topology.

- All devices are connected one central device
- All data passes the central device
(ii) Ring topology.
- Each device is connected to two adjacent devices until they form a loop
- Data circulates around the loop until it reaches its destination
(iii)Bus topology.
- All Devices are connected to single cable called a bus
- Data is sent to the bus and moves along the bus for every device to see


## SOLUTION THREE

## (a) Benefits of having good quality of information system

(i) It enables organisations to reduce the cost of identifying and fixing bad data in their systems
(ii) Organisations are able to avoid operational errors
(iii)Businesses can prevent breakdowns that can increase operating expenses
(iv)Reduce revenues / Increase revenues and reduce expenses
(v) It increases the accuracy of analytics application which leads to better business decision making
(vi)It gives organisations a competitive edge over rivals
(b) Features of a Spreadsheet
(i) Function are predefined formulae in excel. They make calculation easy and fast
(ii) Conditional formatting allows one to apply specific formatting in cells that meet a given condition, e.g use of IF statement
(c)
(i) Absolute referencing is when the cell reference formula is copied the formula does not change whilst relative referencing when the cell reference formula is changed the formula also changes in a new cell reference
(ii) $=\mathrm{B} 20 * \$ \mathrm{~B} 19$
(iii) Copy and paste rate value to c20 up to e20

$$
=\mathrm{C} 19 * \mathrm{C} 20=\mathrm{D} 19 * \mathrm{D} 20=\mathrm{E} 19 * \mathrm{E} 20
$$

## SOLUTION FOUR

(a) Well-designed AIS can contribute to the organisation's value chain by:
(i) Improving the quality and reducing the cost of products and services eg the system can monitor operations.
(ii) Improving the efficiency and effectiveness of the organisation's supply chain. The system may allow customers to access services online
(iii)Sharing knowledge: AIS can make it easier to share information and expertise to improve the operations
(iv)Improving decision making: An AIS can provide assistance in all phases of decision making thereby making quality decisions
(b)
(i) Supercomputers

These are the fastest and powerful special purpose computers. They are used carry billions of calculations using many variables. They are designed for special activities such as weather forecast, mineral exploration, space research etc
(ii) Microcomputers

Microcomputers are based on microprocessor technology and are used to meet the computer needs of an individual. They are mainly by individuals in offices.
Also known as Personal Computer (PC)
(c) List two (2) features of MS Windows operating system
(i) Desktop
(ii) Taskbar
(iii) Recycle bin
(iv)Multitasking
(v) Windows explorer

## SOLUTION FIVE

## (a) The rules of meetings

(i) The manner the meeting will be held, whether physical or online
(ii) The type of people to attend a particular meeting
(iii) The date and time when all the required people can attend
(iv)The meeting documents such as the agenda, minutes and notices should be sent to people in advance
(v) Ensuring that the notes are made during the meeting and that minutes are prepared immediately after the meeting
(b) Duties of the secretary
(i) Prepare the venue for the meeting
(ii) Prepare meeting logistics such as refreshments, sitting arrangements and so on.
(iii)Distributes the documentation of the meeting in advance
(iv)Signs the approved minutes
(v) Takes down notes during the meeting
(vi)Writes down the minutes of the meeting immediately after the meeting
(c) Meeting terminologies
(i) Adjourn - to close a meeting or matter for a later date
(ii) Convene - to meet/gather for a meeting
(iii)Consensus - coming to an agreement by all parties
(iv)Committee - a group of people coming together for a common goal
(v) Deliberation - The meeting discussion

## SOLUTION SIX

(a) Routine report - Which is produced at regular intervals
(b) Incident /investigatory report - which is rarely produced
(c) A REPORT ON THE STOLEN OFFICE PRINTER

## 1. TERMS OF REFERENCE

As requested by Mr Konga, the Head, Finance and Administration Department, this is the report, with recommendations, on the office printer that was stolen on Thursday, 7 December, 2023 from the payroll office.

## 2. PROCEDURES

a) The two guards who were on duty the previous night were interviewed.
b) A physical inspection was conducted at the scene of crime,
c) The police were invited to the scene for finger print lifting

## 3. FINDINGS

a) The guards reported a power failure affecting the entire neighbourhood, including our premises.
b) A physical inspection of the scene revealed that the locking system to the office was damaged without conspicuous signs of physical damage.
c) The police were able to lift fingerprints from the door to the office and the table where the printer was.
d) The total cost of the damage including value of the stolen printer as estimated at K8, 000. 00 (Eight thousand kwacha).

## 4. CONCLUSIONS

It was established that:
a) The thieves used some chemical to disable the locking system to the office.
b) The printer was the only item that was stolen from the office.
c) The power outage reported in the area was caused by vandals who could be part of the gang that stole the printer.
d) The finger prints lifted did not match any of those for our staff.

## 5. RECOMMENDATIONS

To avoid similar incidents in future, Management should:
a) Install CCTV around the premises.
b) Engage a security company to guard our premises at night.
c) Procure and install a standby gen set which would be synchronised to switch on whenever a ZESCO power failure occurred.

NAME:

DESIGNATION: Payroll Accountant $\underline{2013}$

SIGNATURE:

DATE: 11 December

## SOLUTION SEVEN

(a) Qualities of a good listener
(i) Patient
(ii) Maintains eye contact
(iii) Sends feedback
(iv) Asks questions
(v) Seeks clarifications
(vi) Listening without distractions
(vii) Do not interject unnecessarily
(viii) Write notes where necessary.

## (b) Guidelines to note-taking

(i) Use of abbreviation
(ii) Write key points only
(iii) Listen for signal words and phrases
(iv) Write less and more listening
(v) Use short hand
(vi) Write in your own words


## 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 the 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 your answer booklet. Marks allocated are indicated against each question.

1. A batch cost estimate includes 630 productive labour hours. In addition, it is anticipated that the idle time will be $10 \%$ of the total hours paid for the batch. The wage rate is K12 per hour.

What is the total estimated labour cost for the batch?
A. K6,804
B. $\mathrm{K} 7,560$
C. K8,316
D. K8,400
2. The standard material cost for a single product is 11 kg at $\mathrm{K} 2 / \mathrm{kg}$. 500 units were produced and $8,000 \mathrm{~kg}$ of material were purchased for K17,500, of which $5,200 \mathrm{~kg}$ were issued to production. Given that all inventory is valued at standard cost, what is material price and Usage variances.

Price
Usage
A. $\mathrm{K} 1,500$ (F)

K600 (A)
B. $K 1,500(A)$

K600 (F)
C. K1,500 (F)

K600 (A)
D. K1,500 (A)

K600 (A)
3. What term is used to describe charging an item of overhead expenditure in its entirety to one specific cost centre?
A. Absorption
B. Allocation
C. Apportionment
D. Re-apportionment
4. The following purchases and issues from inventory occurred in May 2022

| 1 May | Opening stock | 200 units | K420 |
| :--- | :--- | :--- | :--- |
| 5 May | Purchases | 100 units | K450 |
| 7 May | Issue | 250 units |  |
| 17 May | Purchase | 125 units | K430 |
| 24 May | Issue | 75 units |  |

What is the value of the closing inventory on 31 May using FIFO?
A. K43,000
B. $K 42,500$
C. K42,000
D. K45,000
5. A company employs one supervisor for every ten casual workers hired to work in the shop adding to the current work force. Which of the following correctly describe the supervisor's cost?
A. A Fixed Cost
B. A Variable Cost
C. A Mixed Cost
D. A Stepped Cost
6. Which of the following would be included in the financial accounts, but may be excluded from management accounts?
A. Bank interest and charges
B. Depreciation of storeroom handling equipment
C. Direct material costs
D. Factory manager's salary
7. Prime cost is
A. All costs incurred in manufacturing a product
B. The total of all direct costs
C. The material cost of a product
D. The cost of operating a department
8. Kabwata bakery recorded a marginal costing profit of K53,500. The opening inventory was 500 units and closing inventory was 150 units. The fixed overhead absorption rate was calculated at K6/unit.

What is the profit for Kabwata bakery under absorption costing?
A. K55,600
B. $\mathrm{K} 50,050$
C. K53,500
D. K51,400
9. A company needs 500 liters of Chemical $Z$. There is a normal loss of $12 \%$ of the material input into the process. During the month of March 2022 the company
produced 500 liters of good production, although there was abnormal loss of $8 \%$ of the input materials into the process.
How many liters of the material were input into the process during the month?
A. 550 litres
B. 625 litres
C. 1,000 litres
D. 2,650 litres
(2 marks)
10. JK Company operates an integrated accounting system. Which of the following is the correct way of recording accounting entries for the issue to production of indirect material from inventory.

## Debit

A. Work in Progress Account
B. Stores Control Account
C. Overhead Control Account
D. Cost of Sales Account

## Credit

Stores Control Account
Overhead Control Account
Stores Control Account
Work in Progress Account
(2 marks)
[Total: $\mathbf{2 0}$ Marks]

## SECTION B

## There are FIVE (5) questions in this section.

## Attempt any FOUR (4) questions in this section.

## QUESTION TWO

Rainbow Frames (RF) is a leading manufacturer of silver picture frames. The company uses a traditional costing system to allocate production overheads to products using machine hours.

The newly appointed financial controller believes that activity based costing can provide a better allocation of production overheads to products than the current system does. The following total production overheads for the last period were recorded by the cost accounting system:

|  | K |
| :--- | :--- |
| Utility costs related to machine hours | 189,000 |
| Production set-up costs | 120,000 |
| Cost of ordering materials | 18,000 |
| Cost of handling materials | 33,000 |

Details of the three product models and relevant information for the last period are as follows:

|  | Model 1 | Model 2 | Model 3 |
| :--- | :--- | :--- | :--- |
| Number of production runs | 17 | 25 | 18 |
| Number of material orders | 20 | 30 | 40 |
| Number of material requisitions | 30 | 100 | 70 |
| Units produced | 1,000 | 2,000 | 2,500 |
| Machine hours per unit | 1 | 1.5 | 2 |
| Direct labour hours per unit (K60 per hour) | 0.5 hour | 1 hour 2 hours |  |
| Direct materials per unit | K10 | K12 | K15 |
| Required: |  |  |  |

Calculate the unit production cost of each of the three (3) products using:
(a) The traditional absorption costing.
(8 marks)
(b) The activity based costing approach.

## QUESTION THREE

Kalingalinga Fabricators Enterprise (KFE) manufactures to customer order and operates a job costing system. Job 101 remained incomplete at the end of April 2022 with the following production costs incurred:

| Prime costs | K8,720 |
| :--- | :--- |
| Overheads | K5,780 |

KFE worked on two jobs in May 2022. Prime costs incurred were:

|  | Job101 | Job102 |
| :--- | ---: | ---: |
|  | K | K |
| Direct materials issued from stores | 3,320 | 16,480 |
| Direct materials returned to stores | Nil | $(940)$ |
| Direct materials transferred between the two jobs | $(360)$ | 360 |
| Direct labour | 1,440 | 7,380 |

Direct labour is paid at a rate of K18.00 per hour. Production overheads are absorbed at a rate of K35 per direct labour hour. $10 \%$ of the total production cost of each job is added in order to recover general administration costs. Job 101 was completed in May 2022 and the customer paid the agreed sum of K26,800.

KFE management has been discussing on the possibility of introducing Just-In-Time inventory system

## Required:

(a) Prepare a profit statement for 101. (8 marks)
(b) Calculate the value of work-in-progress for Job 102 at the end of May 2022.
(c) Describe the main features of Just in Time systems.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

Switch Electrical Ltd (SEL) manufactures and sells electrical fittings. The following standard cost information was made available:

- Budgeted selling price at K60
- Direct material 11 Kgs at K1 per kg
- Direct labour 5 hours at K3 per hour
- Variable overhead 5 hours at K2 per hour
- Fixed overhead 5 hours at K1 per hour

The variable and fixed overheads are absorbed on the basis of the direct labour hours worked. SEL planned to produce and sell 3,275 units

The following were the actual results recorded during the month of January:
Number of units produced and sold: 3,500 units

|  | K |
| :--- | ---: |
| Sales revenue | 227,500 |
| Direct materials: 37,800 Kgs purchased and used | 56,700 |
| Direct labour: 18,000 hours | 45,000 |
| Variable overhead | 37,800 |
| Fixed overhead | 17,000 |

## Required:

(a) Prepare the standard cost card for electrical fitting.
(b) Calculate the following variances:
(i) Direct material price
(ii) Direct material usage
(iii) Direct labour rate
(iv) Direct labour efficiency
(v) Variable overhead expenditure
(vi) Variable overhead efficiency
(vii) Fixed overhead expenditure
(viii) Fixed overhead volume
(ix) Sales price
(x) Sales volume profit

## QUESTION FIVE

During COVID 19, a number of companies across the world were affected by the loss of employees through death. After COVID 19, companies started recruiting new employees in order to revert to normal operation.

## Required:

(a) Explain labour turnover and how it is calculated.
(b) List any two (2) of following Labour turnover costs:
(i) Replacement Costs.
(ii) Preventive Costs.
(2 marks)
(c) A Drug Pharmacy located outside University Teaching Hospital (UTH) supply drugs mainly to the UTH patients. The opening drug balance on 1 March was 300 units valued at K33,000.
The flow of drugs for the month of March 2023 were as follows:

| March | Purchases <br> (Units) | Sales <br> (Units) | Total <br> cost <br> (K) |
| :---: | :---: | :---: | :---: |
| 2 | 200 |  | 24,000 |
| 6 |  | 450 | 157,500 |
| 10 | 250 |  | 32,500 |
| 12 |  | 200 | 70,000 |
| 18 | 50 |  | 7,500 |

## Required:

Calculate the cost of drug sales and closing inventory using:
(i) First In First Out principle.
(ii) Last In First Out Principle.
(d) Calculate the profit from the sale of drugs based on FIFO and LIFO methods.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

The following information has been extracted from the records of a company for the half year ended 31 March 2022. A product, called KB, goes through two processes, $X$ and $Y$ :

## Details relating to process $\mathbf{X}$ for the period:

| Input units | 5,000 |
| :--- | :--- |
| Finished units transferred to process $Y$ | 3,200 |

Closing WIP ..... 840
Normal loss ..... 10\%Normal losses have an estimated resale value of K4 per unit.Costs incurred during the period:
K
Direct materials ..... 31,250
Direct labour ..... 21,200
Overheads ..... 17,325Abnormal losses and closing WIP had the following degrees of completion at the end of theperiod:
Direct materials ..... 100\%
Direct labour ..... 80\%
Overheads ..... 50\%

## Required:

Using the weighted average method:
(a) Compute the cost per unit for each of the element of costs.
(b) Compute the value of the completed units transferred to process Y .
(c) Compute the value of the closing WIP.
(d) Prepare process X Account for the period.

## DA 5 COST ACCOUNTING SUGGESTED SOLUTION

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

## SOLUTION TWO

## (a) Traditional Absorption Costing

## Total Machine Hours

| Model 1 | $(1,000$ units@1 hour $)$ | $=1,000$ |
| :--- | :--- | :--- |
| Model 2 | $(2,000$ units @ 1.5 hours $)=$ | 3,000 |
| Model 3 | $(2,500$ units @ 2 hours $)=$ | $\underline{5,000}$ |
|  |  | $\underline{\mathbf{9 , 0 0 0}}$ |

## Production overheads

|  | K |
| :--- | :--- |
| Utility Costs | 189,000 |
| Set up costs | 120,000 |
| Ordering Costs | 18,000 |
| Handling Costs | $\underline{33,000}$ |
|  | $\underline{\underline{\mathbf{3 6 0 , 0 0 0}}}$ |

Overhead Absorption Rate $=$ Budgeted Overheads $/$ Budgeted Machine Hours $=$ K360,000 /9,000 machine hours
$=\underline{\mathbf{K 4 0}} \mathbf{~ p e r ~ m a c h i n e ~ h o u r ~}$
Summary Costs

|  | Model 1 | Model 2 | Model 3 |
| :---: | :---: | :---: | :---: |
|  | K | K | K |
| Direct Material | 10,000 | 24,000 | 37,500 |
| 300,000 |  |  |  |
| Prime Costs | 40,000 | 144,000 | 337,500 |
| Production Overheads | 40,000 | 120,000 | 200,000 |
| Total Production Costs | 80,000 | 264,000 | 537,500 |
|  | $\div$ | $\div$ | $\div$ |

Units Produced
Cost per unit (K)
1,000
2,000
2,500
80
132
215
(b) Activity Based Costing

| Cost Pool | Set-up |  | Ordering | Handling |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Utilities |  |  |  |  |  |
| Total Costs (K) | 120,000 | 18,000 | 33,000 | 189,000 |  |
| Cost Driver | Runs | Orders |  | Requisitions |  |
| Machine Hrs |  |  |  |  |  |
| Volume | $\underline{60}$ | 90 |  | 200 |  |
| ABC rate (K) | $\mathbf{2 , 0 0 0}$ |  | $\mathbf{2 0 0}$ | $\mathbf{1 6 5}$ | $\mathbf{2 1}$ |

## Cost Summary

|  | K | K | K |
| :---: | :---: | :---: | :---: |
| Direct Material | 10,000 | 24,000 | 37,500 |
| Direct Labour | 30,000 | 120,000 | 300,000 |
| Prime Costs | 40,000 | 144,000 | 337,500 |
| Production Overheads: |  |  |  |
| Set up Costs | 34,000 | 50,000 | 36,000 |
| Ordering | 4,000 | 6,000 | 8,000 |
| Handling | 4,950 | 16,500 | 11,550 |
| Utilities | 21,000 | 63,000 | 105,000 |
| Total Production Costs (K) | 103,950 | 279,500 | 498,050 |
|  | $\div$ | $\div$ | $\div$ |
| Unit produced | 1,000 | 2,000 |  |
| 2,500 |  |  |  |
| Cost per unit (K) | 103.95 | 139.75 | 199.22 |

## SOLUTION THREE

(a) Profit statement - Job 101:

|  | K | K |
| :--- | :--- | :--- |
| Sales revenue |  | 26,800 |

Production costs:

Prime costs (w1) $(13,120)$

Overheads (w2)
$(8,580)$
$(21,700)$
Gross profit
General administration costs
Net profit

Workings:

1. Prime costs $=(K 8,720+3,320-360+1,440)=\underline{K 13,120}$
2. Overheads $=[K 5,780+(1,440 \times 35 / 18)]=\underline{\mathbf{K 8}, \mathbf{5 8 0}}$
3. General administration costs $=(K 21,700 \times 0 \cdot 1)=\underline{\mathbf{K 2}, \mathbf{1 7 0}}$
(b) Work-in-progress valuation - Job102

## K

| Prime costs (w1) | 23,280 |
| :--- | :--- |
| Production overheads (w2) | 14,350 |
| Total | 37,630 |

## Workings:

1. Prime costs $=(16,480-940+360+7,380)=\underline{\mathbf{K 2 3}, \mathbf{2 8 0}}$
2. Production overheads $=(7,380 \times 35 / 18)=\mathbf{K 1 4 , 3 5 0}$
(c) Just in time features

Just in Time (or the JIT) is an inventory management system that aims to make production super-efficient. Under this, the raw materials and labour are planned to arrive as and when needed in the production. The primary benefit of using JIT is that the company does not have to invest time and money to store the raw materials.

1. Setup Time: An effective Just In Time System (JIT System) environment generally requires reduced setup time. Reduced setup time offers the capability to react swiftly to customer orders and shrinks the demand for safety inventory.
2. Plant Layout: JIT System offers enhanced plant layout. The layout of the manufacturing plant should be improved to decrease distances work-in-process should flow. In conventional layouts, all of the machinery of a comparable class are assembled together in one cost center or physical location.
3. Flexible workforce. Workers should be multi-skilled in a Just In Time System environment, which is often organized into small "cells" that contain all of the equipment required to carry out many steps in the production process. Workers need to be able to use all of the various pieces of equipment in the work cell.
4. Defect Rates: JIT technology ordinarily offers lower defect rates. An establishment must persistently endeavor for reducing the defects. Big numbers of defects entail that excess work-in-process be put into operations to ensure that there will be adequate defect less output to satisfy customer orders. Hence, defects must be taken care of and possibly eliminated in a JIT environment.

## SOLUTION FOUR

## (a) Standard cost card

KDirect material 11 Kgs at K 1 per kg ..... 11
Direct labour 5 hours at K3 per hour ..... 15
Variable overheads 5 hours at K2 per hour ..... 10
Fixed overheads 5 hours at K1 per hour ..... 5
Total standard cost ..... 41
Standard profit ..... 19
Standard selling price ..... 60
(b) Variance analysis
(i) Direct material price

| Standard: (K1/kg x 37,800kgs) | K37,800 |
| :--- | ---: |
| Actual: | K56,700 |
| Variance | K18,900(A) |

(ii) Direct material usage
Standard: (11kgs x K1/kg x 3,500 units) K38,500

| Actual: $(37,800 \mathrm{kgs} \times \mathrm{K} 1 / \mathrm{kg})$ | K37,800 |
| :--- | :--- |
| Variance | K700(F) |

(iii) Direct labour rate

| Standard: (K3/hr x 18,000hrs) | K54,000 |
| :--- | ---: |
| Actual: | K45,000 |
| Variance | K9,000(F) |

(iv) Direct labour efficiency

Standard: (5hrs x K3/hr x 3,500 units) K52,500
Actual: $(18,000$ hrs $\times$ K3/hr) K54,000
Variance K1,500(A)
(v) Variable overheads expenditure

| Standard: (K2/hr x 18,000hrs) | K36,000 |
| :--- | ---: |
| Actual: | K37,800 |
| Variance | K1,800(A) |

(vi) Variable overheads efficiency

| Standard: $(5 \mathrm{hrs} \times \mathrm{K} 2 / \mathrm{hr} \times 3,500$ units $)$ | K35,000 |
| :--- | ---: |
| Actual: $(18,000 \mathrm{hrs} \times \mathrm{K} 2 / \mathrm{hr})$ | K36,000 |
| Variance | K1,000(A) |

(vii) Fixed overheads expenditure
Budgeted : K5/unit x 3,275 units K16,375

| Actual: | K17,000 |
| :--- | :--- |
| Variance | K625(A) |

(viii) Fixed overheads volume

| Budgeted volume: $(3,275$ units $\times \mathrm{K} 5 /$ unit $)$ | K16,375 |
| :--- | :--- |
| Actual volume: $(3,500$ units $\times \mathrm{K} 5 / \mathrm{unit})$ | $\mathrm{K} 17,500$ |
| Variance | K1,125 (F |

(ix) Sales Price

Budgeted sales: (K60 x 3,500 units) K210,000
Actual sales K227,500
Variance K17,500(F)
(x) Sales volume profit

Budgeted sales volume: (3,275 units X K62,225
K19/unit)

| Actual sales volume: (3,500 units x K19/unit) | K66,500 |
| :--- | ---: |
| Variance | K4,275(F) |

## SOLUTION FIVE

(a) Explanation for labour turnover and how it is calculated.

Labour turnover measures the number of employees leaving the company and this rate should be kept as low as possible.

It is measured by the following formulae:
(Leavers replaced Average number of employees in the period) $X$ 100\%

Note that it is expressed as a percentage
(b) Labour turnover costs (any two)
(i) Replacement Costs
-Cost of selection
-Inefficiency of new labour e.g Lower productivity
-Cost of Training
-Loss of output due to less manpower or labour
-Increased wastage
-Possible accidents resulting into high medical bills
-Cost of Machine Break down due to error of new employees
(ii) Preventive Costs
-Pension Scheme payments

- Good Training policy
-Cost of welfare services and better conditions of service
-Good Work Environment


## (c) (i) Inventory valuation

FIFO method

| Receipts |  |  |  | Issues(Sales) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Descrip <br> tion | Qt <br> y | unit <br> price | Total | Da <br> te | Descrip <br> tion | Qt <br> y | unit <br> price | Total |


| 1 | Balance | $\begin{array}{r} 30 \\ 0 \end{array}$ | 110 | 33,000 | 6 | Issue | 30 0 | 110 | $\begin{aligned} & 33,00 \\ & 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Receipt | $\begin{array}{r} 20 \\ 0 \end{array}$ | 120 | 24,000 |  |  | $\begin{array}{r} 15 \\ 0 \end{array}$ | 120 | $\begin{aligned} & 18,00 \\ & 0 \end{aligned}$ |
|  |  |  |  |  |  | Total | 45 |  | $\begin{aligned} & \text { 51,0 } \\ & 00 \end{aligned}$ |
| 7 | balance | 50 | 120 | 6,000 |  |  |  |  |  |
| 10 | Receipt | $\begin{array}{r} 25 \\ 0 \end{array}$ | 130 | 32,500 | 12 | Issue | 50 | 120 | 6,000 |
|  |  |  |  |  |  |  | 15 0 | 130 | $\begin{aligned} & 19,50 \\ & 0 \end{aligned}$ |
|  |  |  |  |  |  | Total | 20 0 |  | $\begin{aligned} & 25,5 \\ & 00 \end{aligned}$ |
| 13 | Balance | $\begin{array}{r} 10 \\ 0 \end{array}$ | 130 | 13,000 |  |  |  |  |  |
| 18 | Receipt | 50 | 150 | 7,500 |  |  |  |  |  |
| Closing Bal | Total | $\begin{array}{r} 15 \\ 0 \end{array}$ |  | 20,500 |  |  |  |  |  |

## LIFO

| Receipts |  |  |  |  | Issues(Sales) |  |  |  |  |
| :---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Description | Qty | unit <br> price | Total | Date | Description | Qty | unit <br> price | Total |
| 1 | Balance | 300 | 110 | 33,000 | 6 | Issue | 200 | 120 | 24,000 |


| 2 | Receipt | 200 | 120 | 24,000 |  |  | 250 | 110 | 27,500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total | 450 |  | 51,500 |
| 7 | Balance | 50 | 110 | 5,500 |  |  |  |  |  |
| 10 | Receipt | 250 | 130 | 32,500 | 12 | Issue | 200 | 130 | 26,000 |
|  |  |  |  |  |  | Total | 200 |  | 26,000 |
| 13 | Balance | 50 | 110 | 5,500 |  |  |  |  |  |
| 13 | Balance | 50 | 130 | 6,500 |  |  |  |  |  |
| 18 | Receipt | 50 | 150 | 7,500 |  |  |  |  |  |
| Closing Bal | Total | 150 |  | 19,500 |  |  |  |  |  |

(d)

|  | Details | FiFO | LIFO |
| :--- | :--- | ---: | ---: |
|  | Sales - 6 | $157,500.00$ | $157,500.00$ |
| Sales -12 | $70,000.00$ | $70,000.00$ |  |
| Total | $\mathbf{2 2 7 , 5 0 0 . 0 0}$ | $\mathbf{2 2 7 , 5 0 0 . 0 0}$ |  |
| Sales |  |  |  |
| Less Cost of Sales | 51,000 | 51,500 |  |


| 12 | 25,500 | 26,000 |  |
| :--- | :--- | :--- | :--- |
|  | Issue - |  |  |
|  | Total Cost of Sales | 76,500 | $\mathbf{7 7 , 5 0 0}$ |
|  | $151,000.00$ | $150,000.00$ |  |

## SOLUTION SIX

(a) Computation of the cost per unit for each of the element of cost
Item Complete unit + Closing WIP + Abnormal Loss $=\quad$ TC Cost/unit

| K |  |  |  | K |
| :--- | :---: | :---: | :---: | :---: |
| Materials 3,200 840 <br> 6.50   | 360 | 29,250 |  |  |
| Labour <br> 5.00 | 3,200 | 672 | 368 | 21,200 |
| Overheads <br> 4.50 | 3,200 | 420 | 230 | 17,325 |

16.00

* K29,250 = K31,250 - K2,000 [K4 x 500]
(b) value of the completed units transferred to process $Y$
$=\mathrm{K} 16 \times 3,200$ units $=$
K51,200
(c) Valuation of Closing WIP

|  |  | K |
| :--- | :--- | :--- |
| Materials | $(840 \times \mathrm{K} 6.50)$ | 5,460 |
| Labour | $(672 \times \mathrm{K} 5.00)$ | 3,360 |
| Overheads | $(420 \times \mathrm{K} 4.50)$ | $\underline{1,890}$ |
|  |  | $\underline{\mathbf{1 0 , 7 1 0}}$ |

(d)

Units Value (K)
Units Value(K)
Materials
2,000

Process X Account

Normal Loss 500

| Labour | 21,200 | Transfer to Y | 3,200 |
| :--- | :---: | :---: | :---: |
| 51,200 | Overheads | 17,325 |  | Abnornal loss

10,710
$5,000 \quad 69,775 \quad 5$

## 69,775

Valuation of Abnormal Loss

| Materials | $(460 \times \mathrm{K6.50})$ | 2,990 |
| :--- | :---: | :---: |
| Labour | $(368 \times \mathrm{K} 5.00)$ | 1,840 |
| Overheads | $(230 \times \mathrm{K} 4.50)$ | $\underline{1,035}$ |

5,865

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE
DA 6: BUSINESS LAW

FRIDAY 15 DECEMBER 2023

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

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## SECTION A- (COMPULSORY)

## Attempt all ten (10) multiple choice questions

## QUESTION ONE

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

1. What type of liability arises when a person makes a false statement that causes harm to another person's reputation?
A. Defamation
B. Negligence
C. Fraud
D. Strict liability
2. In a negligence claim, which of the following elements must be proven by the plaintiff?
A. Intent to harm
B. Breach of duty
C. Malicious conduct
D. Physical contact
3. What is the maximum number of partners in a partnership?
A. 10
B. 100
C. 20
D. 15
4. People no matter the grouping, need some kind of control and guidance. Society's ethical and moral guidance is an example of $\qquad$
A. Law and Rules
B. Formal control mechanisms
C. Informal control mechanisms
D. Social Order
5. In a voidable contract, property transferred before avoidance is usually
$\qquad$ from a third party.
A. Recoverable
B. Irrecoverable
C. Voidable
D. None of the above.
6. In $\qquad$ ownership is transferred immediately.
A. A contractual agreement
B. An agreement to sale
C. A contract of sale
D. A conditional sale
7. Munga, Matilda and Nchimunya are in a partnership business where Nchimunya is classified as a 'dormant partner'. This means that, a dormant partner.
A. Does not take part in a profit sharing of the business.
B. Does not take part in the management of the business.
C. Does not contribute any capital into the business.
D. Is also known as a nominal partner.
8. What principle of law did the case of Christine Mulundika and 7 others $v$ the Attorney General establish.
A. The constitution is subject to other laws
B. All laws in the country are the same
C. Laws made by parliament are more superior to all other laws
D. None of the above.
9. Which one correctly represents the principle of damage[s] in tort?
A. The aggrieved must always be better off than before
B. The aggrieved must neither be better nor worse off than before
C. The wrong doer must always be punished
D. All the above
10. Which makes a contract voidable?
A. Acceptance not matching offer
B. Misrepresentation of facts
C. Insufficient consideration
D. All the above

## SECTION B

There are five (5) questions in this section. Attempt any four (4) questions QUESTION TWO
(a) Define and explain in detail unfair dismissal.
(b) Explain the various ways a contract of employment may come to an end.
(c) Explain the main Sources of Law in Zambia.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

Naylor and Namatama entered into a partnership business whose aim was sewing school bags. They named their partnership as Apex Tailoring. In their well - drawn up partnership deed, they have spelt out how profits and losses are to be shared, the amount of capital each is to contribute, and that Namatama was to be a salaried partner, whilst Naylor was to be a general partner.

## Required:

(a) Explain as to why the two prepared a partnership deed.
(b) What are the implications of 'Naylor being a general partner'.
(c) Explain Naylor and Namatama's statutory duties in respect to:
(i) Duty to render true accounts and full information.
(ii) Duty to account for private profits.

## QUESTION FOUR

(a) Extra chocolate is a newly established chocolate manufacturing company. To penetrate the market, they have come up with a marketing strategy where they are giving incentives to customers to buy more of their product. Their marketing department has come up with a promotion where people who buy and can show that they have bought more than one hundred bars of their chocolate within a week, would be rewarded with K2,000 cash. Mutolo a 19 years old chocolate fan, decided to take the challenge and bought more than had been indicated.
He gathered all the evidence of such purchase and decided to contact the company to claim his money. The company contended that what was in the newspaper was just mere bluff and was not meant to be taken as an offer for anything. Mutolo cannot believe what he has just been told especially that he spent money given to him by his
parents as up keep for university. He has come to you seeking advice on what he can do.

## Required:

Making reference to relevant case law, advice Mutolo on whether there was any contract that had been made up and whether he would take any action against the company.
(c) Though the law of torts and law of contract are both branches of civil law, they have distinctions mainly arising from what the principles of each are and how liability arise in each. Discuss
(c) Write notes on the following:
(i) Causation
(ii) Remoteness of damage

## QUESTION FIVE

Write short notes on the following:
(a) Sale by description.
(b) Transfer of title in goods by estoppel.
(c) Statutory remedies of unpaid seller against the buyer.
(d) The Zambian Constitution as the primary source of law.
(e) Customary International Law.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) Making reference to case law, explain the test for determining an employee for purposes of vicarious liability.
(b) Explain the common law duties of an employee to their employer.

DA 6: BUSINESS LAW SUGGESTED SOLUTIONS
SOLUTION ONE
1.1 A
1.2 B
1.3 C
1.4 C
1.5 B
1.6 C
1.7 B
1.8 D
1.9 B
$1.10 \quad B$

## SOLUTION TWO

(a) Unfair dismissal is when an employee is dismissed from their job in a harsh, unjust or unreasonable manner including political ground "Any employee who has reasonable cause for believing that his services have been terminated or that he has suffered any other penalty or disadvantages on any of the grounds set out in subsection (i) may within thirty days of the occurrence or occurrences which may give rise to such belief, lay a complaint before the Industrial Relations Court and the court shall if it finds in favour of the complainant, grant to him such remedy as it deems fit including re - instatement for loss of employment". It therefore means that the termination was unfair and as reinstatement may be the best with adequate damages depending on the circumstances.
An employee is unfairly dismissed if fired on any of those grounds prohibited by both the Employment Code Act and Section 108 of the Labour and Industrial Relations Act. These include race, gender, social status, religion, political opinion, tribe extraction, etc.
(b) There are a number of ways by which a contract of employment may be terminated. These are: Resignation, retirement, fundamental breach of the contract terms by either party, dismissal, effluxion of time, performance, mutual agreement, etc.
(c) The main sources of law in Zambia include:

1. Judicial Precedent

Under the doctrine of judicial precedent (stare decisis) earlier decisions of higher courts are binding on lower courts dealing with a similar matter at a later date. When a dispute arises between two parties, lawyers on both sides will usually argue the matter in court before a judge. At the end of the arguments, the judge makes a decision usually resolving the matter in favour of the successful party. Before reaching his decision, the judge usually reviews all existing relevant law and then formulates and applies a legal principle to the facts before him. The principle laid down in the case may form a binding or persuasive precedent to be followed by courts in later disputes involving similar issues. This is how common law is created.
2. Common law is the law as laid down by the judges in deciding cases, though it is always said that judges do not make law - they merely interpret it. The legal principle laid down in the case is known as the ratio decidendi. This is what binds later courts dealing with a similar matter. What the judge says in passing is known as obiter dicta and is strictly not binding.
3. Equity

Citizens who could not obtained redress for grievances in the King's common law courts petitioned the King to obtain relief by direct royal intervention. These petitions came before the King in Council. Because the principles on which the Chancellor decided points were based on fair dealing between two
individuals as equals, it became known as equity. The system of equity, developed and administered by the Court of Chancery, was not a complete alternative to the common law. It was a method of adding to and improving on the common law; it provided a gloss on the law.

## 4. Legislation

Legislation (or statute law) refers to law passed by Parliament in the form of statutes or Acts of Parliament. The bulk of Zambian law is statutory.
5. The Constitution is the supreme law of the land. It is another source of law. Any law not in line with the constitution is null and void.
6. Customary law

Zambia is inhabited mainly by various ethnic groups. Each of these tribes has its own customs, traditions and political system. These customs and traditions form the customary law of these tribes. The Local Courts Act Chapter 29 of the Laws of establishes the Local Courts which administer customary law. Customary law is very important in areas such as marriage, succession and land law.
7. International Customary Law: - This is law which is from the international community such as United Nations, SADC, African Union, etc to which Zambia is a party. These international customs or conventions become part and parcel of our laws in various ways such as by ratification, practice, etc.

## SOLUTION THREE

(a) A partnership deed or agreement governs a partnership business. It is important to have a partnership deed, though not legally necessary to have one for the following reasons: It lays down the details as to how the partnership would run such as amount of capital, management of the partnership, how the partners are to relate to each other, sharing of profits, etc. A partnership deed will reduce confusion in the running of a partnership.
(b) A General Partner is one who has no specific role in a partnership business and is the usual (most common) type of partners. He has the right to take part in the management of the business, usually oversees the day to day running of the business, can legally bind the business and is personally liable for debts of the business, unless the partnership agreement states to the contract. Thus, the implications of Naylor being a general partner are that, he will take part in the management of the partnership, he will bind the partnership, etc unless there is a provision in the partnership deed to the contrary.
(c) Statutory duties of partners are those provided for in the Partnership of 1890.
(i) Duty to render true accounts and full information:- This is a statutory duty that partners (Namatama and Naylor) must disclose their incomes arising from the partnership business and must inform the other partner(s) of anything that is material to the partnership, i.e. that affects the partnership or the partners. Failure to do so renders the transaction voidable (Law v Law [1905]
(ii) Duty to account for private profits:- This is a statutory duty that every partner must account to the firm for any benefit derived by him without the consent of the other partners from any transaction concerning the firm or from any use of the partnership property or business connection. It simply means Namatama and Naylor must not make secret profits from the partnership, should any one of them make any such profits, he/she must disclose/account to the other partner.

## SOLUTION FOUR

(a) The facts in the case are very similar to the celebrated case of Carlill v Carbolic Smoke Ball (1893) where the defendant placed an advert in the paper to the effect that any person who bought and smoked a certain number of their smoke balls but contract influenza, would be paid one hundred pounds. The plaintiff acted on the words in the advertisement and bought the number as had been indicated in the advertisement but suffered influenza. He brought an action against the defendants and they contended that there was no contract as there was no offer made which was capable of being accepted. The Court of Appeal held that the advert amounted to an offer for unilateral contract by the defendants. It was ruled therefore that a contract did exist and the plaintiff was entitled to recover damages.
In similar manner, the advert placed by extra chocolate amounted to an offer and any person who acted on the strength of what was contained in the advert, was entitled to benefit in the contract. Mutolo can therefore sue for breach of contract in the circumstances of the case.
(b) The statement is indeed correct. Both law of torts and law of contracts are branches of private law but have some distinctions. The following are among:
Principles - the law of contract operates on the basis that an award of damage is determined by the possibility that the contract could have been fully executed but has been breached hence a damage suffered. Hence, in the law of contract, a damage can only be awarded based on what the plaintiff anticipated to realize from the contract had it been executed. The damage in contract is therefore liquidated meaning it is already known how much damage has been occasioned to the plaintiff through the breach of the contract.
Conversely, in the law of torts, an award of damage is determined by the loss suffered by the plaintiff as a result of the actions of the defendant causing harm to the plaintiff. Hence, for a plaintiff to be successfully rewarded damages, they have to prove to the court how much they have spent in monetary form as damage as a result of the defendant's wrongful actions. The evidence of what has been spent by the plaintiff is what would determine the damage to be awarded to the plaintiff. The damage is therefore what is referred to as unliquidated damages which has to be determined by the evidence to be presented before the court.

The other distinction comes about in terms of how liability arise. In the law of contract, liability arise by agreement of the parties that come together to enter into a contract with terms and conditions that would guide their contractual relationship. A breach of the terms and condition by one of the parties would warrant the aggrieved party bringing an action to recover for the damage suffered. Conversely, in the law of torts, liability arise by a general imposition of the law where a duty of care is primarily imposed by law on all to
take care so as not to cause injury to another. Where therefore any person acts in a manner that causes injury to another, they would be in breach of the duty of care and therefore liable to the injured person.
(c) Causation - this is a component in the law of torts of negligence. Causation is important to establish negligence in tort. A claim in negligence may not succeed is the plaintiff is unable to establish causation between the damage they have suffered and the wrongful actions of the defendant. Hence, causation is said to be the link that exists between the damage suffered by the plaintiff and the wrong action of the defendant.

Remoteness of damage - this relates to the extent a defendant is to be held liable for the damage suffered by the plaintiff as a result of his/her wrongful; actions. Remoteness of damage usually becomes an issue in a matter where there is more than one act that causes damage suffered by the plaintiff and the court requires to establish the extent to which each of the causes of the damage may be apportioned the blame for the damage. Hence, if the extent of contribution to the damage suffered by the plaintiff cannot really be mainly attributed to the defendant's wrongful act, the court would then hold that the extent is too remote to be the basis of the claim for the damage suffered.

## SOLUTION FIVE

(a) Sale by Description - Section 13 of the Sale of Goods Act provides that where goods are sold by description, the description, as an implied condition, must match with the goods.
(b) Transfer of Title in goods by estopel - This is a transfer of title whereby the true of the goods, through his conduct makes the buyer believe that the seller had the right to sell. The owner is estopped, owing to his conduct prior or during the sale, from denying that he allowed the seller to transfer title to the buyer.
(c) Statutory remedies of an unpaid seller - These are remedies provides for by the Statute (Sale of Goods Act) to the seller. They include right to lien, right to stoppage in transit, right to resale the goods, right to sue for the price or damages, etc
(d) The Zambian Constitution as a primary source of law - This means that the Constitution of Zambia, Chapter 1 of the Laws of Zambia is one of the main sources of law in Zambia. In this regard, Article 1(3) provides that any law written or unwritten which is contrary to it is null and void to the extent of the contradiction. The case of Christine Mulundika and Others, the case of Banda v the People, etc are instructive in this regard.
(e) International Customary Law - This is a source of law from the customs or norms of the community of nations. Members States adopt these customs, conventions and norms and practice them in their states. This makes international norms, some of them unwritten become part and parcel of the conduct or culture of a particular nation.

## SOLUTION SIX

(a) Three test there are for determining a contract of service as opposed to a contract for services. The control test; the integration test and multi-factor test
(i) control test here for the courts to determine whether one is engaged in a contract of service or contract for services, they look at the amount of control the employer exerts on the employee so that, if the employer determines what time the employee ought to report and leave work, when the employee is to have break and how much the employee is to be paid for works done, then the employee would be said to be engaged under a contract of service as opposed to a contract for services. Mersey Docks and Harbour Board v Coggins and Griffiths Ltd (1946) is instructive here. Here the harbor board lent a crane to the defendants and the operator. The contract of hire indicated that the defendants would be the employers of the operator however, the defendants did not know how the operator used the crane and did not have any control over him. A checker at the harbor was injured due to the negligence of the operator and sued the defendant. The court held that the plaintiffs exercised control over the operator of the crane and therefore he was their employee and not of the defendants. Identify how many tests there are for determining a contract of service as opposed to a contract for services. Make reference to case law in your answer.
(ii) The integration test mainly focuses at the degree of integration an employee may be in the business of the employer. So that, the more integrated into the business one may be seen to be, the more the courts are likely to hold them to be employees and not engaged on a contract for services. Cassidy v Ministry of Health (1951) is instructive on this matter. Here the plaintiff underwent an operation which was routine on his hand but the operation was done incompetently that the plaintiff's condition became much worse. He sued the health authority both as employer and in its own capacity. The question was however to determine whether the surgeon was an employee so that the health authority is held liable vicariously or not. The court held that there was a relationship of master servant here and that the health authority were masters of people it employed on a routine basis despite the professional nature of their duties.
(iii)Multi-factor test in this test, the courts will look at the reality of the circumstances and from the relationship of the employee and employer, they will be able to deduce whether one is in fact an employee or not. Therefore whether someone be said to be self-employed and on a contract for services, if he is held to be an employee from the reality of the circumstances, then the courts will construe him/her as such. Ready Mix Concrete (South East Ltd) v Minister of Pensions and National Insurance (1968) is instructive. Here when
the plaintiff company asked the Minister of Social Security to determine whether one of its workers qualified as an employee for social security purposes, the minister stated that the worker was employed under a contract of service however, on appeal the court of appeal reversing the minister's decision held that he was running a business of his own and was therefore not a servant but a small businessman and hence engaged on a contract for services not contract of service.
(b)
(i) First duty of an employee towards the employer under the common law is of competence to do the job for which employed. Lister v Romford Ice and Cold Storage Ltd (1957) is instructive here as it is o the duty to use skill and care. Here the court held the driver liable for injuries sustained by a fellow worker due to the negligence of the driver.
(ii) Duty to obey reasonable and lawful instructions. An employee has a duty only to obey lawful instructions from the employer so that if the employer issues unreasonable instructions, the employee may refuse to obey and will not be in breach of that duty. Morrish v Henlys (Folkestone) Ltd (1973) is instructive on that where the employee refused the superiors orders to falsify accounts books and the courts held that not to be in breach of the instructions.
(iii)Duty to act faithfully employees have a duty to the employee to act in faithfully in their course of dealings with their employers. An employee for instance has a duty not to pass information obtained while in the course of their employment to outsiders and equally not to compete with their employer. Nova Plastics Ltd $v$ Froggett (1982) is instructive where the court held that an employee doing something in direct competition with his employers when done in the employee's spare time would equally constitute a breach of duty.
(iv)Duty to use skill and care in discharge of functions engaged to perform. Lister $v$ Romford Ice and Storage Ltd (1957) is instructive where the court held an employee lorry driver to be liable for injuries suffered by a fellow worker due to the gross negligence in driving the lorry and was held to be in breach of his implied duty of skill and care.
(v) Duty not to take secret profits from the employers' business. Boston Deep Sea Fishing Ice Co. Asel/ (1888) here a managing director of a company was held to have been properly dismissed for taking money as commission from the company's suppliers for orders he placed with the suppliers.

## END OF SOLUTIONS



## INSTRUCTIONS TO CANDIDATES

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

Section A: One (1) Compulsory 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

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. From your knowledge of DA 7 course, what power does a leader possess as a result of his or her knowledge and expertise regarding the tasks to be performed by subordinates?
A. Legitimate power
B. Expert power
C. Referent power
D. Reward Power
2. As a Guru of DA 7, "Practice of Management was pioneered by
A. Henry Fayol
B. F.W.Taylor
C. Mary Parker Follet
D. Peter F. Drucker
3. Which of the following Taylorism principle helps to determine a fair day's work and rest period to complete it;
A. Work study
B. Time study
C. Motion study
D. All of these
4. The philosophy of management that focuses upon systematically retaining authority at the top of the organization is called. $\qquad$
A. Centralization
B. Decentralization
C. Departmentalization
D. Specialization
5. $\qquad$ .principle states that an employee should receive orders form one superior only
A. Span of control
B. Unity of direction
C. Unity of command
D. Esprit de corps
6. Which among the following scholars has given the concept of administrative man as the model for decision making
A. Fredrick Herzberg
B. A.H. Maslow
C. Douglas McGregor
D. Herbert Simon
7. A job description should contain which of the following?
A. Benefits.
B. Duties.
C. Number of positions required.
D. Salary.
8. According to Management, Authority flows from
A. Top to Bottom
B. Bottom to top
C. Horizontally
D. All of these
9. As a student of DA 7, if the orders, instructions or directions are delegated to a particular person, then it is known as;
A. General delegation
B. Specific delegation
C. Written delegation
D. Informal delegation
10. Which of the following is NOT a characteristic of parastatal organization
A. Public corporations owned or partly owned by the state
B. Profit motive limits by the state
C. The state sets a Board of directors to observe accountability
D. Profit maximization is a variation of the profits objectives

## SECTION B

## There are FIVE (5) questions in this Section. Attempt any FOUR (4) questions. QUESTION TWO

(a) Some management scholars have argued that for the organization to operate effectively and efficiently it needs to work as a system.

## Required:

Explain the five (5) aspects of systems theory of management.
(b) It is non disputable that the Small and Medium Scale Entrepreneurship plays a very important role towards economic development of the country.

## Required:

As a business student make five (5) proposals on how the New
Dawn Government can develop and grow entrepreneurship in Zambia.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

(a) Briefly explain any five (5) reasons why communication is important to business organizations.
(b) Discuss the five (5) Leadership styles according to Blake and Mouton managerial grid.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

Drucker argues that the traditional definition of management based on the responsibility for the work of other people is unsatisfactory and too narrow, and emphasizes a secondary rather than a primary characteristic. There are people, often in responsible positions, who are clearly 'management' but who do not have responsibility for the work of other people. A person's function and contribution may be unaffected by the number of subordinate staff. A 'manager' is someone who performs the tasks of management whether or not he or she has power over others.

## Required:

(a) Demonstrate your knowledge of management and its application by describing the following terms: Authority, Responsibility, and Accountability which are often used by manager.
(b) Explain MBO in planning.
(c) State any four (4) benefits of MBO?

## QUESTION FIVE

Delegation may be called the mechanism by which their subordinates are granted decisionmaking authority by the managers. This is one of the most widely used management strategies by many managers.

## Required:

(a) Identify the four (4) common reasons why managers fail to delegate.
(b) State and explain any four (4) benefits of delegation in an organization.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) Mukulumpe Pineapple Processing Company intends to relocate its plant from Lusaka to Chingola in order to have easy access to raw materials from Mwinilunga and increasing market in DR Congo. It also intends to invest in new technology systems to automate the operations.

## Required:

Outline the role that leadership of the company should play in order to effectively manage the planned change.
(b) Explain the importance of a Human Resource Manager in an organization.

## END OF PAPER

DA 7: PRINCIPLES OF MANAGEMENT SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SECTION B

## SOLUTION TWO

(a) The systems theory of management is an approach that view an organisation as a unified, directed system of interrelated parts. Other management theories view an orgnisation as separate parts working independently rather than as a system with a number of interrelated sub-systems. Therefore, systems theory recognizes that each part or subsystem of the organisation is affected by the other and ultimately by the external environment. The subsystems or parts of an organisation are departments that must work together towards the achievement of the organisational goal. Departmental Managers such as Production, Marketing, Finance, Human Resource Etc must work as a team. Systems theories views that the whole is greater than its individual parts. This means that when departments in an organisation interact coorporatively they achieve more than the sum of individual departments. The systems approach entails that managers must work hand in hand with other departmental managers because there is interdependence among departments.
(b) Proposals on how the New Dawn Government may develop and grow entrepreneurship in Zambia:
(i) By introducing tax incentives to small and medium scale entrepreneurs on the importation of equipments to be used for production e.g. machinery.
(ii) Embarking on a program to build capacity in business management through providing training in entrepreneurship by the ministry of commerce to the potential and existing entrepreneurs.
(iii) Providing cheap and flexible source of finance to small and medium Entrepreneurs through government agencies and ministries such as Citizens Economic Empowerment Commission and Ministry of Sports and Youth Development respectively.
(iv) Making entrepreneurship subject or course to be compulsory in the curriculum at tertiary level of education.
(v) Restricting certain type of businesses to Zambian Entrepreneurship only such as fish farming, poultry, broke making, passenger transport, timber processing etc
(vi) Providing markets for specific goods and services to Zambian Entrepreneurs such as supply of school desks, construction, etc
(vii) Restricting or banning the importation of certain goods that are produced in Zambia such as importation of Irish potatoes, onions, maize, wheat etc

## SOLUTION THREE

(a) Briefly explain any five reasons why communication is important to business organizations
(i) Good communication builds and maintains relationships. ...
(ii) Communication facilitates innovation. ...
(iii) It builds effective teams. ...
(iv) Managing employees is easier. ...
(v) It supports growth of the organisation. ...
(vi) Effective communication ensures transparency.
(b) Discuss the five Leadership styles according to Blake and Mouton managerial grid

1. Impoverished: This point shows that the manager little concern for both workers and production, he/she is lazy.
2. Country Club: The manager is employee oriented which means he/she pays more attention to employees than production or task.
3. Task: The manager is more concerned with tasks to be performed than relationships with employees.
4. Middle of the road: The manager is at the middle where he/she shows equal concern for production and employees.
5. Team Management: This is the ideal leadership style where the manager shows high concern for production and employees.

## SOLUTION FOUR

(a)
(i) Authority refers to the scope and amount of discretion given to a person to perform a certain task or make a decision. It may also be referred to as the right to influence the behaviour of others. The organisational structure shows the hierarchy and authority derived from the positions.
(ii) Responsibility refers to the obligation to perform a particular task or the liability of a person to account for his/her actions. It may also be referred to as "the duty" to carry out a particular task. Unlike authority, responsibility cannot be wholly delegated; the manager maintains the ultimate responsibility for the performance of tasks.
(iii)Accountability refers to "answerability" or the extent to which an individual is answerable to the results of his actions. It entails the credit for desirable results and taking the blame for unfavourable consequences. It is also used to refer to the obligation to report to superiors and it is associated with the scalar chain: the reporting levels, the subordinate remains accountable to the superior in that he has to report to him. Generally accountability of results rest with the manager
(b) Define MBO in planning.

MBO is defined as a comprehensive managerial system that integrates many key managerial activities in a systematic manner and is directed toward the efficient achievement of organization and individual objectives.
(c) The benefits of MBO
(i) Improvement of managing thro' results oriented planning.
(ii) Delegation of authority.
(iii) Encouragement of commitment to personal and goals
(iv)Development of effective controls that measure results and lead to corrective action.

## SOLUTION FIVE

(a) Fear, trust, time and skill.
(b) State and evaluate the benefits of delegation in an organization.
(i) Build trust within the organization

Delegation encourages you to learn how to trust your subordinates and to not always be in control. Once subordinates successfully complete a task, you will have more trust in the future in their capabilities.
(ii) Improved time management

Delegation enables you to focus on more important tasks or tasks for which you are better suited. The increase in time reduces pressure and stress
(iii)Specialization

Authorities and responsibilities are delegated as per the skills, abilities, knowledge and experience of subordinates. Thus, delegation of authority promotes specialization and division of work in the organization.
(iv)Reduce Pressure and Workload

It reduces the pressure, stress and workload of top-level manager. Manager get enough time to conduct other important creative and productive activities.
(v) Quick Decisions

Lower-level managers get the authority to make decisions which helps to improve their decision-making power. They do not need to consult top managers to take decision which ensures prompt decisions at the workplace.
(vi)Employee Development

Delegation of authority helps to develop skills and capabilities of subordinates. It helps them to perform challenging jobs which helps to develop managerial qualities.
(vii) On-the-job Training

Delegation of authority is a kind of on-the-job training where subordinates can learn, improve skills and develop managerial abilities at the workplace.
(viii) Better Understanding

It helps to build trust and better understanding between managers and subordinates in the organization. It promotes effective communication and sense of team spirit while performing the job.
(ix)Expansion And Diversification

Delegation creates well-trained, dedicated and competent team of subordinates. So, it is helpful for expansion, growth and diversification of organization.
(x) Suitability

Delegation of authority is suitable for large organizations with different departments, branches and units with various organizational activities.

## SOLUTION SIX

(a) The successful management change of Mukulumpe Pineapple Processing Company is essential for continued economic performance and competitiveness of business. Therefore, the leadership may take the following role to effective manage the planned change:
(i) Develop a clear vision for the change which is sensible and clear.
(ii) Develop objectives to be achieved from the change.
(iii) Develop a plan on how the change process will be implemented with the required resources.
(iv) Information relating to planned change must be effectively communicated to the stakeholders who will be affected.
(v) Implementation of change by providing all the necessary resources required.
(vi) Monitor the implementation of change and make correction actions when the need arises.
(b) A Human Resource Manager plays a service and advisory role because he or she is responsible for dealing with most matters and problems relating to human resource in the organisation. Therefore, a Human Resource Manager plays an important role by carrying out the following functions:
(i) Recruitment and selection.
(ii) Training and development of employees
(iii) Maintaining human resource records
(iv) Facilitating performance appraisal
(v) Developing human resource policies
(vi) Handling employees grievances

## END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 8: FINANCIAL REPORTING

MONDAY 11 DECEMBER 2023

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

Below are the summarized statements of financial position for three companies as at 31 December 2022:

| ASSETS | Muna Ltd K | Naka Ltd K | Chika Ltd K |
| :---: | :---: | :---: | :---: |
| NON-CURRENT ASSETS |  |  |  |
| Property, Plant and Equipment | 450,000 | 294,000 | 252,000 |
| Investments | 522,000 | - | - |
|  | 972,000 | 294,000 | 252,000 |
| CURRENT ASSETS |  |  |  |
| Inventory | 120,000 | 108,000 | 60,000 |
| Trade Receivables | 78,000 | 18,000 | 36,000 |
| Total Assets | 198,000 | 126,000 | 96,000 |
|  | 1,170,000 | $\underline{420,000}$ | 348,000 |
| EQUITY AND LIABILITIES |  |  |  |
| Equity shares of K1.00 each | 300,000 | 96,000 | 60,000 |
| Share Premium | 237,600 | - | - |
| Retained Earnings | 326,400 | 210,000 | 252,000 |
|  | 864,000 | 306,000 | 312,000 |
| NON-CURRENT LIABILITIES |  |  |  |
| 10\% Loan note | 174,000 | 24,000 | - |
| CURRENT LIABILITIES |  |  |  |
| Contingent consideration | 32,400 | - | - |
| Other current liabilities | 99,600 | 90,000 | 36,000 |
|  | 132,000 | 90,000 | 36,000 |
| Total Equity and Liabilities | 1,170,000 | 420,000 | 348,000 |

## The following additional information is relevant

1. On 1 January 2022, Muna Ltd acquired 72,000 shares in Naka Ltd in a share exchange of three shares in Muna Ltd for every two shares in Naka Ltd. The market price of Muna Ltd and Naka Ltd shares at the date of acquisition were K3.2 and K4.5 respectively. Naka Ltd retained earnings at the date of acquisition were K192,000. In addition, Muna Ltd agreed to pay a further amount on 1 January 2023 that was contingent upon the post-acquisition performance of Naka Ltd. At the date of acquisition, Muna Ltd assessed the fair value of this contingent consideration to be at K32,400. By 31 December 2022, it was clear this would be the amount to be paid (ignore discounting). Muna Ltd has
recorded the share exchange and has provided for the initial estimate of K32,400 contingent consideration.
2. On 1 July 2022, Muna Ltd also acquired 24,000 shares in Chika Ltd paying K4 in cash per share acquired and issuing at par K100 10\% Loan note for every 50 shares acquired in Chika Ltd. This consideration has also been recorded by Muna Ltd. Chika Ltd's retained earnings as at 1 July 2022 were K180,000. Muna Ltd has no other investments.
3. At the date of acquisition, the fair value of Naka Ltd's Property, Plant and Equipment was equal to its carrying amount with the exception of Naka Ltd's item of Plant and equipment which had a fair value of K24,000 above its carrying amount. It has been established that Naka Ltd has not adjusted the carrying amount of this item of plant and equipment following this fair value exercise. At that date, the item of plant and equipment had a remaining life of 20 years and Nil residual value. Naka Ltd uses straight line depreciation for Plant and Equipment.
4. Muna Ltd's policy is to value the Non-controlling interest at fair value at the date of acquisition. For this purpose, Naka Ltd's share price at that date can be deemed to be representative of the fair value of the shares held by the non-controlling interest.
5. Muna Ltd's current account with Naka Ltd was K40,800 debit as at 31 December 2022. This was in disagreement with the equivalent balance in Naka Ltd's current account with Muna Ltd. The disagreement was due to some goods in transit invoiced at K21,600 that were sent by Muna Ltd on 27 December 2022, but had not been received by Naka Ltd until 4 January 2023. Muna Ltd sold all these goods at cost plus $50 \%$.
6. Impairment tests carried out on 31 December 2022 revealed that the investment in Chika Ltd was impaired by K7,200 and that due to poor trading performance, consolidated goodwill was equally impaired by K45,600.
7. Unless otherwise stated, assume all profits and losses accrued evenly through the year.

## Required:

Prepare the consolidated statement of financial position for Muna Ltd as at 31 December 2022.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

The trial balance of LULU Plc, as at 31 December, 2022 is provided below:

|  | K'000 | K'000 |
| :--- | ---: | ---: |
| Revenue |  | 320,700 |
| Cost of sales | 215,700 |  |
| Closing inventories (31/12/2022) (Note i) | 15,750 |  |
| Distribution expenses | 20,600 |  |
| Administrative expenses | 14,500 |  |
| Income from Investment property |  | 1,800 |Finance costs4,800

Land and buildings at valuation (Note ii) ..... 94,500
Plant and equipment at cost (Note ii) ..... 54,000
Investment property (Note ii) ..... 24,000
Accumulated depreciation on plant and equipment (01/01/2022) ..... 25,200
Trade receivables ..... 20,250
Cash and cash equivalents ..... 11,850
Trade payables ..... 17,700
Equity shares @ K0.25 ..... 45,000
Deferred tax (Note iii) ..... 7,800
Revaluation surplus ..... 31,500
Retained earnings (01/01/2022) ..... 26,250
475,950 ..... 475,950

## The following additional information is provided:

(i) An inventory count at 31 December 2022 showed closing inventory value of K15.75 million. This included damaged goods with a cost of K1.2 million. These goods would require remedial work costing K0.675 million before being sold for K1.425 million.
(ii) Non-Current Assets

- Land and Buildings were revalued at K22.5 million and K72 million respectively on 1 January 2022, resulting in revaluation gain of K11 million for the current year. At that date, the remaining life of the building was 15 years. Depreciation is on straight line basis. Ignore deferred tax implication.
- Depreciation on Plant and Equipment is at $12.5 \%$ on reducing balance basis.
- LULU PIc uses fair value model of IAS 40 Investment Property to value its investment property. On 31 December 2022, a qualified surveyor valued the property at K20.25 million.
- It is the policy of the company to charge depreciation on full year basis.
(iii) The Directors have estimated the provision for income tax for the year ended 31 December 2022 at K12 million. The tax base of the company's net assets as at 31 December 2022 is K18 million less than the carrying amount. Assume the rate of tax is 30\%.
(iv) On 1 October 2022, LULU Plc imported a piece of equipment from an American supplier for $\$ 1$ million and agreed to settle the bill in six months' time. For purposes of this transaction, the applicable exchange rates are as follows:


## Date

1 October 2022
31 December 2022
1 April 2023

## Exchange Rate

No entries had been made for the above transaction. Any exchange difference on translation should be debited or credited to Administrative expenses.

## Required:

Prepare for LULU Plc -
(a) Statement of profit or loss and other comprehensive Income for year ended 31 December, 2022.
(13 marks)
(b) Statement of Financial Position as at 31 December, 2022.
(12 marks)
[Total: $\mathbf{2 5}$ Marks]

## SECTION B <br> There are THREE (3) questions in this section. Attempt any two (2) questions. QUESTION THREE

(a) Mulenga Ltd is a listed company in southern Zambia and operates many super markets in Choma. The following statements relate to Mulenga Ltd for the year 2022:

Statements of Profit or Loss for the year ended 31 December

|  | 2022 | 2021 |
| :---: | :---: | :---: |
|  | K' million | K' million |
| Revenue | 1,255 | 1,220 |
| Cost of sales | $(1,177)$ | $(1,145)$ |
| Gross profit | 78 | 75 |
| Operating expenses | (21) | (29) |
| Profit from operations | 57 | 46 |
| Finance cost | (10) | (10) |
| Profit before tax | 47 | 36 |
| Income tax | (14) | (13) |
| Net profit | 33 | 23 |

Summarised Statements of Changes in Equity for years ended 31 December

|  | 2022 | 2021 |
| :---: | :---: | :---: |
|  | K 'million | K' million |
| Opening balance | 276 | 261 |
| Profit for the period | 33 | 23 |
| Dividends | (8) | (8) |
| Closing balance | 301 | $\underline{276}$ |
| Statements of Financial Position as at 31 December |  |  |
|  | 2022 | 2021 |
|  | K' million | K' million |
| Non-current Assets |  |  |
| Property, Plant \& Equipment | 580 | 575 |
| Goodwill | 100 | 100 |
|  | $\underline{680}$ | 675 |

Current Assets
Inventory ..... 47 ..... 46
Receivables ..... 12 ..... 13
Cash ..... 46 ..... 12
105 ..... $\underline{71}$
Total Assets $\underline{785}$ ..... 746
Equity
Share Capital ..... 150 ..... 150
Retained Earnings ..... 151 ..... 126
301 ..... 276
Non-current Liabilities
Interest-bearing borrowing ..... 142 ..... 140
Deferred tax ..... $\underline{25}$ ..... $\underline{21}$
167 ..... 161
Current Liabilities
Trade and other payables ..... 297 ..... 273
Short-term borrowing ..... $\underline{20}$ ..... 36
317 ..... 309
Equity and Liabilities ..... 785 ..... 746

## Additional Information:

1. Key ratios for the supermarket sector (based on the latest available financial statement of 12 listed entities in the sector) are as follows:

- Gross Profit margin: 5.9\%
- Return on Capital Employed (ROCE): 3.9\%
- Net Assets Turnover: 1.93 times

2. During the current year, Mulenga Ltd increased the useful lives of its property, plant and equipment.

## Required:

Prepare a report addressed to the shareholders of Mulenga Ltd, analysing the performance and position of Mulenga Ltd based on the financial statements and
additional information provided. The report should also include comparisons with key sector ratios (where appropriate).
(b) IAS 40 Investment Property provides guidance on accounting treatment of investment property. There are basically two methods used to measure investment property, that is, fair value model and cost model.

## Required:

(i) Define Investment Property as per IAS 40 and state the rationale behind the accounting treatment of an investment property under IAS 40.
(ii) Explain the difference between the treatment of an investment property carried under the fair value model of IAS 40 and that of an owner-occupied property carried under the revaluation model of IAS 16.
(3 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FOUR

You are the Accountant of Kalulu Limited and you are required to deal with the items below.

## Note: The financial year end in each scenario [(a), (b), (c) and (d)] is 31 March 2023.

(a) On 1 April 2022, Kalulu purchased $500,000 \mathrm{~K} 1$ listed equity shares at a price of K50 per share. An irrevocable election was made to recognise the shares at fair value through other comprehensive income. Transaction costs were K850, 000. At the year end of 31 March 2023, these shares were trading at K70 per share. A dividend of K25 per share was received for the year ended 31 March 2023.

## Required:

Explain the accounting treatment of this transaction by Kalulu according to IFRSs/IASs.
(6 marks)
(b) Kalulu entered into a two (2) year contract to build a hospital for a customer on 1 April 2022. Performance obligation is satisfied over time and has been measured at $45 \%$ on 31 March 2023 by independent certified experts. The contract price is K8,000,000, and $K 2,475,000$ has been incurred to date, and the estimated completion costs are K3,025,000. To date, K3,000,000 has been invoiced and paid.

## Required:

Explain the accounting treatment of this contract in the books of Kalulu according to IFRSs/IASs.
(c) On 1 September 2022, Kalulu closed one of its separate major lines of business and the assets were disposed of, incurring losses of K350,000 on the disposal of noncurrent assets. The results of Kalulu for the year ended 31 March 2023 were: revenue $K 7,000,000$, operating expenses $K 1,500,000$, operating profit $K 2,000,000$ and income tax expense K650,000.

## Required:

According to IFRSs/IASs:
(i) Explain how Kalulu will account for this discontinued operation. (5 marks)
(ii) Explain any two (2) disclosures required for a discontinued operation.
(d) Kalulu borrowed K5,000, $0006 \%$ loan on 1 January 2022 to construct its own factory. The construction began on 1 July 2022 and was completed on 31 December 2022. As not all of the borrowed funds were immediately required, Kalulu invested K1, 000, 000 in $5 \%$ bonds from 1 July 2022 to 30 September 2022. On 1 January 2022, Kalulu had also K2, 000, $0005 \%$ loan and K3, 000, $0008 \%$ loan. On 1 July 2022, Kalulu drew K2,500, 000 from these loans to complete the factory construction.

## Required:

Explain the meaning of the term 'Qualifying Asset' and calculate the borrowing cost to be capitalised by Kalulu according to IFRSs/IASs.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

(a) The following information was extracted from the financial statements of Twalumba Ltd, a newly listed company based in Kapiri Mposhi district of central Zambia:

## Statement of Profit or Loss and Other Comprehensive Income (extracts) for the year ended 31 March, 2023:

|  | K'000 |
| :--- | :---: |
| Profit before interest and tax | 981 |
| Finance costs | $(108)$ |
| Profit before tax | 873 |

Income tax expense ..... (305)
Profit for the year ..... 568
Other Comprehensive income
Revaluation surplus on property, plant and equipment ..... 418
Total comprehensive income ..... 986
Statements of Financial Position as at 31 March

|  | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 2}$ |
| :--- | ---: | ---: |
| Assets | K $^{\prime} \mathbf{0 0 0}$ | K $^{\prime} \mathbf{0 0 0}$ |
| Non-current assets: |  |  |
| Property, plant and equipment | 11,250 | 10,500 |
| Intangibles | $\underline{500}$ | $\underline{452}$ |
|  | $\underline{11,750}$ | $\underline{10,952}$ |

Current assets:
Inventories ..... 840 ..... 1,125
Trade and other receivables ..... 260 ..... 210
Investments ..... 38 ..... 18
Cash and cash equivalents ..... 5 ..... 30
1,143 ..... 1,383
Total assets 12,89312,335
Equity and Liabilities
Equity
Ordinary share capital ..... 6,000 ..... 5,250
Share premium account ..... 1,800 ..... 1,425
Revaluation surplus ..... 750 ..... 356
Retained earnings ..... 2,011 ..... 3,369
10,561 ..... 10,400
Non-current liabilities:
Loan notes (redeemable) ..... 760 ..... 600
Current liabilities:
Trade and other payables ..... 222 ..... 210
Taxation ..... 600 ..... 525
Ordinary dividend payable ..... 750 ..... 600

## Total equity and liabilities

12,893
12,335

## Statement of Changes in Equity for the year ended 31 March 2023 (Extract)

|  | Retained <br> Earnings | Revaluation <br> Surplus |
| :--- | ---: | ---: |
|  | K'000 $^{\prime}$ | K'000 |
| Balance at 1 April 2022 | 3,369 | 356 |
| Dividends declared | $(1,950)$ |  |
| Total comprehensive income for the year | 568 | 418 |
| Transfer from revaluation surplus to retained earnings | 24 | $(24)$ |
| Balance as 31 March 2023 | 2011 | 750 |

## The following additional information is relevant:

(i) During the year Twalumba Ltd issued both ordinary shares and redeemable preference shares for cash.
(ii) Investments classified as current assets are held for the short term and are readily convertible into the stated amounts of cash on demand.
(iii) During the year, Twalumba Ltd sold plant and equipment with a carrying amount of K840,500 for K900,000. Total depreciation charges for the year amounted to $\mathrm{K} 1,100,000$. Plant costing K50,000 was purchased on credit. The amount is included within trade and other payables.
(iv) Trade and other payables include accrued interest of K5,000 as at 31 March 2023 (2022: K10,000).
(v) Intangibles relate to development costs capitalised in accordance with IAS 38 Intangible Assets. Costs amounting to K70,000 were paid and capitalised during the year.

## Required:

Prepare a statement of cash flows for Twalumba Ltd for the year to 31 March 2023 in accordance with IAS 7 Statement of Cash Flows.
(b) Generally, there are advantages of global harmonisation of financial reporting standards with practices in countries around the world, including Zambia.

## Required:

Discuss three (3) advantages and two (2) disadvantages of international harmonisation of accounting standards across countries in the entire globe.

## END OF PAPER

## DA 8: FINANCIAL REPORTING SUGGESTED SOLUTIONS

## SOLUTION ONE

Muna Ltd's Group
Consolidated statement of Financial Position as at 31 December 2022

| NON-CURRENT ASSETS | K |
| :---: | :---: |
| PPE (450,000 + 294,000 + 24,000-1,200) | 766,800 |
| Goodwill (w1) | 128,400 |
| Investment in Associate (w4) | $\underline{165,600}$ |
| CURRENT ASSETS |  |
| Inventories (120,000 $+108,000+21,600-7,200) \mathrm{w} 5)$ Trade Receivables $(78,000+18,000-40,800)(w 5)$ | 1,060,800 |
|  | 242,400 |
| Total Assets |  |
|  | 55,200 |
| EQUITY AND LIABILITIES |  |
| EQUITY: Equity shares of K1.00 each | 297,600 |
| Share Premium | 1,358,400 |
| Retained Earnings (w2) |  |
| Non-controlling Interest (w3) | 300,000 |
|  | 237,600 |
| NON-CURRENT LIABILITIES |  |
| 10\% Loan notes (174,000 + 24,000) | 319,200 |
| CURRENT LIABILITIES |  |
| Deferred consideration - contingent consideration other current liabilities (99,600 + 90,000+21,600- | 856,800 |
| 40,800) (w5) | $\underline{100,800}$ |
| Total Equity and Liabilities | 957,600 |
|  | 198,000 |
|  | 32,400 |
|  | $\underline{170,400}$ |
|  | $\underline{202,800}$ |
|  | 1,358,400 |

## Workings

1. Goodwill calculation

| Consideration Paid: |  |  |
| :---: | :---: | :---: |
| - Share exchange ( $\frac{72,000}{1} \times \frac{3}{2} \times \frac{K 3.2}{1}$ ) | 345,600 |  |
| - Deferred consideration ${ }^{1}$ | 32,400 | 378,000 |
| NCI ( $25 \% \times 96,000 \times \mathrm{K} 4.5)$ |  | 108,000 |
|  |  | 486,000 |
| less: Equity | 96,000 |  |
| Pre-acquisition Earnings | 192,000 |  |
| Fair value adjustment |  |  |
| Goodwill at acquisition | 24,000 | 312,000 |
| Adjust for impairment |  | 174,000 |
| Goodwill at Reporting date |  | $(45,600)$ |
|  |  | 128,400 |

2. Retained Earnings calculation

|  | Muna Ltd K | Naka Ltd K | Chika Ltd K |
| :---: | :---: | :---: | :---: |
| Balances as per statements less Pre-acquisition Earnings | 326,400 | 210,000 | 252,000 |
|  |  | $(192,000)$ | $(180,000)$ |
| Adjust for: Unrealized Profit ( $\frac{50}{150} \times \frac{21,600}{1}$ | $(7,200)$ | 18,000 | 72,000 |
| ) Depreciation ( $24,000 \div 20$ |  | $(1,200)$ |  |
| yrs) Impairment loss - Naka Ltd | $(21,600)$ | $\frac{(45,600)}{(28,800)}$ |  |
| Share of Naka Ltd ( $75 \% \times 28,800$ ) | 28,800 |  |  |
| Share of Chika Ltd (40\% x 72,000 | $(7,200)$ |  |  |
|  | 319,200 |  |  |

3. NCI at reporting date for Naka Ltd

Equity shares ( $25 \% \times 96,000 \times \mathrm{K} 4.5$ )
K 108,000
Post-acquisition loss ( $25 \% \times 28,800$ )

|  | $\underline{\underline{100,800}}$ |
| :--- | :--- |

4. Investment in Chika Ltd at reporting date

| - Equity shares (24,000 x K4) | K |
| :--- | :---: |
| $-10 \%$ Loan note $\left(\frac{24,000 \text { shares }}{50 \text { shares }} \times \mathrm{K} 100\right)$ | 96,000 |
| Post-acquisition Retained earnings $(40 \% \times 72,000)$ | 48,000 |
| - Impairment loss | 28,800 |
|  | $\underline{(7,200)}$ |
|  | $\underline{165,600}$ |

5. 

- Unrealized Earnings in Inventory ( $21,600 \times \frac{50}{150}$ ) $=K 7,200$
- Self-cancelling items for Current Account Balances.
i. Inventory Balances be increased by $(21,600-7,200)=K 14,400$
ii. Trade Receivables must be reduced by K40,800 while other current liabilities must be reduced by (K40,800 - K21,600) $=$ K19,200


## SOLUTION TWO

## LULU Plc

(a) Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2022

|  | K'000 |
| :--- | ---: |
| Revenue | 320,700 |
| Cost of sales (W2) | $(225,325)$ |
| Gross profit | 95,375 |
| Income from investment property | $\underline{1,800}$ |
| Total income | 97,175 |
| Distribution costs | $(20,600)$ |
| Administrative expenses (14,500 + 300 exchange loss(w5)) | $(14,800)$ |
| Fair value loss on investment property $(24,000-20,250)$ | $\underline{(3,750)}$ |
| Profit before interest and tax | 58,025 |
| Finance cost | $\underline{(4,800)}$ |
| Profit before tax | 53,225 |
| Taxation (w4) | $\underline{(9,600)}$ |
| Profit after tax | 43,625 |
| Other comprehensive income |  |
| Gain on revaluation - PPE | $\underline{11,000}$ |
| Total comprehensive income | $\underline{54,625}$ |

## LULU Plc

(b) Statement of financial position as at 31 December 2022

K'000 K'000

## Assets

Non-current assets:
Property, plant and equipment (w3) 120,325
Investment property $\quad \underline{\underline{20,250}}$
140,575
Current assets:
Inventory (15,750-450(w2)) 15,300
Trade receivables 20,250
Cash and cash equivalents $\quad 11,850$
47,400
Total assets
Equity and Liabilities
Equity:
Share capital of K0.25 each ..... 45,000
Retained earnings $(26,250+43,625)$ ..... 69,875
Revaluation surplus ..... 31,500146,375
Non-current liabilities:
Deferred tax ..... 5,400
Current liabilities:
Trade and other payables (17,700 + 6,500(w5)) ..... 24,200
Current tax ..... 12,00036,200
Workings (W)K'000K'000

1. Depreciation of non-current assets
Buildings (72,000 $\div 15 \mathrm{yrs}$ ) ..... 4,800
Old plant and equipment ((54,000-25,200) x 12.5\%) ..... 3,600
New plant and equipment (6,200x12.5\%(w5)) ..... $\underline{775}$
Total depreciation for the period ..... 9,175
2. Cost of sales
Per trial balance ..... 215,700
Write-down (below) ..... 450
Depreciation charge for the year (W1) ..... 9,175225,325
Inventory
Cost ..... 15,750
Damaged goods:
Cost $(1,200)$
NRV (1,425-675) $\underline{750}$
Write down
Value at year-end ..... 15,300

3. Property, plant and equipment ant \&

Depreciation on buildings per annum: $72 \mathrm{~m} \div 15$ years $=4.8 \mathrm{~m}$
Depreciation on plant and machinery per annum: $(54 \mathrm{~m}-25.2 \mathrm{~m}) \times 12.5 \%=$ 3.6 m

## 4. Taxation:

i) Income tax

Charge for the year 12,000
Decrease in deferred tax
$(2,400)$
Charge to SPL
9,600
ii) Deferred tax

Balance b/d 7,800
Decrease in deferred tax $\quad(2,400)$
Balance c/d
5,400

NB. Deferred tax liability at year-end $=30 \% \times 18 \mathrm{~m}$ (temporary timing difference) $=5.4 \mathrm{~m}$

## 5. Foreign currency translation

## At 1 October 2022

Dr Equipment (1,000 x 6.2) 6,200
Cr Payables
6,200

NB. The non-monetary item is not subject to retranslation but the foreign currency payable is retranslated as follows:

At 1 October $2022 \quad 6,200$
Exchange loss (balance) $\underline{300}$
At 31 December $2022(1,000 \times 6.5) \quad \underline{6,500}$

## SOLUTION THREE

(a) REPORT

| To: | Shareholders of Mulenga Limited |
| :--- | :--- |
| From: | Management accountant |
| Date: | $31 / 12 / 2022$ |
| Subject: | Performance and position of Mulenga Limited |

## Introduction

As requested, I have analyzed the performance and position of Mulenga Ltd. My analysis is based on extracts from the financial statements for the year ended 31 December 2022 with comparative figures for the year ended 31 December 2021. A number of key measures have been calculated and these are set out in the attached Appendix.

Profitability
Gross profit margin increased very slightly during the year by $1.6 \%$ (6.26.1/6.1and this is a little above the industry average. However, although operating profit margin increased significantly during the year, this is still below the industry average of $7.5 \%(3.9 \% \times 1.93$ times). The increase in net profit margin occurred because operating expenses fell by over a quarter in 2022. The operating profit margin rose from 3.8\% (2021) to 4.5\% (2022).

Given the information available, the most likely cause of this fall is an increase in asset lives and the resulting reduction in the depreciation expense. As expected, the company has a considerable investment in property, plant \& equipment and depreciation would normally be significant expense. An increase in asset is relatively unusual and it is possible the directors have used this method to deliberately improve the operating and the net profit margins. (They may have been particularly concerned that the net profit margin has obviously been well below the industry average.)

On the other hand, the directors may have carried out their review of assets lives in good faith or there could be another legitimate reason why operating expenses have fallen. For example, the 2021 figure may have been inflated by a significant "one off" expense.

Other Matters

Net asset turnover has deteriorated slightly from 2.79 times to 2.68 times but still above the industry average of 1.94 times. This suggests that the company uses its assets more efficiently than others in the same sector. However, increasing the asset lives will have reduced the ratio for 2022. It is possible that most of the investment in new property was made during 2022 thereby contributing to deteriorating ratio..

The current ratio for both years is extremely low. Supermarkets often do have relatively low current and quick ratios, but with no average figure for the industry available, it is difficult to tell whether this is normal for the type of operation. Short-term liquidity appears not to be a problem because the company has a positive cash balance which has increased in the year. However, the appearance of the statement of financial position suggests that this has been achieved by delaying payment to suppliers, with trade and other payables increasing by nearly $9 \%$ but revenue and cost of sales only increased by approximately $3 \%$. The debt-to-equity ratio has fallen in the year and gearing does not appear to be a problem.

## Conclusion

Mulenga's profit margins appear reasonable for a company in its industry sector. Although its operating profit margin is below the industry average, this is improving. There are no apparent short-term liquidity problems. It is possible some of this improvement has been achieved by deliberately reducing operating expenses for the year. If, as seems likely, the directors wish to sell their interest in the company in the near future, improved results will help to secure a better price.

However, it is impossible to be certain that this has happened without much more detailed information about the reason for the fall in operating expenses. There may be a legitimate explanation for the improvement in the company's profit margins.

## APPENDIX

## SECTOR

$\underline{2022}$
$\underline{2021}$
KEY

## RATIO

$$
=6.2 \% \quad=
$$

5.90\%

| operating profit margin | $\begin{aligned} & 57 \div 1,255 \times 100 \% \\ & =4.5 \% \end{aligned}$ | $\begin{aligned} & 46 \div 1,220 \times 100 \% \\ & = \end{aligned}$ | 3.8\% |
| :---: | :---: | :---: | :---: |
| Nil |  |  |  |
| ROCE | 57 $\div 468 \times 100 \%$ | $46 \div 437 \times 100 \%$ |  |
|  | = 12.18\% | $=10.5$ | 1.9\% |
| 3.90\% |  |  |  |
| Net assets turnover | 1,255 $\div 468$ | 1,220 $\div 437$ |  |
|  | 2.68 times | 2.79 | times |
| 1.93 times |  |  |  |
| Current ratio | $105 \div 317$ | $71 \div 309$ |  |
|  | = 0.33:1 | = | 0.23:1 |
| Nil |  |  |  |
| Debt $\div$ Equity ratio | $142 \div 301 \times 100 \%$ | $140 \div 276 \times 100 \%$ |  |
|  | = 47.2\% | $=$ | 50.7\% |

Nil

## (b) (Note: Answers too detailed than expected from the students)

(i) An investment property is land or buildings (or a part thereof) held by the owner to generate rental income or for capital appreciation (or both) rather than for production or administrative use. It would also include property held under a finance lease and may include property under an operating lease, if used for the same purpose as other investment properties.

Generally, non-investment properties generate cash flows in conjunction with other assets, whereas a property that meets the definition of an investment property means that it will generate cash flows that are largely independent of the
other assets held by an entity and, in that sense, such properties do not form part of the entity's normal operations.
(ii) The revaluation model and fair value sound very similar; both require properties to be valued at their fair value which is usually a market-based assessment (often by an independent valuer). However, any gain (or loss) over a previous valuation is taken to profit or loss if it relates to an investment property, whereas for an owner-occupied property, any gain is taken to a revaluation reserve (via other comprehensive income and the statement of changes in equity).

A loss on the revaluation of an owner-occupied property is charged to profit or loss unless it has a previous surplus in the revaluation reserve which can be used to offset the loss until it is exhausted. A further difference is that owner-occupied property continues to be depreciated after revaluation, whereas investment properties are not depreciated.

## SOLUTION FOUR

(a) Financial instruments

In the profit or loss statement, K12, 500, 000 (w1) dividends received will be reported as investment income at 31 March 2023.

In the other comprehensive income, K9,150, 000 (w2) will be reported as a gain on investment in equity instruments [financial asset] at 31 March 2023.

In the statement of financial position, K35, 000, 000 (w3) will be reported as carrying value of investment in equity instruments at 31 March 2023.

Workings
W1 Dividends 500,000 x K25 = K12, 500,000
W2 Gain [500,000 x 70] - \{ [500,000*k50]+ 850,000\} $=k 9,150,000$
W3 Carrying value on investment 500,000 *70=35,000,000
(b) In the profit or loss statement, revenue of $K 3,600,000$ (w1) and profit of $K 1$, 125,000 (w2) will be reported at 31 March 2023.

In the statement of financial position, K600, 000 (w3) contract asset will be reported at 31 March 2023.

## Workings

W1 Revenue K8, 000,000 x 45\% = K3, 600,000
W2 Profit K3, 600,000 - K2, 475, $000=\mathrm{K} 1,125,000$
W3 Contract asset K3, 600,000 - K3, 000, $000=$ K600, 000
(c)
(i) Accounting

The total amount of $\mathrm{K} 1,000,000$ (w1) will be presented as a single figure on the face of the profit or loss statement of continuing operations.

This total is post-tax profit/ (loss) of the discontinued operation, and posttax gain or (loss) recognised on: fair value less cost to sell measurement or on the disposal.

W1 Total amount K2, 000,000 - K350, $000-\mathrm{K} 650,000=\mathrm{K} 1,000,000$
(ii) IFRS 5 requires detailed disclosure either in the notes or on the face of the income statement (note: separate from continuing operations) of:

- Revenue K7,000,000
- Expenses K1,500,000
- Pre-tax profit or (loss) K1,650,000
- Related income tax expenses K650, 000
(d) Qualifying assets

This is an asset that necessarily takes a substantial time to get ready for its intended purpose (use or sale).
The borrowing cost of K225, 500 (w1) and (w2) will be capitalised in the statement of financial position.

Workings
W1 Specific borrowing K5, 000,000 x 6\% x 6/12 = K150, 000 Temporary investment K1, 000,000 x 5\% x 3/12 = $(12,500)$
Net amount K150, 000 - K12, 500
K137, 500
W2 General borrowing
$[2,000,000 / 5,000,000 \times 5 \%]+[3,000,000 / 5,000,000 \times 8 \%]=6.8 \%$ K2, 500, $000 \times 6.8 \%=K 170,000 \times 6 / 12=K 85,000$

W3 Borrowing cost total K137, $500+\mathrm{K} 85,000=\mathrm{K} 222,500$

## SOLUTION FIVE

## Twalumba Ltd

(a) Statement of cash flows for the year ended 31 March 2023
K'000
K'000
Cash flows from operating activities Profit before tax ..... 873
Finance cost ..... 108
Depreciation charge ..... 1,100
Amortisation charge (W4) ..... 22
Profit on disposal of PPE (900-840.5) ..... (59.5)
Decrease in Inventories (1,125-840) ..... 285
Increase in trade and other receivables(210-260) ..... (50)
Increase in trade and other payables (W7) ..... 17
Cash generated from operations ..... 2,295.5
Interest paid (W2) ..... (113)
Income tax paid (W1) ..... (230)
Net cash from operating activities ..... 1,952.5
Cash flows from investing activities Purchase of property, plant and equipment (W3) ..... $(2,222.5)$
Purchase of intangibles(70)
Proceeds from sale of property, plant and equipment ..... $\underline{900}$
Net cash used in investing activities$(1,442.5)$
Cash flow from financing activities
Issue of ordinary share capital $(6,000+1,800)-(5,250+1,425) 1,125$
Issue of loan notes (760-600) ..... 160
Dividends paid (W6) ..... $(1,800)$
Net cash used in financing activities(515)
Net increase in cash and cash equivalents ..... (5)
Cash and cash equivalents at beginning (30+18) ..... 48
Cash and cash equivalents at close ( $38+5$ ) ..... 43
Workings
W1 Income Tax
K'000 ..... K'000
Cash paid 230 Bal b/d ..... 525
Bal C/d 600 P \& L ..... 305Finance Cost
Cash 113 Bal b/d ..... 10K'000K'000
Bal c/d $\underline{5}$ P \& L ..... 108
118 ..... 118
W3PPE
K'000 ..... $\mathrm{K}^{\prime} 000$
10,500.0 Disposals ..... 840.5
Bal b/d
Revaluation surplus (W5) 418.0 P \& L ..... 1,100.0
Purchased on credit50.0 Bal b/d11,250.0
Cash
2,222.5
13,190.5 ..... $13,190.5$
W4
Intangibles
K'000 ..... $K^{\prime} 000$
Cash 70 Bal b/d ..... 500
Bal b/d 452 P \& L ..... $\underline{22}$
522 ..... 522
W5 Revaluation Surplus
K'000 ..... K'000
Retained earnings 24 Bal b/d ..... 356
Bal c/d750 PPE418
$\underline{774}$ ..... 774
W6
Ordinary Dividends
K'000 ..... $K^{\prime} 000$
Cash 1,800 Bal b/d ..... 600
Bal c/d1,950
2,550 ..... 2,550

W7 Trade and other payables (excluding interest accrual and payables in respect of PPE)
Opening K210,000 - K10,000
$=\mathrm{K} 200,000$
Closing K222,000 - K5,000
$=\underline{K 217,000}$
Increase

$$
=\underline{K 17,000}
$$

(b) Any Three dvantages and Two Disadvantages of International Harmonisation Advantages of Harmonization

- Comparability in financial statements

The first and most important advantage of harmonization of reporting standards is to achieve comparability in financial statements. Due to different sets of financial reporting standards, the way financial statements prepared and presented are different from each other which make it complicated to compare them. This is even more noticeable in multinational companies when they operate in more than just one country. If international harmonization is achieved, the level of international comparability also increases making it easier for companies to prepare the financial statements under one set of rules; investors who understand the financial statements due to the nature of IFRS and make well thought investment decisions.

- International Expansion

Moving to a single set of global financial standards would also ease barriers to expansion for companies. If companies wish to expand overseas today, they need to consider international costs of compliance, which could mean adopting a completely new set of accounting records to meet statutory requirements in the new country. In some cases, this would nearly double the company's accounting costs. For many small businesses, even the large rewards of moving overseas are dwarfed by these expansion costs.

- Central Authoritative Body

From a policy-making standpoint, moving to a single set of global standards puts rule making into the hands of one body. Currently, accounting standards are set within each country by each standard-setting body, as well as by an international group. One set of standards would reduce disagreement between countries and international regulators, and it might also cut costs. In some countries, businesses are required to pay reporting fees that go to fund these standard-setting bodies. While the costs may not affect large companies, they can have a huge impact on a small business. Moving to a central authoritative body could reduce these costs drastically.

- Another advantage worth noting is the consistency to be achieved under IFRS as it was one of the objectives of IFRS as a single reporting standard. The consistency also contributes to better understanding between investors, lenders and other businesses as there will be the nature of predictability in place. Moreover, companies operating in different countries also can use their expertise and systems in all countries they are operating due to consistency of the reporting standards.

Disadvantages of Harmonization

- Cultural Differences

One of the criticisms of harmonized accounting standards is that the IASB has failed to fully take into account the cultural, political and social differences between countries. This is particularly relevant to their implementation in developing countries, where language barriers, attitudes toward accounting and other socio-cultural aspects may affect their interpretation and application. For example, when the harmonized standards were implemented in Jordan, they were first translated into Arabic. Even though technical accounting terms have been well-defined in Arabic, challenges arose when the English terminology was hard to interpret or used inconsistently and, therefore, difficult to translate accurately.

- Worldwide Acceptance

National accounting standards are highly politicized and there is often a natural tendency to place the interests of the national economy ahead of those of the global economy. Private sector businesses and professional accounting bodies also have a vested interest in accounting practices and financial reporting. Pressure from these groups to change or reject certain standards can carry a lot of weight with political decision makers. Adopting international financial standards is met with additional challenges in developing countries. They often lack the resources and infrastructure to adapt national legal and legislative frameworks in which to house the standards, making proper implementation difficult.

- Training and Retraining

When a country decides to harmonize with the international standards, its companies, accountants and auditors need to be retrained in the new standards and reporting procedures for financial statements. College and university programs in this field also have to undergo significant changes in order to educate new people entering the profession. Before any of this can happen, trainers and professors will require training so they can instruct professionals and students. This will require the development of new learning materials and curricula, new examinations for professional licensing and new accounting software and reporting systems. To further complicate matters, the adoption of harmonized standards has to be phased in, so for a number of years, two different systems are in operation. Such a complex transition requires a lot of safety mechanisms to ensure it achieves uniform results.

- Another disadvantage of harmonization is when there exists different economic environment as harmonization could be considered useless. If a particular country has its own practice in place, and even though they adapt to use one of the international reporting standards, it could be more harmful to the country rather than make anything good. This is because the irrelevant
element of the new reporting standard may be of no use and therefore may even introduce ambiguity and complication to that country's reporting standards.


## END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 9: MANAGEMENT ACCOUNTING

TUESDAY 12 DECEMBER 2023

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 - TW0 (2) COMPULSORY QUESTIONS <br> Attempt BOTH questions in this section.

## QUESTION ONE

| (c) Kabwe Ltd (K Ltd) manufactures three (3) products namely A, B and C. The information given below relates to the month of March, 2023. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Products | quantity (units) | price per unit |
| Sales: | A | 1,200 | K80 |
|  | B | 2,400 | K96 |
|  | C | 1,800 | K112 |
| Materials used in company's products: |  |  |  |
| Materials | MA | MB | MC |
| Cost per unit | K3 | K5 | K8 |
| Quantity used in: | MA (kgs) | MB (kgs) | MC (kgs) |
| Products A | 5 | 3 | ( |
| Product B | 4 | 4 | 3 |
| Product C | 3 | 2 | 2 |
| Finished inventory: | Product A | Product B | Product C |
|  | Units | Units | Units |
| Opening inventory | 1,200 | 1,800 | 600 |
| Closing inventory | 1,320 | 1,980 | 660 |
| Material inventory | MA (kgs) | MB (kgs) | MC (kgs) |
| Opening inventory | 31,200 | 24,000 | 14,400 |
| Closing inventory | 37,440 | 28,800 | 17,280 |

## Required:

Prepare the following functional budgets for the month of March 2023:
(i) Sales in quantity and value, including total values
(ii) Production quantities
(iii) Material usage in quantities
(iv) Material purchases in quantities and value, including total value.
(b) Principal budget factor is such an important factor in the budgetary process. It is essential to identify the principal budget factor before the preparation of budgets.

## Required:

(i) Explain the term "principal budget factor" as used in budgetary planning.
(ii) Identify three (3) examples of key budget factors from a manufacturing organization such as K Ltd.
(3 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

Tumelo Limited makes quality wooden benches for both indoor and outdoor use. Results have been disappointing in recent years and a new Managing Director, Mr Joe Mwaice, was appointed to raise production volumes. After an initial assessment, he considered that budgets had been set at levels which made it easy for employees to achieve. He argued that employees would be better motivated by setting budgets which challenged them more in terms of higher expected output.

Other than changing the overall budgeted output, Mr Mwaice has not yet altered any part of the standard cost card.

Thus, the budgeted output and sales for November 2022, was 4,000 benches and the standard cost card was calculated on this basis:
Cost per unit
(K)
80
32
16
$\underline{64}$
192
$\underline{\mathbf{2 2 0}}$
$\underline{\mathbf{2 8}}$

Overheads are absorbed on the basis of labour hours and the company uses an absorption costing system. There was no inventory at the beginning of November 2022. Inventories are valued at standard cost.
Actual results for November 2022 were as follows:

|  | K |
| :--- | ---: |
| Wood 80,000 Kg @ K3.50 per Kg | 280,000 |
| Labour 16,000 hours @ K7 per hour | 112,000 |
| Variable overheads | $\underline{60,000}$ |
| Fixed overheads | $\underline{196,000}$ |
| Total production cost (3,600 benches) | $\underline{(76,800})$ |
| Closing inventory (400 benches @ K192) | 571,200 |
| Cost of sales | $\underline{720,000}$ |
| Sales (3,200 benches) | $\underline{148,800}$ |

The average monthly production and sales for some years prior to November 2022 had been 3,400 units and budgets had previously been set at this level. Very few operating variances had historically been generated by the standard costs used.

The Managing Director had made some significant changes to the operations of the company. He had also urged suppliers of raw materials to improve quality. He went ahead to increase the selling price, introduced less skilled labour and significantly reduced fixed overheads.

However, the other directors are now concerned that he had been too ambitious in raising production targets.

## Required:

(a) Calculate all the possible operating variances from the information given above.
(b) Prepare an operating statement which reconciles the budgeted and actual profits for the month for of November 2022.

## SECTION B

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

## QUESTION THREE

Mafunjo Bakery is a well-established bakery engaged in the production of various confectionery products to diverse clientele. Subtotals on the spreadsheet of budgeted overheads for a year revealed the following:

|  | Kneading <br> Department | Finishing <br> Department | General Bakery |
| :--- | :--- | :--- | :--- |
| Variable overhead (K'000) | 1,600 | 500 | 1,050 |
| Fixed overhead (K'000) 2,500 850 |  |  |  |
| Budgeted activity: | 800 | 600 |  |
| Machine hours (000) |  |  |  |
| Practical capacity: <br> Machine hours (000) | 1,200 | 800 |  |

## The following additional information is relevant:

(i) Variable overhead of a general bakery department is to be reapportioned to production cost centres based on the machine hours worked in each department. General factory fixed overhead is to be reapportioned on the basis of the practical machine hour capacity of the two departments.
(ii) It has been a long-standing company practice to establish selling prices by applying a mark-up on full process cost of between $25 \%$ and $35 \%$
(iii) A possible price is sought for one new product which is in a final development stage. The total market for this product is estimated at 200,000 units per annum. Market research indicates that the company could expect to obtain and hold about $10 \%$ of the market. It is hoped the product will offer some improvement over competitors' products, which are currently marketed at between K90 and K100 each. The product development department has determined that the direct material cost content is K9 per unit.
(iv) Each unit of the product will take two labour hours (four machine hours) in the kneading department and three labour hours (three machine hours) in the finishing department. Hourly labour rates are K5.00 and K5.50 respectively.
(v) Management estimates that the annual fixed costs which would be specifically incurred in relation to the product are supervision $K 20,000$, depreciation of a recently acquired machine K120,000 and advertising K27,000. It may be assumed that these costs are included in the budget given above.
(vi) Given the state of development of this new product, management does not consider it necessary to make revisions to the budgeted activity levels given above for any possible extra machine hours involved in its process.

## Required:

(a)
(i) Calculate a full cost per unit and a marginal cost per unit.
(ii) Calculate a range of prices as per note (ii) above using the full cost plus method.
(iii) Calculate a product cost based on incremental costs.
(b) Comment on the cost information in part (a) above and suggest a price range which should be considered.
(c) Explain the role of costs in pricing.
(d) Explain two (2) advantages and two (2) disadvantages of using fixed budgets and two (2) advantages and one (1) disadvantage of using flexible budgets as part of a budgetary control system.

## QUESTION FOUR

(a) Malume Hardware Company Limited (MHC Ltd) has been operating in Lufwanyama district for the last three (3) years. The owner of the company Mr Malume has recently asked his accountant who is your former classmate, as to when the company will start making profits. However, since the accountant was not able to respond to his boss's question, he has approached you as a friend to help him answer the question.

Below is the data relating to the company's operations in 2022:

|  | $\mathrm{K}^{\prime} 000$ |
| :--- | ---: |
| Sales | 15,000 |
| Direct material | 3,250 |
| Direct labour | 2,700 |
| Variable overheads | 3,500 |
| Administration expenses | $\underline{1,050}$ |
| Total | $\underline{\underline{25,500}}$ |

## Additional information:

1. Selling and distribution cost is K2.3 million, K1 million of which are variable costs.
2. The following changes are expected to occur during the year:

- Variable selling and distribution expenses will reduce by $5 \%$ due to efficiency in sales staff.
- Variable overheads will reduce by $3 \%$.
- Material costs will increase by $2 \%$ due to increase in inflation rate in the economy.
- Labour costs will increase by $4 \%$.
- The selling price will be reduced by $3 \%$ to attract more customers.
- There will be no closing inventory at the end of the period.


## Required:

(i) Calculate the breakeven point in sales value using the above data.
(ii) Determine the margin of safety in sales value for the year.

Considering the amount of investment and its cost, Malume would like to make a profit of K2.25 million.

## Required:

(i) Calculate how much sales revenue should be generated to earn this profit.
(2 marks)
(ii) Prepare a profit statement if the sales revenue in (iii) above is achieved.
(iii) Discuss limitations of CVP analysis.
(b) Vision Company requires 1,000 units of a component per annum in a manufacturing process in the coming year. One unit of this component cost K50 each. The components are available locally and the lead time is seven (7) days. Each order costs K12 to prepare and process while the holding cost is K15 per unit per annum.

## Required:

(i) How many units should be ordered each time an order is placed to minimize inventory costs?
(ii) Calculate the re-order level.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

Kalaba Mupashi Limited (KM Ltd) is engaged in the manufacture and sale of customized products. In January 2023, KM Ltd entered into an agreement with Katongo Limited for manufacture and supply of 3,500 units of a customized 'Zing' at K4,000 per unit.

KM Ltd placed the order for raw material AA-2 and the supplier agreed to supply the material in second week of March 2023. KM Ltd had also hired skilled labour for the production of Zing. However, in February 2023, Katongo Limited went bankrupt.
KML has recently been approached by Sichone Limited for supply of 3,500 units of D-Zing which is a modified version of Zing. KM Ltd can use the ordered raw material and the hired skilled labour for this product. The production of D-Zing will take three months.

The following information has been provided in this regard:

## Machinery

Specialized machinery will be needed to produce D-Zing. The following proposals are under consideration:
(i) Lease machinery for three (3) months at monthly lease rentals of K250,000 and an upfront payment of refundable security deposit of K5,000,000. The upfront payment will be financed through running finance at $20 \%$ per annum. As per the lease term, monthly maintenance cost of K15,000 will be borne by the lessor.
(ii) Lease machinery at monthly lease rentals of K160,000 for a minimum period of six months. In this case, monthly maintenance of K20,000 will be borne by KM Ltd which will be incurred only in the months in which machinery is operative.

## Direct materials

The following raw materials will be required for manufacturing of each unit of D-Zing:
(i) $\mathbf{1 5}$ units of AA-2: KML had already ordered 50,000 units of AA-2 at K75 per unit under the original contract of zing. The current market price for AA-2 is K80 per unit. If the contract is not fulfilled, a penalty at $20 \%$ of the contract value will be payable by KM Ltd.
(ii) $\mathbf{1 0}$ units of A-78: A-78 is available on the market at K110 per unit. However, it can also be produced internally at a variable cost of K80 per unit. Fixed cost would be absorbed at K25 per unit. Internally produced A-78 would be subject of 20\% normal loss.
(iii) $\mathbf{5}$ units of C-11: The market price of $\mathrm{C}-11$ is K20 per unit. However, a substitute material D-50 can be used after processing it at a cost of K15 per unit. At present 5,000 units of $\mathrm{D}-50$ is available in inventory as a result of over purchasing for a previous order. D-50 was purchased at K5 per unit and can be sold back to the supplier at K3 per unit.

## Direct Labour

(i) KM Ltd hired skilled labour from a third party at K1,000 per hour under the original contract of Zing. If the order from Sichone Limited is not accepted, 200 labour hours would become idle and KM Ltd will have to pay $50 \%$ of the contract price.
(ii) If Sichone's limited's offer is accepted, the D-Zing would require 2,116 skilled labour hours. 1.5 hours of semi-skilled labour is required for each unit of D-Zing produced. Since there is a shortage of semi- skilled labour in the market, only 4,000 labour hours are available at K600 per hour. However, labour is willing to do overtime at a $50 \%$ higher rate up to maximum of 1,500 hours. Alternatively, unskilled labour can be hired at K200 per hour, however, unskilled labour would require $300 \%$ of the time taken by semi-skilled labour. This can be reduced to $250 \%$ if training is given to them at a cost of K300,000.

## Variable overheads

Variable overheads would be charged at K125 per skilled labour.

## Required:

(a) By using the relevant costs approach, compute the minimum price per unit that KM Ltd may quote.
(b) Explain the features of relevant costs.
[Total: 25 Marks]

## END OF PAPER

DA 9: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

a)
i. Sales Budget

| Product: | A | B | C | Total |
| :--- | ---: | ---: | ---: | ---: |
| Sales <br> quantities | 1,200 | 2,400 | 1,800 | 5,400 |
| Selling price | K80 | K96 | K112 |  |
|  | K96,000 | K230,400 | K201,600 | $\mathbf{5 2 8 , 0 0 0}$ |

ii. Production Budget

| Product: | A | B | C |
| :--- | ---: | ---: | ---: |
| Sales quantities | 1,200 | 2,400 | 1,800 |
| Add closing <br> inventory | 1,320 | 1,980 | 660 |
|  | 2,520 | 4,380 | 2,460 |
| Less opening <br> inventory | 1,200 | 1,800 | 600 |
| Units to be <br> produced | $\mathbf{1 , 3 2 0}$ | $\mathbf{2 , 5 8 0}$ | $\mathbf{1 , 8 6 0}$ |

iii. Material Usage Budget (quantities)

|  |  |  |  |  |  |  |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
|  | Units <br> per <br> product | MA <br> Total | Units <br> per <br> product | MB <br> Total | Units <br> per <br> product | MC <br> Total |
| A 1320 | 5 | 6,600 | 3 | 3,960 | 1 | 1,320 |
| B 2580 | 4 | 10,320 | 4 | 10,320 | 3 | 7,740 |
| C 1860 | 3 | 5,580 | 2 | 3,720 | 2 | 3,720 |
| Usage in <br> quantities |  | $\mathbf{2 2 , 5 0 0}$ |  | $\mathbf{1 8 , 0 0 0}$ |  | $\mathbf{1 2 , 7 8 0}$ |

iv. Material Purchases Budget (quantities and value)

|  | MA | MB | MC | Total |
| :--- | :--- | :--- | :--- | :--- |
| Material usage | 22,500 | 18,000 | 12,780 |  |


| Add Closing <br> inventory | $\underline{37,440}$ | $\underline{28,800}$ | $\underline{17,280}$ |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 59,940 | 46,800 | 30,060 |  |
| Less: Opening <br> inventory | $\underline{31,200}$ | $\underline{24,000}$ | $\underline{14,400}$ |  |
| Purchase <br> quantities | 28,740 | 22,800 | 15,660 |  |
| Price per unit | K3 | K5 | K8 |  |
|  | $\underline{\underline{\mathbf{K 8 6 , 2 2 0}}}$ | $\underline{\underline{\mathbf{K 1 1 4 , 0 0 0}}}$ | $\underline{\underline{\mathbf{K 1 2 5 , 2 8 0}}}$ | $\underline{\underline{\mathbf{K 3 2 5 , 5 0 0}}}$ |

b)
(i) The principle budget factor is also known as the limiting factor or key factor. It is defined as the factor which at a particular time, or over a period, will limit the activities of an undertaking. The limiting factor is usually the level of demand for the products or services of the undertaking but it could be a shortage of one of the productive resources.
(ii) Examples of principal budget factor from a manufacturing organisation institution include:
$>$ Production capacity
> Scarce materials MA and/or MB
> Cash to buy MA and/M B; cash to pay workers.

## SOLUTION TWO

(a) Possible operating variances

Sales volume profit variance
$=$ (Actual sales quantity - Budgeted sales quantity) x std profit per unit

$$
\begin{aligned}
& =(3,200 \text { units }-4,000 \text { units }) \times \text { K28 } \\
& =\text { K22,400 (A) }
\end{aligned}
$$

Sales price variance
$=$ (Actual selling price per unit - Standard selling price per unit) $\times$ Actual qty.

$$
=(K 225-K 220) \times 3,200 \text { units }
$$

$$
=K 16,000(F)
$$

Material price variance

$$
\begin{aligned}
& =(\text { standard price }- \text { actual price }) \times \text { Actual quantity } \\
& =(\mathrm{K} 3.2-\mathrm{K} 3.5) \times 80,000 \mathrm{Kg} \\
& =\underline{\text { K24,000 (A) }}
\end{aligned}
$$

## Material usage variance

= (standard quantity for actual production - Actual
quantity) x std price

$$
=[(3,600 \times 25 \mathrm{Kg})-80,000 \mathrm{Kg}) \times \mathrm{K} 3.2
$$

$=\mathbf{K 3 2 , 0 0 0 ( F )}$
Labour rate variance
= (standard wages rate per hour - actual wage rate per
hour) $x$ actual labour hours

$$
\begin{aligned}
& =(K 8-K 7) \times 16,000 \text { hours } \\
& =\underline{\mathbf{K 1 6 , 0 0 0}(\mathbf{F})}
\end{aligned}
$$

Labour efficiency variance
$=($ SLH for actual production - ALH worked $) x$ std wage rate
per hour

$$
\begin{aligned}
& =[(4 \text { hrs } \times 3,600 \text { units })-16,000 \mathrm{hrs}] \times \mathrm{K} 8 \\
& =\underline{\underline{K 12}, \mathbf{8 0 0}(\mathbf{A})}
\end{aligned}
$$

## Variable OH efficiency variance

= (std hrs for actual production - Actual hours) x std VFOH rate per hour
$=[(4$ hrs $\times 3,600$ units $-16,000) \times \mathrm{K} 4]$
$=\underline{K 6,400(A)}$
Variable OH Expenditure variance
$=$ (std VFOH rate - actual VFOH rate) $x$ actual hrs worked
= [(4 x16,000 hrs) - K60,000
$=\underline{\underline{K 4}, 000(F)}$
Fixed FOH Expenditure variance
$=$ budgeted fixed overhead - actual expenditure on fixed
overheads

$$
\begin{aligned}
& =[(4,000 \text { units } \times \text { K64) }- \text { K196,000] } \\
& =(256,000-\text { K196,000) } \\
& =\underline{\underline{K} 60,000(F)}
\end{aligned}
$$

## FFOH Efficiency variance

$=($ std $h r s$ for actual production - actual hrs worked $) \mathrm{x}$
fixed FOH absorption rate

$$
\begin{aligned}
& =[(4 \mathrm{hrs} \times 6,000 \text { units })-16,000 \mathrm{hrs})] \times \mathrm{K} 16 \\
& =\underline{\mathbf{K 2 5}, 600(\mathbf{A})}
\end{aligned}
$$

Fixed overhead capacity variance
$=$ budgeted hours - Actual hours) $\times$ Fixed overhead
absorption rate
$=[(4 \mathrm{hrs} \times 4,000$ units $)-16,000 \mathrm{hrs}] \times \mathrm{K} 16$
$=\underline{\underline{K 0}}$
(b) perating statement for November, 2022

K

> Budgeted profit(K28 x 4,000)

112,000
Sales volume profit variance
22,400(A)
Standard profit on actual sales
89,600
Sales price variance
16,000(F)

105,600

|  | K | K |
| :--- | :---: | :---: |
|  | F | A |
| Material price |  | 24,000 |
| Material usage | 32,000 |  |
| Labour rate | 16,000 |  |
| Labour efficiency |  | 12,800 |
| Variable overhead efficiency |  | 6,400 |


| Variable overhead expenditure | 4,000 |  |
| :--- | :---: | ---: |
| Fixed overhead expenditure | 60,000 |  |
| Fixed overhead efficiency |  |  |
| Fixed overhead capacity | $\underline{0}$ |  |
| Total cost variances | $\underline{112,000}$ | 68,800 |
| $\mathbf{4 3 , 2 0 0 ( F )}$ |  |  |
| Actual profit |  |  |
| $\mathbf{1 4 8 , 8 0 0}$ |  |  |

## SOLUTION THREE

(a) (i) Calculation of overhead absorption rates

Kneading Finishing General Bakery

Department Department overhead
Variable overhead( $\mathrm{K}^{\prime} 000$ )

| Initial allocation 1,600 | 500 | 1,050 |
| :--- | :--- | :--- |

Reapportion general bakery overhead
(800:600)
600
450
$(1,050)$
Total variable overhead
2,200 950 -
$\div$ Budgeted machine hours
$\div 800 \quad \div 600$

Variable overhead rate per hour K2.75/mach. hr K1.58/mach. hr
Fixed overhead

| Initial allocation | 2,500 | 850 | 1,750 |
| :--- | :--- | :--- | :--- |

Reapportion general bakery overhead
(1,200:800)
$1,050 \quad 700 \quad(1,750)$
Total fixed overhead
$\div$ Budgeted machine hours

| 3,550 | 1,550 |
| :--- | :--- |
| $\div 800$ | $\div 600$ |

Fixed overhead rate per hour
K4.44 K2.58

Information to assist with the pricing decision

|  | K per unit |  |  |
| :--- | :---: | ---: | :--- |$\quad$ K per unit

Variable production cost:

Kneading 11.00
Finishing
4.74

Marginal Cost per unit
51.24

Fixed overhead:

$$
\begin{array}{ll}
\text { kneading section }(4 \times \mathrm{K} 4.44) & 17.76 \\
\text { Finishing section }(3 \times \mathrm{K} 2.58) & \underline{7.74}
\end{array}
$$

25.50

## Full processing cost

(ii) A full cost plus price will be based on this cost of K76.74 plus a mark-up of between $25 \%$ and $35 \%$. Taking a high, low and average mark-up, the potential prices are as follows.

|  | 25\% mark-up |  | $30 \%$ | mark-up |
| :--- | :---: | :---: | :---: | :---: |
|  | $35 \%$ mark-up |  |  |  |
| Kull processing cost | K per unit <br> 76.74 | K per unit <br> 76.74 | K per unit <br> 76.74 |  |
| Mark-up | 19.19 | 23.02 | 26.86 |  |
| Full cost plus price | $\mathbf{9 5 . 9 3}$ | $\mathbf{9 9 . 7 6}$ | $\mathbf{1 0 3 . 6 0}$ |  |

Certain incremental or specific fixed costs have been identified, however, and these should be borne in mind for a well-informed pricing decision.
(iii) Product cost based on incremental fixed costs

|  | K'000 | K per unit |
| :--- | :--- | :---: |
| Variable processing cost |  | 51.24 |
| Incremental fixed costs: |  |  |
| supervision | 20 |  |
| depreciation | $\underline{120}$ |  |
| advertising | $\underline{167}$ | $\underline{\underline{59.53}}$ |
| Incremental fixed cost per unit K167,000/20,000 (w.1)) |  |  |
| Incremental total cost per unit |  |  |
| Working 1 |  |  |
| • Total market = 200,000 units per annum |  |  |
| • 10\% market share = 20,000 units per annum |  |  |

(b) The cost information provides a range of bases for a pricing decision.

## Variable manufacturing cost

The variable manufacturing cost is K 51.24 per unit. At a price below this level there would be no contribution to fixed overheads. Since the prevailing market price is between K90 and K100 each, such a low price might suggest that the product is of inferior quality.

## Incremental total cost

The incremental total cost per unit is K59.59. Management must select a price above this level to be sure of covering all costs associated with this product. This unit rate depends on achieving an annual volume of 20,000 units.

## Full manufacturing cost

The full manufacturing cost per unit is K76.74. A price based on this cost will ensure that all costs are covered in the long run, if the annual volume of 20,000 units is achieved. Since competitors' prices range between K90 and K100 it seems possible that the company can compete with a price calculated on a full cost plus basis.

The range of prices suggested, using the company's usual mark-up of between $25 \%$ and $35 \%$, is K95.93 to K103.60 per unit.

Given the current price range of the competitors' products and the fact that the product is expected to offer some improvement over competitors' products, a price towards the upper end of the suggested range would be appropriate.

In general, the price charged for a product should exceed its cost. There are a number of different cost-based approaches to pricing, however, and each is appropriate in different circumstances.

Full cost plus pricing involves adding a profit margin to the fully absorbed total cost of a product.
(c) In certain situations, for example if an organisation has spare capacity, it may be appropriate to use marginal cost as the basis for pricing. Alternatively, if the lowest possible price is sought, perhaps for strategic reasons, a minimum price based on relevant costs may be used as the basis for a pricing decision. Management must not lose sight of the need to cover fixed costs in the long run, however.
Whichever cost basis is used, it is important to appreciate that a cost-based price merely provides a starting point for informed management decisions and pricing negotiations.
Cost is only one of the factors to bear in mind when making a price-setting decision. Other factors to consider will include the organisation's objectives, the market in
which the organization operates and the effect which price has on the volume of demand for its goods.
(d)

## 1. Fixed budgets

The advantages of fixed budgets are as follows.
Preparing a fixed budget at one level will be simpler and less time-consuming than preparing flexible budgets at a number of levels.

A number of costs will not vary if actual output is different from expected output.

These include plant costs and basic wage costs which are a significant proportion of our costs.

A fixed budget can provide a focus for planning and co-ordination of activities.
Note. Only one advantage was required.
However fixed budgets have the following disadvantages.
Preparing fixed budgets based on one activity level gives no indication of what may happen if actual sales and production do differ from expected levels. For example, a fixed budget may not indicate at what level of activity cash flow or capacity problems might occur.

Fixed budgets will often fail to provide a realistic target against which performance can be judged. Certain costs will vary with production. It will be misleading to call managers to account for costs being greater than budgeted, if the reason for the difference is greater than expected activity levels, and not failure to control costs.

If managers know that they are being judged against a single pre-set standard, they will be more inclined to build unnecessary expenditure - budgeting slack - into their budgets to provide a cushion against unforeseen circumstances.

Managers may spend up to budgetary limits even if the expenditure is unnecessary, in order to justify the original allocation or to guard against the possibility of having a reduced budget in a future period.

Note. Only one disadvantage was required.
2. The advantages of flexible budgets are as follows.

Preparing flexible budgets at the planning stage may serve a number of purposes.
(i) Managers can assess what will be the effect of activity falling short of target.

As a result, they may want to make plans for alternative uses of capacity.
(ii) If activity might exceed expectations, managers can assess the costs of extra resources including overtime, can be helpful in decision-making. Managers can set up 'what if' scenarios and assess the effects of various changes in the assumptions made.

Flexible budgets provide an appropriate yardstick for assessing how costs have been controlled. They enable comparisons to be made of results at the actual level of activity with results that would have been expected at that level of activity.

Note. Only one advantage was required.
The disadvantages of flexible budgets are as follows.
The assumptions on which flexible budgets are based may be over-simplistic.
(i) Variable costs per unit are assumed to be constant. In practice, the availability for example of bulk discounts may mean that variable costs per unit vary at different levels of activity.
(ii) A number of fixed costs may be stepped fixed costs, increasing at a number of levels of activity.
(iii)Variable costs are often all assumed to alter with the same measure of activity. This may not be true in practice. For example, selling and distribution costs may vary with sales, but power, machine usage etc. may vary with production.
Managers may not have the time available to prepare flexible budgets to cover all possible scenarios.
Managers will have to make certain decisions at the start of the period for instance labour requirements, based on the most likely activity level. Hence this level has to be identified and highlighted.
Use of budgets generally may mean too much emphasis is placed on judging managers on how they control cost, and not enough on market performance. Note.
Only one disadvantage was required.

## SOLUTION FOUR

(a)
(i) Breakeven sales contribution

| Sales | $15,000,000 * 97 \%$ | $14,550,000$ |
| :--- | :--- | :--- |
|  |  |  |
| Direct material | $3,250,000 * 102 \%$ | $3,315,000$ |
| Direct labour | $2,700,000 * 104 \%$ | $2,808,000$ |
| Variable overheads | $3,500,000 * 97 \%$ | $3,395,000$ |
| Selling and distribution <br> cost | $1,000,000 * 95 \%$ | $\underline{950,000}$ |
| Total variable cost |  | $\underline{10,468,000}$ |
| contribution | $4,082,000 / 14,550,000$ | $\underline{\underline{0.28}}$ |
| Contribution ratio |  |  |

Breakeven sales $=$ Fixed cost/contribution ratio

$$
=(1,300,000+1,050,000) / 0.28=\underline{\underline{K} 8,392,857}
$$

(ii) Margin of safety $=$ Actual sales - breakeven sales

$$
\begin{aligned}
& =K 14,550,000-K 8,392,857 \\
& =\underline{\underline{K 6}, \mathbf{1 5 7 , 1 4 3}}
\end{aligned}
$$

(iii)

To get target sales $=$ (target profit + fixed cost) $/$ contribution ratio

$$
\begin{aligned}
& =(K 2,250,000+K 2,350,000) / 0.28 \\
& =K \underline{\underline{16,428,571}}
\end{aligned}
$$

To get target profit of $2,250,000$. Malume hardware company limited will need to generate K 16,428,571.
(iv)Summary of Profit Statement

## K

Sales
Variable costs 16,428,571

Contribution
$(11,828,571)$

Fixed cost
Profit
$(2,350,000)$
2,250,000
(v) Limitation of CVP analysis
$>$ CVP analysis is time consuming
> The analysis is only applicable to a single product
$>$ At all levels of output, it assumes that the sales price remains constant
$>$ At all levels of output, it assumes that unit variable cost is constant
> At all levels of output, it assumes that the fixed cost is constant which is not practicable in the long run.
$>$ Inventory is not taken into consideration
(b)
(i) The order that minimizes inventory costs is EOQ

$$
\mathrm{EOQ}=\sqrt{(2 * 12 * 1,000 / 15)}=\underline{\underline{\mathbf{4 0} \text { units }}}
$$

(ii) Re-order level
$=$ maximum usage $\times$ maximum lead time
$=1,000 \times(7 / 360)$
$=19$ units

## SOLUTION FIVE

(a) Minimum price based on relevant costs approach

Machinery

## K

Lower of:

## Proposal 1

| Lease rentals | K250,000 x 3 | 750,000 |
| :--- | :---: | ---: |
| Finance cost | $(K 5,000,000 \times 20 \%) / 4$ | 250,000 |

## And

Proposal 2

Lease rentals
Finance cost

Proposal 1 is cheaper

K160,000 x 6 960,000
K20,000 x 3

Direct Material
AA-2
Contract price
Less: savings from penalty amount
Purchasing cost

A-78
Lower of:
Purchasing cost
$3,500 \times 10 \times K 110$
3,850,000

## And

Internal cost
$(3,500 \times 10 \times K 80) / 0.80$
3,500,000
3,500,000
C-11
Opportunity cost of selling back
further processing cost
purchasing cost

## Direct labour

## Skilled

Idle hours saved
Skilled Labour
$200 \times \mathrm{K} 1,000 \times 50 \%$
$(100,000)$
2,166 hours $\times$ K1,000

| $2,116,000$ |
| ---: |
| $\mathbf{2 , 0 1 6 , 0 0 0}$ |

2,016,000

## Semi-Skilled

Lower of:
Normal rate

4,000 hours x K600
2,400,000

| Overtime | $(3,500 \times 1.5)-4,000] \times K 600 \times 1.5$ | 1,125,000 |
| :---: | :---: | :---: |
|  |  | 3,525,000 |
| And |  |  |
| Unskilled |  |  |
| Without training: labour cost | $3,500 \times 1.5 \times 300 \% \times$ K200 | 3,150,000 |
| And |  |  |
| With training: labour cost | $3,500 \times 1.5 \times 250 \% \times \mathrm{K} 200$ | 2,625,000 |
| Training cost |  | 300,000 |
| Lower cost: |  | 2,925,000 |
| Variable overheads | 2,116 hours $\times$ K125 | 264,500 |
| Total relevant costs |  | 13,295,500 |
| Minimum price to be quoted | 13,245,500 / 3,500 = | K3,798 |
| Features of relevant costs |  |  |
| 1. Relevant costs are future costs |  |  |
| A decision is about the future, it cannot alter what has been done already |  |  |
| A cost that has been incurred in the past is totally irrelevant to any decision that is being made 'now'. Such costs are past costs or sunk costs. |  |  |
| 2. Relevant costs are cash flows |  |  |
| This means that costs such as depreciation, which do not reflect additional cash spending, should be ignored for the purpose of decision making. |  |  |
| 3. Relevant costs are incremental costs |  |  |
| Costs that are incremental as a result of undertaking a project are relevant. |  |  |

## END OF SOLUTIONS



## 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

## DA10 TAXATION TABLE

## Income Tax

Standard personal income tax rates Income band Taxable amount
K0.01 to K57,600
K57,601 to K81,600first K57,6000\%
next K24,000 ..... 20\%
K81,601 to K106,800 next K25,200 ..... 30\%
Over K106,80037.5\%
Income from farming for individuals
K0.01 to K57,600 first K57,600 ..... 0\%
Over K57,600 ..... 10\%
Company income tax rates
On income from manufacturing and other ..... 30\%
On income from farming ..... 10\%
On income from mineral processing ..... 30\%
On income from mining operations ..... 30\%
On income of Banks and other Financial ..... 30\%
Institutions
Capital Allowances
Implements, plant and machinery and commercial vehicles:
Wear and Tear Allowance - Standard wear and tear allowance ..... 25\%
Used in manufacturing and leasing ..... 50\%
Used in farming and agro-processing ..... 100\%
Used in mining operations ..... 20\%
Non- commercial vehicles
Wear and Tear Allowance ..... 20\%
Industrial Buildings:
Wear and Tear Allowance ..... 5\%
Initial Allowance ..... 10\%
Investment Allowance ..... 10\%
Low Cost Housing (Cost up to K100,000)
Wear and Tear Allowance ..... 10\%
Initial Allowance ..... 10\%
Commercial Buildings
Wear and Tear Allowance ..... 2\%
Farming Allowances
Development Allowance ..... 10\%
Farm Works Allowance ..... 100\%
Farm Improvement Allowance ..... 100\%
Presumptive Taxes
Turnover Tax
Annual Turnover
K0.01 to K12,000 ..... 0\%
K12,001 to K800,000 ..... 4\%
Rental income Tax
K0.01 to K12,000 ..... 0\%
K12,001 to K800,000 ..... 4\%
On income above K800,000 ..... 12.5\%
Presumptive tax for transporters
Seating capacityTax per annumTax per quarter
K ..... K
Less than 12 passengers and taxis 1,080 ..... 270
From 12 to 17 passengers ..... 2,160 ..... 540
From 18 to 21 passengers 4,320 ..... 1,080
From 22 to 35 passengers 6,480 ..... 1,620
From 36 to 49 passengers 8,640 ..... 2,160
From 50 to 63 passengers 10,800 ..... 2,700
From 64 passengers and over 12,960 ..... 3,240
Property transfer tax
Rate of tax on realised value of land, buildings and shares ..... 5\%
Rate on realised value of intellectual property ..... 5\%
Rate on realised value of mining right for an exploration licence ..... 5\%
Rate of tax on realised value of a mining right for a mining licence ..... 10\%
Rate of tax on realised value on a mineral processing licence ..... 10\%
Value Added Tax
Registration threshold ..... K800,000
Standard Value Added Tax Rate (on VAT exclusive turnover) ..... 16\%

## Customs and Excise duties on used motor vehicles

| Motor vehicles for the transport of ten or more persons, including the driver | Aged 2 to 5 years |  | Aged 5 years and over |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Customs duty K | Excise duty K | Customs duty K | Excise duty K |
| Sitting capacity of 10 but not exceeding 14 persons including the driver | 17,778 | 22,223 | 8,889 | 11,112 |
| Sitting capacity exceeding 14 but not exceeding 32 persons | 38,924 | 0 | 13,840 | 0 |
| Sitting capacity of 33 but not exceeding 44 persons | 86,497 | 0 | 19,462 | 0 |
| Sitting capacity exceeding 44 persons | 108,121 | 0 | 43,248 | 0 |
|  | Aged 2 to 5 years |  | Aged 5 years and over |  |
| Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars | Customs duty | Excise duty | Customs duty | Excise duty |
|  | K | K | K | K |
| Sedans |  |  |  |  |
| Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc | 16,058 | 13,917 | 8,564 | 7,422 |
| Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc | 16,545 | 21,508 | 8,423 | 10,950 |
| Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc | 18,049 | 23,463 | 10,528 | 13,687 |
| Cylinder capacity exceeding 3000 cc | 22,561 | 29,329 | 12,032 | 15,642 |
| Hatchbacks |  |  |  |  |
| Cylinder capacity 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 $22,561 \quad 29,329 \quad 18,049 \quad 23,463$ exceeding 2500 cc

## SUVs

Cylinder capacity not exceeding 2500 cc
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc
Cylinder capacity exceeding 3000 cc

Motor vehicles for the transport of goods with compression-ignition internal combustion piston engine (diesel or semidiesel):
Single cab
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes
GVW exceeding 1.5 tonnes but not exceeding
Cus
21,057 27,374

9,024 11,732
24,06
31,284
13,357
17,598

28,577 37,150
18,049 23,463
Aged 2 to 5 years Aged 5 years and over
3.0 tonnes

GVW exceeding 3.0 tonnes but not exceeding
30,697
13,302
17,541
7,601
5.0 tonnes

## Double cabs

GVW exceeding 3 tonnes but not exceeding 5
30,697
13,302
24,119 10,452
tonnes
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, with spark ignition internal combustion piston engine

## Panel Vans

GVW not exceeding 1.0 tonne

| 13,353 | 5,786 | 7,630 | 3,061 |
| :---: | :---: | :---: | :---: |
| 15,348 | 6,651 | 8,770 | 3,801 |
|  |  |  |  |
| 17,541 | 7,601 | 15,348 | 6,651 |
|  |  |  |  |
| 21,926 | 9,501 | 17,541 | 7,601 |

5.0 tonnes

Trucks
GVW up to 2 tonnes
GVW exceeding 2.0 tonnes but not exceeding

| 13,907 | 10,662 | 6,413 | 4,916 |
| ---: | ---: | ---: | ---: |
| 15,453 | 11,847 | 7,726 | 5,923 |
|  |  |  |  |
| 24,724 | 18,955 | 9,272 | 7,108 |
|  |  |  |  |
| 30,905 | 23,694 | 11,744 | 9,004 |
| 51,898 | 0 | 19,462 | 0 |

GVW exceeding 20 tonnes, with spark ..... 37,086 ..... 28,432ignition internal combustion piston engine
Surtax
On all motor vehicles aged more than five (5) years from year of manufacture ..... K2,000
Customs and Excise on New Motor vehicles
Duty rates on:

1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:
Customs Duty:
Percentage of Value for Duty Purposes ..... 30\%
Minimum Specific Customs Duty ..... K6,000
Excise Duty:
Percentage of Value for Duty Purposes for Excise Duty Purposes ..... 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 $\mathbf{2 0}$ tonnes
Customs Duty:
Percentage of Value for Duty Purposes ..... 15\%
Excise Duty:
Percentage of Value for Duty Purposes for Excise Duty Purposes ..... 0\%
SECTION A - TWO (2) COMPULSORY QUESTIONS

## Attempt BOTH questions in this section.

## QUESTION ONE

TIPS Plc is a Zambian resident company engaged in manufacturing. The company was listed on the Lusaka Securities Exchange on 1 May 2023, and $40 \%$ of the shares were taken up by indigenous Zambians. The company's summarized statement of profit or loss for the year ended 31 December 2023 is as follows:

| Sales revenue |  | K |
| :---: | :---: | :---: |
|  |  | 7,133,000 |
| Cost of sales | (Note 1) | $(3,923,150)$ |
| Gross profit |  | 3,209,850 |
| Distribution and Selling costs | (Note 2) | $(612,500)$ |
| Administration expenses | (Note 3) | (1,565,800) |
| Profit from operations |  | 1,031,550 |
| Investment income | (Note 4) | 1,250,000 |
| Profit before tax |  | 2,281,550 |
| Income tax expense | (Note 5) | $(280,710)$ |
| Profit for the year |  | 2,000,840 |

## Note 1: Cost of sales

Cost of sales comprised the following items:

|  | K |
| :--- | ---: |
| Opening inventory | $1,101,900$ |
| Purchases | $2,500,000$ |
| Depreciation | $1,123,500$ |
| Loss on sale of plant | 61,750 |
| Closing inventory | $\underline{(864,000)}$ |
|  | $\underline{\underline{3,923,150}}$ |

## Note 2: Distribution and selling costs

These included:

## K

Gifts of TIPS plc calendars each costing K98 98,000
Advertising expenses 152,250
Entertaining clients 313,900
Repairs of delivery van $\quad \underline{48,350}$
$\underline{612,500}$

## Note 3: Administration expenses

These included:

|  | K |
| :--- | ---: |
| Share issue costs | 150,000 |
| Wages and salaries | $1,277,400$ |
| Penalty for late payment of provisional income tax | 102,000 |
| Trade debts written off | 87,000 |
| Increase in general provision for bad debts | 58,900 |

Loan to former employee previously written off now recovered $\quad \underline{\underline{(109,500)}}$

## Note 4: Investment income

Investment income included the following items:

|  | K |
| :--- | ---: |
| Rental income (gross) | 375,000 |
| Royalties (gross) | 382,500 |
| Dividends (gross) | 257,500 |
| Bank interest (gross) | $\underline{235,000}$ |
|  | $\underline{1,250,000}$ |

## Note 5: Income tax expense

Provisional income tax paid by the company during the tax year 2023 amounted to K78,268.

## Note 6: Implements, Plant and Machinery

The company had the following implements, plant and machinery on 1 January 2023:

|  | Income tax value | Original cost |
| :--- | :---: | :---: |
|  | K | K |
| General machinery | 62,500 | 250,000 |
| Manufacturing plant | 175,000 | 350,000 |
| Toyota Allion 2000cc | 64,000 | 160,000 |

During the tax year 2023, the company undertook the following transactions in implements plant and machinery:

## Cost/(Proceeds) <br> K

$\begin{array}{lr}\text { Disposal of manufacturing plant } & (275,000) \\ \text { Purchase of manufacturing equipment } & 360,000 \\ \text { Purchase of Fuso truck } & 230,000 \\ \text { Purchase of Ford Ranger double cab van (3000cc) } & 1,080,000\end{array}$

The Toyota Allion car and Ford Ranger double cab van are used on a personal-to-holder basis by the Sales Manager and Chief Financial Officer respectively.

## Note 7: Managing Director's accommodation

The Managing Director is accommodated in company house. If the house was to be rented out it would have been let out at K15,000 per month. The Managing Director does not pay any rent. His Annual salary is K960,000.

## Required:

i. Explain the criteria Zambia Revenue Authority uses to determine whether a company is resident in Zambia.
ii. Calculate the Maximum capital allowances claimable by the company for the tax year 2023.
iii. Calculate the taxable business profit for the tax year 2023.
iv. Calculate the income tax payable for the tax year 2023.
[Total: 25 Marks]

## QUESTION TWO

Smart Phiri had been employed by Kumawa Limited as an Electrical Technician. He decided to resign from employment on 1 August 2023.

He was entitled to an annual salary of K114,000 which was paid at the end of each month. He was also entitled to the following allowances:

|  | K |
| :--- | ---: |
| Housing allowance per month | 3,200 |
| Domestic servant allowance per month | 1,800 |
| Transport allowance per annum | 7,200 |
| Children education allowance per child per annum | 54,000 |

Smart Phiri has three (3) school going children. He additionally received a performance related bonus of K4,500 in March 2023. This was in recognition of his effort for the year ended 31 December 2022.

During the year ended 31 December 2023, the following payments and deductions were made from his gross emoluments:

|  | K |
| :--- | ---: |
| National Pension Scheme Authority Contributions | 9,600 |
| National health insurance Scheme (NHIMA) contributions | 665 |
| Pay As You Earn | 12,900 |
| Subscriptions to Engineers Institute of Zambia | 2,500 |
| Children's School fees | 58,900 |

## Other income

Other income received by Smart Phiri in the tax year 2023 included dividend of K10,200 (net) from Luangwa Limited, a Zambian manufacturing Company, royalties of K4,250 (net) and consultancy fees of K8,500 (net). Withholding tax had been deducted at source in each case.

## Required:

(a) Explain any six (6) tests used to distinguish employees from self-employed persons.
(12 marks)
(b) Calculate the amount of income tax payable by Smart Phiri for the tax year 2023.
(13 marks)
[Total: 25 Marks]

## SECTION B

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

(a) Value Added Tax (VAT) is changeable on goods and services supplied by businesses at every stage of the supply or production chain where value is added.
(i) Explain the implications of a trader dealing only in exempt supplies from a VAT point of view.
(ii) Explain the importance of establishing the Tax point in respect of supplies for VAT purposes.
(b) Tembi is an enterprising business person dealing in stationery and hardware. His business is registered for VAT. He has provided you with the following information relating to the month of October 2023:
(1) Sales for the month amounted to K350,000, out of which $20 \%$ were Zero rated supplies, $10 \%$ were exempt supplies and the remainder were standard rated.
(2) Tembi sold off an old delivery van for K90,000 VAT inclusive.
(3) Standard rated purchases amounted to K265,000, out of which $40 \%$ were bought from unregistered VAT suppliers and the balance from VAT registered suppliers.
(4) Standard rated operating expenses for the month included, entertainment expenses for customers amounting to K45,000, entertainment expenses for employees amounting to K10,200, advertising expenses of K1,500, telephone bills of K12,500 and stationery expenses of K1,800.
(5) Bad debts amounting to K10,500 were written off on 1 October 2023, the figure consists of two invoices of K5,250 each in respect of which payment was due on 11 April 2020 and 30 November 2022.
(6) Unless specifically stated otherwise all the above figures are exclusive of VAT.

## Required:

Calculate the amount of VAT payable/recoverable by Tembi for the month of October 2023. You should indicate by the use of a zero (0) all items on which VAT is not chargeable or recoverable.
(9 marks)
(c) Mangani imported a second hand 3500 cc BMW sedan car for his wife. The car was manufactured in 2020 and the invoice price of the car was US\$7,500 (Free on Board). He paid insurance and freight charges amounting to US\$2,500 and US\$1,570 respectively in transit to the port of Dar es salaam. Other incidental costs from the port of Dar es salaam to the Nakonde border were US\$1,289. Mangani paid K4,000 to transport the vehicle from Nakonde to Lusaka and a further K2,500 for the registration of the car in Lusaka.

The exchange rate in one of the Bureau De Changes in Lusaka was K19.02 per US\$1. The exchange rate as approved by the Commissioner General was K18.30 per US\$1.

## Required:

(i) Describe the complete customs clearance procedure Mangani followed to have the motor vehicle cleared.
(ii) Calculate the total import taxes paid on the importation of the motor vehicle.
(7 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FOUR

(a) The IFAC Code of Ethics for Professional Accountants provides a conceptual framework for applying fundamental principles of the code of ethics, when providing taxation services. Members must apply this conceptual framework to identify threats to compliance with the principles, evaluate their significance and apply appropriate safeguards to eliminate or reduce them so that compliance is not compromised.

## Required:

Explain the meaning of the following fundamental ethical principles of the IFAC Code of ethics as they apply to the provision of tax services:
(i) Integrity.
(ii) Objectivity.
(b) Maria Junza retired from employment some few years ago and she invested most her retirement package into a farming business. She prepares her financial statements to 31 December each year. Her annual turnover has always exceeded K800,000. The statement of profit or loss for the year ended 31 December 2023, showed a net profit before taxation of K625,300. This profit figure was arrived at after dealing with the following items:
(1) Depreciation of non-current assets charged to the profit and loss account was K23,600.
(2) Salaries amounting to K448,000. This figure includes a nominal annual salary of K186,000 for Maria and the remainder consists of salaries for employees at the farm.
(3) A fine for a speeding offence of K900 incurred by an employee on a trip to collect farming inputs from a Farmers input Support Programme (FISP) depot.
(4) Other operating expenses incurred during the year were as follows:

| Legal fees in connection with acquisition of farm land | 14,500 |
| :--- | ---: |
| Entertaining employees | 32,400 |
| Entertaining foreign customers | 15,700 |
| Increase in general provision for doubtful debts | 9,500 |
| Gifts of 50 food hampers for suppliers of K80 each | 4,000 |
| 112,300 |  |

(5) Motor car running expenses amounting to $K 44,600$. It has been agreed with the Commissioner General that $25 \%$ of the motor car running expenses related to Maria's private motoring.
(6) Other income received by Maria which was credited to her statement of profit or loss which included dividends amounting to K8,500 (net) and consultancy fees amounting to K17,000 (net).

## Additional information

(1) During the year Maria withdrew some farm produce for family consumption. No entries were made in respect of the drawn goods. The profit margin for the produce consumed by Maria and family is $20 \%$.
(2) During the year Maria incurred the following farming expenditure:

K
Expenditure on digging a well
Purchase of ploughs
35,000
Cost of constructing a farm dwelling for farm employees
70,000
Cost of constructing a farm barn
46,000
Cost incurred on water conservation 18,000
(3) At 1 January 2023, the only asset qualifying for capital allowances held by the business was a motor car which was bought at an original cost of K94,800 and had an Income Tax Value of K56,880 on 1 January 2023. The private use of the car by Maria as agreed with the Commissioner General is $25 \%$.
(4) At 1 January 2023, Maria had a trading loss brought forward from farming of K26,900 which arose in the previous tax year, when her crop was destroyed by army worms. Maria will not make an election to have farming profits averaged in respect of this loss.

## Required:

(i) Explain the circumstances under which income from farming may be averaged.
(2 marks)
(ii) Calculate the capital allowances claimable by Maria Junza for the tax year 2023.
(iii) Calculate the amount of income tax payable by Maria Junza for the tax year 2023.

## QUESTION FIVE

(a) Property Transfer Tax (PTT) is one source of revenue for the Government amongst other taxes. PTT is chargeable on any person who transfers property to another.

## Required:

State the five (5) categories of properties which are chargeable to Property Transfer. (5 marks)
(b) Mwamo, an enterprising businessman has approached you seeking advice on the tax implications of the following transactions:
(1) He sold 450,000 ordinary shares of K1.00 each in Bingo Plc for K500,000 on 30 April 2023. Bingo Plc is listed on Lusaka Securities Exchange (LuSE).
(2) He sold a farm plot in Mkushi farming block for K200,000 which was bought from a farmer in the same area for K90,000.
(3) He sold 200,000 ordinary shares of K1.00 each he held in MIKI Ltd for K250,000 on 28 February 2023.
(4) He sold a Mitsubishi Canter for K150, 000 on 1 May 2023. The truck was acquired at a cost of K180,000 two years ago.
(5) Sold off a house he owned in Matero valued at K350,000 to his son for K50,000. The house was constructed three years ago at K185,000.

## Required:

Explain the Property Transfer Tax implications for Mwamo arising from the above transactions. Your answer should be supported by computations of the amount of any Property transfer tax arising on each transaction. marks)
(c) Mwamo has ventured into public passenger transportation business. He bought the following buses which were operating on the Chelstone route of Lusaka Zambia:
(1) Two (2) Toyota Hiace buses each with a seating capacity of sixteen (16) persons. Each bus was brought into use on 1 June 2023, and was operational for five days per week up to 31 December 2023.
(2) A twenty-six (26) seater Rosa bus. The Rosa bus was brought into use 1 October 2023 and was operational for five days each week up to 31 December 2023.

## Required:

(i) Explain any four (4) benefits of Presumptive Taxes.
(ii) Calculate the Presumptive taxes paid by Mwamo in the tax year
2023.

## DA 10: TAXATION SUGGESTED SOLUTIONS

## SOLUTION ONE

(a) Criteria Zambia Revenue Authority (ZRA) uses to determine a company's residence status.
(1) A company is resident in Zambia if it is formed or in Zambia.
(2) If not incorporated in Zambia, a company is still Zambian resident if it is centrally managed and controlled in Zambia.
(b) COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2023

Cost/ITV
K

62,500
$(62,500)$
62, 500 nil

175,000
$(275,000)$
100,000 $(100,000)$
Manufacturing equipment
Cost 360,000
Wear \& tear @ 50\% x 360,000
ITV c/f
180,000
Capital allowances
K
General machinery
ITV b/f
Wear \& tear @ 25\% X K250, 000
Manufacturing plant
ITV b/f
Disposal proceeds

180,000
Toyota Allion
ITV b/f 64,000
Wear \& tear @ 20\% x 160,000
$(32,000)$
32,000

ITV C/F
32,000
Fuso truck
Cost
230,000
Wear \& tear @ 25\% x 230,000
$(57,500)$
57,500

ITV c/f
172,500
Ford Ranger 1,080,000
Wear \& tear @ 20\% x K1, 080,000
ITV C/F
Total capital allowances

216,000 216,000
864,000
448,000

|  | K | K |
| :---: | :---: | :---: |
| NET profit before tax |  | 2,281,550 |
| Add: |  |  |
| Depreciation | 1,123,500 |  |
| Loss on sale | 61,750 |  |
| Entertaining clients | 313,900 |  |
| Share issue costs | 150,000 |  |
| Penalty for late submission of provisional tax | 102,000 |  |
| Increase in general provision | 58,900 |  |
| Personal-to-holder cars: Toyota allion | 36,000 |  |
| Ford Ranger | 48,000 |  |
| MD's free accommodation (K960, $000 \times 37.5 \%$ ) 36 | 360,000 |  |
|  |  | 2,254,050 |
|  |  | 4,535,600 |
| Less: |  |  |
| Rental income | 375,000 |  |
| Royalties | 382,500 |  |
| Dividends | 257,500 |  |
| Bank interest | 235,000 |  |
| Loan to former employee written off now recovered | d 109,500 |  |
| Capital allowances | 448,000 |  |
|  |  | $(1,807,500)$ |
| Tax adjusted business profit |  | $\underline{2,728,100}$ |
| (d) TIPS |  |  |
| COMPANY INCOME TAX COMPUTATION FOR TAX YEAR 2023 |  |  |
|  |  | K |
| Adjusted business profit |  | 2,728,100 |
| Royalties |  | 382,500 |
| Bank interest |  | 235,000 |
| Total taxable income |  | 3,345,600 |
| Income tax @ $23 \% \times \mathrm{K} 3,345,600$ |  | 769,488 |
| Less |  |  |
| Provisional income tax |  | $(78,268)$ |
| WHT- royalties (K382, $500 \times 15 \%$ |  | $(57,375)$ |
| Bank interest (K235, $000 \times 15 \%$ ) |  | $(35,250)$ |
| Income tax payable |  | 598,595 |

TIPS Plc is entitled to a $2 \%$ discount for listing its shares on the Lusaka Stock Exchange and a further $5 \%$ for issuing more than $1 / 3$ of its shares to indigenous Zambians.

## SOLUTION TWO

(a) Factors used to distinguish employees from self-employed persons
(i) Control

The work of employees is controlled by the employer who gives stipulated times when an employee is expected to report for work and the time, he/she is expected to leave the place of work.
Self-employed individuals decide when to perform the assigned duties and how to perform them.
(ii) Exclusivity

Employees can normally work exclusively only for one employer.
Self-employed individuals normally work a wide range of clients.
(iii) Work performance

Employed individuals are required to perform the duties assigned to them by their employer themselves. Self-employed individuals may hire other people to perform the duties for them.
(iv) Insurance

Employers provide insurance cover for the actions of their employees whereas self-employed individuals provide their own insurance cover.
(v) 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 an 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.
(vi) Tools and equipment

Employees are normally provided with the tools and equipment they need to perform the duties of their employment.

Self-employed persons on the other hand are required to provide their own tools and equipment.
(vii) Type of contract

A contract of employment is evidenced by a contract for services which shows a master and servant kind of relationship, whilst self-employment is characterized by a contract for services.

## (b) Smart Phiri

Personal income tax computation for the tax year 2023
K
K

## Earned income

| Annual basic salary $(K 114,000 \times 7 / 12)$ | 66,500 |
| :--- | ---: |
| Education allowance $(K 54,000 \times 7 / 12 \times 3)$ | 94,500 |
| Housing allowance $(K 3,200 \times 7)$ | 22,400 |
| Domestic servant allowance $(1,800 \times 7)$ | 12,600 |
| Transport allowance $(K 7,200 \times 7 / 12)$ | 4,200 |
| Performance bonus | $\underline{4,500}$ |
|  | 204,700 |

## Investment income

Consultancy fees (K8,500 X 100/85) 10,000
Royalties (K4,250 X 100/85) $\quad \underline{5,000}$
15,000
19,700
Less allowable deductions
Professional subscriptions $\quad \underline{(2,500)}$
Taxable income 217,200
Income Tax
On First K57,600 X 0\% 0
On Next K24,000 X 20\% 4,800
On Next K25,200 X 30\% 7,560
On Excess (K217,200 - K106,800) X 37.5\% 41,400
53,760
Less:
PAYE
$(12,900)$
WHT- Consultancy fees (K10,000 X 15\%) ( 1,500 )
WHT- Royalties (K5,000 X 15\%)
(750)

Income tax payable $\quad \underline{\underline{38,610}}$

## SOLUTION THREE

(a)
(i) Exempt supplies are supplies which fall outside the scope of VAT. The following are the implications:
(1) The trader will not be required to register for VAT as exempt supplies are not taken into account when determining whether the trader is a taxable person.
(2) The trader will not be required to charge VAT on all supplies he makes as no VAT charged on exempt supplies.
(3) The trader dealing in exempt supplies will not be able to claim input VAT, as VAT attributable to exempt supplies is not recoverable.
(ii) The importance of establishing the tax point on respect of supplies for VAT purposes
(1) The tax point is used for determining the tax period in which VAT relating to the supply should be accounted for.
(2) The tax point is used to decide which scheme or VAT rate will apply to a supply when there is a change in the VAT scheme or VAT rate.
(b) COMPUTATION VAT PAYABLE/RECOVERABLE BY TEMBI FOR THE MONTH OF OCTOBER 2023

| OUTPUT VAT | K K |
| :---: | :---: |
| Zero rated (K350, $000 \times 20 \% \times 0 \%$ ) | 0 |
| Exempt (K350, $000 \times 10 \%$ ) | 0 |
| Standard rated (k350, $000 \times 70 \% \times 16 \%$ ) | 39,200 |
| Sale of delivery Van (K90, 000X 4/29) | 12,414 |
|  | 51,614 |
| INPUT VAT |  |
| Purchases (K265, $000 \times 60 \%$ X16\%) | 25,440 |
| Entertaining customers 0 |  |
| Entertaining employees 0 |  |
| Telephone 0 |  |
| Bad debt relief (K5, $250 \times 16 \%$ ) 840 |  |
| Advertising (1,500 x 16\%) $\times$ 90\% 216 |  |
| Stationery expenses (1,800 x 16\%) x 90\% | 2,59.2 |
|  | $(26,755.20)$ |
| VAT payable | 24,858.80 |

WORKINGS
Only 90\% of the non-attributable recoverable input VAT on advertising and stationary expenses will be recoverable since exempt supplies represent $10 \%$ of total supplies.
(c)
(i) The procedure for a complete customs clearance of a motor vehicle Mangani
was as follows:

- Presentation of genuine import documents.
- Revaluation by customs, if necessary
- Payment of customs duty, VAT and processing fee
- Processing of the declaration in form CE 20 by customs.
(ii) Total import taxes paid for importation of motor vehicle

US\$
Cost price 7,500
Insurance
2,500
Freight
1,570
Incidental costs $\quad 1,289$
Total $\quad 12,859$
VDP US\$12,859 x K18.30=K235, 320
Value Import
Taxes
K
235,320
Customs duty
22,561

257,881
Excise duty
29,329
29,329

| Import VAT $(16 \% \times$ K287,210 $)$ | $\underline{45,954}$ | $\underline{45,954}$ |
| :--- | :--- | :--- |
| Total taxes | $\underline{333,164}$ | $\underline{97,844}$ |

## SOLUTION FOUR

## (a) (i) Integrity

The principle 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 members providing taxation services must not knowingly be associated with reports, returns, communications or other information where the member believes that the information contains a materially false or misleading statement or calculation; or contains statements furnished recklessly.
(ii) Objectivity

Members shall not be impartial and allow prejudice or bia, conflict of interest or the influence of others to override their objective judgement in relation to taxation. Where a member is required to act as an advocate, the member shall ensure that the client is aware that the member has an obligation not to mislead the courts or tribunal.
(b) (i) Income from farming may be averaged if:
(1) It is for two consecutive tax years and it is such that one year's income is substantially greater than the income the other year; or
(2) One year has a loss while the other has a profit.
(ii) MARIA JUNZA

COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2023

## Digging of well

Farm works allowance (K35,000 X 100\%)
Ploughs
Wear and tear allowance (K65,000 X 100\%)

Farm dwelling
Farm improvement allowance (K70,000 X 100\%)

## Farm barn

Farm improvement allowance (K46,000 X 100\%) ..... 46,000
Water conservation
Farm works allowance (K18,000 X 100\%) ..... 18,000
Motor car
Wear and tear allowance (K94,800 X 20\% X 75\%) ..... 14,220
Total capital allowances for the year ..... $\underline{248,220}$
(iii) MARIA JUNZA
COMPUTATION OF TAXABLE FARMING PROFIT AND INCOME TAXPAYABLE FOR THE TAX YEAR 2023

Less trading loss b/f$(26,900)$
Taxable farming profit ..... 628,330
Add:
Consultancy fees (K17,000 X 100/85)
Total taxable income ..... 648,330
Tax on non-farming income:
First K20,000 X 0\% ..... 0
Tax on farming income
First K37,600 X 0\% ..... 0
Balance K590,730 X 10\% ..... 59,07359,073
Less WHT - Consultancy fees (K20,000 X 15\%) ..... $(3,000)$
Final income tax payable ..... 56,07320,000

## SOLUTION FIVE

(a) Categories of properties were property transfer tax is charged:
(1) Any land in Zambia (including any building on it)
(2) Any share(and equivalent rights) issued by a company in Zambia that is not listed on the Lusaka Securities Exchange (LuSE).
(3) A mining right for an exploration licence
(4) A mining right for a mining licence
(5) A mineral processing licence
(b) Property Tax Implications
(1) Bingo Plc has shares listed on the. Lusaka Securities Exchange. Shares that are listed on Lusaka Securities Exchange are not chargeable to property. Therefore, property transfer tax is not payable on the disposal of shares in Bingo Plc.
(2) Land is a chargeable property. The realized value is the greater of the open market value and the actual sales price. Property transfer tax paid is $5 \% \mathrm{X}$ K200, 000=K10,000
(3) Shares in Miki Itd are chargeable property because the company is not listed on the Lusaka Securities Exchange. The realized value is the greater of the nominal value and the open market value. It is difficult to value shares that are not listed; the sales price can be assumed to be the open market value as it is more than the nominal value. Property transfer tax paid $5 \% \times \mathrm{K} 250,000=$ K12,500
(4) The sale of a movable property is not chargeable for property transfer tax. Therefore, the sale of a Toyota Canter will not be subjected to PTT.
(5) Sale of the house to his Son meets the definition of transfers to members of the immediate family for consideration. Therefore, property transfer tax is chargeable only if there is a consideration received by the transferor. The realizable value in this case is the actual consideration received. Property Transfer Tax paid 5\% x K50, $000=$ K2,500
(c) Presumptive tax
(i) Benefits of presumptive taxes
(1) Simplified process- the process of dealing with taxes has been simplified. There is no requirement to keep proper business and accounting records
and the taxes payable are predictable and therefore resulting in easing the cash flow planning process.
(2) Cash flow friendly- since operators find it fairly easy to pay a whole range of fees on a quarterly basis, because the amounts look small and do not seriously disrupt their daily position,
(3) No need for professional consultancy services- paying levies is straight forward as paying lading fees or other fees currently in place. Hence very little intellectual or professional effort required. The driver or conductor make arrangements for presumptive tax to be paid
(4) Equity-as the system is made simpler, all transporters are expected to pay their part hence no free riders as was before the introduction of presumptive tax. As presumptive tax is a levy there will no longer be need to keep records for tax purposes and as such no audits will be conducted on a transporter's business. The only requirement is for the transporter to pay his presumptive tax as stated in the law.
(5) Allowance for breakdown-the levies are charged for vehicles that are on the road during the tax period
(ii) Calculation of Presumptive taxes payable

## K

Toyota hiace (2 x 3 X K540) 3,240
Rosa ( $1 \times$ K1, 620) $\quad 1,620$
Total presumptive tax $\underline{\underline{4,860}}$

END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO<br>$\qquad$<br>DA 11: PRINCIPLES OF AUDITING<br>THURSDAY 14 DECEMBER 2023<br>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 COMPULSORY QUESTIONS

## Attempt Both questions in this sections.

## QUESTION ONE

Galaxy International Co (GIC) is a manufacturer of electrical equipment. It has factories across the country and its customer base includes retailers as well as individuals, to whom direct sales are made through the website. The company's year-end is 30 June 2023. Galaxy International does not have an Internal Audit Department to review its internal controls.

You are an Audit Supervisor in Musonda \& Mulenga Co and are currently reviewing documentation of GIC's internal controls in preparation for the interim audit. You are aware of ISA 315(Revised) Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment which requires auditors to understand the entity's internal controls which are made up of five (5) components.
The GIC's website allows individual customers to order goods directly, and full payment is received in advance. Currently the website is not integrated into the inventory system and inventory levels are not checked at the time when orders are placed. Inventory is valued at the lower of cost and net realisable value.

Goods are despatched using local couriers; however, they do not always obtain customer signatures as proof that the customer received the goods. Over the past twelve (12) months there have been customer complaints about the delays between sales orders and receipt of goods. Galaxy International Co. investigated these complaints and found that, in each case; the sales order had been entered into the sales system correctly but was not forwarded to the despatch department for retention.

GIC's retail customers undergo credit checks prior to being accepted and awarded credit limits set by sales ledger clerks. These customers place their orders through one (1) of the sales members who decide on sales discount levels to be given.

Raw materials used in the manufacturing process are purchased from a wide range of suppliers. As a result of staff changes in the purchase ledger department, supplier statement of reconciliations is not performed. Additionally, a change to supplier details in the purchases ledger master file is undertaken by purchase ledger clerks as well as supervisors.

In the past six (6) months GIC changed part of its manufacturing process as a result of a new equipment that was purchased. There is a piece of plant and equipment which is now surplus to requirements. Purchase requisitions for all new equipment have been authorised by Production Supervisors and little has been done to reduce the surplus of old equipment.

## Required:

(a) Explain the five (5) components of an entity's internal controls and give a brief explanation of each component.
(5 marks)
(b) (i) Identify and explain four (4) deficiencies in internal controls.
(4 marks)
(ii) Recommend a control to address each one (1) of the deficiencies in (i) above (4 marks)
(iii) Describe a test of control that should be performed to assess effectiveness of each of the controls in (ii) above.
(c) Describe four (4) substantive audit procedures the auditor should perform at the year-end on additions to equipment.
(8 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

Samson Ltd provides scientific services to a wide range of clients. Typical assignments range from testing food for illegal additives to providing forensic analysis on items used to commit crimes to assist law enforcement officers.

The annual audit is nearly complete. As Audit Senior you have reported to the Engagement Partner that Samson Ltd is having financial difficulties. Income has fallen due to the adverse effects of two (2) high-profile court cases against Samson Ltd.

Not only did this provide adverse publicity for Samson Ltd, but a number of clients cancelled their contracts. A senior employee left Samson, stating lack of investment in new analysis machines was increasing the risk of incorrect information being provided by the company.

A cash flow forecast prepared internally shows Samson Ltd requiring significant additional cash within the next twelve (12) months to maintain the current level of services. Samson Ltd.'s auditors have been asked to carry out a review on the cash flow which will give rise to a limited assurance.

After performing the audit procedures, you are of the opinion that the audit evidence gathered is not sufficient to support the audit opinion. This entails that additional audit procedures will need to be performed in some areas of the audit.

After the review of the audit file by the Engagement Partner, he noted that further work has to be done on the audit of Samson Ltd so that a basis can be established for the audit opinion. He further guided you that you read through ISA 580 Written Representations so as to get the guidance on what you would expect in the written representation obtained from management.

## Required:

(a) List and explain four (4) factors that will influence the auditor's judgement regarding the sufficiency of the evidence obtained.
(4 marks)
(b) Explain three (3) actions that the auditor may now take in response to the insufficient evidence obtained.
(3 marks)
(c) List six (6) items that auditors would obtain from written representations from management.
(d) (i) Define 'going concern' and discuss the auditor's objectives in respect of going concern.
(ii) Explain the audit procedures the auditor may take where the auditor has concluded that Samson Ltd is not a going concern.
(iii) In the context of the cash flow forecast, define the term 'limited assurance' and explain how this differs from reasonable assurance given after an audit of financial statements.

## SECTION B

## There are THREE (3) questions in this section.

## Attempt any TWO (2) questions

## QUESTION THREE

Kabwe Builders (KB) cooperative was formed by cooperative members after successfully obtaining funds from the Constituency Development Fund (CDF). A meeting was convened and in attendance were bank officials, the community, customers, employees and tax inspectors from the Zambia Revenue Authority (ZRA). Among other issues discussed was the appointment of external auditors and establishment of an internal audit function in order to enhance cooperate governance. Some Board Members expressed concern at the fast pace KB was introducing good governance structures even before the cooperative begins to make profits. While other members felt it was important to have the affairs of the cooperative audited for the sake of transparency and accountability, some stakeholders at the meeting were against appointment of external auditors while others were for the idea. For instance, those from ZRA pointed out that the amount of tax paid does not depend on whether financial statements are audited or not.

One (1) of the new members on the Board of Directors agreed to the suggestion of engaging external auditors. He holds the view that external auditor's objective is to detect fraud and errors so that those who are involved in fraud are caught and prosecuted. He further, mentioned that external auditors provide an absolute assurance to the users of financial statements.

Unfortunately, auditors who were appointed at the first meeting resigned halfway in the year citing interference from politicians and lack of understanding of the nature of the auditor's work. In addition, KB did not give access to certain records and information used in the preparation of financial statements. ISA 265 (Revised) Communicating deficiencies in internal controls to those charged with governance and management gives guidance on how matters arising during the audit of financial statements should be communicated to those charged with governance. The previous auditors failed to communicate with management regarding challenges they faced during the audit of $K B$.

You are the Engagement Partner in Pedro Chartered Accountants that replaced the previous auditors and you are reviewing current audit file of KB which contains the following:

1. Pedro Chartered Accountants was asked to prepare tax computations on behalf of KB. This was after an accountant in charge of tax resigned.
2. You have been a supplier of building materials to $K B$ and you have continued to do so. You appeared as one of the esteemed suppliers of KB at the just ended annual dinner gala.
3. During the year, KB sold ladders to one of the customers who later sustained a broken leg after falling from a defective ladder. KB was approached for an out of court medical settlement but instead the company refused. The case is in court and the Managing Director asked your firm to be witness in this case due to the fact that you audited the
year ended financial statements and confirmed all inventory including ladders were in good and usable condition.
4. Mr. Mambwe, a trainee auditor with Pedro was, sponsored by KB to study a Diploma in Accountancy programme. He stayed with the Managing Director for a period of over six (6) years.
5. The Managing Director called the Engagement Partner to his office to inform him to submit the current audit files to his office before the audit is completed. Further, he advised that he will not accept any qualified audit opinion from Pedro and that he will not hesitate to replace the firm with another auditor if they do not agree to his suggestion.

## Required:

(a) (i) Explain the objective of an audit engagement.
(ii) Describe the nature of an assurance engagement.
(iii) Identify and state two (2) users of financial statements, stating why they supported the abolishment of audits for small companies.
(2 marks)
(b) (i) Identify and explain five (5) threats to objectivity faced by Pedro Chartered Accountants during the audit of KB.
(ii) Suggest appropriate safeguards for each of the threats in (a) (i) above. (5 marks)
(c) (i) Explain two (2) reasons why Pedro Chartered Accountants need communicating with those charged with governance. (2 marks)
(ii) Explain three (3) factors that KB should consider before assessing the need for an internal audit function.
(iii) Explain the meaning of the term 'audit risk.'

## QUESTION FOUR

You are an auditor for Best Suits (BS) Ltd, a company that specializes in the manufacture of suits for celebrities. The suits are sold through retail shops located in leading shopping malls.

BS Ltd employs few workers in the Accounts department which includes the Finance Director and an Accountant. Other non-accounts members of staff are allowed access to the Accounts department without being cleared by the Finance Department.

This is the first time of auditing a company in clothing industry. You have been assigned to the audit of BS Ltd. Among other issues to consider during the audit are the indicators of noncompliance with laws and regulations and the methods to use in order to gain an understanding of BS Ltd and its environment.

In April 2022, the BS Ltd decided to sell some of the second grade suits to other retailers who later sold the suits to the general public who could not afford the expensive type. This business line proved popular and a success as people were able to wear suits that are associated with celebrities. Due to this huge success, BS Ltd decided to build seven (7) more shops in different shopping malls before the end of June 2023. Customers are allowed to pay using mobile payment platforms, debit cards and credit cards in all its outlets. The variety of modes of payment were introduced in order to increase its sales.

During the second quarter of 2023, the company decided to acquire an advanced computerized accounting system that integrated all the stores systems to its main accounting system. All inventory records were updated and management was able to monitor all stores operations in real time. A large part of the computerized accounting system is programmed to suit specific accounting needs of Best Suits Ltd.

Of the seven (7) new outlets that were built, five (5) underwent extensive refurbishment using a loan from a local bank secured on the buildings of BS Ltd.

Two (2) years later, the government introduced a lower tax rate for companies in the clothing industry. This allowed other companies to set up operations such as those of BS Ltd. This caused BS Ltd to lose a big share of its market. Consequently, BS Ltd has been facing liquidity challenges forcing the company management to increase its overdraft facility to its maximum. In addition, BS Ltd was charged penalties due to delays in paying its statutory obligations such as Pay As You Earn (PAYE).

In order to minimize the cost of labour, BS Ltd employed underage children against the country's laws and regulations. This attracted negative media publicity. The company was charged by labour office for not following labour laws. It was also established that the company paid out of court settlements in certain cases in order to minimize damage to its reputation. The Finance Director, working under instructions from the Managing Director, made an electronic transfer of $\$ 78,000$ to his personal foreign bank account without approval of the Board of Directors as per internal regulations of BS Ltd.

Workers in the factory clock in and out and each employee is allowed to enter a unique employee number on to an electronic key board. All details relating to hours clocked by employees are kept by the Production Supervisor. In cases when production and demand for suits is high, the Supervisor hires additional casual workers as he sees fit. Details of new employees are sent to Human Resource Manager after payments are effected. The company assigned three (3) wages clerks to make any amendments to employee salary details such as leave pay and sick pay. A list of employees to be paid is prepared by the supervisor. At the end of the month; casual workers are paid in cash that is brought to the factory by courier which is arranged by the supervisor.

## Required:

(a) Identify and explain five (5) audit risks at the planning stage during the audit of BS Ltd.
(b) Explain the auditor's response for each of the risks identified in (a) above. (5 marks)
(c) (i) Explain five (5) factors that indicate that BS Ltd was not compliant with laws
(ii) Explain two (2) methods that should be used to gain an understanding of BS Ltd.'s environment.
(2 marks)
(d) (i) Identify and explain any three (3) weaknesses in the wages system of BS Ltd.
(3 marks)
(ii) Suggest suitable recommendations to remedy the weaknesses identified in (d) (i) above.
(3 marks)
(iii) State two (2) control objectives for wages system.
(2 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

You are a Manager in Patel \& Co, a firm of Chartered Accountants, with three (3) offices and twelve (12) partners. About half of the firm's clients are audit clients, the remaining are clients for whom Patel \& Co performs tax, accounting and business advisory services.

One of your clients is Mwansa Ltd, a company contracted by the Lusaka City Council (LCC) to clean the city by way of collecting garbage. Mwansa Ltd invested $\$ 1 \mathrm{~m}$ dollars in the state of the art machinery which is expected to perform better in terms of garbage collection than the current dump loader. However, the Board of Directors is not satisfied with its performance so far and feel it was just a worst of resources and is asking for a Value for Money (VFM) audit at the end of the year from internal auditors.

You had a discussion with the Board for Mwansa Ltd, on which current issues were debated by employees and partners of Patel \& Co. One (1) of the issues raised concerned the compulsory rotation of audit firms, whereby it was suggested in the press that after a predetermined period, audit firms must resign from office, to be replaced by new auditors. Other than that the company was reviewing its policy concerning confidentiality. Auditors have a duty to consider all the information they come across during audit is not disclosed to anyone without client authorisation. You are aware of the fact that one of the clients has been involved in money laundering.

Mwansa Ltd is planning to float its shares on a stock exchange within six (6) months. The listing rules require compliance with corporate governance principles, and the directors are not sure whether they are following best practice in relation to corporate governance. They asked the audit Engagement Partner for his view on this matter.

LCC has been failing to collect enough revenue from various businesses in the city and consequently owed huge amounts of money to contractors such as Mwansa Ltd.

Mwansa Ltd board comprise six (6) Executive Directors, a Non-Executive Director who is also Board Chairman and three (3) other Non-Executive Directors (NEDs). The Chairman and one (1) of the NEDs who are former Executive Directors of Mwansa Ltd on reaching retirement
age were asked to take on Non-Executive roles. The company established an audit committee and all NEDs are members including the Board Chairman who also chairs the Audit Committee.

All of the Directors have been members of the board for at least four (4) years without being subjected to re-election annually. As the Chairman does not have an executive role, he has sole responsibility for liaising with the shareholders. The company established an internal audit function to monitor internal controls. Among other tasks to perform during the audit of Mwansa Ltd is the debt owed by LCC to Mwansa Ltd.

## Required:

(a) (i) Explain the ethical threats created by a long association with an audit client.
(ii) Evaluate one (1) advantage and one (1) disadvantage of compulsory audit firm rotation.
(2 marks)
(b) State and explain the three (3) Es that make up the Value for Money audit.
(c) Explain briefly audit work to be performed on the debt owed by LCC to Mwansa Ltd.
(d) Describe five (5) corporate governance weaknesses in Mwansa Ltd and provide a recommendation to address each weakness.
(10 marks)
[Total: $\mathbf{2 5}$ Marks]

## END OF PAPER

## DA 11: PRINCIPLES OF AUDITING SUGGESTED SOLUTIONS

## SOLUTION ONE

(a) Internal control components

ISA 315 Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment considers the components of an entity's internal control. It identifies the following components:

## (i) Control environment

The control environment includes the governance and management functions and the attitudes, awareness, and actions of those charged with governance and management concerning the entity's internal control and its importance in the entity. The control environment sets the tone of an organisation, influencing the control consciousness of its people.

The control environment has many elements such as communication and enforcement of integrity and ethical values, commitment to competence, participation of those charged with governance, management's philosophy and operating style, organizational structure, assignment of authority and responsibility and human resource policies and practices.
(ii) Entity's risk assessment process

For financial reporting purposes, the entity's risk assessment process includes how management identifies business risks relevant to the preparation of financial statements in accordance with the entity's applicable financial reporting framework.
It estimates their significance, assesses the likelihood of their occurrence, and decides upon actions to respond to and manage them and the results thereof.
(iii) Information system, including the related business processes, relevant to financial reporting, and communication

The information system relevant to financial reporting objectives, which includes the accounting system, consists of the procedures and records designed and established to initiate, record, process, and report entity transactions (as well as events and conditions) and to maintain accountability for the related assets, liabilities, and equity.

## (iv) Control activities relevant to the audit

Control activities are the policies and procedures that help ensure that management directives are carried out. Control activities, whether within information technology or manual systems, have various objectives and are applied at various organizational and functional levels.
(v) Monitoring of controls

Monitoring of controls is a process to assess the effectiveness of internal control performance over time. It involves assessing the effectiveness of controls on a timely basis and taking necessary remedial actions. Management accomplishes the monitoring of controls through ongoing activities, separate evaluations, or a combination of the two. Where there is an internal audit department, it plays a pivotal role in the monitoring of controls.
(b) Galaxy International Co Internal control

| (i) Deficiency | (ii)Control <br> Recommendations | (iii) Test of control |
| :--- | :--- | :--- |
| Currently the website is <br> not integrated into the <br> inventory system. | The website should be <br> updated to include an <br> interface into the <br> inventory system; this <br> should check the result in Galaxy <br> accepting customer <br> inventory levels and only <br> orders when they do not <br> have the goods in <br> inventory. This can cause <br> them to lose sales and <br> inventory is held. | Test data could be used <br> to attempt to process <br> orders via the website for <br> items which are not <br> currently held in <br> inventory. |
| If inventory is out of goodwill. | stock, this should appear <br> on the website with <br> approximate waiting time. | The orders should be <br> flagged as being out of <br> stock and indicate an <br> approximate waiting time. |
| For goods dispatched by <br> local couriers, customer <br> signatures are not always <br> obtained. This can lead to <br> customers falsely claiming <br> that they have not <br> received their goods. <br> Galaxy should remind all <br> local couriers that <br> customer signatures must <br> be obtained as proof of <br> delivery and payment will <br> to prove that they has in <br> not be made for any <br> fact despatched the <br> goods and may result in | Select a sample of <br> despatches by couriers <br> and ask Galaxy for proof <br> of delivery by viewing <br> customer signatures on missing <br> should return with duly <br> signed proof of delivery. | the delivery documents. |


| goods being dispatched twice. |  |  |
| :---: | :---: | :---: |
| There have been a number of situations where the sales orders have not been fulfilled in a timely manner. This can lead to a loss of customer goodwill and if it persists will damage the reputation of Galaxy as a reliable supplier. | Once goods are despatched, they should be matched to sales orders and flagged as fulfilled. The system should automatically flag any outstanding sales orders past a predetermined period, such as five days. <br> This report should be reviewed by responsible official. | Review the report of outstanding sales orders. If significant, discuss with a responsible official to understand why there is still a significant time period between sales order and despatch date. <br> Select a sample of sales orders and compare the date of order to the goods despatch date to ascertain whether this is within the acceptable predetermined period. |
| Customer credit limits are set by sales ledger clerks. <br> Sales ledger clerks are not sufficiently senior and so may set limits too high, leading to irrecoverable debts, or too low, leading to a loss of revenue. | Credit limits should be set by a senior member of the sale ledger department and not by sales ledger clerks. <br> These limits should be reviewed by responsible official. | For a sample of receivables who have been given credit, inspect the credit authorisation and confirm approved by a senior responsible official. |
| Sales discounts are set by Galaxy's sales team. In order to boost their sales, members of the sales team may set the discounts too high, leading to a loss of revenue. | All members of the sales team should be given authority to grant sales discounts up to a set limit. Any sales discounts above these limits should be authorised by senior members of staff. | Review a sample of sales discounts given and confirm that they have been authorised by a senior responsible person. |
| Supplier statement reconciliations are no longer performed. | Supplier statement reconciliations should be performed on a monthly basis for all suppliers and | Review of the file for reconciliations to ensure that they are being performed on a regular |


$\left.$| This may result in errors <br> in recording of purchases <br> and payables not being <br> identified in a timely <br> manner. | these should be reviewed <br> by a responsible official. | basis and that they have <br> been reviewed by a <br> responsible official. |
| :--- | :--- | :--- |
| Changes to supplier |  |  |
| details in the purchase |  |  |
| ledger master file can be |  |  |
| undertaken by purchase |  |  |
| ledger clerks. |  |  |$\quad$| Only purchases ledger |
| :--- |
| supervisors should have |
| the authority to make |
| changes to master file |
| data. This should be |
| controlled via passwords. |$\quad$| Request a purchase |
| :--- |
| ledger clerk to attempt to |
| access the master file and |
| make an amendment; the |
| system should not allow |
| this. | \right\rvert\,

## (c) Substantive procedures - additions

(i) Obtain a breakdown of additions, cast the list and agree to the non-current asset register to confirm completeness of plant and equipment.
(ii) Select a sample of additions and agree cost to supplier invoice to confirm valuation.
(iii)Verify rights and obligations by agreeing the addition of plant and equipment to a supplier invoice in the name of Galaxy.
(iv)Review the list of additions and confirm that they relate to capital expenditure items rather than repairs and maintenance.
(v) Review board minutes to ensure that significant capital expenditure purchases have been authorised by the board.
(vi)For a sample of additions recorded in P \& E, physically verify them on the factory floor to confirm existence.

## SOLUTION TWO

## (a) Factors that will influence sufficiency of evidence:

(i) Assessment of risk at the financial statement level and/or the individual transaction level. As risk increases then more evidence is required.
(ii) The materiality of the item. More evidence will normally be collected on material items whereas immaterial items may simply be reviewed to ensure they appear correct.
(iii)The nature of the accounting and internal control systems. The auditor will place more reliance on good accounting and internal control systems limiting the amount of audit evidence required.
(iv)The auditor's knowledge and experience of the business. Where the auditor has good past knowledge of the business and trusts the integrity of staff then less evidence will be required.
(v) The results of tests of controls in a particular area will influence the sufficiency of evidence. If the results of tests of control show that the controls were operating effectively, less evidence will be required compared to a situation where the controls were found not to be operating effectively when more evidence will be required.
(vi)The source and reliability of the information. Where evidence is obtained from reliable sources (e.g. written evidence) then less evidence is required than if the source was unreliable (e.g. verbal evidence).
(b) Action in response to insufficient evidence obtained:
(i) The auditor could perform additional substantive procedures on the audit area. This action will help to quantify the extent of the error and makes the implicit assumption that the control system is not operating correctly.
(ii) If the matter is not resolved, then the auditor will also need to consider a modification of the audit report; the exact wording depending on the materiality of the errors found.
(c) Written representation letter contents
(i) No irregularities involving management or employees that could have a material effect on the financial statements
(ii) All books of account and supporting documentation have been made available to the auditors
(iii)Information and disclosures with reference to related parties is complete
(iv)Financial statements are free from material misstatements including omissions
(v) No non-compliance with any statute or regulatory authority
(vi)No plans that will materially alter the carrying value or classification of assets or liabilities in the financial statements
(vii) No events, unless already disclosed, after the end of the reporting period that need disclosure in the financial statements.
(viii) On the ability of the company being a going concern and how this conclusion has been reached.
(d)

## (i) Going concern

Going concern means that the enterprise will continue in operational existence for the foreseeable future without the intention or necessity of liquidation or otherwise ceasing trade. It is one of the fundamental accounting concepts used by auditors and stated in IAS 1 Presentation of Financial Statements.

The auditor's responsibility in respect of going concern is explained in ISA 570 Going Concern. The ISA states 'when planning and performing audit procedures and in evaluating the results thereof, the auditor should consider the appropriateness of management's use of the going concern assumption in the preparation of the financial statements'.

The auditor's objectives therefore fall into three areas:

1. To carry out appropriate audit procedures that will identify whether or not an organisation can continue as a going concern.
2. To ensure that the organisation's management have been realistic in their use of the going concern assumption when preparing the financial statements.
3. To report to the members where they consider that the going concern assumption has been used inappropriately, for example, when the financial statements indicate that the organisation is a going concern, but audit procedures indicate this may not be the case.
(ii) Audit procedures if Samson is not considered to be a going concern
4. Discuss the situation again with the directors. Consider whether additional disclosures are required in the financial statements or whether the financial statements should be prepared on a 'break up' basis.
5. Explain to the directors that if additional disclosure or restatement of the financial statements is not made then the auditor will have to modify the audit report.
6. Consider how the audit report should be modified. Where the directors provide adequate disclosure of the going concern situation of Samson. This
will be explained in the paragraph headed material uncertainty related to going concern in the auditor's report.
7. Where the directors do not make adequate disclosure of the going concern situation then modify the audit report making reference to the going concern problem.
(iii)Limited assurance

Limited assurance means that nothing has come to the attention of an auditor which indicates that the cash flow forecast contains any material errors. The assurance is therefore given on the absence of any indication to the contrary. In a re view giving rise to limited assurance the auditors do not perform the same level of work as in an audit. They primarily use inquiries and analytical reviews to obtain evidence.

The assurance given in a limited assurance is negative in nature,

In contrast, the audit report on statutory financial statements provides a reasonable assurance; that is the financial statements do show a true and fair view.

In the case of an audit, the auditors perform detailed tests and the opinion is in positive form. The reasonable assurance in an audit is a high level of assurance.

## SOLUTION THREE

(a)
(i) The objective of an assurance engagement:

The objective is to enable the Pedro to express an opinion on whether financial statements of KB are prepared in all material respect, in accordance with an applicable financial reporting framework.
(ii) Nature of an assurance engagement:

The nature of an assurance engagement is one in which Pedro aims to obtain sufficient appropriate audit evidence in order to express a conclusion, in order to enhance the confidence, the financial statement about a subject matter information.
(iii)Cooperative members:

These members objected to the appointment of an external auditor as they felt it was expensive,
Tax authority: they argument was that audited financial statements do no enhance tax computations.
(b)
(i) Threats
(ii) Safeguards

1. Pedro was asked to prepare tax computations for KB . This constitutes a self-review threat.
2. The Engagement Partner supplying building material to the client. This constitutes self-interest threat as they are conducting business together
3. The request by $K B$ to be represented in court is wrong ethically. This will result into an advocacy threat
4. Trainee auditor was sponsored by KB. and was kept by the Managing Director of $K B$. He is too familiar with the operations and people at KB. This will result into familiarity threat.
5. The refusal by the Managing Director not willing to accept a qualified audit opinion. This is an intimidation threat.

The auditor should not have accepted to do tax computation for the client. In future the auditors should not take on management responsibilities.
The Engagement Partner should cease supplying building materials to an audit client. Alternatively, the working papers should be independently reviewed.
Auditors should decline to represent their client in court as it will result into loss of their objectivity.
The trainee auditor should not be allowed to be on the audit of KB.

The auditors should bring this matter to the attention of those charged with governance and seek their indulgence. If the matter remains unresolved the auditor may need to reconsider the integrity of management. Finally, the

|  | auditors my consider resigning from the <br> engagement. |
| :--- | :--- |

(c)
(i) Pedro needs to communicate with those charged with governance for the following reasons:

1. This will assist those charged with governance to understand related matters to the audit so that both parties can develop a good working relationship.
2. Pedro will be able to obtain information from KB without any hindrance.
3. It assists those charged with governance to realize their responsibility for the preparation of financial statements so that risks of material misstatements are reduced.
(ii) The following factors should be considered when KB wants to establish an internal audit function:
4. KB should consider the cost of setting up and running an internal audit function, against its budget,
5. KB should consider whether there will be any savings from external audit fees if an internal audit function is put in place.
6. KB should also take into account the complexity and size of their organization to warrant a separate internal audit function.
7. The company should also consider if the current staff have skills to perform internal audit tasks.
8. The perception that management at KB has on the importance of assessing risks and the effectiveness of internal controls.
9. Consider whether it may be cheaper to outsource internal audit rather than setting up an internal audit department.
(iii) The meaning of the term 'Audit Risk.'

Audit risk refers to a situation where an external auditor such Pedro expresses an inappropriate audit opinion when financial statements have been materially misstated.

## SOLUTION FOUR

## (a) Audit risk

(b) Response to audit risks

1. BS Ltd sells fashion suits. These are in high demand and can be stolen. Further the suits are fashionable and taste can change. Therefore, misstatements in inventory can occur. Inventory is likely to be stated at value in excess of its net realizable value if not sold.
2. Rapid expansion. BS Ltd refurbished (5) new shops in a short period of time. There is a risk that non-current assets may not be recorded at their correct value. There is also a risk that misclassification of capital and revenue expenditure will occur.
3. The company has liquidity problems and obtained loans and overdrafts from the bank. It has cash flow problems which may indicate going concern difficulties. Failure to repay the loans could have going concern implications for the company.

During the audit, extra attention needs to be paid to instructions that were given so that slow moving suits are identified. Auditor should also test the value of sales post year end to verify their net realizable value.

Auditors need to carry out specific tests for asset acquisition of the shop building. There is also need to review any repairs that could have carried out on the building and confirm that expenditure has been correctly classified between revenue and capital expenditure.
The auditors should obtain evidence of the repayment of the loans. Inquire from management how it hopes to go round the liquidity problems. During the audit look out for any indicators that the company may fail to continue as a going concern. The auditors should obtain written representations from management regarding going concern.
4. Specific computerized accounting software Not all accountants will be familiar with the new software. Errors and misstatements are likely to occur. The software is not designed for general purpose. Once a new line of business comes on board, there could a need for a new one which could be costly.
5. Transfer of funds to the personal account of the Managing Director - This could be a tip of the iceberg and there could be other payments made irregularly impacting on the financial statements.
(c)
(i) The following factors indicate BS Ltd was non-compliant to laws and regulations:
2. The company had employed underage children which was against the laws of the country.
3. It was reported in the media that BS Ltd received negative publicity. This will cause the general public to view BS Ltd as a bad cooperate citizen.
4. BS was charged penalties by ZRA due to no payment or delays in remitting PAYE.
5. Out of court settlements indicate that there are cases against BS Ltd that were not brought before the court due to non-compliance.
6. The Finance Director transferred $\$ 78,000$ to a personal foreign bank account without obtaining the Board's approval.
(ii) The following methods can be used to gain an understanding of BS Ltd.'s business environment:

1. Inquiries - inquiries of management, accounting staff, stores and human resources departments should be used in order to obtain relevant information. This information will be reviewed in order to understand BS Ltd.
2. Analytical procedures-these are procedures that will be performed in order to analyze the plausible relationship between financial and nonfinancial data from BS Ltd.
(d)

| (i) Weakness | (ii) Suggested recommendation |
| :--- | :--- |
| 1. Supervisor keeping employee details. <br> Supervisors are not the ones who <br> employ workers. There is a possibility <br> that they can include details of <br> employees who have been paid already. | Record of employees must be kept by <br> those in the Human Resources <br> Department. |
| 2. Hiring of staff by supervisors. <br> Supervisors may inflate the numbers of <br> employees by even including ghost <br> workers in addition to bonfire workers. | The hiring of staff should only be done <br> by the Human Resources Department <br> after approval from higher authority. |
| 3. Delivery of cash using a courier <br> This can result in theft of the courier <br> services by thieves. | BS Ltd should start paying all its workers <br> using bank transfer which is safer and <br> cheaper for the company. Alternatively, <br> the company should put in place security |
| measures when moving cash such as |  |
| having an armed guard. |  |

3. Two (2) control objectives for wages and system
(i) The payment to employees should only be paid to employees who belong to BS Ltd.
(ii) To ensure that employees are paid in accordance with the conditions of services and the agreed pay.

## SOLUTION FIVE

(a)
(i) It is not uncommon for firms to act as auditors for a client for a number of years. However, the code states that using the same senior personnel on an assurance engagement over a long period of time may create a familiarity and self-interest threat. The significance of the threat depends upon factors such as:

1. The length of time that the individual has been a member of the assurance team;
2. The role of the individual on the assurance team;
3. The structure of the firm;
4. The nature of the assurance engagement;
5. Whether the client's management team has changed; and
6. Whether the nature, complexity of the clients accounting and reporting issues have changed.

The problem of long association is that a familiarity threat to objectivity is created. The senior personnel risk losing their professional skepticism, and may cease to challenge the client on significant matters.

A close relationship will be built up between the senior audit personnel and senior members of the client's management team, so the auditors become too sympathetic to the interests of the client.

The code requires that for public interest clients, the key audit partners should be rotated after a pre-determined period of seven years, as a means to safeguard against the familiarity threat. After such time, the key audit partner shall not be a member of the engagement team or be a key audit partner for the client for two years.

During that period, the individual shall not participate in the audit of the entity, provide quality control for the engagement, consult with the engagement team or the client regarding technical or industry specific issues, transactions or events or otherwise directly influence the outcome of the engagement.

## (ii) Auditor rotation:

## Advantage:

The main argument in favor of compulsory rotation of audit firms is that it should work to eliminate the familiarity threat. By not only rotating the key partner, but the entire audit firm, it is argued that the auditor's independence is not compromised, and that this adds credibility to the auditor's reports and the profession as a whole.

## Disadvantage:

There will be loss of experience on the part of the auditors. This is because auditors who have gained experience will be required to leave to fulfill the requirement for auditor rotation.
(b) The three Es that make up Value for Money (VFM) audit are: Economy: this refers the comparison between the cost of using the new machinery against the benefits obtained from the use of the machinery that Mwansa Ltd has deployed in the cleaning of the city.
Efficiency: in the aspect the internal auditors will need to establish whether the input resources such human and financial are less than the outputs in terms of services that the company gets from using this machinery.
Effectiveness: internal auditor will have to establish whether the objectives that the company has set with respect to the use of this machinery have been achieved.
(c) The following audit procedures can be performed on the debt owed by the LCC:
(i) Obtain confirmations from LCC to verify if the debt exists and to what extent does LC agrees to the amount owed.
(ii) Obtain and review the bank statement to confirm amounts paid.
(iii) Re- perform a debtor's reconciliation for correctness of the amounts of receivables in the statement of financial position.
(d)

| Weakness | Recommendation |
| :---: | :---: |
| The board is comprised of six (6) Executives and only four (4) NonExecutive Directors (NEDs). There should be an appropriate balance of Executives and NEDs, to ensure that the Board makes the correct objective decisions which are in the best interest of the stakeholders of the company and no individual or group of individuals dominates the Board decision making. | At least half of the Board should be comprised of NEDs. Hence the Board of Mwansa Ltd should consider recruiting and appointing additional independent NEDs to satisfy this requirement. |
| One of the NEDs and the Chairman are former Executive Directors of Mwansa Ltd who were asked to take on their existing roles following retirement. As former Executive Directors, they were previously employed by the company and so may not bring the required level | Only independent Non-Executive with relevant experience and skills should be appointed to the Board of Mwansa Ltd. A review should be undertaken of the independence of all existing NEDs. Any who are not independent should ideally be replaced. |


| of independence and objective <br> judgement to the role as is necessary. <br> The independence of other NEDs <br> cannot be assessed. |  |
| :--- | :--- |
| The Chairman who is a NED sits on the <br> audit committee as chair. The audit <br> committee is supposed to be made up <br> of independent NEDs. The Chairman <br> can, for smaller companies sit on the <br> committee provided that he is an <br> independent Non-Executive, which is <br> not the case for Mwansa Ltd. | The Chairman should cease to <br> undertake the role of Chair of the Audit <br> Committee. One of the newly appointed <br> independent NEDs should be appointed <br> to this role instead. |
| All four members of the Audit <br> Committee were previously involved in <br> sales or production related roles. At <br> least one member of the audit <br> committee should have recent and <br> relevant financial experience. | The company should ensure when they <br> recruit the new independent NEDs that <br> at least one of them has the required <br> recent and financial experience. |
| All the Directors have been members of <br> the Board for at least four years. The <br> shareholders should review on a regular <br> basis that the composition of the board <br> of directors is appropriate and that <br> there is an appropriate re-election <br> process in place to ensure this can be <br> achieved. | The Directors should be subject to re- <br> election by shareholders at regular <br> intervals not exceeding three years. |
| At the current year's annual general |  |
| meeting it should be proposed that a |  |
| number of the Directors are subject to |  |
| re-election. The remaining Directors |  |
| could then be subject to re-election next |  |
| year. |  |


|  | the views of major shareholders about <br> the company. |
| :--- | :--- |

## END OF SOLUTIONS

## 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.

## 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

Dr. Ng'andu is the Managing Director of Money Front Group of Companies which is a large public limited company with interests in mining and forestry. The group's profits have drastically fallen in the last three years causing the company's share price to fall on the stock market. At its last meeting, the company appointed Moasted H. Chartered Accountants, a firm of auditors to audit its books and prepare a report.

The auditors' report for the year ended 31 March, 2023 stated that 'the profits of the company have fallen from last year's K10 million to K4 million and the net assets of the company have fallen from K200 million to K132 million. To mitigate this, the company needs to come up with stringent measures which will reduce borrowing and control expenditure, failure to which the company would be bankrupt and its shares will keep falling'.

Dr. Ng'andu is unhappy with the auditors' report as he is scared of being fired should the report reach the Board of Directors with such statements, and he persuades them to delete the last part of the report and the auditors have agreed.

## Required:

(a) What are the legal implications of the decision to 'delete' on the part of auditors?. Explain your answer.
(8 marks)
(b) The auditors have also recommended that the shareholders' capital in the group be reduced so as to lessen the dividend burden on the company. Explain four (4) methods of reducing capital Money Front Group of Companies can use. (8 marks)
(c) What procedure will Money Front Group of Companies follow to reduce its capital?
(5 marks)
(d) Looking at its performance, the shareholders are scared that the company may be wound up by the court. State four (4) grounds for winding up by the court.
(4 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

(a) Discuss the facts and holding in the case of Salomon v Salomon [1897], making reference to the principle of separate legal personality.
(15 marks)
(b) Describe the main elements of a partnership according to the Partnership Act of 1890. (10 marks)
[Total: 25 Marks]

## SECTION B

## There are THREE (3) questions in this section. Attempt TWO (2) questions. QUESTION THREE

Katebe has been a small scale businessman in Lusaka as a general dealer. In the past few years his business has been doing so well that he has now decided to have it incorporated under the Zambian laws. Because of the viability of his business he has started to trade in his company name Muzo Imports and Exports Ltd even before it is registered. Katebe operating under the company name has entered into a contract with Fwambo General Dealers to supply a consignment of assorted goods. The business transaction with Fwambo General Dealers has gone beyond Katebe's expectation such that before the certificate of incorporation could be issued, huge profit was made from the transaction and Katebe decided to keep the proceeds of the transaction as a personal benefit. Muzo Imports and Exports Ltd have since been incorporated and the other members of the newly registered company are demanding that Katebe should not personally benefit from the transaction that took place before the company was incorporated.

## Required:

(a) Advise Katebe in the above scenario on the law under which he could register the company and the documents required to be filed at the appropriate office in Zambia along with the basic information they should contain.
(10 marks)
(b) Also, advise the other members of the incorporated Muzo Imports and Exports Ltd on the implications of Katebe's conduct before and leading to the incorporation of their company.
(10 marks)
(c) Explain the circumstances under which a veil of incorporation may be lifted in company law.
(5 marks)
Total: 25 Marks]

## QUESTION FOUR

A Company is governed through two collective bodies namely the Board of Directors and Shareholders acting in a General Meeting. A company general meeting is one of the medium through which Shareholders Act. General meetings and resolutions represent the way in which shareholders can make their voices heard by management, though shareholders can also privately meet management and make their voices heard.

## Required:

(a) Discuss the types of meetings which are held as well as requisite notice and members expected to attend.
(b) Meetings are convened for decision-making purposes by resolutions. Explain the types of resolutions made by companies
(c) What are the promoter's duties and how are they enforceable?
[Total: 25 Marks]

## QUESTION FIVE

Arthur and Barbara are the two shareholders in Printing Ltd, a small private company which specializes in very high quality printing work. They invite Cedric, an expert in high quality printing, to be the Managing Director of the company and they transfer a $5 \%$ shareholding to him. Arthur and Barbara hold the remaining $95 \%$ of the shares. It is proposed that the Board of Directors consist of Arthur, Barbara and Cedric. Cedric is keen to accept the invitation to be the managing director, but he is very conscious of the powerful position which Arthur and Barbara will hold as majority shareholders.

## Required:

(a) Advise Cedric on various ways in which minority shareholders are protected by company law.
( 15 marks)
(b) One of the duties of company Directors is to avoid conflict of interest. Explain this duty in detail.
(5 marks)
(c) Explain the characteristics of non-Executive Directors.
(d) Explain the mode for winding up a company by Court.
(2 marks)
[Total: $\mathbf{2 5}$ Marks]

## END OF PAPER

## DA 12: GOVERNANCE AND CORPORATE LAW SUGGESTED AOLUTIONS

## SOLUTION ONE

(a) The legal implications of the decision to 'delete' by the auditors are:

Auditors (Moasted H. Chartered Accountants) are supposed to audit the accounts of a company and must do the work independently. Should they allow interference from other persons, they will be guilty of misfeasance, and will be liable to make good the amount lost by the company due to their failure to speak their mind. The case of Re London and General Bank (1895) is instructive in this regard. Therefore the decision to 'delete' following instructions from Dr. A.N. Ng'andu, the CEO means that the auditors will be held liable for any loss the company will incur due to their decision and are guilty of misfeasance (wrongful exercise of power/misuse of power).
Auditors have no duty to detect fraud, but they must investigate and disclose any suspicious accounts, without fear or favour. They must speak their minds.
(b) Methods of reducing capital:

- Extinguishing or reducing liability on unpaid shares - This involves the reduction or extinction of shareholders' liability on unpaid for shares. This in essence reduces the shareholder's capital in the business as the shares issued to them reduce. For example if shares issued to a shareholder are worth K100 and only K75 have been paid for, the company can reduce its issued capital by extinguishing its liability on the unpaid for K25 worth of shares.
- Cancelling share capital which is lost- This is where a company cancels out any paid up shares due to losses. For example, if a shareholder has fully paid up shares worth K200 and due to losses their real value reduces to K150, the company can cancel out the K50 which represents the actual loss in shares. The lost shares can be cancelled. This reduces one's shares in the company and reduces the amount of capital held by the company.
- Paying off paid up share capital, which is in excess of what the company needs - This done when a shareholder has overpaid on his capital into the company. It acts as a refund. For example a shareholder has a fully paid up capital of K500, but the company only needs K430 for its operations, it can pay back to him the K70. This reduces his capital in the business. This can also be done where part of the company has been sold and the excess money on shares is paid off to the existing shareholders. This reduces the amount of capital in the business.
- Payment in kind - Capital can be reduced if payment for shares is done in kind as the value of the items given in place of capital may represent a lesser value than actual cash, e.g. receiving a cow instead of K4, 000 capital may reduce the capital as the real value of the cow may be K3,800.
(c) The following is the share capital reduction procedure:
- The articles of a company must provide for reduction
- The company will pass a special resolution to reduce its share capital
- The application must be made to the court for an order to allow the reduction within 21 days after its passing. The court will look at how well the interests of creditors have been taken care of.
- After court approval, the special resolution is lodged with the Registrar of Companies within 21 days after it is passed.
- Once this is done, then the reduction is effected
(d) Grounds for winding up by the courts include:
- Inability to pay debts
- Default in holding statutory meetings
- Reduction of members below legal minimum
- When it is just and equitable to do so.
- When there is a complete deadlock in the company.


## SOLUTION TWO

(a) Separate Legal Entity-The principle of the law established in the case is that, when a company is incorporated, it 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 (Shareholders) 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. The owners' liability is limited to the amounts they invested or pledged to invest in the business, i.e. shareholders have limited liability '.
(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 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.

## SOLUTION THREE

(a) Register under the Companies Act number $\mathbf{1 0}$ of 2017.

The persons will be required to submit the following documents:
(i) Application for name clearance, in order to avoid use of an existing or similar name
(ii) Application for incorporation by subscribing the names of directors and secretaries of the company
(iii)Articles of Association for the company
(iv)Statutory declaration as to compliance with the Company's Act
(v) Signed consent to act as director or secretary by each person named in the company's application
(vi)Declaration of guarantee, if a company is limited by guarantee.

The minimum share capital of a company is $\mathrm{K} 15,000,000$. The law requires that half the directors of the company be resident in Zambia.
(b) The implications of his conduct are that, as a promoter, he is personally liable for a contract made by or on behalf of a company when the company has not been formed where the promoter purports to act for the company. A contract that purports to be made by or on behalf of a company at a time when the company has not been formed has effect, subject to any agreement to the contrary, as one made with the person purporting to act for the company or as agent for it, and he is personally liable on the contract accordingly.

The only time he will not be liable is when he puts a pre-incorporation clause to the effect that the company would take responsibility once it is incorporated for the debts accrued before its incorporation. In the absence of that, he will be liable as was the case in Kelner v Baxter. Further, the fact that he used the money for personal benefit, he is in breach of fiduciary duties imposed on promoters who hold an office of trust like directors and he must therefore account for the money he received.
(c) The court will lift the veil of incorporation of any company to find out who was behind the fraudulent and improper conduct. This would be necessary where the canopy of legal entity is used to defeat public convenience, justify wrong, perpetuate and protect fraud and crime....

## SOLUTION FOUR

(a) The meetings are as below;
(i) Statutory Meetings: These are meetings required to be held by law. They are:
Annual General Meetings:- Held annually by the shareholders to discuss issues affecting the company such as financial reports, appointment of directors, etc. Extra ordinary General Meetings:- This is a meeting held whenever there is an urgent and important issue that needs to be attended to and can't wait for the annual general meeting.
Class Meeting:- This is a meeting for a particular class of shares aimed at addressing the interests of that class of shares e.g. preference shareholders' only or a meeting for ordinary shareholders only.
(ii) Meeting of Debenture Holders: This is a meeting for and by the debentureholders in a particular company.
(iii) Meeting of the Board of Directors:- This is a meeting by the board of directors who are tasked with the day to day running of the company. The meeting brings together all the directors of a company who belong to its board.
(iv) Meeting of Creditors and Contributors: This is a meeting for creditors and contributors. Just like debentureholders, the purpose of these meetings is to discuss the welfare of their resources they invested in the company and at times they may meet to appoint a liquidator if the company they invested in is experiencing difficulties to pay them back what they lent to it. .
(b) Types of resolutions

Three forms of resolutions are available: ordinary resolution and special resolution
(i) Ordinary Resolution - Requires simple majority and does not have special rules. Used for any other matter other than very serious matters that have a huge shift or impact on a company. The articles of the company must provide for which matters that should require such a resolution.
(ii) Special Resolution - This must be specifically provided for in the company articles. It has a threshold of at least $75 \%$ of the members of a meeting must support an item for it to be reached. It is used in very serious decision making processes where the decisions have a huge impact on the company.
(c) A Promoter is neither an agent nor a trustee of the Company. He acts in a fiduciary position towards the Company. He takes steps for the formation of the Company and incurs the preliminary expenses for the Incorporation of the Company like Registration expenses, Stamp duty payment; professional fees

## Further a promoter has the following duties;

(i) To disclose the secret profit: The promoter should not make any secret profit.
(ii) To disclose all the material facts: ..
(iii) The promoter must make good to the company what he has obtained as a trustee: ...
(iv) Duty to disclose private arrangements:- Failure to disclose these private arrangements can make members to enforce them against ailing promoters/members or company based on the pre-incorporation contracts.

## SOLUTION FIVE

(a) My advice to Cedric is that minority shareholders can be protected by Shareholders Agreement or provisions in the Articles of Incorporation that protect them. Contractual protection for minority shareholders can be agreed via a shareholders' agreement to prevent disputes down the line, including providing for protections which are greater than that provided under law.
If there are no shareholders' agreement in place, it may be worth discussing with the directors if one can be put in place to give yourself peace of mind.
The other way to enhance minority shareholder rights is via Articles of association. There is no limit on the extent of enhancement over and above the Companies Act that is possible. It is all a matter of knowing what rights you will need and what you can agree. Therefore, Cedric can use any of the above ways to protect his interest.
Minority shareholders are also protected by law in that, they take part in decision making of the company through voting at AGMs, they have a right to any information about their company, protection against oppression by other shareholders, right to fair valuation of their shares, pre-emptive rights to purchase more shares, protected by oversight bodies such as PACRA, LuSE, and so on.
(b) A director of a company must not act on behalf of a company, or exercise any of his powers as a director, in relation to any matter in which he has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the company. Director is required to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly may conflict, with the interests of the company, Examples of situational conflicts which might be caught under this section include where a director of company $A$ is also a director of company $B$ which potentially competes with company A , or where a director wishes personally to take up an opportunity that has been offered to, but declined by, his or her company.
(c) The characteristics of a non-executive director include promotion of highest ethical standards, supportive to executive director's integrity, ability to listen, trusted, independent, compliance with corporate governance principles, they do not hold executive positions and do not take part in the day to day running of the company.
(d) It is by way of a petition except where there has been a resolution to wind up voluntarily. This occurs where a creditor or shareholder or any interested person petitions the court to have the company wound up due to a number of reasons. The court will grant the application if it has merit.

## END OF SOLUTIONS

