DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS
$\qquad$
LEVEL ONE

DA 1: FINANCIAL ACCOUNTING

MONDAY 20 MARCH 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 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 What is the role of IASB?
A. Oversee the standard setting and regulatory process.
B. Formulate international financial reporting standards.
C. Review defective accounts.
D. Control the accountancy profession.
1.2 Which one of the following is not a qualitative characteristic of financial information according to the conceptual framework for financial reporting?
A. Going concern.
B. Accruals.
C. Timeliness.
D. Relevance.
1.3 Which one of the following costs would be classified as revenue expenditure on the invoice?
A. Road tax.
B. Number plates.
C. Filed stereo radio.
D. Delivery costs.
1.4 A sole trader who does not keep full accounting records wishes to calculate her sales revenue for the year. The following information is available:

1. Opening inventory K34,000
2. Closing inventory K48,000
3. Purchases

K182,000
4. Standard gross profit on sales revenue

40\%

Which of the following is the sales figure for the year?
A. K235,200.
B. K280,000.
C. K420,000.
D. K216,000.
1.5 Which one of the following is a disclosure about non-existing Events required by IAS 10 Events after the reporting period?
A. Dividends declared before the end of the reporting period and paid after the end of the reporting period.
B. The nature of both material and non-material non-adjusting events.
C. An estimate of the financial effects of the event, unless a reasonable estimate cannot be made.
D. The date that the non-adjusting event occurred.
1.6 Doreen's company's financial statement shows a carrying value of K2,850,000 for capitalized development expenditure. Its policy is to amortize development expenditure on a straight line basis at 5\% per annum. Accumulated amortization brought forward is K150,000.

What is the charge in the statement of profit or loss for the year's amortization?
A. K130,500.
B. K142,500.
C. K135,000.
D. K150,000.
1.7 Under IAS1 presentation of financial statements, which of the following must be shown as a line entry on the face of the statement of profit or loss and other comprehensive income?
A. Profit before tax.
B. Gross profit.
C. Revenue.
D. Dividends.
1.8 A company uses the imprest system to administer its petty cash, keeping a float of K4,000. The following transactions took place:
(i) $\mathrm{K} 1,000$ beverage.
(ii) K800 hire of taxis.
(iii) K1,600 travel incidentals, returned unused.
(iv) K480 cleaning material.
(v) K456 stationery.

How much should be drawn out of the bank?
A. $\mathrm{K} 4,000$.
B. K3,336.
C. K3,736.
D. K1,480.
1.9 Which of the following is not a valid reason for the cash book and bank statement failing to agree?
A. Cash receipts posted to payables.
B. Overdraft interest.
C. Unpresented cheques.
D. Bank charges.
1.10 Kazala and Sons have the following manufacturing figures:

Prime cost
Opening work in progress
Factory overheads
Factory cost of goods completed

## K

168,000.
18,600.
13,500.
171,000.

Calculate the closing work-in-progress.
A. $\mathrm{K} 2,100$.
B. K29,100.
C. K8,100.
D. K35,100.
(2 marks)
[Total: $\mathbf{2 0}$ Marks]

## SECTION B

## Attempt any four (4) questions out of five (5) in this section.

## QUESTION TWO

(a) Chipo Ltd is a Manufacturer of farming Equipment and the following is an extract of balances from the accounting records of the business entity at 31 December 2021.

## K

Inventory at 1 January 2021:
Raw materials 55,000
Work-in-Progress 80,000
Finished Goods
100,450
Inventory at 31 December 2021:
Raw materials 85,000
Work-in-Progress 90,000
Finished Goods 90,200
Wages:

> Direct manufacturing 1,015,400

Factory supervisors
66,625
Direct Factory fuel and Power 455,000
Factory heat and light 22,500
Royalty payables 20,000
Factory Rent 15,000
Purchase of Raw materials 1,280,000
Returns Inwards 2,100
Returns Outwards 2,500
Administrative Expenses 72,500
Selling and distribution costs 126,430
Sales 4,001,450

## Additional information.

- Administrative Expenses are owing at 31 December 2021 by K7,500


## Required:

(i) Prepare the Manufacturing Account of Chipo Ltd for the year ended 31

December 2021.
(ii) Prepare the Statement of Profit or Loss of Chipo Ltd for the year ended 31

December 2021.
(b) Moses Zulu is a Sole trader who does not operate a full double-entry system of bookkeeping, but the records he does keep are accurate and from them, the following figures have been extracted.

|  | 1 January 2021 | 31 December 2021 |
| :--- | :---: | :---: |
|  | K | K |
|  | 2,000 | 1,800 |
| Inventory | 3,750 | 4,900 |
| Trade Receivables | 6,400 | 7,450 |
| Trade Payables | 7,300 | 5,100 |
|  | 5,200 | 4,000 |

## Other transactions:

1. Cash received from Trade Receivables K31,950 after allowing discount of K500
2. Cash paid to Trade Payables K20,650 after a discount of K750
3. Administration Expenses paid K1,750
4. Wages paid K2,500 with K200 still owing at 31 December 2021.

## Required:

Prepare Moses Zulu's statement of Profit or Loss for the year ended 31 December 2021
(c) In relation to accounting for incomplete records:
(i) Explain the terms Mark-up and Margin
(ii) Henry Chata, a market stall owner at Kachulu market in Kabwe practices single entry accounting. On valentine's day, Chata, whose mark-up is $40 \%$ on cost made slaes of K175,000.

Calculate Henry Chata's profit for the day.

## QUESTION THREE

Shaka and Junza are in Partnership. They share Profits in the ratio of 70\% for Shaka and 30\% for Junza.

The following trial Balance was extracted on 31 December 2021.

## Trial Balance as at 31 December 2021

|  | $\begin{gathered} \text { Dr } \\ \text { K } \end{gathered}$ | $\begin{aligned} & \mathbf{C r} \\ & \mathbf{K} \end{aligned}$ |
| :---: | :---: | :---: |
| Sales |  | 902,000 |
| Purchases | 683,400 |  |
| Inventory at 1 January 2021 | 192,050 |  |
| Office equipment at cost | 46,000 |  |
| Accumulated Depreciation on equipment |  | 18,000 |
| Motor vehicles at cost | 107,000 |  |
| Accumulated Depreciation on motor vehicles |  | 64,000 |
| Trade receivables | 209,700 |  |
| Trade payables |  | 161,080 |
| Bank | 10,590 |  |
| Cash | 1,585 |  |
| Salaries | 137,000 |  |
| Office expenses | 10,650 |  |
| Discount allowed | 1,560 |  |
| Current accounts at 1 January 2021: |  |  |
| Shaka |  | 36,910 |
| Junza |  | 35,045 |
| Capital Accounts: Shaka |  | 250,000 |
| Junza |  | 100,000 |
| Drawings: Shaka | 87,500 |  |
| Junza | 80,000 |  |
|  | 1,567,035 | $\underline{1,567,035}$ |

## Additional Information:

(i) Inventory at 31 December 2021 was K206,560.
(ii) It is the business policy to provide a full year's depreciation in the year of acquisition and none in the year of disposal. A motor vehicle with original cost of K7,000 was disposed of at $K 5,000$. The accumulated depreciation allowance on the sold vehicle was $\mathrm{K} 3,000$. The disposal is yet to be recorded in the books of accounts. Motor vehicles are depreciated at $25 \%$ of cost while office equipment is depreciated at $20 \%$ using reducing balance method.
(iii) Accrue office expenses by K1,200 on 31 December 2021.
(iv) Charge interest on capitals at $5 \%$ per annum.
(v) Interest on drawings charged was: Shaka K1,500 and Junza K1,000.

## Required:

(a) Prepare a statement of Profit or Loss and Appropriation account for the year ended 31 December 2021.
(b) Prepare current accounts for the partnership.
(3 marks)
(c) Prepare a statement of Financial Position as at 31 December 2021.
(7 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

(a) Ditta is a car manufacturing company that was established 40 years ago by two brothers, Zimba and Wezi. The company has been manufacturing manual cars which are sold mainly in Africa where demand has been huge. For the past ten years, the demand for manual cars has deceased as customers are now looking for electric cars. The company's sales have been affected by this trend leading to financial losses. The new Chief Financial Officer advised management to purchase new technological machinery that will allow the company to manufacture electric cars. He further stated that if new machinery was not purchased, the company's going concern status would be affected.

## Required:

(i) Distinguish between capital and revenue expenditure giving an example in each.
(ii) Explain the going concern concept and state how it can be applied to Ditta Company.
(b) Ditta Ltd Company's financial year ends on 31 December. The information below shows details relating to the acquisitions of Equipment :

Equipment
Equipment A
Equipment B
Equipment C
Equipment D

Date purchased
1 July 2019
30 April 2020
30 September 2020
1 March 2021

Cost
K1,300,000
K1,800,000
K2,000,000
K1,500,000

On 31 May 2021 Ditta Ltd company sold Equipment A which was bought on 1 July 2019 for K1,200,000 by cheque. The company charges depreciation at 20\% per annum using reducing balance method.

Note : You must provide for depreciation on the basis of one month's ownership.

## Required:

(i) Prepare equipment account for the years ended 31 December 2019, 2020 and 2021.
(ii) Prepare equipment allowance for depreciation account for the years ended 31 December 2019, 2020 and 2021.
( $41 / 2$ marks)
(iii) Prepare a disposal account
(2 marks)
(iv) Prepare a statement of profit or loss account (extract) for the years ended 2019, 2020 and 2021.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FIVE

Kowa Limited prepares its financial statements to 30 September each year. On 30 September, 2022 its trial balance was as follows:

|  |  | K |
| :--- | ---: | ---: |
| Plant and machinery at cost | 750,000 |  |
| Acc: depreciation at 1 October, 2021 |  | 168,000 |
| Office equipment at cost | 270,000 |  |
| Acc: depreciation at 1 October, 2021 |  | 90,000 |
| Inventories at 1 October, 2021 | 69,000 |  |
| Purchases and sales | 48,000 | $1,128,000$ |
| Returns inwards and outwards | 72,000 | 36,000 |
| Selling expenses | 48,000 |  |
| Heat and light | 84,000 |  |
| Wages and salaries | 30,000 |  |
| Director's fees | 36,000 |  |
| Printing and stationery | 36,000 |  |
| Telephone | 24,000 |  |
| Rent and insurance | 210,000 | 198,000 |
| Trade receivables and payables | 30,000 | 24,000 |
| Allowance for receivables at 31 October 2021 | 6,000 |  |
| Bank |  | 600,000 |
| Petty cash |  | 72,000 |
| Ordinary shares of K0.50 each | $\underline{204,000}$ |  |
| Share premium account | $\underline{2,520,000}$ | $\underline{2,520,000}$ |
| Retained earnings at 1 October 2021 |  |  |

The following additional information was available at 30 September, 2022.
(i) Closing inventories for resale
(ii) Prepayments: Telephone Insurance
(iii) Accruals: Wages and salaries Income tax

K318,000
K6,000
K6,000
K9,000
K6,000
(iv) Irrecoverable receivables to be written off amounted to K18,000.
(v) Allowance for irrecoverable receivables to be amended to 5\% of receivables, after writing off irrecoverable receivables.
(vi) Depreciation of non-current assets is to be calculated as follows:

- Plant and machinery $10 \%$ on cost.
- Office equipment $25 \%$ reducing balance at the end of the year.
(vii) An accrual of K6, 000 for income tax is to made.


## Required:

Prepare Kowa Limited's -
(a) Statement of profit or loss for the year ended 30 September, 2022.
(b) Statement of financial position as at 30 September, 2022.

## QUESTION SIX

Mr. Besa, a new Cashier of GMK Company, initially prepared a trial balance which balanced and presented it to the Accountant. However, upon investigation the Accountant discovered that there were some errors. The Accountant told Mr. Besa to redo the work quickly as the information was required to help in the preparation of the financial statements. Mr. Besa did not understand why despite balancing there were still some errors in the trial balance.

The second trial balance that Besa prepared for the year ended 31 December 2022 had a problem too as it failed to balance with a shortage on the debit side of K165,000. A suspense account was opened for the difference.

Upon investigations, the following errors were revealed:
(i) The purchases returns journal was overcast by K20,000
(ii) A sale of goods on credit to H Chanda of K4,200,000 was wrongly debited to the personal account of H Chunda in the receivable ledger.
(iii) A purchase of goods by cheque of K180,000 was completely omitted from the purchases account
(iv) A receipt for sales commission of K30,000 was omitted in the nominal ledger
(v) A payment for wages and salaries by cheque of $\mathrm{K} 200,000$ was credited to wages and salaries account in the nominal ledger and debited to the bank account in the cash book.
(vi) A payment for rent by cash of K50,000 was entered on both sides as K70,000
(vii) Discount received from suppliers was under cast by K10,000
(viii) A purchase of goods on credit of K40,000, from a supplier, was correctly entered in the purchases account but wrongly entered in the payable's account as K45,000.

## Required:

(a) Explain six (6) errors that cannot be disclosed by the trial balance.
(b) Prepare a journal proper to correct the above errors. Narrations are not required. (8 marks)
(c) Prepare a suspense account to clear-off the above errors.
(6 marks)
[Total: 20 Marks]

## END OF PAPER

## DA 1: FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SOLUTION TWO

## (a)(i) Chipo Ltd's

Manufacturing Account for the year ended 31 December 2021

| Cost of Raw Materials - opening Inventory | K | K |
| :---: | :---: | :---: |
|  | 55,000 |  |
| Purchases (1,280,000-2,500) | 1,277,500 |  |
|  | 1,332,500 |  |
| Closing Inventory | $(85,000)$ | 1,247,500 |
| Direct Expenses: Manufacturing wages | 1,015,400 |  |
| Royalties | 20,000 |  |
| Factory fuel and Power | 455,000 | 1,490,400 |
| Prime cost |  | 2,737,900 |
| Production overheads: |  |  |
| Factory supervisors wages | 66,625 |  |
| Factory heat and Light | 22,500 |  |
| Factory Rent | 15,000 | 104,125 |
|  |  | 2,842,025 |
| Adjust for Work-In-Progress. |  |  |
| Opening Work-In-Progress | 80,000 |  |
| Closing Work-In-Progress | $(90,000)$ | $(10,000)$ |
| Cost of Production |  | 2,832,025 |

(ii) Chipo Ltd's

Statement of Profit or Loss for the year ended 31 December 2021.

| Sales (4,001,450-2,100) | K | $\begin{gathered} \hline \mathrm{K} \\ 3,999,350 \end{gathered}$ |
| :---: | :---: | :---: |
| Opening Inventory | 100,450 |  |
| Cost of Production | 2,832025 |  |
|  | 2,932,475 |  |
| less Closing Inventory | (90,200) | $(2,842,275)$ |
| Gross Profit |  | 1,157,075 |
| less Administrative Expenses ( $72,500+7,500)$ | 80,000 |  |
| Selling and distribution | 126,430 | $(206,430)$ |
| Net Profit |  | 950,645 |

(b) Moses Zulu's

Statement of Profit or Loss for the year ended 31 December 2021.

|  | K | K |
| :---: | :---: | :---: |
| Sales ( $5,100+500+31,950-7,300)$ |  | 30,250 |
| Opening Inventory | 6,400 |  |
| Purchases (4,000 + 750 + 20,650-5,200) | 20,200 |  |
|  | 26,600 |  |
| less Closing Inventory | $(7,450)$ | $(19,150)$ |
| Gross Profit |  | 11,100 |
| Discount Received |  | 750 |
|  |  | 11,850 |
| less Administrative Expenses | 1,750 |  |
| Depreciation (2,000-1,800) | 200 |  |
| Wages ( $2,500+200$ ) | 2,700 |  |
| Discount allowed | 500 | $(5,150)$ |
| Net Profit |  | 6,700 |

(c) (i) Mark-up is profit as a percentage of cost while margin is profit as a percentage on sales.
(ii) Mark-up is $40 \div 100$; so margin is equal to $40 \div 140$ and hence Chata's profit is $40 \div 140 \times \mathrm{K} 175,000=\mathrm{K} 50,000$

## SOLUTION THREE

(a) Shaka and Junza's

Statement of Profit or Loss and Appropriation Account for year ended 31 December 2021

|  | K | K |
| :---: | :---: | :---: |
| Sales |  | 902000 |
| Opening Inventory | 192050 |  |
| Purchases | 683400 |  |
|  | 875450 |  |
| Less closing inventory | $(206560)$ | (668 890) |
| Gross profit |  | 233110 |
| Other Income- Profit on Disposal (5000-4 000) |  | 1000 |
|  |  | 234110 |
| Less Depreciation (wk1) | 30600 |  |
| Salaries | 137000 |  |
| Office expenses (10 650 + 1 200) | 11850 |  |
| Discount Allowed. | 1560 | (181 010) |
| Net Profit |  | 53100 |
| Add interest on drawings - Shaka | 1500 |  |
| Junza | 1000 | 2500 |
|  |  | 55600 |
| Less Interest on capital - Shaka | 12500 |  |
| Junza | 5000 | (17 500) |
|  |  | 38100 |
| Share of Profits - Shaka 70\% | 26670 |  |
| Junza 30\% | 11430 | (38 100) |

(b)

| Current Accounts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| interest on drawing | Shaka K 1500 | Junza K 1000 | Balances b/f | $\begin{gathered} \text { Shaka } \\ \mathbf{K} \\ 36910 \end{gathered}$ | $\begin{gathered} \text { Junza } \\ \mathbf{K} \\ 35 \end{gathered}$ |
|  |  |  |  |  | 045 |
| Drawings | 87500 | 80000 | Interest on capitals | 12500 | 5000 |
|  |  |  | Share of profits | 26670 | 11 |
|  |  |  |  |  | 430 |
|  |  |  | Balances c/d | 12920 | $\underline{29}$ |
|  |  |  |  |  | 525 |
|  | $\underline{89000}$ | $\underline{81000}$ |  | $\underline{89000}$ | $\underline{81}$ |
|  |  |  |  |  | $\underline{000}$ |

(c) Shaka and Junza's

Statement of Financial Position as at 31 December 2021

Non-current Assets:
Office equipment (46 000-23 600)

K
K

22400

## Current Assets:

Inventory
206560
Trade Receivables
209700
Bank (10 $590+5000$ )
Cash
15590
1585
Financed by:

| Capitals - Shaka | 250000 |  |
| :--- | ---: | ---: |
| Junza | $\underline{100 ~ 000}$ | 350000 |
| Current Accounts - Shaka | $(12920)$ |  |
|  | Junza | $\underline{(29525)}$ |

Current Liabilities:
Trade Payables 161080
Office expenses owing $\quad 1200$
162280 469835

## Workings

1. Depreciation Expense

Motor vehicles $25 \% \times(107000-7000)=25000$ Office equipment $20 \% \times(46000-18000)=\frac{5600}{30600}$ 30600
2. Interest on capitals: Shaka $5 \% \times 250000=12500$ $5 \% \times 100000=5000$

## SOLUTION FOUR

(a) Distinction between capital and revenue expenditure with examples

## Capital expenditure

This is expenditure which is incurred in the purchase of non-current assets or improvement in their earning capacity.

Purchase of technological machinery in the case of Ditta Company will be classified as capital expenditure. Capital expenditure on the non-current asset is charged to the statement of financial position while depreciation on the assets is treated as an expense and charged to the statement of profit or loss.

## Revenue expenditure

This is expenditure which is incurred in the day to day running of the business. It can also be for the purpose of maintain the existing earning capacity of the non-current asset

Example of such expenditure could be expenditure on fuel for delivery van.
(b) Explanation of going concern concept and how it can be applied to Ditta's Company.

## Going concern concept

This is a concept which assumes that once a business has been formed, it will continue to be in existence for a foreseeable future. This is why non-current assets are shown in the statement of financial position at cost and not net realizable value.

In the case of Ditta Company, the company has lost its market for manual cars because of demand for electric cars. This has caused the company to be making losses. If this continues, the company will no longer be a going concern.

## (c) Equipment Calculations

i.

| Dr |  | Equipment a/c |  |  | Cr |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 |  | K'000 | 2019 |  | K'000 |
| 1/7 Bank |  | 1,300 | 31/12 Balance | c/d | 1,300 |
|  |  | 1,300 |  |  | 1,300 |
| 2020 |  |  | 2020 |  |  |
| 1/1 Balance | b/d | 1, 300 |  |  |  |
| 30/4 Bank |  | 1, 800 |  |  |  |
| 30/9 Bank |  | 2,000 | 31/12 Balance | c/d | 5,100 |
|  |  | 5,100 |  |  | 5,100 |
| 2021 |  |  | 2021 |  |  |
| 1/1 Balance | b/d | 5,100 | 31/5 Disposal |  | 1,300 |


iv. Statement of profit or loss account (extract) for the year ending:

| 2019 | 2020 | 2021 |
| :--- | :---: | :---: |
| K'000 $^{\prime} 000$ | K $^{\prime} 000$ | K' $^{\prime} 000$ |

Gross profit
Profit on sale of equipment 342
Less expense:
$\begin{array}{llll}\text { Depreciation } & 130 & 574 & 860\end{array}$
Working on depreciations

1. Year 12019

K'000
K'000
Equipment A
1 July -31 Dec $\quad$ Depreciation $=1,300 \times 0.2 \times 7 / 12=$ 130
2. Year 22020

Equipment A
1 Jan - 31 Dec $\quad$ Depreciation $=1,300-130 \times 0.2 \times 12 / 12=234$

## Equipment B

30 April -31 Dec $\quad$ Depreciation $=1,800 \times 0.2 \times 8 / 12=240$
Equipment C
30 Sep -31 Dec $\quad$ Depreciation $=2,000 \times 0.2 \times 3 / 12=100$
3. Year $\mathbf{3} 2021$

Equipment A
1 Jan - 31 May $\quad$ Dep. Before disposal $=1,300-364 \times 0.2 \times 5 / 12=78$

## Equipment B

1 Jan - 31 Dec $\quad$ Depreciation $=1,800-240 \times 0.2 \times 12 / 12=312$

## Equipment C

1 Jan - 31 Dec $\quad$ Depreciation $=1,200-100 \times 0.2 \times 12 / 12=220$
Equipment D
1 March -31 Dec Depreciation $=1,500 \times 0.2 \times 10 / 12=\underline{250}$ 860

## 4. Accumulated depreciation on disposed Equipment A

## SOLUTION FIVE

## (a) Kowa Limited

Income Statement for the year ended 30 September 2020

|  | K | K |
| :--- | ---: | ---: |
| Sales |  | 1128000 |
| Less: returns inwards |  | $\underline{(48000)}$ |
|  |  | 1080000 |
| Opening inventories | 69000 |  |
| Purchases | $(36000)$ |  |
| Returns outwards | $(\underline{318000)}$ |  |
| Closing inventories |  | $\underline{522000}$ |
| Cost of goods sold |  | 558000 |
| Gross Profit |  | 572400 |
| Decrease in allowance for receivables |  |  |

## Less Expense:

Selling expenses 72000
Heat and Lighting 48000
Wages and salaries (84000 + 9000 ) 93000
Administrative expense(126 000-12 000) 114000
Irrecoverable receivables 18000
Income tax 6000
Depreciation - Plant and machinery 75000

- Office equipment $\underline{45000}$

Profit for the period
(b) Kowa Limited

Statement of Financial Position as at 30 September 2020

| Cost <br> K | Acc. depn' <br> K | NBV <br> K |
| :---: | :---: | :---: |
|  |  |  |
| 750000 | $(243000)$ | 507000 |
| 270000 | $\underline{(135000)}$ | $\underline{135000}$ |
| 1020000 | $\underline{378000}$ | 642000 |

## Current assets:

Inventories
318000
Receivables(210 000-18 000-9 600)

| Bank | 30000 |  |
| :---: | :---: | :---: |
| Prepaid Administrative expenses | 12000 |  |
| Petty cash | 6000 | 548400 |
|  |  | 1190400 |
| Equity and Liability: |  |  |
| Ordinary shares of K0.50 each |  | 600000 |
| Share premium account |  | 72000 |
| Retained earnings(204 000+101 400) |  | 305400 |
|  |  | 977400 |
| Current Liabilities: |  |  |
| Payables | 198000 |  |
| Accrued wages and salaries | 9000 |  |
| Income tax | 6000 | $\underline{213000}$ |
|  |  | 1190400 |

## SOLUTION SIX

(a) Explanation of six (6) errors not disclosed by the trial balance
i) Error of omission

This is a type of an error in which a transaction is completely omitted from the books of accounts, i.e. there is neither debit nor credit entry.
ii) Error of original entry

This is an error in which an incorrect figure is obtained from the source document and posted to the ledger accounts on both sides of the correct accounts.
iii) Error of principle

This type of an error is where the rule of accounting is violated by entering a transaction in the wrong class of account. For example capital expenditure is treated as revenue expenditure.
iv) Error of commission

This is a type of an error in which a correct amount is entered in a wrong account but the class of account is correct, e.g. an entry in Bwali's account is made instead of Bwalya's account.
v) Error of complete reversal

This is a type of an error in which the account to be debited is credited and the account which required to be credited is debited.
vi) Compensating errors

These are types of errors which cancel-out each other. Example, an account which has a debit entry is overcast with the same amount as an entry which has a credit side.

## vii) Errors of transposition

This is a type of an error in which incorrect digits are used to record transactions on the two sides of the accounts.
(b) GMK's Journal Proper

|  |  | Dr | Cr |
| :---: | :---: | :---: | :---: |
| (i) |  | K | K |
|  | Purchases returns | 20,000 |  |
|  | Suspense |  | 20,000 |
| (ii) | H Chanda | 4,200,000 |  |
|  | H Chunda |  | 4,200,000 |
| (iii) | Purchases | 180,000 |  |
|  | Suspense |  | 180,000 |
| (iv) | Suspense | 30,000 |  |
|  | Sales commission received |  | 30,000 |
| (v) | Wages and salaries | 400,000 |  |
|  | Bank |  | 400,000 |
| (vi) | Cash | 20,000 |  |
|  | Rent |  | 20,000 |
| (vii) | Suspense | 10,000 |  |
|  | Discount Received |  | 10,000 |
| (viii) | Payable | 5,000 |  |
|  | Suspense |  | 5,000 |


| (c) | Dr Suspense a/c |  |  | Cr |
| :---: | :---: | :---: | :---: | :---: |
|  |  | K |  | K |
|  | Trial balance difference | 165,000 | Purchases returns | 20,000 |
|  | Sales commission received | 30,000 | Purchases | 180,000 |
|  | Discount received | 10,000 | Payables | 5,000 |
|  |  | 205,000 |  | $\underline{\underline{205,000}}$ |

END OF SOLUTIONS


Zambia Institute of Chartered Accountants

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 22 MARCH 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: 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.
10. A mathematical standard formulae book MUST be provided to you. Request for one if not given by the Invigilators.
DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

## SECTION A - (Compulsory)

## Attempt all ten (10) multiple choice questions

## QUESTION ONE

Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.
1.1 A set of numerical data that is summarized in grouped data can be displayed into a diagram in which bar of groups are attached. The diagram is called;
A. Histogram.
B. Cumulative frequency curve
C. Bar chart.
D. stem and leaf plot.
(2 marks)
1.2 Tonny invested K1,000 at $8 \%$ interest compounded continuously. Find the amount accumulated at the end of seven (7) years.
A. K1,550.67
B. $\mathrm{K} 1,750.67$
C. K1,650.67
D. $\mathrm{K} 1,450.67$
1.3 On his first five (5) statistics tests, Daka received the following 73, 87, 93, 64 and 78. What test score must Daka earn on his sixth test so that his average (mean score) for all the six (6) tests will be 80 .
A. 80
B. 85
C. 90
D. 95
(2 marks)
1.4 The payoff table of three (3) types of fruits Mango, Banana and Guava is given in the table below:

| FRUIT |  |  |  |
| :---: | :---: | :---: | :---: |
| YEAR | MANGO | BANANA | GUAVA |
| 1 | 50 | 70 | 80 |
| 2 | 90 | 60 | 100 |
| 3 | 70 | 85 | 95 |

The fruit determined by Maximin process is:
A. Guava.
B. Mango.
C. Banana.
D. Orange.
(2 marks)
1.5 Compute the modal value for

| $\boldsymbol{x}$ | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{f}$ | 5 | 3 | 19 | 23 | 22 | 20 | 11 | 4 | 3 |

A. 170
B. 120
C. 140
D. 160
1.6 In correlation analysis, the correct range of the correlation coefficient is:
A. 0 and 1
B. -1 and 0
C. -1 and 1
D. Greater than 0
(2 marks)
1.7 Determine the simple interest received per annum from a K70,000 stock at 7\% rate.
A. K74,900
B. K65,100
C. K4,900
D. K78,000
(2 marks)
1.8 The cash flows of a simple project for two (2) years are given in the table below:

| YEAR | 1 | 2 |
| :--- | :--- | :--- |
| CASHFLOW | 70 | 50 |

The cost of the capital is $9 \%$ and initial cost of the project is K85.
The net present value (NPV) of the project is:
A. K64.22.
B. K21.31.
C. K42.09.
D. K106.31.
(2 marks)
1.9 Below you are given a summary output from a simple linear regression analysis from a sample of size 20, Sum of squares due to regression (SSR, explained variation) is 125, and Sum of squares total (SST, total variation) is 160 . The coefficient of determination is;
A. 0.35
B. 1.28
C. 0.78125
D. 0.28
1.10 A woman invested $\frac{1}{3}$ rd of the sum at $7 \%, \frac{1}{4}$ th at $8 \%$ and the remaining at $10 \%$ for one (1) year. If the annual interest is K408, then the investment is
A. K8,400
B. K5,000
C. K4,800
D. K4,896

## SECTION B

## Attempt any Four (4) questions out of five (5) in this section.

## QUESTION TWO

(a) A heavy machinery sales company investigates the value of depreciation ( $Y$ ) of a machine and its subsequent useful life $(X)$. The findings are shown in the table below:

| Useful life in years (X) | 12 | 13 | 15 | 19 | 20 | 21 | 25 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Depreciation Value(Y) in <br> K'000 | 8 | 10 | 20 | 16 | 35 | 45 | 60 | 80 |

## Required:

(i) Draw the scatter plot of the above data.
(ii) Fit the regression model $y=a+b x$.
(iii) Calculate the Pearson coefficient of correlation and interpret the result appropriately.
(b) A newly graduated college student has K5,000 invested at 8\% compounded interest per annum for four (4) years. Calculate the value of the investment at the end of four (4) years if investment is compound per month.

## QUESTION THREE

(a) Data were collected from a survey of 150 students in a college canteen. The daily expenditure on mid-day meals is summarised in the table below:

| Expenditure (K) | Frequency |
| :--- | :--- |
| $0.66-0.90$ | 11 |
| $0.91-1.15$ | 28 |
| $1.16-1.30$ | 38 |
| $1.31-1.45$ | 34 |
| $1.46-1.70$ | 27 |
| $1.71-2.00$ | 12 |

## Required:

(i) Draw a histogram to illustrate this information.
(ii) Calculate the mean value of the daily expenditure.
(iii) Calculate the standard deviation.
(b) A businessman invested K10,000 for six (6) years at 8\% per annum compounded semi-annually.
(i) Find the total investment value.
(ii) Compare the return on the investment when the interest is compounded annually to that when interst is compunded semi-annually.
(iii) Find the total value of investment when compounded Monthly and daily.
(3 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

(a) In a certain city the mean price of a quart of milk is 65 ngwee and the standard deviation is 10 ngwee. The average price of a package of bacon is K2.75 and the standard deviation is 20 ngwee. Assume a normal distribution for both items applies. If we pay K0.99 for a quart of milk and K3.20 for a package of bacon at 24-hour convenience store, which item between the two (2) is relatively more expensive using the $z$-score?
(b) Suppose the following data represent total revenues (in millions of constant 1996 Kwachas) by a car rental agency over the eleven (11) year period 1991-2001.

| 5.0 | 6.0 | 8.0 | 7.0 | 9.0 | 10.0 | 6.0 | 3.0 | 4.5 | 6.5 | 7.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Required:

Compute the five (5) year moving averages for this annual time series. (12 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FIVE

(a) Briefly explain the following:
(i) Compound interest
(2 marks)
(ii) Ordinary Annuity (2 marks)
(b) How much money would you need to deposit today at 9\% annual interest compounded monthly to have $\$ 12,000$ in the account after six (6) years.
(4 marks)
(c) MSN investment runs construction projects in Kitwe and Ndola cities. The cash flows of two (2) projects $A$ and $B$ are shown in the table below:

| YEAR | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :---: | :---: | :---: | :---: |
| A | 600 | 700 | 400 |
| B | 500 | 900 | 700 |

Suppose the initial cost of each project is K1,600 and the cost of the capital is $10 \%$.
Calculate the NPV of project $A$ and project $B$, hence determine which project is a better option.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) Mr. Vena Mwila deposited K750 in a bank for five (5) years and obtained amount of K1,114.425.

## Required:

Calculate the rate when interest is compounded quarterly.
(b) The distribution weight $(\mathrm{kg})$ of workers is given in the table below:

| WEIGHT(kg) | NUMBER OF WORKERS |
| :---: | :---: |
| 50 and under 60 | 3 |
| 60 and under 70 | 8 |
| 70 and under 80 | 15 |
| 80 and under 90 | 6 |
| 90 and under 100 | 4 |

## Required:

Calculate:
(i) Mean.
(ii) Standard deviation.
(iii) Mode.

## END OF PAPER

## DA 2: QUANTITATIVE ANALYSIS SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SOLUTION TWO

a)

(b)

| $x$ | $y$ | $x^{2}$ | $x y$ | $y^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| 12 | 8 | 144 | 96 | 64 |
| 13 | 10 | 169 | 130 | 100 |
| 15 | 20 | 225 | 300 | 400 |
| 19 | 16 | 361 | 304 | 256 |
| 20 | 35 | 400 | 700 | 1225 |
| 21 | 45 | 441 | 945 | 2025 |
| 25 | 60 | 625 | 1500 | 3600 |
| 30 | 80 | 900 | 2400 | 6400 |
| $\sum x=155$ | $\sum y=274$ | $\sum x^{2}=3265$ | $\sum x y=6375$ | $\sum y^{2}=14070$ |

$$
\begin{aligned}
& b=\frac{\sum x y-\frac{\sum x \sum y}{n}}{\sum x^{2}-\frac{\left(\sum x\right)^{2}}{n}} \\
& =\frac{6375-\frac{(155)(274)}{8}}{3265-\frac{(155)^{2}}{8}} \\
& =\frac{1066.25}{261.875} \\
& \approx 4.07 \\
& a=\bar{y}-b \bar{x}
\end{aligned}
$$

$$
\begin{aligned}
& =\frac{274}{8}-(4.07)\left(\frac{155}{8}\right) \\
& \approx-44.61
\end{aligned}
$$

Therefore the required answer is $\hat{y}=-44.61+4.07 x$
b) Correlation coefficient $r$ is

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

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

d).

$$
\begin{aligned}
& P_{T}=P\left(1+\frac{r}{n}\right)^{n t} \\
= & 5000\left(1+\frac{0.08}{12}\right)^{4(12)} \\
= & 6878.33
\end{aligned}
$$

## SOLUTION THREE

(a)

| Class Limit | Xi | ni | niXi | $\mathrm{ni}(\mathrm{Xi}-\bar{x})^{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| $0.66-0.9$ | 0.78 | 11 | 8.58 | 3.055019 |
| $0.91-1.15$ | 1.03 | 28 | 28.84 | 2.148412 |
| $1.16-1.3$ | 1.23 | 38 | 46.74 | 0.225302 |
| $1.31-1.45$ | 1.38 | 34 | 46.92 | 0.181186 |
| $1.46-1.7$ | 1.58 | 27 | 42.66 | 2.012283 |
| $1.71-2$ | 1.855 | 12 | 22.26 | 3.603648 |
| Totals |  |  | $\mathbf{1 5 0}$ | $\mathbf{1 9 6}$ |
| $\mathbf{1 1 . 2 2 5 8 5}$ |  |  |  |  |



Mean:

$$
\bar{X}=\frac{1}{\sum f} \sum f_{i} x_{i}=\frac{196}{150}=1.31
$$

Standard deviation:

$$
\begin{gathered}
s=\sqrt{\frac{\sum f_{i}\left(x_{i}-\bar{x}\right)^{2}}{\sum f-1}} \\
s=\sqrt{\frac{11.22585}{150-1}}=0.27
\end{gathered}
$$

(b) $\quad P_{0}=K 10000 \quad r=\frac{8}{100}=0.08 \quad t=6 \quad$ semi annually implies $m=2$

$$
\begin{aligned}
P_{t} & =P_{0}\left(1+\frac{r}{m}\right)^{m t} \\
P_{5} & =10000\left(1+\frac{0.08}{2}\right)^{(2)(6)} \\
& =10000(1.04)^{12} \\
& =K 116010.22
\end{aligned}
$$

ii. annually;

$$
\begin{aligned}
& P_{t}=P_{0}(1+r)^{t} \\
& =10000(1+0.08)^{6} \\
& =K 15868.74
\end{aligned}
$$

The gain is $K 116010.22-K 15868.74=K 141.58$ over when compounded annually.
iii. Monthly $P_{t}=10000\left(1+\frac{0.08}{12}\right)^{(12)(6)}=K 16135.02$

Daily $P_{t}=10000\left(1+\frac{0.08}{365}\right)^{(365)(6)}=K 16159.09$

## SOLUTION FOUR

(a)

Milk

$$
\mu=65, \quad \sigma=10
$$

Standardize the value for a quart of milk $X=0.99$

$$
Z=\frac{X-\mu}{\sigma}=\frac{0.99-0.65}{10}=3.4
$$

Bacon

$$
\mu=K 2.75, \quad \sigma=0.20
$$

Standardize the value for a quart of milk $X=3.20$

$$
Z=\frac{X-\mu}{\sigma}=\frac{3.20-2.75}{10}=2.25
$$

Our Z - score shows us that we are over paying quite a bit more for the milk than we are for the bacon.
(b)

|  | Five moving total | Five moving average |
| :---: | :---: | :---: |
| $5+6+8+7+9$ | 35 | 7 |
| $6+8+7+9+10$ | 40 | 8 |
| $8+7+9+10+6$ | 40 | 8 |
| $7+9+10+6+3$ | 35 | 7 |
| $9+10+6+3+4.5$ | 32.5 | 6.5 |
| $10+6+3+4.5+6.5$ | 30 | 6 |
| $6+3+4.5+6.5+7.5$ | 27.7 | 5.5 |


| Total Revenues | 5 - Year moving averages |
| :---: | :---: |
| 5.0 |  |
| 6.0 | 7.0 |
| 8.0 | 8.0 |
| 7.0 | 8.0 |
| 9.0 | 7.0 |
| 10.0 | 6.5 |
| 6.0 | 6.0 |
| 3.0 | 5.5 |
| 4.5 |  |
| 6.5 |  |
| 7.5 |  |

## SOLUTION FIVE

a) i) Compound interest: Compound interest (or compounding interest) is the interest on a loan or deposit calculated based on both the initial principal and the accumulated interest from previous periods.
(ii) Annuity: An annuity is a contract between you and an insurance company in which you make a lump-sum payment or series of payments and, in return, receive regular disbursements, beginning either immediately or at some point in the future.
b)

$$
\begin{gathered}
P_{T}=P\left(1+\frac{r}{n}\right)^{n t} \\
12000=P\left(1+\frac{0.09}{12}\right)^{5(12)} \\
12000=1.5657 P \\
P=\frac{12000}{1.5657}=7664.30
\end{gathered}
$$

c)

## PROJECT A

| YEAR | CASH | DF | C(DF) | PV |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 600 | $1.1^{-1}=0.9090$ | $600(0.9091)$ | 636.37 |
| $\mathbf{2}$ | 700 | $1.1^{-2}=0.8264$ | $700(0.8264)$ | 661.12 |
| $\mathbf{3}$ | 400 | $1.1^{-3}=0.7513$ | $400(0.7513)$ | 300.52 |
| TOTAL |  |  |  | 1598.01 |

## $N P V=1598.01-1600=K-1.99$

| YEAR | CASH | DF | C(DF) | PV |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 500 | $1.1^{-1}=0.9090$ | $500(0.9091)$ | 454.55 |


| $\mathbf{2}$ | 900 | $1.1^{-2}=0.8264$ | $900(0.8264)$ | 743.76 |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3}$ | 700 | $1.1^{-3}=0.7513$ | $700(0.7513)$ | 525.91 |
| TOTAL |  |  |  | 1724.22 |

$N P V=1724.22-1600=K 124.22$
Project $B$ is optimum

## SOLUTION SIX

$$
\begin{aligned}
& \text { (a) } \\
& P=K 750 \\
& \mathrm{n}=5 \quad \mathrm{~m}=4 \\
& A=1114.425 \\
& \mathrm{P}\left(1+\frac{i}{m}\right)^{\mathrm{mn}}=\mathrm{A} \\
& 750\left(1+\frac{i}{4}\right)^{4(5)}=1114.425 \\
& 750\left(1+\frac{i}{4}\right)^{20}=1114.25 \\
& \left(1+\frac{i}{4}\right)^{20}=\frac{1114.425}{750} \\
& \left(1+\frac{i}{4}\right)^{20}=1.4859 \\
& \sqrt[20]{\left(1+\frac{i}{4}\right)^{20}}=\sqrt[20]{1.4859} \\
& 1+\frac{i}{4}=1.01999 \\
& 1+\frac{i}{4}=1.02 \\
& \frac{i}{4}=1.02-1 . \\
& \frac{i}{4}=0.02 \\
& \text { i } \quad=0.02 \times 4=0.08 \\
& \frac{R}{100}=0.08 \\
& R=0.08 \times 100=8 \% \\
& \text { (b) (i) } \\
& \text { (ii) } \sigma=\sqrt{\frac{\Sigma f x^{2}}{\sum f}-\bar{x}^{2}}=\sqrt{\frac{20670}{36}-75^{2}}=\sqrt{5741.67-5625} \\
& =\quad \sqrt{116.67} \\
& =10.8 \text {. }
\end{aligned}
$$

$$
\text { (iii) } \quad \begin{aligned}
\text { Mode } & =\mathrm{LL}+\left(\frac{f_{1}-f_{0}}{2 f_{1-} f_{2}-f_{0}}\right) \mathrm{c} \\
& =70+\left(\frac{15-8}{2(15)-6-8}\right) 10 \\
& =70+\left(\frac{7}{30-14}\right) 10 \\
& =70+\frac{7}{16} \times 10 \\
& =70+\frac{35}{8} \\
& =70+4.375 . \\
& =74.38 .
\end{aligned}
$$

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 3: BUSINESS ECONOMICS
TUESDAY 21 MARCH 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.
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.
1.1 Economists assume that individuals:
A. Prefer to live in a society that values fairness above all else.
B. Are rational and respond to incentives.
C. Behave in unpredictable ways.
D. Will never take actions to help others.
(2 marks)
1.2 Assuming that dry cleaning is a normal good, an increase in consumer income, other things being equal, will $\qquad$ .
A. increase the demand for dry cleaning
B. decrease the demand for dry cleaning
C. increase the supply of dry cleaning
D. decrease the supply of dry cleaning demanded
1.3 A shoe company currently sells its shoes at K25 and each year, 2 million pairs of shoes are purchased. It is estimated that the PED is -2 . What is the likely effect on total revenue if shoe prices were reduced to K20?
A. + K3 million
B. -K 3 million
C. + K6 million
D. -K6 million
(2 marks)
1.4 A firm has a total fixed costs of K 3000 and can produce 2 units per hour. Its total variable costs are K2000 for 1 unit and K3000 for 2 units. Which of the following cost will fall the least when the second unit is produced?
A. Average fixed cost
B. Average total cost
C. Average variable cost
D. Marginal cost
1.5 Which of the following is likely to increase monopoly power?
A. Barriers to entry fall, product differentiation increases
B. Barriers to entry rise, production differentiation increases
C. Barriers to entry fall. Product differentiation falls
D. Barriers to entry rise, product differentiation falls
1.6 Which statement does not apply to the use of expansionary monetary policy?
A. Policies that aim to constrain economic activity to control inflation
B. Policies that make borrowing and investing more attractive
C. Policies that shift the aggregate demand curve to the right
D. Policies that aim to close deflationary gap
(2 marks)
1.7 A country currently uses flexible exchange rate why might a government change to a fixed exchange rate?
A. To increase the stock of foreign currency reserves
B. To make the terms of trade more favorable
C. To raise the level of certainty for businesses
D. To use the value of the exchange rate to reduce domestic prices.
1.8 What will result in the short run from rising unemployment in an economy
A. The Government's budget deficit will fall
B. Potential output will fall
C. Any existing inflationary pressure will be reduced
D. The economy's production possibility curve will move inwards
1.9 The position of the long run aggregate supply curve for an economy depends on:
A. Size and quantity of the labour force and capital stock
B. Size of budget deficit
C. Rate of inflation
D. Size of trade deficit
1.10 Which policy is not likely to reduce a deficit on a current account of a country's balance of payments?
A. An increase in expenditure promoting locally produced goods
B. An increase in the quota on cheap imports
C. An increase in subsidies to exporting industries
D. An increase in the restriction on foreign exchange.
(2 marks)

## SECTION B:

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

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

 questions.
## QUESTION TWO

The table below shows the output of mealie meal bags produced at Tiyeseko Milling Limited:

| Units of <br> Capital | Number of <br> workers | Total Product <br> (TP in ton) | Average <br> product(AP) | Marginal <br> Product(MP) |
| :---: | :--- | :--- | :--- | :--- |
| 20 | 0 | 0 |  |  |
| 20 | 1 | 16 |  |  |
| 20 | 2 | 44 |  |  |
| 20 | 3 | 78 |  |  |
| 20 | 4 | 113 |  |  |
| 20 | 5 | 145 |  |  |
| 20 | 6 | 171 |  |  |
| 20 | 7 | 190 |  |  |
| 20 | 8 | 200 |  |  |
| 20 | 9 | 200 |  |  |

## Required:

(a) Calculate and complete the table for Marginal product (MP) and Average Product (AP) (10 marks)
(b) Indicate where the highest average product is with the corresponding units of labour employed.
(2 marks)
(c) Explain what happens to marginal product once it has reached its maximum.
(2 marks)
(d) With the help of the data above, explain the Law of Diminishing Returns (6 marks)
[Total: 20 Marks]

## QUESTION THREE

(a) Differentiate between between supernormal profit and normal profit? (4 marks)
(b) Compare the two (2) market structure of monopolistic competition and oligopoly in terms of (i) market size (ii) product type (iii) price used and (iv) demand curve.
(8 marks)
(c) Explain the concept of economic liberalization?
(d) Distinguish between short run and long run in economic theory?

## QUESTION FOUR

(a) Country X has experienced a drought which has affected the production of maize. The cross-price elasticity between maize and rice is 0.42 . With the help of a diagram, show the effect of the drought on the demand for rice. Indicate clearly the new equilibrium price and quantity traded?
(b) Define cross-elasticity of demand and comment on its values in (a) above?
(6 marks)
(c) A monopolist is a single firm which dominates the market. Explain any four (4) advantages of monopolies as an industry structure
[Total: $\mathbf{2 0}$ Marks]

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

## QUESTION FIVE

(a) In a two (2) sector economy named "Chambia" the marginal propensity to save (MPS) is 0.2 , investment (I) is K500billion and income $(\mathrm{Y})$ is K250billion.
(i) Assuming investment remains constant what is the equilibrium level of income and what is the value of the multiplier?
(ii) If the investment were to increase by K50 billion, what would be the new equilibrium level of income?
(2 marks)
(b) Explain any four (4) disadvantages of direct taxes
(c) Outline any three (3) functions of commercial banks
(6 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) In line with national income accounting, explain the following macroeconomic concepts:
(i) Underground economy
(ii) Intermediate goods (2 marks)
(iii) National income approach of calculating GDP
(2 marks)
(b) Assume that an economy's marginal propensity to consume (MPC) is 0.75 and there is a recessionary gap of K100million. How much must government spending increase to eliminate the gap?
(c) Outline the four (4) phases of a business cycle
(8 marks)
[Total: 20 Marks]

## QUESTION SEVEN

(a) Differentiate between balance of payment and balance of trade?
(b) Briefly explain any four (4) factors that drive globalization
(c) Compute the change in income if the marginal propensity to consume (MPC) is 0.5 and the change in consumption K500.
(d) Discuss any three (3) reasons why a government can intervene to control the exchange rates
(6 marks)
[Total : $\mathbf{2 0}$ Marks]

## END OF PAPER

## DA3 BUSINESS ECONOMICS SUGGESTED SOLUTIONS

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

## SOLUTION TWO

a) The table below shows the output of mealie meal bags produced at Tiyeseko Milling Limited:

| Units of <br> Capital | Number of <br> workers | Total Product <br> (TP in ton) | Average <br> product(AP) | Marginal <br> Product(MP) |
| :---: | :--- | :--- | :--- | :--- |
| 20 | 0 | 0 | - | - |
| 20 | 1 | 16 | 16.00 | 16 |
| 20 | 2 | 44 | 22.00 | 28 |
| 20 | 3 | 78 | 26.00 | 34 |
| 20 | 4 | 113 | 28.25 | 35 |
| 20 | 5 | 145 | 29.00 | 32 |
| 20 | 6 | 171 | 28.50 | 26 |
| 20 | 7 | 190 | 27.14 | 19 |
| 20 | 8 | 200 | 10.00 | 10 |
| 20 | 9 | 200 | 10.00 | 0 |

b) The highest average product (AP) is $\mathbf{2 9}$ tons and it is reached when $\mathbf{5}$ workers are employed
c) Once the maximum marginal product is reached, it starts declining. The marginal product of 9 workers is zero. The marginal products of additional workers after 9 are negative implying that their employment causes total product to decline
d) The Law of Diminishing returns states that as more of a variable factor is combined with one or more fixed factor in a production process, a point will eventually be reached where first the Marginal Product, then the Average Product and finally the Total Product start to decline

## SOLUTION THREE

(a) Normal profit is the profit that is enough to keep the entrepreneur going, to prevent him from investing elsewhere.
Supernormal profit is the profit that is above the normal profit, it is the bonus profit being in the right industry.
(b) Characteristics

|  | Monopolistic <br> competition | Oligopoly |
| :--- | :--- | :--- |
| Market <br> size | Many firms <br> Many buyers | Few firms <br> Many buyers |
| products | differentiated | Differentiated |
| Price <br> competition | Price competition | Non-price competition |
| Demand curve | Downward sloping | Kinked demand curve |

(c) Liberalization is used to explain the process of removing the excess regulation and protection of markets in order to stimulate competition, improve efficiency and achieve economic growth.
(d) Short run is a period of time over which the input of at least one factor of production is fixed.
Long run is a period of time during which all factor of production are variable

## SOLUTION FOUR

(a) Maize and rice are substitute goods. The drought in the cultivation of maize will force consumers to buy rice. The supply curve for rice will shift to the right from its original position.


PO: original equilibrium price of rice $\quad$ Qo: original equilibrium quantity of rice
P1: new equilibrium price of rice
Q1: new equilibrium quantity of rice
Effects: (i) supply curve of rice has shifted to the right from So to S1
(i) New equilibrium price for rice has dropped from Po to P1
(ii) New equilibrium quantity has increased from Qo to Q1
(b) Formula for cross-elasticity of demand XED $=\frac{\% \text { change in demand for good } A}{\% \text { change in price for good } B}$

Cross-elasticity of demand is the degree of responsiveness of demand for a product A to changes in price of another product $B$

- A positive value indicates the goods are substitutes. Therefore, maize and rice are substitutes in consumption.
- A negative value indicates the goods are complements
(c) Advantages of a monopoly market
(i) Monopolies may achieve economies of scale and lower unit costs of production will push into lower prices
(ii) Monopolies can afford to spend more on R\&D and are able to exploit innovation and technological progress much better than small firms
(iii) Monopolies may find it easier than small firms to raise funds on the capital markets and therefore financing new products leading to economic growth
(iv) Monopolies can stimulate competition in the short run. In the process rival companies will end up with new products of better design, better quality and low prices.


## SOLUTION FIVE

a) Equilibrium national income
i) In equilibrium $S=I$, so that if investment remains constant at K500billion, the economy will settle in equilibrium where $S=$ K500billion.
If MPS $=0.2$, then MPC $=1-0.2=0.8$
The Multiplier $=1 / 1-$ MPC or $1 /$ MPS $=1 / 1-0.8$ or $1 / 0.2=5$
ii) Increase in income = Multiplier X Increase in Investment

$$
\begin{aligned}
& =5 \text { X K50billion } \\
& =\text { K250billion }
\end{aligned}
$$

New level of Income $=$ K250billion + K250billion $=$ K500billion
b) A direct tax is tax on income or profit or wealth, it is paid directly to the revenue authorities by taxpayers. Examples include income tax, corporation tax, capital tax, inheritance tax, etc.

- Direct tax is very inconveniencing because taxpayers have to prepare lengthy statements of his income and expenditure. He has to keep up-to-date record of income throughout the year.
- Direct tax is paid as a lump sum every year while income which a person earns is received in small amounts. It often becomes difficult by taxpayers to pay large amounts in one instalment.
- High rates acts as a disincentive to efficiency, effort and enterprise. Tax reduces the return on the investment and reduces a firm's ability to invest and expand as this depends on retained profits. Workers are less inclined to put extra hours. Individuals and firms want to make money for themselves and not to contribute to government revenues.
- High rates might encourage migration of skilled manpower to 'tax haven'.
- High rates encourage tax avoidance. People find loopholes so as to avoid paying tax. It also encourages tax evasion, which is illegal non-payment of tax especially in the informal sector.
c) Functions of commercial banks are:
- Safekeeping of depositors' money: This is the basic function of banking. Many customers also keep jewels and important documents in bank safes
- Transfer of money: Much of the daily work of retail banks is concerned with making payments through cheques and other written instructions
- Lending money: Banks make most of their profits from lending money
- Money management, advisory and agency services: Retail banks have become increasingly involved in selling their financial skills to help people manage their money
- Foreign exchange: Banks do engage in the buying and selling of foreign exchange


## SOLUTION SIX

a) Macroeconomic concepts:
i) Underground economy: This relates to activities that are not captured in national income for various reasons, one of them being tax evasion. This tend to understate an economy's performance
ii) Intermediate goods: These are goods and services used as inputs for the production of final goods
iii) Income approach: This is a national income accounting method that measures GDP by adding all incomes, including compensation of employees, rents, net interest, and profit
b) Spending Multiplier = Change in GDP/Change in Government spending

Spending multiplier $=1 / 1-\mathrm{MPC}=1 / 1-0.75=4$
$4=\mathrm{K} 100 \mathrm{million} / \Delta \mathrm{G}$
Thus $\Delta \mathrm{G}=\mathrm{K} 100$ million/ $4=\mathrm{K} 25$ million
c) The four phases of a business cycle are:

- Peak: The phase in which real GDP reaches maximum after rising during a recovery
- Recession: A downturn in the business cycle during real GDP declines, also known as contraction
- Trough: The phase of the business cycle in which GDP reaches its minimum after falling during a recession
- Recovery: This is an upturn in the business cycle during which real GDP rises, also called an expansion.


## SOLUTION SEVEN

## (a)

- Balance of payment is a statistical accounting record of the international trade and capital transactions that have taken place during that year
- Balance of trade for any country records two things: the volume of goods exported and imported and the relative prices of exports and imports.
(b) Factors driving globalization
- Improved technology
- Reduction of transport costs
- Political realignment
- Growth of global industries and institutions
- Breakdown of some trade barriers by free trade organizations and treaties
(c) Formula for calculating the MPC:

MPC= (changes in consumption)/(changes in income)

$$
0.5=500 / \Delta Y, \text { thus } \Delta Y=500 / 0.5=1000
$$

(d) Reasons for control of exchange rates:

- To rectify a balance of trade deficit by trying to bring about a fall in the exchange rate
- To prevent a balance of trade surplus from getting too large, by trying to bring about a limited rise in the exchange rate
- To emulate economic conditions in other countries, for example lower inflation
- To stabilize the exchange rate of its currency. Exporters and importers will then face less risk of exchange rate movement wiping out their profit.


## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION
WEDNESDAY 22 MARCH 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 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 company you are working for wants to setup an ERP system. As a recent ZICA graduate you are told to explain the benefit of an ERP system to management.

Which of the statements below best describes the benefit of an ERP system?
A. Software for management decision support, which is integrated with standardized workflows
B. Online batch transaction system, with standalone workstations
C. End-user software to manage the hardware operation of the computer
D. Utility software used for multitasking in a computer system
(2 marks)
1.2 Which one of the following statements best describes controls used in a spreadsheet application?
A. Cell and sheet protection using password
B. Copying workbook data to an infected disk
C. Carry out infrequent backup and update of cell data
D. Authorise access to data on a spreadsheet to other users in the office
1.3 What is the use of usernames or ID's and password referred to?
A. Logical access controls
B. Physical access controls
C. Data controls
D. Physical controls
1.4 Which type of a virus copies itself from one machine to another machine?
A. Logic bomb
B. Worm
C. Trojan
D. Hoaxes
1.5 Which of the following network topologies is an integration of multiple star topologies onto a bus?
A. Ring topology
B. Bus topology
C. Tree topology
D. Extended ring topology
1.6 In the process of communication $\qquad$ .
A. The receiver is the creator
B. The receiver is the encoder
C. The receiver is the interpreter
D. The receiver is the originator
1.7 In business letter writing, the abbreviation 'bcc' means
A. The writer is not sure how many copies have been sent
B. The recipient knows who else has a copy of the letter
C. The recipient does not know who else has a copy of the letter.
D. The recipient is made aware of the circulation list of the letter
(2 marks)
1.8 Which of the following aspects of communication uses oral communication more frequently?
A. Letter writing
B. Instruction giving
C. Meetings
D. Interview conducting
(2 marks)
1.9 What is external communication?
A. One in which members interacts within their organization
B. One that takes place outside the organization
C. One between local organization and others
D. One that occurs between one department and the others
1.10 One of the reasons note making is important is that $\qquad$ .
A. it gets things done
B. it serves time
C. it helps communicate with others
D. it solves problems

## SECTION B

## This section has two parts:

## 1. INFORMATION TECHNOLOGY

2. COMMUNICATION

## 1. INFORMATION TECHNOLOGY

## Attempt any two (2) from Questions: TWO, THREE AND FOUR

## QUESTION TWO

(a) Storing accounting data has been a challenge for some time. Financial data has been growing exponentially in most organisations thereby creating the need to procure large storage devices. The organisation is considering making use of data warehousing and data
(b) mining technology.

## Required:

(i) Define data mining.
(ii) Briefly explain any two (2) analytical approaches used by data mining software.
(iii) Outline any four (4) other computer storage devices used in an organisation.
(iv) State any two (2) from the 3 V 's of big data.
(v) Organizations require different types of information systems at different levels. Briefly explain the purpose of the systems that serve the needs of the four (4) levels of an organization.
(8 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

(a) Businesses today are constantly facing new IT risks and it can be challenging to keep up with the changes in technology and best practices for protecting your business and the valuable data. One of the most effective ways to ensure your organisation is taking the correct steps to Mitigate risks is to develop a set of internal controls that ensure your processes, policies and Procedures are designed to protect your valuable corporate assets and keep the organization secure and intact.

Describe the use of any five (5) controls that minimize security risks
(b) Explain a typical Local Area Network configuration

## QUESTION FOUR

(a) The nature of the work of an accountant is dealing with figures and carrying out a lot of calculations. Because of this, accountants need to be very conversant with spreadsheets.
(i) State two (2) advantages of using cell referencing in formulae instead of cell contents.
(4 marks)
(ii) Give an advantage of using macros in spreadsheets.
(b) Social network and email has become an important IT tool in most modern organization including accounting firms. You have been tasked to advise management on social Networks.

Mention the four (4) most common features of social networks.
(c) List any six (6) business applications which can be part of integrated financial management information system (IFMIS) software.
[Total: $\mathbf{2 0}$ Marks]

## 2. COMMUNICATIONS

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

## QUESTION FIVE

Communication plays an important role in day-to-day business operations. However, there is need for information to be clear, accurate and appropriate.

## Required:

(a) Explain the 7 C's of effective communication used in everyday business operations.
(14 marks)
(b) Explain any three (3) challenges that are likely to hinder effective communication.
(6 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

Meetings are conducted by managers to advance the well-being of an organisation. You are planning a meeting to talk about abuse of resources by members of your department and remedies to that.

## Required:

(a) Briefly explain five (5) roles meetings play at work places.
(b) Meeting notices and agendas are documents required in carrying out an effective meeting.
(i) Write a meeting notice.
(5 marks)
(ii) Prepare an agenda for the meeting with three other items to talk about.

## QUESTION SEVEN

Visual representations assist us in quickly comprehending data. Whether you are comparing sales figures or highlighting a trend, your report or presentation gains clarity and authority when you show an effective graph or chart.

## Required:

(a) Outline any four (4) key principles of effective communication that you must consider when designing diagrams, graphs and charts for a presentation.
(b) Explain the following terms.
(i) Line graph
(2 marks)
(ii) Bar chart
(2 marks)
(iii) Pie chart
(c) State three (3) advantages of using diagrams, graphs and charts in your presentation.

## END OF PAPER

## DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

## SOLUTION ONE

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

## SOLUTION TWO

## Data mining

(i) Extraction of data from multiple data sources by means of interactive and analytical software tools.
(ii) Any two(2) of the following

- identifying clusters of useful and significant data
- summarizing data to show overall patterns that maybe hidden if data is viewed at the detailed level
- creating and learning classification rules
- finding possible dependences between previous apparently unrelated data sets using correlation and regression tools
- detecting anomalies in patterns of data that might signify events
(iii) Four (4) other storage devices used in an organisation
- Removal/Flash disks
- Hard drives
- Memory card
- Optical disks
(iv) $\mathbf{3} \mathbf{V s}$ of big data
- Volume: - big data contains vast quantities of data
- Velocity: - data changes very rapidly with continuous real-time updates
- Variety: - data is gotten from a variety of sources
(v) Purpose of information systems according to management level
- Strategic level: to help senior managers with long term planning
- Management: to help middle managers to monitor and control
- Knowledge: to help knowledge and data workers design products, distribute information and perform administrative tasks
- Operations: to help operational managers track the organization's day to day operational activities.


## SOLUTION THREE

## a) Security controls: Any five of the following

- Antivirus software: searches systems for viruses and removes them.
- Firewalls: disables part of the telecoms technology to prevent unauthorized intrusions.
- Encryption: encryption involves scrambling data at one end of the line, transmitting scrambled data and unscrambling it at the receiver's end of the line.
- Electronic signatures: encryption makes use of electronic signatures in the data scrambling process by using public key cryptography signatures.
- Authentication: technique of making sure that a message has come from an authorized sender.
- Dial back security: operates by requiring the person wanting system access to dial into the network and identify themselves first.


## b) Local Area Network configuration consists of

- File server: stores all of the software that controls the network as well as the software that controls the network as well as the software and data that can be shared by the computers attached to the network.
- Workstation: computers connected to the file server (MACs or PCs). They are less powerful than the file server.
- Cables: used to connect the network interface cards in each computer
- Wifi: used to link the computers in a network wirelessly without use of cables.
- Bluetooth: spans about 10 m and is used to connect devices such as a headset and a phone.


## SOLUTION FOUR

a)

## i) Advantages of cell referencing: -

- It offers flexibility as values can be changed without changing the formula
- The formula can be copied and applied somewhere without changing anything
- You can easily see the cells used in the formula
ii) Advantages of using macros: -
- They reduce the possibility of human error that increases with many, repetitive keystrokes and tasks.
- Macros reduce the amount of time that must be spent performing basic computing tasks, freeing users up for more complex problem-solving and ideagenerating activities.
- They also make complex computations easier to perform.
b) Features of a social network
i. Able to create user profiles online, this could include the personal details such as interests, photos and family
ii. The user could upload photos, videos and can be downloaded also
iii. Users within and outside the network can be able to communicate with each other
iv. Users can share games and other programs of interest
v. Advertising of products and services
c) Six (6) business applications which constitute IFMIS software
i. Purchases
ii. Sales
iii. Accounts Payable
iv. Cash Management
v. Inventory
vi. Payroll


## SOLUTION FIVE

(a) - completeness - the information must contain all the facts required by the audience

- Consideration - The audience 's characteristics such as education, gender, culture must be taken care of when communicating
- Conciseness - communicating what must be conveyed in the fewest possible words.
- Clear - information must be free of ambiguity, avoiding the use of jargon and eliminating unnecessary words.
- Concreteness - specifying information, and using plain or simple language.
- Correctness - information presented must be accurate with all the required facts.
- Courtesy - politeness and friendliness enhances effective communication and therefore must be enforced.
(b) The challenges likely to hinder infective communication are:
- Language
- Emotions
- Using wrong medium of communication
- Information overload and underload
- Status
- Having different perceptions
- Silence
- Failure to take note of non-verbal cues


## SOLUTION SIX

Meetings are conducted by managers to advance the well-being of an organisation. You are planning a meeting to talk about abuse of resources by members of your department and remedies to that.

TASKS:
(a) Briefly explain five roles meetings play at work places. (10)

- Meetings are used to inform members of the organisation of new developments surrounding their work.
- Meetings may also be used to report progress made by various individuals and committees on tasks they were assigned.
- Meetings are used to coordinate activities within the organisation.
- Management use meetings to ask for assistance from members as well as to gain consensus in order to come up with good decisions
- Meetings are used to discuss problems and find solutions
(b) Prepare a meeting notice.

LITAMA INVESTMENTS (any name)
Meeting notice
Departmental Staff Meeting
There will be a meeting for all members of department
DATE: 07062022
TIME: 1500 HOURS
VENUE: The Pavilion
IMSignature
Secretary 01/06/2022
(c) prepare agenda for the meeting with three other items to talk about

Meeting Agenda

1. Apologies
2. Opening Remarks
3. Minutes of the Previous Meeting
4. Matters Arising
5. New Business
(a) Abuse of resources by staff
(b) Remedies to abuse of resources
6. Any other Business
7. Closing remarks

## SOLUTION SEVEN

A. - give each diagram or chart a concise title

- Cite the source of the data
- Clearly label all elements
- Keep textual elements brief
B. Graphs
i. A line graph is graphical show of data that keeps changing over time using lines between data points
ii. Bar chart is a graphical representation of data using rectangular bars that usually compare different categories.
iii. Pie chart is a representation of data using a circular statistical graph which indicates numerical properties in slices.
C. Advantages of Graphs
- It is memorable
- It shows trends
- Easy to interpret
- Can be used by people who are not literate
- It supplies complex information
- It summaries statistical data
- It can be used for illustrating techniques and procedures


## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE
DA: 5 COST ACCOUNTING

TUESDAY 21 MARCH 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. 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 correct answer. Write the LETTER of the correct answer you have chosen in the answer booklet. Marks allocated are indicated against each question.
1.1 Batoka Limited, a chemical manufacturing company in southern province of Zambia that operates a process costing system had work-in-progress at the start of last month of 300 units (valued at K34,200) which were $60 \%$ complete in respect of all costs. Last month a total of 2,000 units were completed and transferred to the finished goods warehouse. The cost per equivalent unit for costs arising last month was K200. The company uses the FIFO method of cost allocation.

What was the total value of the 2,000 units transferred to the finished goods warehouse last month?
A. K398,200
B. $\mathrm{K} 400,000$
C. K410,000
D. $\mathrm{K} 434,200$
1.2 Consider the following statements regarding costing systems:
(i) Work is done to customer specification.
(ii) Work is usually completed within a relatively short period of time.
(iii) Products manufactured tend to be all identical.

Which TWO of the above statements are in relation to job costing?
A. (i) and (ii) only
B. (i) and (iii) only
C. (ii) and (iii) only
D. (i), (ii) and (iii)
1.3 Kacholola Limited in Nyimba district of eastern province of Zambia always determines its order quantity for a raw material by using the Economic Order Quantity (EOQ) model. What would be the effects on the EOQ and the total annual holding cost of a decrease in the cost of ordering a batch of raw material?

## EOQ Annual holding cost

A. Higher Lower
B. Higher Higher
C. Lower Higher
D. Lower Lower
(2 marks)
1.4 A cost driver is .....
A. An activity which generate costs.
B. Any cost relating to transport and accommodation
C. A common cost which is shared over cost centres
D. An item production overhead
1.5 Which one of the following is least likely to operate a system of service costing?
A. A printing company
B. A hospital
C. A chemical manufacturing company
D. A Law firm.
1.6 Chamboli Limited's budgeted sales for last month were 20,000 units with a standard selling price of K40 per unit and a standard profit of K8 per unit. Last month actual sales of 21,000 units at an average selling price of K29.50 per unit were achieved.
What were the sales price and sales volume variances for last month?

## Sales price variance

A. K220,500 Adverse
B. K220,500 Adverse
C. K10,000 Adverse
D. K10,000 Adverse

Sales volume variance
K8,000 Favourable
K8,000 Adverse
K8,000 Favourable
K8,000 Adverse
1.7 Zoole Factories consist of two production cost centres (Y and Z) and two service cost centres (A and B). Operations are conducted in Lusaka's 15 miles area and the total allocated and apportioned overhead for each cost centre is as follows:

| Y | Z | A | B |
| :---: | :---: | :---: | :---: |
| K950,000 | K820,000 | K460,000 | K300, 000 |

It has been estimated that each service cost centre does work for other cost centres in the following proportions:

|  | Y | Z | A | B |
| :--- | :--- | :--- | :--- | :--- |
| Percentage of service cost centre A to | 50 | 50 | - | - |
| Percentage of service cost centre B to | 30 | 60 | 10 | - |

The reapportionment of service cost centre costs to other cost centres fully reflects the above proportions. After the reapportionment of service cost centre costs has been carried out, what is the total overhead for production cost centre Y ?
A. K1,245,000
B. $K 1,261,000$
C. K1,270,000
D. K1,285,000
1.8 A company in Chipata, operates a standard costing system. The variance analysis for last month shows a favourable materials price variance and an adverse labour efficiency variance. The following four statements, which make comparisons with the standards, have been made:
(i) Inferior quality materials were purchased and used.
(ii) Superior quality materials were purchased and used.
(iii) Lower graded workers were used on production.
(iv) Higher graded workers were used on production.

Which statements are consistent with the variance analysis?
A. (i) and (iii)
B. (i) and (iv)
C. (ii) and (iii)
D. (ii) and (iv)
1.9 Machining company in Chingola uses an overhead absorption rate of K35 per machine hour, based on 32,000 budgeted machine hours for the period. During the same period the actual total overhead expenditure amounted to K1,088,750 and 30,000 machine hours were recorded on actual production.

By how much was the total overhead under or over absorbed for the period?
A. Under absorbed by K38,750
B. Under absorbed by K70,000
C. Over absorbed by K38,750
D. Over absorbed by K70,000
(2 marks)
1.10 Chips Limited has the following total costs at two (activity levels:

| Activity level (units) | 160,000 | 220,000 |
| :--- | ---: | ---: |
| Total costs (K) | $1,350,000$ | $1,700,000$ |

Variable cost per unit is constant within this range of activity but there is a step up of K50,000 in the total fixed costs when the activity exceeds 175,000 units.

What is the total cost at an activity of 200,000 units?
A. K1,550,000
B. $K 1,580,000$
C. K1,166,000
D. K1,633,334

## SECTION B

## There are FIVE (5) questions

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

## QUESTION TWO

Chanda and Lee started a partnership business which is involved with construction industry. Both Chanda and Lee are graduates from a University in China. Their firm is known as Leecha Constructions. The business is renowned for doing fabulous construction works with various government ministries and departments. As at 31 December 2021, Leecha Constructions had three (3) contracts in progress as follows:

| Contract Name | Nyimba | Sinda | Katete |
| :--- | :--- | :--- | ---: |
| Contract Number | N44 | S45 | K46 |
|  | K | K | K |
| Contract value | 700,000 | $2,920,000$ | $1,700,000$ |
| Costs incurred to date | 330,000 | $2,200,000$ | 364,000 |
| Anticipated future costs to complete 220,000 | 550,000 | $1,266,000$ |  |
| Anticipated guarantee costs | - | - | 190,000 |
| Payments received on account | 380,000 | $1,400,000$ | 290,000 |
| Value of work certified | 424,000 | $2,250,000$ | 320,000 |
| Cost of work certified | 330,000 | $2,140,000$ | 260,000 |

## Additional information

1. The Nyimba contract No. 44 commenced on 30 September 2015, Sinda contract No. 45 started on 4 March 2015 and the Katete contract began on 1 January 2021 respectively.
2. No profits have been taken so far from anyone of the contracts as at 31 December 2021.
3. Leecha Construction policy is to take two-thirds of notional profit multiplied by a factor of cash received divided by the value of work certified when the degree of completion between $30 \%$ to $80 \%$.

## Required:

(a) Calculate for Leecha Constructions the following as at 31 December 2021.
(i) Expected profit or loss for each contract
(3 marks)
(ii) Degree of completion for each contract
(3 marks)
(iii) Interim profit or loss for each contract in line with policy
(7 marks)
(b) State four (4) similarities between job and contract costing
(4 marks)
(c) Explain any two (2) features of contract costing

## QUESTION THREE

Makola is a specialized hospital that is developing a cost accounting system for the first time since its inception a year ago. The consultant engaged to develop the system has proposed to create four cost centres Gyneacology, Urology, Pharmacy and House Keeping. Gyneacology and Urology deal directly with customers whilst Pharmacy and House Keeping are internal service cost centres.

The following overhead details have been estimated for the forthcoming period.

|  | Gyneacology | Urology | Pharmacy | Housekeeping | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | K | K | K | K | K |
| Consumable Materials | 140,000 | 230,000 | 270,000 | 90,000 | 730,000 |
| Emoluments | 165,000 | 130,000 | 115,000 | 55,000 | 465,000 |
| Rent and rates |  |  |  |  | 375,000 |
| Medical Insurance |  |  |  |  | 140,000 |
| Heating \& Lighting |  |  |  |  | 185,000 |
| Machinery Depreciation |  |  |  |  | 375,000 |
|  |  |  |  |  | $2,270,000$ |

The following additional information is also available.

|  | Gyneacology | Urology | Pharmacy | Housekeeping | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Floor area $\left(\mathrm{m}^{2)}\right.$ | 2,750 | 1,350 | 600 | 300 | 5,000 |
| Value of Machines | $\mathrm{K} 3,500,000$ | $\mathrm{~K} 2,500,000$ | $\mathrm{~K} 750,000$ | $\mathrm{~K} 750,000$ | $\mathrm{~K} 7,500,000$ |
| No. of prescriptions | 20 | 20 | 15 | 5 | 60 |

In the period it is estimated that there will be 30,000 Gynecological cases and 14,000 Urological cases to be handled. Pharmacy processes 70\% of Gyneacology and 30\% of Urology prescriptions. And Housekeeping provides services in the tune of 20\% for Pharmacy, 30\% for Urology and 50\% for Gyneacology.

## Required:

(a) Prepare an overhead statement showing clearly allocations and apportionment to each cost centre.
(10 marks)
(b) Calculate appropriate overhead absorption rates for Gyneacology and Urology departments.
(4 marks)
(c) Calculate the under/over absorption of overheads if actual results were such that 25,000 Gynecological cases were handled with overheads of K1,446,000 and 20,250 Urological cases were handled with overheads of K1,234,000.
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FOUR

The following is an email sent to the production supervisor, human resources officer and procurement officer from the Management Accountant of a medium seized manufacturing company in Kitwe.

## mwaba tembo mwaba.tembo@minetech.co.zm

to Chanda, John, Rodgers
Dear all,
Kindly forward to me the resource prices and usage data for each cost element; direct materials, direct labour, variable overheads and fixed overheads as resolved in the management meeting. This will enhance the standard cost card for effective operation of a standard costing system.

## Regards.

## Mwaba Tembo AZICA

Management Accountant
Minetech Limited
Kitwe, Zambia

Summaries of responses from each of the three officers in relation to the production of the Minetech major product are as follows:

## Production supervisor

- Each unit of the product will require 20 Kilograms of material A and 15 Kilograms of material B.
- Each unit of the product will require 14 hours of preparation time and 5 hours of assembly time.


## Procurement officer

- Each kilogram of material A will cost K 8 per Kg while each kilogram of material B will cost K3 per Kg.
Human resources officer
- Each hour of preparation time will cost K4 whilst each hour of assembly time will cost K3 An extract from the forthcoming production budget indicates the following.

|  | K | Hours |
| :--- | :--- | :--- |
| Preparation department | 880,000 | 21,000 |
| Assembly department | $1,500,000$ | 24,000 |

The fixed production overheads included in the above figures are K250,000 and K480,000 respectively for preparation and assembly.

Actual results for the period were as follows:

1. Output was 6,000 units
2. The kilograms used of material A were $75,000 \mathrm{Kgs}$ valued at $\mathrm{K} 450,000$ whilst K175,000 was spent on 50,000 kilograms of material B.
3. Labour hours amounted to 80,000 hours of preparation time at a cost of K400,000 and 40,000 hours of assembly time at cost of K200,000.
4. Variable production overheads incurred were K6,400,000
5. Fixed production overheads were K800,000.

## Required:

As Cost Accountant for Minetech, undertake the following tasks for the Management Accountant.
(a) Prepare a standard cost card for one unit of the product
(b) Calculate the following variances
(i) Material A and B price variances
(ii) Preparation and assembly labour rate variances
(iii) Variable production overhead cost variance
(iv) Fixed production overhead cost variance
(1 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION FIVE

Lukundo is a hardware manufacturer situated in Mufulira. The following data related to major control levels of a critical item of inventory.

Monthly demand is 1,000 units
Ordering cost is K350 per order
Purchase cost per unit K8
Carrying costs are 15\% per annum
Average usage 100 units per day
Minimum usage 60 units per day
Maximum 130 units per day
Lead time 20-26 days

## Required:

(a) Calculate the following for Lukundo Co.
(i) Economic order quantity
(ii) Reorder Level
(iii) Minimum level
(iv) Maximum level
(b) State four (4) assumptions for the EOQ
(c) Explain the following terms associated with inventory management.
(i) Lead time
(1 mark)
(ii) Economic Order Quantity
(iii) Buffer or safety inventory
(iv) Re-order level
(v) Re-order quantity

## QUESTION SIX

(a) Maximo Limited is a Matero based chemical processing company that specializes in the manufacturing of cosmetic products for middle aged women. During May, the following data relates to a single process involved in making a face cream used by teenage girls to clear pimples :-

1. Materials (1,000 litres) K90, 000
2. Labour K180, 000
3. Overheads K130, 500
4. A normal loss of $10 \%$ of input was expected.
5. Actual output was 850 litres.
6. Losses are sold as scrap for K90 per litre.

## Required:

(i) Calculate the cost per litre
(ii) Prepare a Process Account
(iii) Prepare the abnormal Loss Account
(b) In a period, 20,000 units of product $Z$ were produced whilst 18,000 units were sold with 2,000 units were carried forward as inventory to the next period. Initially, it was anticipated before the beginning of the control period that all the 20,000 units of product Z would be produced and sold as a result of an expected favourable demand conditions in the market.

## Costs and revenues were as follows:

|  | K |
| :--- | ---: |
| Sales | $1,000,000$ |
| Production costs: |  |
| Variable | 350,000 |
| Fixed | 150,000 |
| Selling, Distribution and Administration costs: |  |
| Variable | 120,000 |
| Fixed | 250,000 |

## Required:

(i) Prepare a profit statement based on marginal costing principles. (6 marks)
(ii) Explain briefly the two (2) main uses for marginal costing. (4 marks)
[Total: $\mathbf{2 0}$ Marks]

## END OF PAPER

## DA 5 - COST ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SOLUTION TWO

## (a) Leecha Constructions

(i) Expected profit or loss

|  |  | Nyimba K | Sinda K | Katete K |
| :---: | :---: | :---: | :---: | :---: |
|  | Contract value | 700,000 ${ }^{1 / 4}$ | $\underline{2,920,000}{ }^{1 / 4}$ | 1,700,000 ${ }^{1 / 4}$ |
|  | Costs incurred to date | $330,000^{1 / 4}$ | 2,200,000 ${ }^{1 / 4}$ | $364,000^{1 / 4}$ |
|  | Anticipated future costs | $\underline{220,000}{ }^{1 / 4}$ | 550,000 ${ }^{1 / 4}$ | $1,266,000^{1 / 4}$ |
|  | Total expected costs | 550,000 ${ }^{1 / 4}$ | $\underline{2,750,000}{ }^{1 / 4}$ | 1,630,000 ${ }^{1 / 4}$ |
| Expected profit | 150,000 | 170,000 | 70,000 |  |

## (ii) Degree of completion

This is calculated by dividing the costs incurred to date by total expected costs
Nyimba Site $\quad$ K330, $000 \times 100=60 \%$
K550, 000

| Sinda Site | $\frac{K 2,200,000}{} \times 100=\mathbf{8 0 \%}$ |
| :--- | :--- |
|  | K2, 750,000 |
| Katete Site | K364, 000 $\times 100=\mathbf{2 2 \%}$ |
| subtotal | K1, 630,000 |

(iii) Interim profits for each contract

According to policy, profit $=2 \times$ notional profit $\times \underline{\text { Cash received }}$
3 values certified

Nyimba Contract $=2 / 3(424,000-330,000) \times 380,000 / 424,000$
$=\underline{K 56,163.52}$
Sinda Contract $=2 / 3(2,250,000-2,140,000) \times 1,400,000 / 2,250,000$
$=\underline{\mathbf{K 4 5 , 6 2 9 . 6 3}}$

Katete Contract $=$ No profit will taken

This is because this contract is only $22 \%$ complete. Thus, it is prudent NOT to take any profit until more of the contract is complete.
(b) Four (4) similarities between job and contract costing include situations where work is:-
i. Undertaken according customers' special requirements
ii. Site based.
iii. Costs and revenues are recorded separately for each job or contract.
iv. Frequently of a constructional nature
(c) Any two features of contract costing include
i. Higher proportion of direct costs - due to the self-contained nature of most site operations, many items normally classified as indirect costs can be identified specifically with a contract and/or site and thus charged directly. Examples include site electricity, communications costs, site vehicles, design and planning, etc. ( $1^{1 / 2}$ marks)
ii. Low indirect costs - the only item of indirect cost would be a charge for Head Office expenses.
iii. Difficulties of cost control - because of the scale of some contracts and the size of the site, there is frequently major problems of cost control concerning material usage, loses, pilferage, labour supervision, etc.
iv. Surplus material- management and treatment of these must be handled properly including a transfer to another site and returns to main stores with appropriate records updated.

## SOLUTION THREE

(a) Makola Hospital

Overhead Analysis Sheet

| Item | Basis of <br> apportionment | Gyneacology | Urology | Pharmacy | House <br> Keeping | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Consumables | Allocated | 140,000 | 230,000 | 270,000 | 90,000 | 730,000 |
| Emoluments | Allocated | 165,000 | 130,000 | 115,000 | 55,000 | 465,000 |
| Rent \& rates | Floor area | 206,250 | 101,250 | 45,000 | 22,500 | 375,000 |
| Medical <br> Insurance | No. of <br> prescriptions | 46,667 | 46,667 | 35,000 | 11,667 | 140,000 |
|  <br> Lighting | Floor Area | 101,750 | 49,950 | 22,200 | 11,100 | 185,000 |
| Machine <br> Depreciation | Value of <br> Machines | 175,000 | 125,000 | 37,500 | 37,500 | 375,000 |
|  |  | $\mathbf{8 3 4 , 6 6 7}$ | $\mathbf{6 8 2 , 8 6 7}$ | $\mathbf{5 2 4 , 7 0 0}$ | $\mathbf{2 2 7 , 7 6 6}$ | $\mathbf{2 , 2 7 0 , 0 0 0}$ |
|  |  | 113,883 | 68,330 | 45,553 | $(227,766)$ | - |
|  |  | $\mathbf{3 9 9 , 1 7 7}$ | 171,076 | $(570,253)$ | - |  |
|  |  | $\mathbf{1 , 3 4 7 , 7 2 7}$ | $\mathbf{9 2 2 , 2 7 3}$ |  |  | $\mathbf{2 , 2 7 0 , 0 0 0}$ |

(b) Overhead Absorption Rates

Gyneacology = K1, 347,727/30,000 cases = K44.92 per case
Urology $=$ K922,273/14,000 cases $=\underline{\text { K65.88 per case }}$
(C) Under/over absorption of overheads

## Gyneacology

K
Overheads absorbed (25,000 cases x K44.92)
1,123,000
Actual Overheads incurred
1,446,000
Under absorbed overheads
323,000

## Urology

Overheads absorbed (20,250 cases x K65.88)
Actual overheads
1,334,070
Over absorbed overheads
1,234,000

## SOLUTION FOUR

(a) Minetech Limited

Standard Cost Card


Preparation
80,000 hours should have cost x K4

## K

320,000
400,000 80,000 (A)

## Assembly

40,000 hours should have cost x K3 But did cost

> | K |
| :---: |
| 120,000 |
| $\mathbf{2 0 0 , 0 0 0}$ |
| $\mathbf{8 0 , 0 0 0}$ |

K
8,700,000
6,400,000
2,300,000 (F)
(iv) Fixed Production Overhead Cost Variance

K
Budgeted overheads
730,000
Actual overheads

800,000
70,000 (A)

## SOLUTION FIVE

Lukundo Co.
(a) (i) Economic Order Quantity (EOQ) $=2$ CD/H

Where C = Cost per order; K350
$\mathrm{D}=$ Annual Demand; 1,000 units $\times 12=12,000$ units
$\mathrm{H}=$ Holding cost per item per annum; = K8 x 15\% = K1.2

$$
: \text {. } \mathrm{EOQ}=\sqrt{\frac{2 \times \mathrm{K} 350 \times 12 \times 1,000}{\mathrm{~K} 1.2}}
$$

$=\underline{\underline{\mathbf{2}, 646}}$ units
(ii) Re-order level $=$ Maximum usage x maximum lead time
$=130$ units $\times 26$ days
$=3,380$ units
(iii) Minimum level $=$ Re-order level - (average usage $x$ average lead time)
$=3,380$ units - ( 100 units $\times 23$ days)
$=3,380$ units $-2,300$ units
$=\underline{1,080}$ units
(iv) Maximum level $=$ Re-order level + EOQ - (Minimum usage $x$ minimum lead time) 1 mark

$$
\begin{aligned}
& =3,380 \text { units }+2,646 \text { units }-(60 \text { units } \times 20 \text { days }) \\
& =6,026 \text { units }-1,200 \text { units } \\
& =\underline{4,826} \text { units }
\end{aligned}
$$

(b) Four (4) assumption of the economic order quantity model include:-
(i) Constant ordering costs
(ii) Constant annual demand
(iii) Constant purchase price per unit
(iv) Constant inventory holding costs per annum
(c) Explanation of terms associated with inventory management include:-
(i) Lead-time - the period of time between ordering and replenishment.
(ii) Economic order quantity - the quantity which minimizes the total costs associated with inventory ordering and holding.
(iii) Buffer or safety inventory - an inventory allowance to cover errors in forecasting the lead time or demand during the lead time.
(iv) Re-order level - the level of inventory at which a further replenishment order should be placed. It is an action point.
(v) Re-order quantity - the quantity of the replenishment order.

## SOLUTION SIX

(a) Calculation of cost per unit

Litres
K

| Materials | 1,000 | 90,000 |
| :--- | :---: | :--- |
| Labour |  | 180,000 |
| Overheads | $\underline{1,000}$ | $\underline{130,500}$ |
| Normal loss (10\%) | $\underline{(100)}$ | $\underline{900,500}$ |
|  | $\underline{900}$ | $\underline{391,500}$ |

$\begin{array}{ll}\therefore \text {. Cost per unit } & =\text { K391, 000/900 litres } \\ & =\underline{\underline{K 435} \text { per litre }}\end{array}$

Dr
Process Account

|  | Litres | K |  |  |  |  |  |  | Cr |  |
| :--- | ---: | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Materials | 1,000 | 90,000 | Normal loss | 100 | K |  |  |  |  |  |
| Labour |  | 180,000 | Output | 850 | 369,750 |  |  |  |  |  |
| Overhead |  | 130,500 | Abnormal <br> loss | 50 | 21,750 |  |  |  |  |  |
|  | $\mathbf{1 , 0 0 0}$ | $\mathbf{4 0 0 , 5 0 0}$ |  |  | $\mathbf{4 0 0 , 5 0 0}$ |  |  |  |  |  |

Dr
Abnormal Loss Account

|  | Litres | K |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :---: | :---: | :---: | :---: |
| Normal loss | 100 | 9,000 | Cash | 150 | 13,500 |  |  |  |
| Abnormal <br> loss | 50 | 21,750 | Profit or <br> loss |  | 17,250 |  |  |  |
|  | $\mathbf{1 5 0}$ | $\mathbf{3 0 , 7 5 0}$ |  | $\mathbf{1 5 0}$ | $\mathbf{3 0 , 7 5 0}$ |  |  |  |

## Working

1. Scrap value of normal loss $=100$ litres $\times K 90=K 9,000$
2. Abnormal loss $=$ Actual loss - Normal loss $=150-100=50$ litres
(b) Profit statement using marginal costing principles

K K
Sales revenue (18,000@K50 (W1)
900,000
Less variable costs:
Production (20,000@K17.5(W2)
350,000
Closing inventory (2,000@ K17.5)
$(35,000)$
315,000
Selling, Distribution \& Administration costs

## Workings

1. Sales price per unit $=K 1,000,000 / 20,000$ units $=K 50$
2. Variable production costs per unit $=\mathrm{K} 350,000 / 20,000$ units $=\mathrm{K} 17.5$
3. Variable Selling, Distribution and Administration costs $=$ K120,000/20,000 units $=$ K6
4. Contribution per unit = selling price per unit - variable costs per unit $=$ K50 - K23.5)=K26.5 per unit
5. Fixed Costs $=150,000+250,000=K 400,000$
(c) Marginal costing can be useful in the following ways including
(i) It is used in decision making situations such as make or buy, special orders, shut down decisions, minimum pricing, etc
(ii) It is used in the determination of prices especially in the retail industries
(iii) It is used in preparation of profit statements under marginal costing statements
(iv) Determination of optimum production plans

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS
LEVEL ONE
DA 6: BUSINESS LAW

FRIDAY 24 MARCH 2023
TOTAL MARKS - $\overline{100 ; ~ T I M E ~ A L L O W E D: ~ T H R E E ~(3) ~ H O U R S ~}$

## INSTRUCTIONS TO CANDIDATES

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

Section A: One (1) Compulsory scenario question.
Section B: Five (5) Optional Questions. Attempt any Four (4) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must NOT appear anywhere on your answer booklet.
4. Do NOT write in pencil (except for graphs and diagrams).
5. Cell Phones are NOT allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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

## SECTION A- (Compulsory)

## Attempt all ten (10) multiple choice questions

## QUESTION ONE

1.1 Hawa's boss decided to terminate her contract because she got married to one of the boss' enemies over the weekend. Which type of dismissal was Hawa given by her boss?
A. Wrongful dismissal
B. Constructive dismissal
C. Unfair dismissal
D. Summary dismissal
1.2 Which of the following is not a way of creating an agency relationship?
A. Estoppel
B. Necessity
C. Ratification
D. Full contractual capacity
(2 marks)
1.3 The Latin maxim of volenti non fit injuria in Tort is an example of the defence of ...
A. Consent
B. Contributory Negligence
C. Illegality
D. Common Law Justification
1.4 A partnership can dissolve in any of the following ways except
A. Resignation
B. Death
C. Occasional rudeness or bad temper
D. Bankruptcy
1.5 Statutory Instruments (SIs) are examples of $\qquad$
A. By-laws
B. Statute
C. Delegated legislation
D. Judicial precedent
1.6 Which one correctly represents the principle of damages 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
1.7. Which are the elements of a valid contract?
A. An agreement, consideration and execution
B. Invitation to treat, acceptance and consideration
C. Offer, consideration and execution
D. Offer, acceptance and consideration
1.8 In Hedley Byrne \& Co. v Heller and Partners Ltd, 1963, the court came to a conclusion that individuals may be liable for making misleading or negligent misstatements. This, however, depended on certain factors, such as
A. Lacking special skills which others rely upon.
B. Being strategically positioned for others to rely on your judgment or skill.
C. Inability to make an inquiry that others will depend on.
D. Not being in a position to foresee that others will depend on the statement or advice.
1.9 A builder has been hired to construct a house and stable for the horse, but runs short of funds and does not complete the works. What doctrine explains the most amicable way of settling the dispute that may ensue?
A. Frustration.
B. Discharge.
C. Quantum Meruit.
D. Privity.
1.10 Mwamba bought a wind screen from Auto-Mechanics. It could not fit onto his car as advised by the salesman who had examined the smashed screen on the car. When he returned the screen to the shop, he was referred to the receipt which stated that "once goods are sold, they are not returnable". Which of the following terms under the Sale of Goods Act 1893 (SOGA) may have been breached by the shop?
A. An implied condition that goods supplied shall be merchantable.
B. An implied condition that the goods supplied will correspond with the sample.
C. An implied warranty that that the bulk shall correspond with the sample in quality.
D. Section 18 of SOGA which contains rules of ascertaining intention parties.
(2 marks)
[Total: $\mathbf{2 0}$ Marks]

## SECTION B

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

## QUESTION TWO

Bwalya and Daka are two friends who have dropped out of school and come together with a business idea of selling bananas. They chose Ridgeway Post Office as their station since it has many customers. Bwalya contributes a wheelbarrow for transport while Daka's contribution is five hundred Kwacha as the money for buying the initial fruits. The demand is so high that Bwalya borrows K500 from Kaloba Finance Ltd to meet the demand. The two friends agree that Daka should enroll at CH Business College to study entrepreneurship so as to improve their business skills. Since Bwalya works full time, they agree that he be paid K200 every week. After one year, the business has made a lot of profits and the two friends want to go separate ways, but they don't know how to do it. They end up fighting and the police brings them to your attention for advice.

Looking at the various legal formalities which they addressed or didn't address during their business association, what would you tell them regarding nature, formation and dissolution of the relationship among other things?
[Total: $\mathbf{2 0}$ Marks]

## QUESTION THREE

On the 1 February 2022 the Minister of Commerce rose in parliament and presented in parliament a bill entitled 'Sale of Zambia's Copper Products to the Locals'. He said the purpose of the bill was to encourage the sale of Zambia's copper to local manufacturing companies so as to avoid exporting raw mineral materials without adding value to them. He emphasized that quality shall be of essence.

## Required:

(a) Explain the stages the bill that the Minister presented will pass through to become law after he introduced it in parliament.
(10 marks)
(b) One of the local buyers of copper products is Zamcopper Cables Ltd. The company manufactures and supplies electrical cables to their customers for house wiring. Last week Musonda Doreen bought cables from Zamcopper Cables, but the cables have failed to work due to defects in their manufacturing process and are causing sparks each time current (power) passes through. She has brought it to the attention of the company, but they are saying she never told them what she needed the cables for and can't do anything about her issue. Following the company's refusal, she has come to you to find out as to whether her claim would be successful if she took the matter to court.

With the aid of statute and or case law, explain to her as to whether the company would be held liable by the court or not.
(10 marks)
[Total 20 Marks]

## QUESTION FOUR

(a) Explain how agency relationship is created under commercial law.
(b) Discuss the reciprocal duties that owed between the agent and principle in the law of agency in commercial law.
(c) Discuss the principle of law established in Grover and Grover Ltd. V Matthews (1910) with regard to agency relationship.
[Total 20 Marks]

## QUESTION FIVE

Samson offered to sell a VX Laptop to Mirriam at ZMW 8,750.00 which was displayed on a shelf. However, Mirriam offered to pay ZMW 8, 760.00 instead. Samson refused to sell it at the price suggested by Mirriam adding that Mirriam was boastful. He then decided to offer the VX Laptop to Sally at ZMW 5, 790.00 who accepted to buy the VX Laptop.

After hearing that Samson was offering the VX Laptop to Sally, Mirriam was furious as she is aware that she entered into a contract with Samson at ZWM 8, 760.00 an amount which was more than what Samson was asking for and less than what he offered to Sally.

Mirriam has called Sally telling her to stay away from the VX Laptop as it belonged to her or else she would sue her.

Before going to the Magistrate Court to commence an action, Sally and Mirriam have come to you for your advice.

## Required:

(a) Explain if there is any legal relationship between Samson and Miriam.
(8 marks)
(b) Explain the relationship between Samson and Sally. (8 marks)
(c) Describe the effect of the display of the VX Laptop on the shelf.
(4 marks)
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

Explain each of the following:
(a) An offer
(b) Privity of contract
(c) Unascertained goods
(d) The multiple (economic reality test)

## END OF PAPER

## DA 6: BUSINESS LAW SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## SOLUTION TWO

This is a partnership formed without the requisite formalities. It is formed orally and is difficult to prove. A partnership is legally formed by a Partnership agreement/deed. But this one is based on friendship. Every partner should participate in the management of the business unless a contrary position is agreed upon, as the two friends did. Bwalya is a salaried partner and this is allowed by partnership law, notwithstanding that partners are entitled to profits and not salaries. Bwalya is responsible for the daily running of the business and is therefore given a salary. He would therefore be bound by two contracts, one of the partnership entity and the other an employment contract. These ought to be written contracts, but the parties omitted them due to limited knowledge.

Dissolution is not just walking away after sharing what they contributed, but they can do it judicially by seeking the courts in the interest of justice or by mutual consent. A partner can retire if the deed provides so.

On the debt which was acquired by Bwalya, it binds the firm, that is liability is joint and several both Bwalya and Daka may be sued for the debt either together or individually.

## SOLUTION THREE

(a) The answer must start from the second reading since the first stage, that formal introduction of the bill was already done by the minister.

- Second Reading - At this stage, the minister or a member of parliament who has introduced it explains the purpose of the Bill and there is debate about the Bill.
- Committee Stage - At this stage the Bill is given to a specialized committee which will look at it in detail, make amends, etc.
- Report Stage - At this stage the committee reports back to the House anything that the Committee Stage has done amendments.
- Third Reading - This is a review of the bill in its final state. This is the final stage in the House, once members are ok with it, it goes for presidential assent.
- Presidential Assent - The bill is taken to for assent/signing pursuant to Article 66 of the Constitution. Once he signs the bill, it becomes law.

These are the stages the bill on 'Sale of Zambia's copper products to the locals' will pass through.
(b) The question relates to the fitness for purpose and satisfactory (merchantable) quality. It provides that the goods bought must be fit for the purpose for which they are bought. Section 14 of the Sale of Goods Act provides that there is no implied warranty as to quality or fitness for any particular purpose of goods supplied under a contract of sale, except:

Where the buyer expressly or by implication makes known to the seller the particular purpose for which the goods are required, so as to show that the buyer relies on the seller's skill and judgment, and the goods are of a description which is the seller's business to supply (whether he be the manufacturer or not) there is an implied condition that the goods shall be reasonably fit for the purpose, provided that, in case of a contract for the sale of a specified article under its patent or trade name, there is no implied condition as to its fitness for any particular purpose'.

The seller, Zamcopper Cables Ltd is in the business of supplying electrical cables for house wiring, thus have and implied duty to ensure that the goods are reasonably fit for the purpose. The buyer got them for the purpose for which Zamcopper Cables sells them, that was the only use for which the cables would be bought for. Therefore, there was thus no need for the customer to inform them of their use as the cables were used for the purpose for which they were sold (house wiring). Thus Zamcopper Cables Ltd would be held liable. Cases of Priest v Last (1903), Grant v Austrian Mills (1936) and DTC Industries Ltd v Jimfat Nigeria Ltd (1975).

## SOLUTION FOUR

(a) (i)The first way in which agency relationships can be created is through express appointment of an agent by a principal. A principal can expressly or directly appoint another person to act on their behalf in business matters of the principal. For instance, directors of a company are expressly appointed to run the business of the company as agents of the company so that profits made are accrued to the company and any losses made while exercising skill and care would not be losses of the agent but the principle as the case in Regal (Hastings) Ltd v Gulliver (1942) where the directors of a company where found to have made individual profits as agents which were mean to accrue the company as they are meant to be acting for the company.
(ii)Agency can be created by operation of the law that is, where the imply that the relationship of agency exists from the facts of a particular case. Example, the implies an agency relationship to exist where there is need for certain action or decisions to be made but the principal is in a position not to make such decisions therefore agency by necessity would be created. Great Northern Railways v Swarfield (1874) is instructive here. here the court held that the railway company acted as agents by necessity when they put a horse in a stable after transporting it and the owners could not pick it in time where there was no address to specifically drop it and there was no way for the railway company to contact the owners.
(iii)Agency by ratification is another way the relationship of agency would arise. This happens where the agent does not have actual authority to act for the principal but the principal decides to ratify acts which may be done for them by the principal as if they were acts that the principal would have given them actual authority to do for them. This kind of agency usually happens in companies which are in the process of incorporation so that pre-incorporation contracts may be ratified as provided by section $28(3)(a)(b)$ of the Companies Act Cap 388 of the Laws of Zambia.
(b)Duties owed by the agent to the principal include:
(a)duty of loyalty that is, the agent is not supposed to compete with the business of the agent but to act in good faith.
(b)The agent has a duty to separate his/her financial interest from those of the principal and to give a financial account of his dealings on behalf of the principal to the principal.
(c)Duty not use his position as agent to acquire for himself property, contract or business opportunities which should be acquired for the principal.
Duties owed by the principal to the agent include:
(d)Duty to provide the agent with the relevant documentation and information related to the goods concerned.
(e)Duty to timely avail the agent information necessary for the performance of the agency contract and any other information which may be deemed necessary for the performance of the agency agreement.
(f)A duty not to undermine the agent and proceed with the sale of the goods concerned where the principal may have favourable markets for the goods without informing the agent.
(c) Agency Relationships are contractual in nature. For a contract to be valid, it is a requirement that the contracting parties have the capacity to enter into a contract. Therefore, a minor or person of unsound mind for instance does not have the capacity to enter into a contract because they are unable to appreciate what they may be entering into and such contracts are usually voidable. Therefore for an agent to purport to be acting on behalf of someone, the principal must be one who is able to enforce the contract entered into by the agent should there be a breach and they can only enforce such contracts if they have the capacity to enter into contract, In Grover and Grover Ltd. V Matthews (1910) the court held that the agent must act for a principal who has the capacity to contract at the time he/she acted for the principal. In the case the agent wanted to act for a principal in a contract of insurance but at the time, the property which was to be insured had already been destroyed by fire hence the principal had no capacity to enter into a contract of insurance to insure the said property.

## SOLUTION FIVE

(a) It must be noted that this scenario deals with contractual relationships. From the onset, there is no legal relationship that exists between Samson and Mirriam but only a failed contractual relationship.

Samson offered to sell his laptop to Mirriam at ZMW 8, 750. In contractual rules, Mirriam was supposed to accept the offer for there to be contract. However, Mirriam offered to buy the Laptop at ZMW 8, 760, an amount which was different from the offer. This at law amounts to a counter offer. A counter offer is an offer that varies or intends to change the terms of the offer. A counter offer rejects the original offer which cannot be substantially be accepted.

Therefore, when Mirriam offered to buy the Laptop at ZMW 8, 760 she changed the offer and became the offeror and Samson was supposed to accept for it to be a contract but Samson did not accept.

The guiding position is the case of Hyde v. Wrench (1840) in which Wrench offered to sell his farm to Hyde at $£ 1000$ which Hyde declined. On 6 June 1840, Wrench wrote to Hyde's agent offering to sell the farm for $£ 1000$, stating that it was the final offer and that he would not alter from it. Hyde offered $£ 950$ in his letter by 8 June, and after examining the offer Wrench refused to accept, and informed Hyde of this on 27 June. On the 29th Hyde agreed to buy the farm for $£ 1000$ without any additional agreement from Wrench, and after Wrench refused to sell the farm to him he sued for breach of contract.

It was held that the There was no contract as the original offer of $£ 1000$ was killed off by the counter-offer for $£ 950$.
(b) In this case, the relationship that exist now is contractual as there is now a contract between Samson and Sally. For a contract to exist the major element of the offer, acceptance, consideration and intention to create legal relations.

Offer: An offer is a proposal made on certain terms by the offeror together with a promise to be bound by that proposal if the offeree accepts the terms. An offer may be made expressly, or implied by conduct. An offer must be distinguished from an invitation to treat which is where a person holds himself out as ready to receive offers, which he may then either accept or reject.

Acceptance: Acceptance can be defined as a positive act by a person to whom an offer has been made which, if unconditional, brings a binding contract into effect. The contract comes into effect once the offeree has accepted the terms presented to them. This is the point of no return. After acceptance the offeror cannot withdraw the offer and both parties will be bound by the terms that they have agreed. Failure to abide by the contract will entitle the other party to claim for damages or terminate a contract depending on what has been breached.

Consideration: Consideration has been defined as a valuable consideration in the sense of the law may consist either in some right, interest, profit or benefit accruing to one party, or some forbearance, detriment, loss or responsibility given, suffered or undertaken by the other. This consideration just needs it to be sufficient and not adequate.

Intention to create legal relations: Intention to create legal relation is the other element that is needed to validate a contract. After all, if you invite a friend round for a social evening at your house, you would not expect legal action to follow if the occasion has to be cancelled.

From the above, it must be noted that Samson offered to sell his laptop to Sally at ZMW 5, 790 and Sally immediately accepted the offer. The acceptance means that a contract was made. Consideration may be seen in the amount spent in the transaction as the intention to create legal relations.
(c)It must be noted that for an offer is made, mostly there is what is called an invitation to treat. An invitation to treat is an invitation to someone to come and make an offer. Thus, what entices someone to go and buy something is an invitation to treat. Invitation to treat takes different forms like display of goods by the window, display of goods by the shelf, auctions, company prospectus etc.

From the facts, Samson displayed the laptop on a shelf which enticed Mirriam to go and buy. Therefore, this display on a shelf amount to an invitation to treat.

## SOLUTION SIX

(a) An offer:- An offer is a proposal made on certain terms by the offeror together with a promise to be bound by that proposal if the offeree accepts the terms. An offer may be made expressly, or impliedly by conduct. The offer may be made to a specific person, in which case it can only be accepted by that one person. It can be made to a group or to the whole world as was the case in Carlill v Carbolic Smoke Ball Co. (1893).
(b) Privity of contract:- This doctrine states that a person cannot be bound by, or take advantage of, a contract to which he was not a party. Only parties to a contract must enjoy or suffer its consequences - Dunlop v Selfridge (1915), and Moses Chapakwenda and Others v Attorney General (2011).
(c) Unascertained goods.- Unascertained goods (future goods) are those goods which are not identified and agreed o when the contract is made. At the time of buying the goods, it is impossible to identify which specific goods of the whole/bulk would be yours once they are ascertained/set aside. In a sale for unascertained goods, the property passes to the buyer only when the goods have been ascertained. Section 18 rule 5 of the Sale of Goods Act provides that once the unascertained goods sold by description are ascertained by the seller with the assent of the buyer or buyer with the assent of seller, the property in the goods then passes to the buyer. They are ascertained to the buyer once they are separated from the bulk and earmarked for a particular buyer, without separating the goods from the bulk, the property in the goods does not pass - Healy v Howlett \& Sons (1917).
(d) The Multiple (economic reality) test.- This is one of the tests used to determine whether an employee is under a contract of service or contract for services. It requires looking at a number of factors such as does the employee provide his own tools, does he delegate his work, is he paid the gross amount without tax being deducted by the employer, etc. In other terms, to arrive at whether one is an employee or not, a number of factors need to be put into consideration Ready Mixed Concrete (South East) v Ministry of Pensions \& National Insurance (1968).

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

## DA 7: PRINCIPLES OF MANAGEMENT

MONDAY 20 MARCH 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 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. 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.
1.1 Which management Scholar developed the human relations management theory.
A. Henry Fayol
B. Fredrick W Taylor
C. Elton Mayo
D. Chester Bernard
1.2 $\qquad$ is the method of production which focuses on producing a unique product according to customer specifications or order.
A. Batch production
B. Job production
C. Flow production
D. Mass production
1.3 Which strategic level deals with product or market strategy?
A. Operational strategy
B. Business strategy
C. Corporate strategy
D. Marketing strategy
1.4 The analysis of the Covid-19 diseases is associated with which factor of the macroenvironment.
A. Economical factor
B. Environmental factor
C. Social factor
D. Political factor
1.5 Which term on the managerial grid of Blake and Mouton describes a manager who is more concerned with workers welfare than production.
A. Country club
B. Team
C. Impoverished
D. Middle road
(2 marks)
1.6 According to Fielder, which one of the following variables suggest the effectiveness of a work group.
A. Leaders who prefer formal consultations.
B. Leaders who do not seek to formalize roles.
C. The relationship to which the task is designed and structured.
D. The relationship of managers who relate in an informal way.
(2 marks)
1.7 Which of the following aspects of job design represents Herzberg's theory?
A. Job enlargement and job rotation.
B. Job enlargement and job transfers
C. Job rotations and Job transfers
D. Job rotations and job promotions.
(2 marks)
1.8 Which of the following is a benefit of Human Resources Management?
A. Encouragement of initiatives
B. Attracting of applicants for new job positions
C. Selecting a suitable candidate for a job.
D. Preparation of job specification and job descriptions.
1.9 Which one of the following is NOT an example of public sector
A. Government department
B. Most schools and universities
C. Security and private companies
D. The armed forces.
1.10 State one reason micro-environmental factors are important in strategic planning.
A. Changes are difficult to predict and management should continue to identify these changes in the environment so often.
B. To be in line with Government policies providing financial services to small businesses.
C. It is helpful in planning.
D. To be in line with private policies providing financial services to businesses.

## SECTION B

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

Attempt any FOUR (4) questions.

## QUESTION TWO

(a) Define the aim of business management.
(b) State four (4) important characteristics that constitute any organization and makes it possible to accomplish its goals.
(c) Describe the four (4) major elements of strategic formulation.
[Total: 20 Marks]

## QUESTION THREE

(a) Organizations interact with individuals and groups who influence the development and achievement of its mission and objectives.

## Required:

Explain the importance of maintaining a good relationship with the following:
(i) Customers
(2 marks)
(ii) Financial institutions
(iii) Suppliers
(iv) Unions
(2 marks)
(v) Employee
(b) Describe five (5) contents of an organization chart.

## QUESTION FOUR

Culture is the collective programming of the mind which distinguishes the members of one category of people from the other (Hofstede)

## Required:

(a) Explain the three (3) observable expressions of culture as postulated by Schein.
(b) Identify four (4) factors that influence organizational culture.
[Total: 20 Marks]

## QUESTION FIVE

(a) Abraham Maslow suggested that five (5) needs of individuals can be arranged in a hierarchy. The need at a lower level the dominator motivating factor for the individual until it has been satisfied. This means realistically the need at the higher level is not important for that individual until the needs at the lower level are satisfied.

## Required:

Explain the Maslow's needs of hierarchy starting with the lower level to the higher level.
(10 marks)
(b) The main purpose of training and development is to raise the competences and performance standards. It is concerned with personal development, helping and motivating employees to fulfill their potential.

## Required:

(i) List four (4) skills that might be covered by training or education program.
(ii) Explain the importance of performance evaluation
[Total: $\mathbf{2 0}$ Marks]

## QUESTION SIX

(a) Describe the five (5) categories of what Managers do as described by Drucker.
(10 marks)
(b) Since the coming of Covid-19 working together is being encouraged due the social and economic benefits that are there. Explain five (5) benefits of joining cooperatives. (10 marks)
[Total 20 marks]

## END OF PAPER

## DA 7- PRINCIPLES OF MANAGEMENT SUGGESTED SOLUTIONS

 SOLUTION ONE1.1 C
1.2 B
1.3 B
1.4 C
1.5 A
1.6 C
1.7 A
1.8 A
1.9 C
1.10 A

## SOLUTION TWO

a) The aim of business management is to produce the greatest quantity and quality of a given product or service at the lowest possible cost.
b) The Four (4) characteristics that constitute any organization are:
i. Distinct purpose- these are the goals an organization wants to achieve
ii. People- people will be needed to perform the tasks that will lead to the accomplishment of the organizational goals
iii. Deliberate structure- the network, rules roles regulations that will make coordination easy for the work to be done.
iv. Structure of an organization is best illustrated in form of a chart.
c) The following are the four (4) major elements of strategic formulation:
i. Analysis of organization's mission and purpose
ii. Analysis of the organization's values and corporate culture which should help to build competitive advantage
iii. Analysis of weaknesses and strengths in order to compete favorably in industry
iv. Analysis of opportunities and threats in the environment and find solutions.

## SOLUTION THREE

a) The following are reasons for maintaining a good relationship with the following:
i. Customers- they have the greatest influence on the outcome of the business and their response to a product or service will depend on how they are served concerning the value and satisfaction they get and the mutual respect they enjoy expressed through durability safety and after sales services.
ii. Financial institutions-the good relationship with the financial institute will make it easy for the business to get loans, other credit facilities and other favorable terms as may be determined by the bank. This relationship will depend on the trustworthiness of the organization in its dealings with clients financially and morally.
iii. Suppliers- provide goods and services to the organization and good business relationship will allow the organization get goods on credit, enjoy favors like free delivery of goods and having preference treatment over other companies especially during periods of shortages therefore giving an advantage to the company over others.
iv. Unions-a good relationship based on mutual trust will allow an atmosphere for fair negotiations good will, prevention of strikes and other forms of industrial unrest leading to the promotion of workers' rights and dignity.
v. Employees- these are the first customers who can promote the goods and services therefore fair equitable treatment of workers will add value to the company because they will spread the good news about it or bad news, which may destroy its reputation.
b) The following are the contents of an organizational chart:
i. The division of work assigned
ii. Type of work performed by the person assigned including their titles
iii. Supervisor- subordinate relationship who reports to whom in the hierarchy of authority
iv. Formal communication channels
v. Major subunits divisions or departments.
vi. Levels of management vertical linkages, which show management levels.

## SOLUTION FOUR

(a) Explain the three observable expressions of culture as postulated by Schein
(i) Behavior: people behave in a similar ways and have similar ways of dealing with other people. There are established norms of behavior: and customs and rules about behavior that are acceptable or unacceptable
(ii) Artifacts: Culture may also be expressed in terms of the architecture of the building in which the organisation is located, interior design of the office, dress code and other symbols
(iii) Attitudes: these are patterns of collective behavior such as greeting styles, business formalities, social courtesies and ceremonies
(b) Identify four (4) factors that influence organisational culture.
(i) Founder: key values and assumptions of the founder
(ii) Organisation History: how the organization was founded
(iii) Leadership and management style
(iv) Organisation environment: the line of business and the environment of operations

## SOLUTION FIVE

(a) Explain the Maslow's needs of hierarchy starting with the lower level to the higher level.

1. Physiological needs: Food and shelter
2. Safety needs: security, order, predictability, freedom from threats
3. Love/social needs: affection and belonging
4. Esteem needs: recognition, status and respect
5. Self-actualization needs: fulfillment of personal potential
(b)
(iii) List four (4) skills that might be covered by training or education programme.
(i) Basic literacy skills
(ii) Technical skills
(iii) Interpersonal skills
(iv) Problem solving skills
(iv) Explain the impotence of performance evaluation

Performance evaluation is used to identify the training needs. It can also be used to identify the potential and reward review

## SOLUTION SIX

a) The following is how Drucker described what managers do:
i. Setting objectives for the organization and targets to be achieved
ii. Organizing the work
iii. Motivating the employees
iv. Job of measurement through establishment of objective and yard sticks, analysis of actual performance, communication of findings and explanation of their significance to them and the organization
v. Developing people by bringing out their talents and strengthen their integrity.
b) The following are the advantages and benefits of joining a cooperative:
i. Members join a cooperative to develop their businesses and benefit economically and socially.
ii. There are sets of rules to help monitor the activities
iii. They are democratic and offer self-expression opportunities through the votes
iv. The aim is to make profits which are shared by everyone
v. They are open to new members on voluntary basis who can leave when they wish to do so
vi. All members participate in the economic activities of the business
vii. They provide information and training to their members
viii. They cooperate with other cooperatives

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 8: FINANCIAL REPORTING
MONDAY 20 MARCH 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.

## SECTION A

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

## QUESTION ONE

Peach holds investments in two (2) other entities, Sapodilla and Apricot. All three (3) entities prepare financial statements to 31 March and the statements of financial position of the three (3) entities at 31 March 2022 were as follows:

| Assets | Peach K | Sapodilla K | Apricot K |
| :---: | :---: | :---: | :---: |
| Non-current Assets |  |  |  |
| Property Plant and Equipment | 312,500 | 212,500 | 187,500 |
| Investments | 80,000 |  |  |
|  | 392,500 | 212,500 | 187,500 |
| Current Assets |  |  |  |
| Inventories | 82,500 | 75,000 | 70,000 |
| Trade receivables | 107,500 | 75000 | 77,500 |
| Cash and cash equivalents | 27,500 | 25,000 | 22,500 |
| Total current assets | 217,500 | 175,000 | 170,000 |
| Total assets | 610,000 | 387,500 | 357,500 |

## Equity and Liabilities

## Equity

Share capital (K1 share)
Retained earnings
Total Equity
Non-current Liabilities

| 8\% loan notes | 125,000 | 62,500 | 55,000 |
| :--- | ---: | ---: | ---: |
| Deferred Tax | $\underline{87,500}$ | $\underline{30,000}$ | $\underline{42,500}$ |
| Total non-current liabilities | $\underline{212,500}$ | $\underline{92,500}$ | $\underline{97,500}$ |
| Current liabilities |  |  |  |
| Trade and other payables | 62,500 | 42,500 | 50,000 |
| Current tax payables | 22,500 | $\underline{17,500}$ | $\underline{15,000}$ |
| Total current liabilities | $\underline{85,000}$ | $\underline{60,000}$ | $\underline{65,000}$ |
| Total equity and liabilities | $\underline{610,000}$ | $\underline{387,500}$ | $\underline{357,500}$ |

## The following additional information is relevant:

(i) Peach purchased 100,000 shares in Sapodilla on 1 April 2021, by issuing one share in Peach for every two shares bought in Sapodilla. This share issue has not yet been recorded by Peach. The retained earnings of Sapodilla on the date of acquisition were K87,500

The market price of Peach's shares at 1 April 2021, was K6 per share and the market price of Sapodilla's shares at the same date was K2.40.
(ii) At the date of acquisition of Sapodilla, the fair values of its assets were equal to their carrying amounts with an exception of the non-depreciable land that had a fair value of K25,000 in excess of its carrying amount and plant and machinery that had a fair value of K20,000 in excess of the carrying amount. The estimated future economic life of plant and machinery at 1 April 2021 was four (4) years.
(iii) At 1 April 2021, Sapodilla had a long standing portfolio of loyal customers that regularly ordered goods and services from Sapodilla. The customer relationship was not included in the statement of financial position of Sapodilla on 31 March 2021 because Directors did not consider that they met the recognition criteria in IAS 38, Intangible Assets for internally developed intangible assets.

The Directors of Peach considered that the customer relationship had a fair value of K50,000 at 1 April 2021 and that based on the life cycle of the existing products, the existing customers would continue to order goods and services from Sapodilla for at least five (5) years from that date.
(iv) Peach also purchased 50,000 shares in Apricot on 1 April 2020 for a cash payment of K1.60 per share. The retained earnings of Apricot on the date of acquisition were K37,500.
(v) The inventories of Sapodilla and Apricot at 31 March 2022 included components purchased from Peach during the year at cost of K50,000 to Sapodilla and K40,000 to Apricot. Peach supplied these components at cost plus a mark-up of $25 \%$.
(vi) Trade receivables of Peach included K12,500 receivable from Sapodilla and K10,000 receivable from Apricot in respect of the purchase of components in note (v). The trade payables of Sapodilla and Apricot include an equivalent amount payable to Peach.
(vii) An impairment test at 31 March 2022 on consolidated goodwill revealed that it should be written down by K2,500. Investment in Apricot has not suffered any impairment loss.
(viii) It is group policy to measure non-controlling interest at fair value. The fair value of noncontrolling interest in Sapodilla at the date of acquisition is to be calculated using the fair value of share price of Sapodilla at acquisition.

## Required:

Prepare the consolidated statement of financial position for Peach Group as at 31 March 2022.
[Total: 25 Marks]

## QUESTION TWO

The following trial balance relates to Mukonde Co as at 31 March 2022.

|  | K'000 | K'000 |
| :---: | :---: | :---: |
| Revenue (note (ii)) |  | 535,800 |
| Cost of sales | 333,200 |  |
| Distribution costs | 50,000 |  |
| Administrative expenses | 44,000 |  |
| Equity shares of K1 each |  | 50,000 |
| Other equity |  | 23,600 |
| Retained earnings at 1 April 2021 |  | 16,000 |
| 5\% convertible loan notes (note (iii)) |  | 60,000 |
| Land and buildings at cost (land element K28 million) (note (i)) | 128,000 |  |
| Plant and equipment at cost (note (i)) | 165,400 |  |
| Patent at cost (10 year life) (note (i)) | 15,000 |  |
| Accumulated depreciation/amortization at 1 April 2021: |  |  |
| Buildings |  | 10,000 |
| Plant and equipment |  | 73,400 |
| Patent |  | 6,000 |
| Inventory at 31 March 2022 | 64,200 |  |
| Trade receivables | 77,000 |  |
| Bank |  | 5,400 |
| Current tax (note (iv)) | 3,100 |  |
| Deferred tax (note (iv)) |  | 9,600 |
| Loan note interest paid (note (iii)) | 3000 |  |
| Bank interest | 300 |  |
| Other operating income from |  | 600 |
| Trade payables |  | 92,800 |
|  | 883,200 | 883,200 |

## The following notes are relevant:

(i) Due to rising property prices, Mukonde Co decided to revalue its land and buildings on 1 April 2021 to their fair value. The values were confirmed at that date as land K32 million and buildings K104.4 million. At that date, the buildings had an estimated remaining useful life of 18 years. Mukonde Co intends to make an annual transfer from the revaluation surplus to retained earnings in respect of an annual realization of the revaluation surplus. Deferred tax on revaluation is to be ignored.

Plant and equipment is depreciated at $15 \%$ per annum using the reducing balance method.

During the current year, the income from royalties relating to the patent had declined considerably and the Directors were concerned that the value of the patent may be impaired. A study at the year-end concluded that the present value of the future estimated net cash flows from the patent at 31 March 2022 was K6.5 million; however, Mukonde Co also had a confirmed offer of K6.8 million to sell the patent immediately at that date. No
depreciation/amortisation had been charged on any non-current asset for the year ended 31 March 2022.

All depreciation/amortisation is charged to cost of sales. There were no acquisitions or disposals of non-current assets during the year.
(ii) Revenue included an amount of K32 million for a sale made on 1 April 2021. The sale related to a single product, inclusive of ongoing servicing by Mukonde Co. for four (4) years. The normal selling price of the product and the servicing would be K36 million and K1 million per annum (K4 million in total) respectively.
(iii) Mukonde Co. issued 600,000; K100 5\% convertible loan notes on 1 April 2021. The loan notes are convertible to equity shares on the basis of 25 shares for each K100 loan note on 31 March 2024 or redeemed at par for cash on the same date.

An equivalent loan note without the conversion rights would have required an interest rate of $8 \%$. The present value of K1 receivable at the end of each year, based on discount rates of $5 \%$ and $8 \%$, are:

|  | $5 \%$ | $8 \%$ |
| ---: | :---: | :--- |
| End of year 1 | 0.95 | 0.93 |
| 2 | 0.91 | 0.86 |
| 3 | 0.86 | 0.79 |

(iv) The Directors estimated that a provision for income tax for the year ended 31 March 2022 of K22.8 million would be required. The balance on current tax in the trial balance represents the under/over provision of the tax liability for the year ended 31 March 2021. At 31 March 2022, Mukonde Co had taxable temporary differences of K37 million requiring a provision for deferred tax. Any deferred tax movement should be reported in profit or loss. The income tax rate applicable to Mukonde Co is $20 \%$.

Required: Working to the nearest K1000; prepare Mukonde Co.'s
(a) Statement of profit or loss and other comprehensive income for the year ended 31 March 2022.
(11 marks)
(b) Statement of changes in equity for the year ended 31 March 2022.
(c) Statement of financial position as at 31 March 2022. Work to the nearest K1,000.
(10 marks)
[Total: $\mathbf{2 5}$ Marks]

## SECTION B

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

## Attempt any two (2) questions

## QUESTION THREE

Musimbi Co. is a manufacturer and distributor of hardware and electrical appliances operating from Kitwe town. Management is pleased with the current year's performance compared to it's immediate past years. They are of the view that revenue has increased tremendously in the current year. However, the Chief Finance Officer (CFO) has advised management that there is need to review the performance of other companies in the sector in which Musimbi Co. operates before settling down on the 'purported improved performance'. The Chief Finance Officer added that the review of Musimbi Co.'s sector averages will provide a good indicator of the company's performance in the sector. To this effect, the CFO has obtained some ratios for Musimbi Co.'s business sector based on the year ended 30 June 2022 as follows:

Gross profit margin 23\%
Operating profit margin $12.3 \%$
Net asset turnover (total assets less current liabilities 2 times
Return on Capital Employed (ROCE) 20.5\%
Current ratio 1.6:1
Gearing ratio (Debt/equity) 38\%
The summarized financial statements of Musimbi Co are provided below:

Statement of profit or loss for the year ended 30 June 2022

| Revenue | K'000 |
| :--- | :---: |
| Cost of sales | 250,000 |
| Gross profit | $\underline{(207,200)}$ |
| Operating expenses | $(23,800$ |
| Finance cost | $\underline{(7,200)}$ |
| Profit before tax | 12,400 |
| Income tax expense | $\underline{(4,000)}$ |
| Profit for the year | $\underline{8,400}$ |

Statement of financial position as at 30 June 2022
Non current assets ..... K'000
Property, Plant and Equipment (PPE) ..... 131,600
Current assets ..... 65,600
Total assets ..... 197,200
Equity and liabilities
Equity
Equity shares of K1 each ..... 36,000
Property, revaluation surplus ..... 16,000
Retained earnings ..... 42,400
Total shareholders' funds ..... 94,400
Non-current liabilities:

| $10 \%$ loan note | 40,000 |
| :--- | ---: |
| Lease obligation | $\underline{25,600}$ |
| Total non-current liabilities | $\underline{65,600}$ |
| Current liabilities: | 8,400 |
| Lease obligation | $\underline{28,800}$ |
| Other current liabilities | $\underline{37,200}$ |
| Total current liabilities | $\underline{\underline{197,200}}$ |

## Additional information:

(i) Included in the item property, plant and equipment above is a leased plant to Musimbi Co. with the value of K48.8 million and a newly acquired item of plant valued at K6.8 million.
(ii) Part of the owned property was revalued in the year to 30 June 2022.
(iii) Due to the previous year's unfavourable performance, Musimbi Co. decided to lower its selling prices of hardware components to its large customers and extended their credit periods.

## Required:

(a) Prepare Musimbi Co.s equivalent ratios to those of its business sector.
(9 marks)
(b) Analyse the financial performance and position of Musimbi Co. for the year ended 30 June 2022 in comparison to sector averages.
(16 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FOUR

(a) Mudaala purchased a bond with a par value of K10 million on 1 July 2021. The bond carries a $5 \%$ coupon payable annually in arrears and is redeemable on 30 June 2026 at K11.6 million. Mudaala fully intends to hold the bond until the redemption date. The bond was purchased at $10 \%$ discount. The effective interest rate on the bond is $10.26 \%$.

## Required:

Explain how the financial instrument should be classified, initially measured and subsequently measured in the books of Mudaala for the year to 30 June 2022 in accordance with IFRS 9 Financial Instruments.
(b) Mudaala buys an equity investment on 1 July 2021 for K 40 million. Mudaala made an irrevocable election that the equity investments at inception should be classified and accounted for as Fair Value Through Other Comprehensive Income (FVTOCI) instrument. Transaction costs are K1 million. Mudaala received dividends from this investment of K0.8 million. At year end, the value of the asset has risen to K 60 million.

## Required:

Discuss the appropriate accounting treatment for the above instrument for the year ended 30 June 2022, and contrast how it would be accounted for if it was designated as a Fair Value Through Profit or Loss (FVTPL) instrument in accordance with IFRS 9 Financial Instruments.
(c) On 1 July 2018, Mudaala bought a machine for K900 million which was estimated to have the original useful economic life of ten years with no residual value. On 1 October 2021, Mudaala looked at these estimates again and thought the original estimates were over optimistic. As a result, the Directors approved the revision of the estimated useful life of the machine to eight years from 1 July 2018, and that the machine would now have a scrap value at the end of its life amounting to K10 million.

## Required:

Explain the required accounting treatment for the machine for the year ended 30 June 2022 in accordance with IAS 16 Property, Plant and Equipment.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

(a) Define events after the reporting period and outline three (3) examples of adjusting events and three (3) examples of non adjusting events.
(b) Briefly explain accounting treatment of adjusting events and non adjusting events in accordance with IAS 10 Events after the reporting period.
(c) Describe 'investment property in accordance with IAS 40 Investment properties, giving examples.
(d) The following transactions arose for Tabo. The year end for Tabo is 30 June every year.
(i) Tabo purchased a building for its investment potential at a cost of K1,000,000 on 1 January 2016. The asset was estimated to have an economic useful life of 10 years when purchased. There has been no change to its estimated useful economic life since it was purchased.

At 1 July 2020, the fair Value of the building was K750,000 and on 30 June 2021, it was K690,000.

## Required:

The Directors of Tabo have asked for your advice on the required accounting treatment for the building for the year ended 30 June 2021 if the following models are adopted:

1. Cost model
2. Fair value model
(ii) Tabo purchased a brand name for its products at a cost of K55,000 on 1 August 2020. The brand name has an estimated economic useful life of 5 years from the date of purchase. Amortization is done proportionately.

## Required:

Discuss the accounting treatment of the brand that Tabo must adopt for the year ended 30 June 2021. Contrast the accounting treatment of the brand in question with the accounting treatment of an internally generated brand.

## END OF PAPER

## DA8 FINANCIAL REPORTING SUGGESTED SOLUTIONS SOLUTION ONE <br> Peach Group Statement of financial position as at 31 March 2022

|  | 'K' |
| :---: | :---: |
| Non-current assets |  |
| Property, plant and Equipment (312,500 + 212,500 + 40,000)W3 | 565,000 |
| Goodwill (W2) | 50,000 |
| Investment in Apricot (W6) | 89,800 |
| Intangible non-current asset (W3) | 40,000 |
| Total non-current assets | 744,800 |
| Current assets |  |
| Inventories (82,500 $+75,000-10,000 \mathrm{~W} 5)$ | 147,500 |
| Receivables (107,500+75,000-12,500) | 170,000 |
| Cash and cash equivalents ( $27,500+25,000$ ) | 52,500 |
| Total current assets | 370,000 |
| Total assets | 1,114,800 |
| Equity and liabilities |  |
| Equity shares (175,000 + 50,000 W8) | 225,000 |
| Share premium | 250,000 |
| Retained earnings (W4) | 141,300 |
|  | 616,300 |
| Non-controlling interest (W7) | 61,000 |
|  | 677,300 |
| Non-current liabilities |  |
| $8 \%$ Loan note (125,000 + 62,500) | 187,500 |
| Deferred tax (87,500 $+30,000)$ | 117,500 |
| Total non-current liabilities | 305,000 |
| Current liabilities |  |
| Trade and other payables (62,500 + 42,500-12,500) | 92,500 |

Current tax payable $\quad(22,500+17,500)$
Total current liabilities
Total equity and liabilities
1,114,800

## WORKINGS

## 1. Group structure

1 year ago


Investment of Peach into Sapodilla $=100,000$ shares $/ 125,000 \times 100=80 \%$
Investment of Peach into Apricot $=50,000$ shares $/ 125,000 \times 100=40 \%$
2. Goodwill on acquisition of Sapodilla

Purchase consideration:
Share exchange [100,000/2 x1 x K6]
300,000
Fair value of NCI at acquisition [20\% x 125,000 x K2.4]
60,000
360,000
Less net assets acquired:
Share capital
125,000
Pre-acquisition retained earnings
87,500
Fair value adjustments (W3)
95,000
$(307,500)$
Gross Goodwill
52,500
Less impairment loss
Net goodwill
'K' $\mathbf{K}^{\prime} \quad \mathbf{K}^{\prime}$

|  | $\underline{(307,500)}$ |
| :--- | :---: |
| Gross Goodwill | 52,500 |
| Less impairment loss | $\underline{(2,500)}$ |
| Net goodwill | $\underline{\underline{50,000}}$ |

## 3. Fair value adjustments

|  | At acquisition | movement | at reporting |
| :--- | :---: | :---: | :--- |
|  | ${ }^{\prime} \mathrm{K}^{\prime}$ | $\mathrm{K}^{\prime}$ | ${ }^{\prime} \mathrm{K}^{\prime}$ |

i) Depreciation on Fair value adjustment of plant and machinery: K20,000/4years =K5,000 per annum.
ii) Amortization of customer relationship: K50,000/5 years = K10,000 per annum.
4. Consolidated retained earnings

|  | Peach | Sapodilla | Apricot |
| :--- | :--- | :--- | :--- |
| Balances per question | 137,500 | 110,000 | 70,000 |
| Less pre-acquisition retained Earn. |  | $(87,500)$ | $(37,500)$ |
| Less additional depreciation: |  |  |  |
| Plant and machinery | $(5,000)$ |  |  |
| Customer relationship | $(10,000)$ | ---------- |  |
|  | 7,500 | 32,500 |  |

Unrealized profit:
Peach to Apricot( $25 / 125 \times 50,000 \times 40 \%$ )
Peach to Sapodilla $(25 / 125 \times 50,000)$
$(10,000)$
Peach's share of Sapodilla's PARE:
$(80 \% \times 7,500) \quad 6,000$
Peach's share of Apricot' PARE:
$(40 \% \times 32,500) \quad 13,000$
Peach's share of impairment loss:
( $80 \% \times 2,500$ )
$(2,000)$
Consolidated retained earnings
141,300

## 5. Provision for unrealized profit

i) Peach to Apricot
$25 / 125 \times K 40,000 \times 40 \%=K 3,200$
Double entry for this is:
Dr Group retained earnings
3,200
Credit Investment in associate $\quad 3,200$
ii) Peach to Sapodilla
$25 / 125 \times$ K $50,000=K 10,000$
Double entry:
'K'
Dr Group Retained earnings
10,000
Cr Group inventory $\quad 10,000$
6. Carrying amount of Investment in Apricot at reporting date: ' $\mathbf{K}^{\prime}$

Cost of investment in Apricot (K1.60 x 50,000 shares) $\quad 80,000$
Add: Peach's share of Apricot' post acquisition retained earnings: ( $40 \% \times \mathrm{K} 32,500$ )

13,000
Less: Provision for unrealized profit (W5)
$(3,200)$
Carrying amount of investment in Apricot
89,800

## 7. Non-controlling interest at reporting date:

NCI at acquisition (W2) 60,000
Add: NCI share of Sapodilla's post acquisition retained earnings (20\% x K7,500(w4))

1,500
Less: NCI share of impairment loss of Goodwill $(20 \% \times 2,500)$
(500)

Carrying amount of NCI at reporting date
61,000

## 8. Share capital and share premium from purchase consideration of Sapodilla



## 9. Alternative approach to calculating net assets hence post acquisition retained

 earnings of subsidiary:|  | At acquisition | At reporting | Movement |
| :--- | ---: | :--- | :--- |
|  |  |  |  |
|  | $K^{\prime} 000$ | $K^{\prime} 000$ | $K^{\prime} 000$ |
| Share capital | 125,000 | 125,000 | 0 |
| Retained earnings | 87,500 | 110,000 | 22,500 |
| Fair value land | 25,000 | 25,000 | 0 |
| Fair value plant | 20,000 | 15,000 | $(10,000)$ |
| Fair value Brand | $\underline{50,000}$ | $\underline{40,000}$ | $\underline{(10,000)}$ |
|  | $\underline{307,500}$ | $\underline{315,000}$ | $\underline{7,500}$ |

Post acquisition retained earnings of Sapodilla is K7,500
10. Alternative group retained earnings:

| Peach | 137,500 |
| :--- | :---: |
| Peach share of Sapodilla $(80 \% * 7,500)$ | 6,000 |
| PUP: Peach to Sapodilla $(25 / 125 * 50,000)$ | $(10,000)$ |
| Peach to Apricot $40 \%(25 / 125 * 40,000)$ | $(3,200)$ |
| Peach share of Apr PARE $(40 \% * 32,500)$ | 13,000 |
| Peach share of impairment loss $(80 \% * 2500)$ | $\underline{(2,000)}$ |
| CSFP | $\underline{141,300}$ |

## SOLUTION TWO

a) Mukonde Co statement of profit or loss and other comprehensive income for the year ended 31 March 2022

|  | K'000 |
| :--- | ---: |
| Revenue (535,800-2,400) (W1) | 533,400 |
| Cost of sales (W2) | $\underline{(355,000)}$ |
| Gross profit | 178,400 |
| Administrative expenses | $(44,000)$ |
| Distribution costs | $(50,000)$ |
| Other operating income | 600 |
| Finance cost (300+4,411W3) | $\underline{(4,711)}$ |
| Profit before tax | $\underline{80,289}$ |
| Income tax expense (W5) | 56,589 |
| Profit for the year | $\underline{17,600}$ |
| Other comprehensive income: | $\underline{74,189}$ |
| Revaluation surplus(4,000+14,400-(14,400/18) |  |

b) Mukonde Co

Statement of changes in equity for the year ended 31 March 2022


| transfer to retained | - | - | $(800)$ | 800 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| earnings |  |  |  |  |  |
| TOTALS | $\underline{\mathbf{5 0 , 0 0 0}}$ | $\underline{\mathbf{2 8 , 4 6 0}}$ | $\underline{\mathbf{1 7 , 6 0 0}}$ | $\underline{\mathbf{7 3 , 3} 89}$ | $\underline{\mathbf{1 6 9 , 4 4 9}}$ |

C ) Mukonde Co. statement of financial position as at 31 March 2022 K’000

## Non-current assets

Property, plant and equipment (W4) 208,800
Patent (W4) $\underline{\underline{6,800}}$
Total non-current assets $\quad \underline{215,600}$

## Current assets

Inventories 64,200
receivables $\quad \underline{77,000}$

Total current assets $\underline{\underline{141,200}}$
Total assets $\quad \underline{356,800}$

## Equity and liabilities

Equity:
Equity share capital K1 each 50,000
Other components of equity (23,600+4,860 W3) 28,460
Revaluation surplus (18,400-800) 17,600
Retained earnings $\quad \underline{73,389}$
Total equity $\quad \underline{169,449}$

## Non-current liabilities

5\% convertible loan note (W3) 56,551
Deferred tax (W5) 7,400
Deferred revenue (W1) $\underline{1,600}$
Total non-current liabilities $\quad \underline{65,551}$

## Current liabilities

Trade payables 92,800
Deferred revenue (W1) 800
Bank overdraft 5,400
Current tax payable (W5) $\quad \underline{22,800}$
Total current liabilities $\quad \underline{121,800}$
Total equity and liabilities $\quad \underline{\underline{356,800}}$

## WORKINGS:

1) Product and servicing sale Under IFRS 15 Revenue from Contracts with Customers, sales made which include revenue for on-going servicing work must have part of the revenue
deferred and any discount offered to stand-alone selling prices must (normally) be allocated to each component pro rata to the stand-alone selling prices.

The stand-alone selling price of the product and the servicing work would be K40 million (K36 million and K4 million (1m x 4 years) respectively). The actual combined selling price of K32 million represents a $20 \%$ discount on the stand-alone selling prices ((K40 million K32 million)/(36 million + K4 million)).

Thus the sales revenue of K32 million would be allocated K28.8 million (K36 million $\times 80 \%$ ) to the product and K3. 2 million ( $4,000 \times 80 \%$ ) to the servicing.

At 31 March 2022 there are three more years of servicing work, thus 2.4 million ( $(3,200$ $x 3$ years/4 years) must be treated as deferred revenue, split K800,000 as a current liability and K1,600,000 as a non-current liability.

## 2) Cost of sales:

| As per trial balance | 333,200 |
| :--- | ---: |
| Dep'n- building (104,400/18 yrs) | 5,800 |
| -plant \& equipment $(15 \% * 92,000)$ | 13,800 |
| Amortization of patent $(15,000 / 10 \mathrm{yrs})$ | 1,500 |
| Impairment of patent (W4) | 700 |
| Total | $\underline{355,000}$ |

## 3) Convertible loan notes

The convertible loan notes are a compound financial instrument having a debt and an equity component which must both be quantified and accounted for separately.
Splitting the instrument:
Year ending 31 March cash flow 8\% discount factor present value

|  | K'000 |  | K'000 |
| :---: | :---: | :---: | :---: |
| 2022 | 3,000 | 0.93 | 2,790 |
| 2023 | 3,000 | 0.86 | 2,580 |

2024
3,000
0.79
2,370
2024
60,000
0.79
47,400
Liability component
55,140
Equity component (balancing figure)
4,860
60,000

Proceeds

## Amortization of a liability component:

|  | Balance $\mathrm{b} / \mathrm{f}$ | effective finance cost | coupon paid | balance $\mathrm{c} / \mathrm{f}$ |
| :--- | :--- | :---: | ---: | :--- |
| $\mathrm{Y} / \mathrm{E} 31 / 3 / 22$ | 55,140 | 4,411 | $(3,000)$ | 56,551 |

The finance cost for the year will be K4.411 million (K55.14 million*0.08) to be debited to statement of profit or loss and other comprehensive income and the carrying amount of the loan at 31 March 2022 will be K56.551 million (K55.14 million + (K4.411 million -K3 million)) to be recognized in the statement of financial position at the same date.
4) Property, plant and equipment plus patent

|  | Land | Building | Plant \& Equipment | Patent |
| :---: | :---: | :---: | :---: | :---: |
|  | K'000 | K'000 | K'000 | K'000 |
| Balance b/f | 28,000 | 100,000 | 165,400 | 15,000 |
| Less acctd dep'n b/f | - | $(10,000)$ | $(73,400)$ | $(6,000)$ |
| Carrying amount b/f | 28,000 | 90,000 | 92,000 | 9,000 |
| Revaluation surplus | 4,000 | 14,400 | - | - |
| Revalued/carrying | 32,000 | 104,400 | 92,000 | 9,000 |
| Depre'n expense | - | $(5,800)$ | $(13,800)$ | - |
| Impairment loss - Pa | tent | - | - | (700)* |
| Amortization |  |  | - | $(1,500)$ |
| Carrying amt c/f | 32,000 | 98,600 | 78,200 | 6,800 |

i) Transfer of revaluation reserve to retained earnings:

Surplus $14,400 / 18$ yrs remaining $=800$
Dr revaluation reserves 800
Cr retained earnings 800
ii) The patent had a carrying amount of K7.5 million (K9m-K1.5 m amortization). As its recoverable amount was only K 6.8 m (the higher of value in use ( K 6.5 m ) and the fair value less costs to sell (K6.8m), the patent was impaired by K700 (K7.5-K6.8m).
5) Income tax expense account

| Dr |  |  | Cr |  |
| :--- | :---: | :---: | :---: | :---: |
| Balance b/f : current tax | 3,100 | Balance b/f | 9,600 |  |
| Bal c/f : Current tax | 22,800 | Profit/loss | 23,700 |  |
| Deferred tax (K37m x 20\%) | $\underline{7,400 *}$ |  | - |  |
|  | $\underline{33,300}$ |  | $\underline{33,300}$ |  |

## Alternative tax working:

Deferred tax carried forward (20\%*37,000) 7,400
Plus current tax carried forward 22,800
Plus current tax $\mathrm{b} / \mathrm{f} \quad 3,100$
Less deferred tax b/f
$(9,600)$
Profit and loss charge
23,700

## SOLUTION THREE

a) Musimbi Co equivalent ratios

| RATIO | FORMULAR | SUBSTITUTION <br> For Musimbi Co ratios $K^{\prime} 000$ | MUSIMBI CO | SECTOR <br> AVERAGES |
| :---: | :---: | :---: | :---: | :---: |
| Gross profit margin | Gross profit/revenue $\text { x } 100$ | 42,800/250,000 x 100 | 17.1\% | 23\% |
| Operating profit margin | Operating <br> profit/revenue x 100 | $\begin{aligned} & 12,400+7,200 / 250,000 x \\ & 100 \end{aligned}$ | 7.8\% | 12.3\% |
| Net asset turnover | Revenue/capital employed | 250,000/(197200-37,200) | 1.6 times | 2 times |
| Return on capital employed (ROCE) | Operating profit/capital employed x 100 | $\begin{aligned} & 12,400+7,200 / 197200- \\ & 37,200) \end{aligned}$ | 12.2\% | 20.5\% |
| Current ratio | Current assets/current liabilities | 65,600/37,200 | 1.8:1 | 1.8:1 |
| Gearing ratio | Debt/equity | 102,800/94,400 | 109\% | 38\% |
| Interest cover | Operating profit/finance cost | 12,400+7,200/7,200 | 2.7 times |  |
| Operating expenses to revenue ratio | $\begin{aligned} & \text { Operating } \\ & \text { expenses/revenue } x \\ & 100 \end{aligned}$ | 23,200/250,000 x 100 | 9.3 \% | 10.7 |

## b) Financial performance

As measured by the Return on Capital Employed (ROCE), Musimbi Co's overall profitability does not compare well with its competitors, underperforming the sector average profitability by over $40 \%$ (( $20 \cdot 5 \%-12 \cdot 2 \%) / 20 \cdot 5 \%)$. The component parts of overall
profitability are asset turnover and profit margins and, on both of these, Musimbi Co considerably underperforms the sector average. The underperformance is worse for profit margins than for asset utilisation and indeed it is the gross margin which is the main cause of the unfavourable comparison. This is largely because of a deliberate policy of underpricing competitors (to increase sales) as confirmed by management. It is also likely to be due to inefficient manufacturing and distribution methods that may fail to recover costs caused by the operations hence poor profitability. Musimbi Co's control of operating expenses, as shown by the difference between gross and operating profit margins, is relatively good (at $9 \cdot 3 \%$ of revenue compared to $10 \cdot 7 \%$ for the sector) which confirms that it is the gross profit margin which is the problem area, assuming there are no differences in cost classification. Musimbi Co is generating approximately 20\% ((2 $1 \cdot 6) / 2$ ) less revenue from its assets compared to the sector average which (as already noted) is also contributing to overall lower profitability (ROCE). Apart from the obvious implication that Musimbi Co may be a less efficient manufacturer and distributor, there could also be a number of other reasons for the lower asset utilisation.

Musimbi Co revalued its property, whereas it is not known if its competitors also revalued their properties. Some of Musimbi Co's plant were recently acquired and therefore may not be up to full production capacity, meaning the current year's revenue does not contain sales for a full year in respect of production from this plant. The leasing of plant is usually more expensive than outright purchase (although the finance costs would not affect ROCE). Of course other competitors may also experience some of these issues, the effects of which would be included in the sector average figures.

## Financial position

The current ratio shows that the liquidity of Musimbi Co is within expected norms and compares well with its competitors. Musimbi Co's gearing is quite high as compared to its competitors. This obviously increases finance costs and with an interest cover of only $2 \cdot 7$ times (19,600/7,200), any downturn in profit may place Musimbi Co in a difficult position. That said, a finance cost of $10 \%$ on the loan notes (plus the finance costs of the lease obligations) is a lower percentage than the ROCE so shareholders are getting a (slight) benefit from the debt, but this is at considerable risk.

Further, the gearing ratio shows that Musimbi has a high proportion of debt compared to equity $1.08(102,800 / 94,400)$. This means Musimbi Co may not be as attractive to its shareholders as much of its resources will go towards servicing debts which may negatively affect shareholder income through dividends. However, Musimbi Co likely to have a tax advantage as high interest cost reduces tax obligation hence increasing disposable profit.

## Conclusion

Musimbi Co is considerably underperforming its sector averages and the Chief Finance Officer is correct to say that a comparison with its competitors is a better indication of Musimbi Co's current performance than looking at the past trend of its own performance, subject to the definitions and accounting policies used by other companies in the sector. The analysis indicates Musimbi Co may need to look at its pricing policy or improve its manufacturing and distribution efficiency and also need to investigate a strategy of reducing its gearing.

## SOLUTION FOUR

a) The debt purchased by Mudaala is a financial asset - debt instrument. As Mudaala intends to hold the bond until redemption date, it will be classified as an amortized cost instrument. This classification is made for instruments that satisfy two (2) tests: that is, the objective of business model in which the asset is held to collect contractual cash flows and the contractual terms are to give rise to cash flows that comprise principle and interest on specified dates.

The initial measurement of such an instrument is fair value less any trade discount plus any transaction costs. In case of Mudaala, the initial measurement will be at fair value of the bond on issue less any trade discount =K9 million [K10 million - K1 million (10\%*K10,000)]. No transaction costs were incurred on purchase of instrument.

In subsequent years, interest income method will be used in which the initial value will be increased by the effective finance income at the rate of $10.26 \%$ giving Mudaala finance income of K923,000; less K500,000 coupon received at the rate of $5 \%$ of K10 million leaving K9.423 million (K9m+K0.923-K0.5) as balance asset on the financial asset.
b) The financial asset has been classified as FVTOCI instrument and therefore initial measurement of the instrument at purchase date is fair value plus transaction costs giving a total measure of K41 million (K40 million plus K1 million). Note that for this classification, the transaction costs do not get expensed to profit and loss but added to initial fair value.

For subsequent measurement, fair value is again determined at the reporting date and is the amount at which the financial asset gets recognized in the statement of financial position, i.e. K60 million in Mudaala's case. Further, the movement in fair value of K19 million (K60 million - K41 million) will be credited (gain) to other comprehensive income portion of the statement of profit or loss and other comprehensive income for the year ended 31 December 2021. Additionally, the investment income from dividends received amounting to K0.8 million will be credited to profit or loss for the same year ending 31 June 2022.

However, if the instrument was designated as a FVTPL, while the transaction costs of K1 million would have been expensed to profit or loss, dividend income of K0.8 million would have maintained the accounting treatment of crediting to profit or loss. The initial fair value would be K40 million as transaction costs would not be added to purchase cost to arrive at initial fair value. The reporting date fair value of K 60 million is the amount at which the instrument would be shown in the statement of financial position at 31 June 2022 with the gain of K20 million taken as credit to profit or loss statement.
c) The correct amount of depreciation and hence carrying amount for each of the years to 30 June 2022 are as follows:

Profit and loss
K'million
Y/E 30/6/2019 dep'n
Y/E 30/6/2020 dep'n
Y/E 30/6/2021 dep'n

90
90
90
statement of financial position
K'million
PPE CA810 (900-90)
PPE CA720 (900-180)
PPE CA630 (900-270)
PPE CA 607.5 (630-22.5)

From 1/7/21- Y/E 30/9/2021 dep'n 22.5m (90m*3.12)
From 1/10/2021-30/6/22 dep'n 94.34m (607.5-10/4.75 years)*9/12.

Depreciation of K90 million per annum would not apply to year ending 30/6/2022 as there was a revision of useful life and hence per annum depreciation needed to be recalculated using remaining life and new residual value.

Note that at 1 October 2021 when life in total was revised to 8 years, a total of 3.25 years had passed with balance of years being 4.75 ( 8 years- 3.25 years). IAS 16 requires that depreciation is recalculated using the remaining years after changes in useful life and residual value hence the use of 4.75 years and carrying amount at date of change.

To be recognized in profit or loss for year ending 30 June 2022 will be total depreciation of K116.84 m (K22.5m +94.34 m) being 3 months and 9 moths depreciation respectively.

The carrying amount of the machine at 30 June 2022 will be:
K513.16 million (K607.5-94.34 million)

## SOLUTION FIVE

a) Events after the reporting period are those events, both favourable and unfavourable, that occur between the reporting date and the date when financial statements are authorized for issue. Two types of events can be identified namely:

Adjusting events - those that provide further evidence of conditions that existed at the reporting date or which call into question the going concern status of an organization.

Non adjusting events -those that are indicative of conditions that arose subsequent to the reporting date.

Note that the 'after the reporting period' referred to in IAS 10 is strictly between the reporting date and date financial statements are authorized for issue to outsiders.

Any event occurring after authorization date is outside the scope of IAS 10
Examples of adjusting events include:

- Irrecoverable debts arising after the reporting date
- Evidence of impairment of assets, e.g sale of inventory at less than the cost, ie allowances for inventories due to evidence of net realizable value having fallen after the reporting date.
- Discovery of fraud and error
- Amounts received or receivable in respect of insurance claims which were being negotiated with the insurance company at the reporting date.
- Completion of a court case entered into before the reporting date
- Determination of sale or purchase price of assets sold or purchased before the year end.

Examples of non adjusting events include:

- A major business combination after the reporting date.
- Announcement of discontinuance of operation
- Major purchase or disposal or revaluations of non current assets
- Destruction of a major production plant by fire
- Announcement of major restructuring
- Abnormally large changes after the reporting date in foreign exchange rates
- Issue of shares or loan notes
- Announcement of changes in tax rates
- Dividends declared before financial statements are authorized.
- Acquisition or disposal of subsidiary after the year end.
b) Adjusting events - require the adjustments of amounts recognized in the financial statements. Non adjusting events - should be disclosed by note if they are of such importance that non disclosure would affect the ability of the users of financial statements to make proper
evaluation of their decisions. The note is to disclose the nature of the event and its financial effect on the company
c) Investment property is land or a building held to earn rentals, or for capital appreciation or both, rather than for use in the entity or for sale by the entity in the ordinary course of business. Owner occupied property is excluded from the definition of Investment Property.
- Land held for long term capital appreciation rather than for short term sale in the ordinary course of business.
- A building owned by the reporting entity (or held by the entity under finance lease) and leased out under operating lease.
- A building held by a parent and leased to a subsidiary (only in parent's separate financial statements)
- Property being constructed for future use as an investment property.

The following do not qualify as investment property:

- property intended for sale in ordinary course of business (IAS 2)
- property being constructed on behalf of third parties (IFRS 15)
- Owner occupied property (IAS 16)
d) (i) investment property


## Cost model <br> K’000

Cost at 1.1.2016 1,000
Dep'n to 1.1.2021(1000/10yrs)*5
Dep'n 6 months to 30/6/21
(50)

Carrying amount @ 30/6/21
450

## Fair value model

Fair value at 1.7.2020
Fair value loss
Fair value at 30/6/2021

K'000
750

## (60)

690

Under cost model, the investment property would be reported in the statement of financial position at its carrying amount of K450,000 and depreciation of K550,000 in total would have been suffered since purchase of investment property but for the year ending 30 June 2021, depreciation of K100,000 would be charged to profit and loss statement as follows:

## Profit and loss extract for year ended 30 June 2021

K'000
Dep'n expense 100

Statement of financial position extract as at 30 June 2021
Non-current assets
K'000
Investment property
450

Under fair value model, the investment property would be recognized at its fair value at the reporting date on 30 June 2021 of K690,000 in the statement of financial with its fair value loss of K60,000 being reported in profit or loss. According to IAS 40 Investment Properties, once fair value model is adopted, the asset must never be depreciated.

## Profit and loss extract for year ended 30 June 2021

K'000
Fair value loss
60

## Statement of financial position extract as at 30 June 2021

## Non-current assets K'000

Investment property 690
(ii) Intangible assets K'000

Cost at $1 / 8 / 2020$
55
Less 11 months amortization
( $55,000 / 5$ yrs x $11 / 12$ )
10.1

Carrying amt at 30/6/21
44.9

The brand will be accounted for by recognizing amortization in profit and loss for the year ending 30 June 2021 of K10,083 and carrying amount of K44,917 in statement of financial position at the same date.

Internally generated brand does not get recognized in financial statements as ascertaining their value is highly subjective, and so fail to meet the recognition criteria for intangible assets outlined in IAS 38 Intangible assets.

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 9: MANAGEMENT ACCOUNTING
TUESDAY 21 MARCH 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

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

## QUESTION ONE

(a) Ensachi Ltd (EL) is a manufacturing company producing and selling leather products. In the last quarter of the year 2022, management started preparing budgets for the following year. EL expects to sell its products at an average price of K50 per each unit but this is expected to increase in last quarter of 2023 by five per cent (5\%). The following is the sales forecast:

| Quarter-Year | $1-2023$ | $2-2023$ | $3-2023$ | $4-2023$ |
| :--- | :--- | :--- | :--- | :--- |
| Forecast sales 48,000 36,000 72,000 | 54,000 |  |  |  |
| units |  |  |  |  |

Sales units for the year 2024 are projected to be 230,400 distributed evenly. It is EL's policy to hold inventory of finished goods at the end of each quarter equal to a third of the following quarter's sales demand and inventory of raw material equal to a quarter of the following quarter's raw material production requirement. The inventory at the beginning of the budget period is expected to meet this policy.

The production schedule shows that each unit requires 0.85 kgs of direct materials at K29 per Kg .

## Required:

Prepare the following budgets for 2023:
(i) Sales budget in quantity and value for each quarter.
(ii) Production budget in quantity for each quarter.
(iii) Raw material purchases budget in quantity and value for the first three (3) quarters.
(b) A new Finance Director, who previously held a senior management position in a 'not- forprofit' health organisation, has recently been appointed. Whilst employed by the health service organisation, the new Finance Director had been the Manager responsible for the implementation of a zero-based budgeting system which proved highly successful.

## Required:

Describe the three (3) steps to be considered when implementing a system of zero-based budgeting within EL.
(c) A programme planning and budgeting system (PPBS) sets a budget in terms of programmes (groups of activities with common objectives). This is particularly useful for public sector and not-for-profit organisations.

## Required:

Explain why the use of traditional budgeting for public sector and not-for-profit organizations is not suitable.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

Goodwell Ltd has been manufacturing and selling three (3) products in Zambia. The market demand for the products on average has been as follows:

| Products: | Cool | Best | Zed |
| :--- | :--- | ---: | ---: |
| Annual demand (units): | 20,000 | 25,000 | 48,000 |

The manufacturing of the products requires time on a machine as follows:

| Products | Time required |
| :--- | :--- |
| Cool | 30 minutes |
| Best | 45 minutes |
| Zed | 20 minutes |

The following details are available for each of the products:

|  | Cool <br> K/Unit | Best <br> K/Unit | Zed <br> K/Unit |
| :--- | ---: | ---: | ---: |
| Direct materials | 15 | 12 | 14 |
| Direct Labour | 25 | 20 | 23 |
| Variable Overheads | 5 | 3 | 6 |
| Fixed Overheads | 7 | 5 | 8 |
| Profit per unit | 8 | 8 | 8 |
| Selling price per unit | 60 | 48 | 59 |

Due to the prevailing drought and power rationing, the company can only manage to get a maximum of 30,000 hours on the machine per year.

## Required:

(a) Advise the management on the most profitable production mix.
(b) Determine the resultant net profit from the optimal mix in (a) above. (8 marks)
(c) State the factors the company should consider to improve the throughput accounting ratio.
(5 marks)
[Total: 25 Marks]

## SECTION B

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

## Attempt any TWO (2) questions in this section

## QUESTION THREE

Katwishi Manufacturing Company (KMC) has three (3) product lines: K1, M2 and C3. Since its creation the company has been using a single direct labour cost percentage to assign overhead costs to products.
Despite C3, a relatively new line, attracting additional business, increasing overhead costs and a loss of market share, particularly for M2, a major product, have convinced management that the costing system needs some development. KMC uses full cost plus method to set selling prices. The current profit mark-up is $15 \%$. A team, led by the Management Accountant was established to develop an improved system of costing based on activities. The team spent several weeks collecting data (see tables below) for the different activities and products. For the accounting period in question, given in the tables below is data on KMC's three (3) product lines and overhead costs:

| Product | K1 | M2 | C3 |
| :--- | ---: | ---: | ---: |
| Production volume (Units) | 22,500 | 37,500 | 12,000 |
| Direct labour cost per unit | K4 | K8 | K6.40 |
| Material cost per unit | K18 | K25 | K16 |
| Selling price per unit | K47 | K80 | K68 |
| Materials movements (in total) | 4 | 25 | 50 |
| Machine hours per unit | 0.5 | 0.5 | 0.2 |
| Set-ups (in total) | 1 | 5 | 10 |
| Proportion of engineering work | $30 \%$ | $20 \%$ | $50 \%$ |
| Orders packed (in total) | 1 | 7 | 22 |


| Activities | Cost Pool |
| :--- | ---: |
|  | K |
| Material receiving and handling | 150,000 |
| Machine maintenance and depreciation | 390,000 |
| Set-up labour | 18,688 |
| Engineering | 100,000 |
| Packing | 60,000 |
| Total | 718,688 |

## Required:

(a) Calculate the selling prices for all three products using the absorption costing system.
(6 marks)
(b) Calculate the selling prices for all three products using activity-based costing system.
(12 marks)
(c) Calculate the breakeven sales revenue for the three products assuming that all overheads are treated as fixed costs, direct labour and material are variable costs. The sales mix is as follows: 31: $52: 17$
(7 marks)
[Total: 25 Marks]

## QUESTION FOUR

Sindolo Company Limited specializes in the manufacture of industrial adhesives. The adhesive is made from a solution of chemical powder X and liquid chemical Y . After manufacturing the adhesive, the company packs it into plastic tubes before distributing it to the customers.

The standard prime cost of a tube of the adhesive is as follows:

## Industrial adhesive

## K/unit

Materials:
Powder X
$\begin{array}{ll}\text { Liquid chemical } Y & 6.00\end{array}$
Plastic tube
Direct labour: mixing and pouring
Total standard prime cost
3.00
15.00
1.125
$\underline{25.125}$

The standard material allowance for each tube of the adhesive is 2 kg of chemical powder $\mathrm{X}, 1 / 4$ litres of liquid chemical $Y$ and one piece of plastic tube. The standard wage rate of mixing and pouring the chemicals is K11.25 per hour.

During the month ended 31 March, 2022, 45,000 tubes of the adhesive were made. There was no work in progress at the beginning or end of the month and the receipts and issues of materials during the month were as shown below:

|  | Powder Chemical X | Liquid Chemical Y | Plastic Tubes |
| :---: | :---: | :---: | :---: |
| Opening inventory | $15,000 \mathrm{~kg}$ | 2,000 litres | 1,000 tubes |
| Purchases | 100,000 kg @K7 per kg | 6,000 litres @K23 per litre | 2,000 tubes @K4 each |
| Issues | 98,000 kg | 10,500 litres | 45,200 tubes |

Employees working on the mixing and pouring of the chemicals worked a total of 2,050 hours during the month ended 31 March 2022. They were paid gross wages amounting to K22, 500.

It is the policy of the company to analyse variances from the standard prime costs.

## Required:

(a) Calculate the following variances:
(i) Materials price variance
(ii) Materials usage variance
(iii) Direct labour efficiency and rate variances
(b) Explain five (5) differences between management accounting and financial accounting. (10 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

ABC Ltd is a manufacturing company whose working capital needs are of concern. During the recent management meeting it was discovered that the company had continued supplying to customers whose payments were inconsistent. It was also noted that the ABC Ltd was either having stock outs or overstocking. The meeting therefore decided that a credit control unit be created immediately that would help to assess the creditworthiness of customers. The inventory management needs also to be reviewed in order to optimize its benefits. This action is expected to improve the working capital.

ABC Ltd has predicated a general annual demand of 80,000 units at a steady rate for its product. It would cost $2 \%$ of order cost to hold a unit for a year. The cost of placing an order will be K40.

## Required:

(a) Explain how ABC Ltd would assess creditworthiness of the credit customers. (10 marks)
(b) Explain the use of Just-in-Time inventory system in a manufacturing company such as ABC Ltd.
(10 marks)
(c) Calculate the length of the inventory cycle and the total costs of holding inventory for the year.

## END OF PAPER

## DA 9: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

(a) Budgets for the year 2023.
(i) Sales budget

| Quarter | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Sales units | 48,000 | 36,000 | 72,000 | 54,000 |
| Sales price (K) | 50 | 50 | 50 | 52.50 |
| Sales value (K) | $2,400,000$ | $1,800,000$ | $3,600,000$ | $2,835,000$ |

## (ii) Production budget

| Quarter | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Sales units | 48,000 | 36,000 | 72,000 | 54,000 |
| Opening finished goods inventory | $(16,000)$ | $(12,000)$ | $(24,000)$ | $(18,000)$ |
| Closing finished goods inventory | 12,000 | 24,000 | 18,000 | 19,200 |
| Budgeted production units | 44,000 | 48,000 | 66,000 | 55,200 |

## (iii) Materials Purchases budget

| Quarter | 1 | 2 | 3 |  |
| :--- | :---: | :---: | :---: | :---: |
| Budgeted production units | 44,000 | 48,000 | 66,000 | 55,200 |
| Material usage | 0.85 | 0.85 | 0.85 | 0.85 |
| Budgeted material usage (Kgs) | 37,400 | 40,800 | 56,100 | 46,920 |
| Opening raw material inventory | $(9,350)$ | $(10,200)$ | $(14,025)$ | $(11,730)$ |
| Closing raw material inventory | 10,200 | 14,025 | 11,730 | 12,240 |
| Budgeted material purchases (Kgs) | 38,250 | 44,625 | 53,805 | 47,430 |
| Materials price (K/kgs) | 29 | 29 | 29 | 29 |
| Budgeted material purchases (K) | $1,109,250$ | $1,294,125$ | $1,560,345$ | $1,375,470$ |

## (b) Steps in implementation of zero based budgeting

The three steps of ZBB
Step 1
Define decision packages, comprehensive descriptions of specific organisational activities (decision units) which management can use to evaluate the activities and rank them in order of priority against other activities. There are two types:

Mutually exclusive packages contain alternative methods of getting the same job done. The best option among the packages must be selected by comparing costs and benefits and the other packages are then discarded.

Incremental packages divide one aspect of an activity into different levels of effort. The 'base' package will describe the minimum amount of work that must be done to carry out the activity and the other packages describe what additional work could be done, at what cost and for what benefits.

## Step 2

Evaluate and rank each activity (decision package) on the basis of its benefit to the organisation. This can be a lengthy process. Minimum work requirements (those that are essential to get a job done) will be given high priority and so too will work which meets legal obligations. In the accounting department these would be minimum requirements to operate the payroll, payables ledger and receivables ledger systems, and to maintain and publish a satisfactory set of accounts.

Step 3
Allocate resources in the budget according to the funds available and the evaluation and ranking of the competing packages.

## (c) Limitations of the use of traditional budgeting for public sector and not-for-profit organisations

- Activities often span several years but the emphasis is on annual figures.
- It is difficult to incorporate into a budget report planned or actual achievements (number of sufferers helped, level of education and so on) as these achievements tend to be nonfinancial in nature.
- Costs relating to a particular objective are spread across a number of cost categories. For example, the costs relating to an objective of a police force to protect people and property from traffic hazards might be allocated to a variety of traditional cost categories - personnel, transport, administration, training and so on. It would be impossible to tell how much was spent, or authorised, to achieve that objective.
- There is no evidence as to how effectively or efficiently resources are being used.


## SOLUTION TWO

a) Optimal production mix

|  | Cool | Best | Zed |
| :---: | :---: | :---: | :---: |
|  | K/Unit | K/Unit | K/Unit |
| Selling price per unit | 60 | 48 | 59 |
| Direct materials | 15 | 12 | 14 |
| Direct Labour | 25 | 20 | 23 |
| Variable Overheads | $\underline{5}$ | 3 | $\underline{6}$ |
| Contribution per unit | $\underline{15}$ | $\underline{13}$ | $\underline{16}$ |
|  |  |  |  |
| Labour time(minutes) | 30 | 45 | 20 |
|  |  |  |  |
| Contribution per min | K0.50 | K0.289 | K0.80 |
| Ranking | $2^{\text {nd }}$ | $3{ }^{\text {rd }}$ | 1st |

Minutes
Machine time available (30,000 X 60)
$=1,800,000$
Product Zed: 48,000 units @ 20 minutes
Product Cool : 20,000 units @3 minutes
$=\frac{(960,000)}{840,000}$
$\begin{array}{r}840,000 \\ (600,000) \\ \hline\end{array}$
240,000
Product best: $240,000 / 45=5,333$ units
$(240,000)$
0

Therefore the most profitable product mix is:

Zed: 48,000 units
Cool: 20,000 units
Best: 5,333 units
b) Resultant net profit

K
Zed: 48,000 units X K16
Cool: 20,000 units X K15
=768,000
Best: 5,333 units X K13
$=300,000$
Total contribution
$=69,329$
Less Fixed costs:
$1,137,329$
Less Fixed costs:

Zed 48,000 X K8
Cool: 20,000 xK7
Best : 25,000 xK5
(c) Factors to consider to improve the throughput accounting ratio:
$>$ Increasing the selling price if possible
$>$ Reducing material costs per unit
$>$ Reducing total factory cost(operating expenses)
$>$ Improving productivity of employees.
> Automation

## SOLUTION THREE

(a) Product cost per unit

Product
Direct material
Direct labour
Overheads (153.96\% of labour cost)
Total cost per unit
Profit mark-up (15\%)
Selling price

| K1 | M2 | C3 |
| :---: | :---: | :---: |
| K/Unit | K/Unit | K/Unit |
| 18 | 25 | 16 |
| 4 | 8 | 6.40 |
| 6.16 | 12.32 | 9.85 |
| 28.16 | 45.32 | 32.25 |
| 4.22 | 6.80 | 4.84 |
| 32.38 | 52.12 | 37.09 |

Working:
Overhead rate
Direct labour $=(22,500 \times 4)+(37,500 \times 8)+(12,000 \times 6.4)=K 466,800$
OAR $=(718,688 / 466,800 \times 100 \%)=153.96 \%$
(b) Product cost per unit using ABC

| Product | K1 | M2 | C3 |
| :--- | ---: | ---: | ---: |
| Direct material | 18.00 | 25.00 | 16.00 |
| Direct labour | 4.00 | 8.00 | 6.40 |
| Overheads | 7.83 | 8.35 | 19.13 |
| Total cost per unit | 29.83 | 41.35 | 41.53 |
| Profit mark-up (15\%) | 4.47 | 6.20 | 6.23 |
| Selling price | $\underline{34.30}$ | $\underline{47.55}$ | $\underline{47.76}$ |

Activity
Material receiving and handling
Machine maint. \& depreciation
Set-up labour
Engineering
Packing

| Cost pool <br> K | Cost driver |
| :---: | :--- |
| 150,000 | 79 movements |
| 390,000 | 32,400 machine hrs |
| 18,688 | 16 set-ups |
| 100,000 | Proportion |
| 60,000 | 30 Orders |

Rate
K per activity
1,898.73/movement
12.04/hr

1,168/set-up
30:20:50
2,000/order

Allocation of overheads

| Product | K1 | M2 | C3 |
| :--- | ---: | ---: | ---: |
|  | K | K | K |
| Material receiving and handling (K1,898.73 $\times 4 / 25 / 50)$ | 7,595 | 47,468 | 94,936 |
| Machine main. \& depreciation | 135,450 | 225,750 | 28,896 |
| (12.04x11,250/18750/2400) |  |  |  |
| Set-up labour (K1,168 $\times 1 / 5 / 10)$ | 1,168 | 5,840 | 11,680 |
| Engineering (30:20:50) | 30,000 | 20,000 | 50,000 |
| Packing (2,000 x 1/7/22) | 2,000 | 14,000 | 44,000 |

Total overheads
Number of units
Overheads per unit(K)

| $\frac{176,213}{22,500}$ | $\frac{313,058}{37,500}$ | $\frac{229,512}{12,000}$ |
| ---: | ---: | ---: |
| $\mathbf{7 . 8 3}$ | $\mathbf{8 . 3 5}$ | $\mathbf{1 9 . 1 3}$ |

(c) Breakeven sales for the three products

Contribution per unit

| Product | K1 | M2 | C3 |
| :--- | ---: | ---: | ---: |
| Selling price | 47 | 80 | 68 |
| Direct material | 18 | 25 | 16 |
| Direct labour | 4 | 8 | 6.4 |
| Contribution per unit | 25 | 47 | 45.6 |

Contribution per mix
$(31 \times \mathrm{K} 25)+(52 \times \mathrm{K} 47)+(17 \times \mathrm{K} 45.6)=\underline{\mathrm{K} 3,994.20}$
Breakeven point (mixes) = Fixed costs / Contribution per unit
Breakeven point (mixes) $=\mathrm{K} 718,688 / 3,994.20=179.93=\underline{180}$
Breakeven point (units) $=(31 \times 180)+(52 \times 180)+(17 \times 180)$

$$
\begin{aligned}
& =5,580+9,360+3,060 \\
& =\underline{18,000 \text { units }}
\end{aligned}
$$

Breakeven point (Revenue) $=(K 47 \times 5,580)+(K 80 \times 9,360)+(K 68 \times 3,060)$

$$
=K 262,260+K 748,800+K 208,080=\underline{\mathbf{K 1} 1, \mathbf{2 1 9}, \mathbf{1 4 0}}
$$

## SOLUTION FOUR

a)
i. Material price variance
= Actual quantity purchased (std price - Actual price)

| Powder X | $100,000(\mathrm{~K} 7.5-\mathrm{K} 7)$ | $=\underline{\mathrm{K} \mathrm{50,000}(\mathrm{~F})}$ |
| :--- | :--- | :--- |
| Liquid Chemically | $Y$ | $=6,000(\mathrm{~K} 24-\mathrm{K} 23)$ |

## Material usage variance

= Standard price (standard quantity used - actual quantity used)
Determining quantities (both standard and actual)

|  |  | Budget | Actual |
| :--- | :--- | :--- | :--- |
| Power X | 2 kg per tube $X$ <br> 45,000 | $90,000 \mathrm{~kg}$ | $98,000 \mathrm{~kg}$ |
| Liquid Y | $1 / 4$ litre tube $X$ <br> 45,000 | 11,250 litres | 10,500 litres |
| Plastic tube | 1 piece per tube $X$ <br> 45,000 | 45,000 | 45,200 |

Variances computations:

| Powder Chemical $X$ | $=K 7.5(90,000-$ | $=\underline{K 60,000(A)}$ |
| :--- | :--- | :--- |
|  | $98,000)$ |  |
| Liquid Chemical $Y$ | $=K 24(11,250-10,500)$ | $=\underline{K 18,000(F)}$ |
| Plastic tube | $=K 3(45,000-45,200)$ | $=\underline{K 600(A)}$ |

ii. Direct labour rate variance

2,050 hours should have cost K11.25
K 23,063
But did cost

Direct labour efficiency variance
= standard rate ( standard hours - actual hours)
Standard hours $=0.1 \times 45,000=4,500$ hours
Variance $=$ K11.25(4,500-2,050) $=\underline{K 27,562.50(F)}$
b) Differences between management accounting and financial accounting.

| FINANCIAL ACCOUNTING | MANAGEMENT ACCOUNTING |
| :--- | :--- |
| Limited companies are required by law to <br> prepare financial accounts. | There is no legal requirement to prepare <br> management accounts. |
| Most financial accounting information is <br> monetary in nature. | Management accounts incorporate both <br> monetary and non monetary measures. |
| Financial accounts present an essentially <br> historic picture of past operations. | Management accounts are both historical and <br> future planning. |
| The law and financial reporting standards <br> prescribe formats of published financial <br> statements. | Management accounting formats are entirely <br> at the discretion of management. |
| Financial accounting is for external reporting | Management accounting is for internal <br> reporting. |
| Financial accounts concentrates on the <br> business as a whole aggregating revenues <br> and costs from different operations and are <br> an end in themselves. | Management accounts can focus on the <br> specific areas of an organization's activities. |
| man |  |

## SOLUTION FIVE

(a) Creditworthiness

ABC Ltd's credit control would involve the initial investigation of potential credit customers and the continuing control of outstanding accounts. The following points may be considered in assessing customers:

- ABC Ltd could pay a visit to customer concerned, to get a first-hand impression. This would be advisable in the case of a prospective major customer.
- Customers should provide atleast two good traceable referees, including one from a bank and other suppliers, before being granted credit.
- Credit ratings might be checked through a credit rating bureau.
- A new customer's credit limit should be fixed at a low level and only increased if the payment record subsequently warrants it.
- A file should be maintained of any available financial information about the customer containing information such as bank statements, monthly management accounts and audited accounts. This file should be reviewed regularly.
- The current status of customer could be determined through press statements and comments.
(b) Just in time management

Just-in-time procurement is a term which describes a policy of obtaining goods from suppliers at the latest possible time (ie when they are needed) and so avoiding the need to carry any materials or components inventory.
Just-in-time production describes manufacturing to order. As orders are received, manufacturing is triggered to fulfil those orders. This enables better product customisation, less/no risk of obsolescence and few holding costs. It does, however, imply a flexible manufacturing process (in terms of what and how much is made) with follow-on considerations for employment terms. In addition, idle time may need to be tolerated (although managed to a practical minimum).

Introducing JIT might bring the following potential benefits.

- Reduction in inventory holding costs
- Reduced manufacturing lead times
- Improved labour productivity
- Reduced scrap/rework/warranty costs

Reduced inventory levels mean that a lower level of investment in working capital will be required.
(c) Inventory cycle and the total costs of holding inventory per year

Inventory cycle $=52$ weeks/ 28.28 orders $=\underline{\underline{\mathbf{1} .84} \text { weeks }}$
Total costs of holding inventory per year $=(28.28 \times \mathrm{K} 40)+\left(\frac{2,828}{2} \times 0.8\right)=\underline{\underline{K 2}, 262.40}$

Working:

$$
\begin{aligned}
& \mathrm{EOQ}=\sqrt{\frac{2 \mathrm{C}_{0} \mathrm{D}}{\mathrm{C}_{\mathrm{h}}}} \\
& \mathrm{EOQ}=\sqrt{2 \times 40 \times 80,000 / 0.8}=\underline{2,828 \text { units }} \\
& \text { Number of orders }=\frac{80,000}{2,828}=\underline{\underline{28.28 \text { orders }}}
\end{aligned}
$$

## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS
$\frac{\overline{\text { LEVEL TWO }}}{\frac{\text { DA 10: TAXATION }}{}}$
THURSDAY 23 MARCH 2023
$-\overline{100 ; \text { TIME ALLOWED: THREE (3) HOURS }}$

## INSTRUCTIONS TO CANDIDATES

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

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

DO NOT OPEN THIS QUESTIO PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.
Taxation table for paper DA10
Income Tax
Income band
K57,601 to K82,800Taxable amount
Rate
first K54,000 ..... 0\%
next K3,600 ..... 25\%
next K25,200 ..... 30\%37.5\%
Income from farming for individuals
K1 to K54,000 first K54,000 ..... 0\%
Over K54,000 ..... 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\%
Income from farming for individuals
K1 to K54,000 first K54,000 ..... 0\%
Over K54,000 ..... 10\%
Company Income Tax rates
On income from manufacturing and other ..... 30\%
On income from farming ..... 10\%
On income of Banks and other Financial ..... 30\%
Institutions
On income from mineral processing ..... 30\%
On income from mining operations ..... 30\%
On income from manufacture of products ..... 15\%
made out of copper cathodes
Capital Allowances
Implements, plant and machinery and commercial vehicles:
Wear and Tear Allowance - $\quad$ 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 K20,000)
Wear and Tear Allowance ..... 10\%
Initial Allowance ..... 10\%
Commercial Buildings
Wear and Tear Allowance ..... 2\%
Farming Allowances
Development Allowance ..... 10\%
Farm Works Allowance ..... 100\%
Farm Improvement Allowance ..... 100\%
Presumptive Taxes
Turnover Tax ..... 4\%
Rental Income Tax
Annual Rental Income
K800,000 or below ..... 4\%
Above K800,000 ..... 12.5\%
Presumptive tax for transporters
Seating capacity

Tax per annum
Less than 12 passengers and taxis
From 12 to 17 passengers
From 18 to 21 passengers
From 22 to 35 passengers
From 36 to 49 passengers
From 50 to 63 passengers
From 64 passengers and over

K
1,080
2,160 540
4,320 1,080
6,480 1,620
8,640 2,160
10,800 2,700
12,960 3,240

## Property transfer tax

Rate of tax on realised value of land, land and buildings and shares ..... 5\%
Rate on realised value of intellectual property ..... 5\%
Rate of tax on realised value on a transfer or sale of a mining right ..... 10\%
Rate of tax on realised value on a mineral processing licence or an interest in the 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

|  | 2 years old but less than 5 years |  | Aged 5 years and over |  |
| :---: | :---: | :---: | :---: | :---: |
| Motor vehicles for the transport of ten or | Customs | Excise | Customs | Excise |
|  | K | K | K | K |

Sitting capacity of 10 but not exceeding 14 persons including the driver
Sitting capacity exceeding 14 but not exceeding 32 persons
Sitting capacity of 33 but not exceeding 44 persons
Sitting capacity exceeding 44 persons

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars

## Sedans

cylinder capacity not exceeding 1000 cc
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc
Cylinder capacity exceeding 3000 cc

## Hatchbacks

cylinder capacity not exceeding 1000 cc
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc
Cylinder capacity exceeding 3000 cc

## Station wagons

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

| 17,778 | 22,223 | 8,889 | 11,112 |
| ---: | ---: | ---: | ---: |
| 38,924 | 0 | 13,840 | 0 |
| 86,497 | 0 | 19,462 | 0 |
| 108,121 | 0 | 43,248 | 0 |

## 2 old years but less than 5 years

| Customs | Excise <br> duty | Customs <br> duty | Excise <br> duty |
| :--- | :---: | :---: | :---: |

Aged 5 years and over

K
K

| K | K | K | K |
| :---: | ---: | ---: | ---: |
| 12,490 | 10,824 | 7,136 | 6,185 |
| 16,058 | 13,917 | 8,564 | 7,422 |
| 16,545 | 21,508 | 8,423 | 10,950 |
| 18,049 | 23,463 | 10,528 | 13,687 |
|  |  |  |  |
| 22,561 | 29,329 | 12,032 | 15,642 |
| 10,705 | 9,278 | 7,136 | 6,185 |
| 14,274 | 12,371 | 8,564 | 7,422 |
| 15,041 | 19,553 | 8,423 | 10,950 |
|  |  |  |  |
| 16,545 | 21,508 | 10,523 | 13,687 |
|  |  |  |  |
| 19,553 | 25,419 | 12,032 | 15,642 |
|  |  |  |  |
| 16,545 | 21,508 | 9,024 | 11,731 |
| 18,049 | 23,463 | 13,357 | 17,598 |
| 22,561 | 29,329 | 18,049 | 23,463 |

21,057 27,374 9,024 11,732

24,065
31,284
28,577
37,150
2 years old but less than 5 years
$13,357 \quad 17,598$
18,049 23,463 Aged 5 years and over

Motor vehicles for the transport of goods with compression-ignition internal

| combustion piston engine (diesel or semi- | Customs <br> duty <br> diesel): | Excise <br> duty <br> K | Customs <br> duty <br> K | Excise <br> duty <br> K |
| :--- | :---: | :---: | :---: | :---: |
| Single cab <br> GVW exceeding 1.0 tonne but not exceeding 1.5 | 21,926 | 9,501 | 8,770 | 3,801 |
| tonnes |  |  |  |  |
| GVW exceeding 1.5 tonnes but not exceeding <br> 3.0 tonnes <br> GVW exceeding 3.0 tonnes but not exceeding | 26,311 | 11,402 | 15,348 | 6,651 |
| 5.0 tonnes |  |  |  |  |

## Double cabs

30,697
13,302
24,119
10,452
GVW exceeding 3 tonnes but not exceeding 5 tonnes
Double cabs GVW exceeding 3.0 tonnes but not
33,766
14,632
26,531
11,497
exceeding 5.0 tonnes, with spark ignition
internal combustion piston engine
Panel Vans
GVW not exceeding 1.0 tonne
GVW exceeding 1.0 tonne but not exceeding 1.5
tonnes
GVW exceeding 1.5 tonnes but not exceeding
13,353 5,786 7,630 3,061
3.0 tonnes

GVW exceeding 3.0 tonnes but not exceeding 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 |
| 37,086 | 28,432 | 13,907 | 10,662 |

5.0 tonnes

GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes

GVW exceeding 10.0 tonnes but not exceeding
20.0 tonnes

GVW exceeding 20 tonnes
ignition 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 PurposesCylinder capacity of 1500 cc and less20\%
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 PurposesSeating Capacity of 16 persons and less25\%
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

## Attempt BOTH questions in this section.

## QUESTION ONE

Mumena Plc is a Zambian resident company engaged in manufacturing which is registered for Value Added Tax. The company listed its shares on the Lusaka Securities Exchange in the year 2022 and issued 30\% of its shares to indigenous Zambians in February 2022. The company prepares its accounts to 31 December every year.

In the financial year ended 31 December 2022,Mumena Plc made a profit after tax of K2,400,000. This profit after tax figure was arrived at after taking into account the following items:

## Note 1: Income tax expense

The income tax expense of K500,000, which represented the amount of provisional income tax paid in the tax year 2022.

## Note 2: Depreciation

Depreciation on non-current assets charged in the statement of profit or loss for the year which was K250,000.

## Note 3: Salaries and wages

Salaries and wages which amounted to K3,800,000. These were inclusive of emoluments of the two (2) Directors who were accommodated in company owned houses, which were acquired in 2020 at a cost of K1,360,000. The emoluments for each of the Directors is K528,000 per annum. The rest of the salaries and wages related to all other employees.

## Note 4: Bad debts

Bad debts for the year amounting to K45,000. These comprised a decrease in general provision during the year amounting to K24,000, trade debts written off of K49,000 and increase in specific provision of K20,000.

## Note 5: Legal expenses

Legal expenses for the year which included legal costs relating to the issue of shares amounting to K19,200 and legal costs relating to the acquisition of land amounting to K3,000.

## Note 6: Entertainment expenses

These were expenses incurred on entertaining customers on the official opening of a newly constructed building amounting to K99,200.

## Note 7: Motor vehicle running expenses

Motor vehicle running expenses which amounted to K172,000.

## Note 8: Investment income

Debenture interest of K68,000 (gross), bank interest of K34,000 (net) and dividends from a non-mining company of K45,000 (gross) were received.

## Additional information

## The following additional information is available:

## (1) Buildings

The company completed construction of a building which was brought into use on 1 November 2022. The cost of the building was made up of the following items:

|  | K |
| :--- | ---: |
| Land | 360,000 |
| Administration offices | 416,000 |
| Factory | $1,170,000$ |
| Showroom | $\underline{1,274,000}$ |
| Total cost | $\underline{\underline{3,220,000}}$ |

(2) Implements, plant \& Machinery

During the tax year 2022, the following acquisitions and disposals of implements, plant and machinery took place:

- A Tata truck was acquired at a cost of K290,000 (VAT inclusive) and a Fuso Fighter truck at a cost of K348,000 (VAT inclusive).
- Two (2) Nissan cars each with a cylinder capacity of 3,000cc, were purchased at a cost of K180,000 (VAT inclusive) each. Both of these cars are used on personal to holder basis by the directors.
- On 5 February 2022, the company sold an Isuzu single cab van which was acquired on 5 February 2020 at a cost of K140,000 (VAT exclusive) making a loss on disposal of K40,000. The income tax value on that date was K70,000 (VAT exclusive) while the disposal proceeds were K30,000 (VAT exclusive).
- On the same date the company sold a Land Cruiser single cab van which was also acquired in February 2020 at a cost of K160,000 (VAT exclusive) making a profit of K50,000. The income tax value was

K80,000 (VAT exclusive) while the disposal proceeds were K130,000 (VAT exclusive).

## Required:

(a) Calculate the maximum capital allowances claimable on the buildings, implements plant and machinery for Mumena Plc for the tax year 2022.
(b) Calculate the tax adjusted business profit for Mumena Plc for the tax year 2022.
(c) Calculate the income tax payable by Mumena plc for the tax year 2022.
(4 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

(a) Explain two (2) advantages of the provisional tax system.
(b) Explain any two (2) methods apart from taxation, central government may use to raise revenue.
(c) Explain the circumstances under which capital allowances on expenditure incurred by a person carrying on farming operations may be available at higher rates. (3 marks)
(d) FarmTech Limited is a Zambian resident company engaged in farming and manufacturing. The company is not listed on the Lusaka Securities Exchange (LUSE). For the year ended 31 December 2022, the following results were obtained:

K
Profits from farming (Note 1) 650,000
Profits from manufacturing (Note 2) 320,000
Other income (Note 3)

The following additional information is relevant:

## Note 1: Profits from farming

The farming profit is the tax adjusted business profit before capital allowances. The company incurred the following capital expenditure on farming business during the year:

## K

Construction of storage barn
23,500
Purchase of combine harvester

125,000
Construction of two farm dwellings for staff 155,000
Cost of stumping and clearing of farm land 15,000
Cost of fencing the farm 70,000

## Note 2: Profits from manufacturing

The profit from manufacturing was arrived at before capital allowance on implements, plant and machinery of K38,200.

## Note 3: Other income

The other income comprises bank interest of K34,000 (net) and debenture interest of K20,000 (gross) received from a Zambian resident company.

## Note 4: Provisional income tax

The provisional income tax paid for the year was K62,750.

## Required:

Calculate the amount of income tax payable by the FarmTech Ltd for the tax year 2022.

## SECTION B

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

## Attempt any TWO (2) questions.

## QUESTION THREE

Jean Kazembe has traded successfully as a shoe designer and manufacturer since 2018. Since then her turnover has consistently fallen below the threshold of K800,000. However, the sales from her business exceeded K800,000, in July 2022, and she therefore registered her business for Value Added Tax (VAT). Jean has heard that certain business can register to account for VAT under the cash accounting scheme and wishes to register her business under this scheme.

The following summarized statement of profit or loss has been extracted from her interim accounts for the month of September 2022.

|  | Notes | K |
| :--- | :---: | :---: |
| Sales | $(1)$ | 900,200 |
| Cost of sales | $(2)$ | $\underline{324,500}$ |
| Gross profit |  | 575,700 |
| Operating expenses | $(3)$ | $\underline{(290,000)}$ |
| Net profit |  | $\underline{\underline{285,700}}$ |

The following additional information is available:

## Note1: Sales

Included in sales are standard rated sales of K600,000 and zero rated sales of K210,180, the remainder are exempt sales.

## Note 2: Cost of sales

Included within cost of sales are credit purchases of K123,500 and cash purchases of K96,000. Included in credit purchases are standard rated purchases of K85,000, Zero rated sales of K25,000 and exempt sales of K13,500.

All cash purchases are standard rated and were made from suppliers who are not registered for Value Added Tax (VAT), whilst all credit purchases were from vendors who are registered for VAT.

## Note 3: Operating expenses

The operating expenses are standard rated and cannot directly be attributed to either taxable or exempt supplies and comprise the following items:

|  | K |
| :--- | ---: |
| Entertaining potential customers | 73,750 |
| Bad debts written off (note 4) | 32,700 |
| Entertaining suppliers | 57,250 |
| Motor vehicle repairs | 28,300 |
| General overheads | $\underline{\underline{98,000}}$ |
|  | $\underline{\underline{290,000}}$ |

## Note 4: Bad debts

The bad debts relate to standard rated sales and were written off on 30 September 2022. The figure consists three (3) invoices of K10,900 each whose payment due dates were on 1 October 2020, 31 January 2021 and 30 June 2021 respectively.

## Note 5: Capital assets

The business bought a motor car at a cost of K145,000 (VAT inclusive) during the month. The private use of the car by Jean has been agreed with the Commissioner General to be 20\%.

The business also bought manufacturing equipment for K174,000 (VAT inclusive) on 10 September 2022.

## All the above figures are VAT exclusive unless stated otherwise.

## Required:

(a) Describe the operation of the cash accounting scheme and explain whether Jean will be permitted to register under the scheme.
(3 marks)
(b) Explain three (3) advantages and two (2) disadvantages of the cash accounting scheme in relation to VAT.
(5 marks)
(c) Calculate the VAT payable by Jean Kazembe for the month of September 2022. You should indicate using a zero the items on which VAT is not chargeable or recoverable.
(14 marks)
(d) Explain the consequences of the late payment of VAT and late submission of VAT returns.
[Total: 25 Marks]

## QUESTION FOUR

(a) Mwansa, an Information Technology expert has recently been paid his retirement package by his former employers and used part of the monies to buy his dream car. Mwansa imported a brand new BMW 3000cc from a motor car dealer in Japan at a cost of US\$ 8,500. He paid insurance of US\$ 2,300 and freight charges of US\$ 2,700 in transit up to the port of Dar-es-salaam.
He further paid insurance and freight costs from the port of Dar- es salaam to Nakonde of US $\$ 500$ and US\$ 400 respectively. Mwansa paid transportation costs of US $\$ 250$ to transport the vehicle from Nakonde to Lusaka.
Mwansa paid for the vehicle at an exchange rate of US\$ 1 to K16.40 which he agreed with his bankers in a forward contract. The approved exchange rate by the Commissioner General was K17.00 to 1US\$ on the same date.

## Required:

(i) Calculate the total amount of import taxes paid by Mwansa on the importation of the Motor vehicle.
(8 marks)
(ii) Explain the complete customs laws procedure for clearance of a motor vehicle.
(4 marks)
(b) On 1 April 2022, Mwansa was engaged as a Cyber Manager by Tik Plc, a Zambian resident company.

His annual salary was agreed at K420,000. His other conditions included:

Annual Housing allowance of
Transport allowance
Telephone allowance
$30 \%$ of the annual salary
K3,500 per month
K950 per month.

During the tax year 2022, the company paid Mwansa K24,250 in respect of school fees for his children. He was further reimbursed K12,000 relating to the medical expenses he incurred in respect for his sick son during the tax year 2022. In September 2022, Mr. Mwansa received a labour day award consisting of cash of K40,000 and a double door fridge valued at K18,000. The company further paid medical insurance premiums for Mwansa of K2,000 per month.

During the tax of 2022, Mwansa incurred the following expenses:

Professional subscription

Mr Mwansa always contributed NAPSA contributions of 5\% of his gross earnings

During the tax year 2022, Mwansa received income from his investments as follows:

|  | K |
| :--- | ---: |
| Interest on government bonds | 6,200 |
| Royalties | 56,850 |
| Bank deposit interest | 4,000 |
| Dividends from Ash Limited | 17,300 |

The amounts of investment income are the actual amounts of cash received, withholding tax had been deducted at source.

## Required:

Calculate the amount of income tax payable by Mwansa for the tax year 2022.
(13 marks)
[Total: $\mathbf{2 5}$ Marks]

## QUESTION FIVE

(a) The International Ethics Standards Board for Accountants (IESBA) lays down fundamental principles in the code of ethics for professional Accountants. The IESBA's code of ethics for Professional Accountants gives the key reason why accountancy bodies produce ethical guidance.

## Required:

(i) Explain the meaning of integrity and confidentiality as fundamental principles in the IESBA code of ethics.
(ii) Explain any three (3) consequences of tax evasion.
(b) Gideon Phiri intends to commence a retail business running a chain of retail shops. In order to raise capital for his intended business, he entered into the following capital transactions involving his personal assets during the year ended 31 December 2022:
(1) He sold a residential plot for K78,000. He acquired this plot in 2017 at a cost of K22,000. The residential plot was determined by, the valuations department, to have an open market value of K80,000. He incurred costs amounting to K2,500 to process transfer of title.
(2) He sold an Isuzu double cab van for K60,000. He acquired the motor vehicle in 2018 at a cost of K112,000. The open market value of the motor vehicle was K54,000. He incurred motor vehicle repairs amounting to K4,000, to make the vehicle ready for sale.
(3) He sold a house to his niece for K260,000. He bought the house in 2010 at a cost of K200,000. The open market value of the house was determined to be K600,000. He incurred K10,000 to process the transfer of title.
(4) He sold 1,800 equity shares he held in AD Limited a Zambian company not listed on the Lusaka Securities Exchange. He sold the shares for cash consideration of K15 each. The nominal value of the shares was K1 each. The open market value was determined to be K16.50 per share.
(5) He sold 2,100 equity shares he held in BSA Plc a Zambian resident company listed on the Lusaka Securities Exchange. The nominal value of the shares was K1 each. The open market value of each share on the date of sale was K9 per share.

## Required:

(i) Explain how the realized value of shares and buildings is determined for the purposes of property transfer tax.
(ii) Explain the property transfer tax implications arising from the capital transaction Gideon entered into during the year ended 31 December 2022. Your answer should include a computation of any property transfer tax payable on each transaction.
(10 marks)
[Total: 25 Marks]

## END OF PAPER

## DA 10: TAXATION SUGGESTED SOLUTIONS SOLUTION ONE

(a) MUMENA PLC

COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2022:

Cost/I
TV
K

## ISUZU Van:

ITV b/f
Disposal proceeds
Balancing allowance
LandCruiser Van:
ITV b/f
Disposal proceeds
Balancing charge
Nissan car 1:
Cost
Wear and tear @20\%
ITV c/f
Nissan car 1:
Cost
Wear and tear @20\%
ITV c/f
Tata truck:
Cost(K290,000 x 25/29)
Wear and tear @20\%
ITV c/f
Fuso fighter truck:
Cost (348,00 x 25/29)
Wear and tear @25\%
ITV c/f
Factory:
Cost
Initial allowance @ 10\%
Investment allowance @10\%
Wear and tear allowance @5\%
ITVc/f

## Show Room:

Cost
Wear and tear (K1,274,000 x 2\%)
ITV c/f

70,000
$(30,000)$
Nil 40,000
80,000
$(130,000)$
Nil
180,000
$(36,000)$
144,000
180,000
$(36,000)$
144,000
250,000
$(62,500)$
187,500
300,000
$(75,000)$
$\underline{\underline{225,000}} \quad 75,000$

1,170,000
117,000
58,500 994,500 58,500

1,274,000
25,480 25,480
1,248,520

Capital allowances

36,000

36,000

62,500

117,000
117,000

## Administration offices:

Cost 416,000
Wear and tear (K416,000 x 2\% 8,320
8,320
ITV c/f
407,680
TOTAL Capital allowances
525,800

Qualifying expenditure of the buildings

|  | K |
| :--- | :---: |
| Total cost | $3,220,000$ |
| Less cost of land | $\underline{(360,000)}$ |
|  | $\underline{\underline{2,860,000}}$ |

## 10\% TEST

10 \% x K2,860,000 = K286,000
The cost of the showroom and the administrative offices exceed the above amount and will therefore be classified as a commercial building. Only the cost of the factory qualifies as an industrial building.
(b) MUMENA PLC

COMPUTATION OF ADJUSTED BUSINESS PROFITS FOR THE TAX YEAR 2022
Profit after tax
K
K
Add
Loss on disposal 40,000
Income tax expense 500,000
Depreciation 250,000
Accommodation benefit
(K528,000 $\times 2 \times 30 \%$ )
316,800
Legal expenses-land
Costs of issuing shares
3,000
19,200
Entertaining customers
99,200
Personal to holder Car benefit
( $2 \times \mathrm{K} 40,000$ )

## Less

Profit on disposal 50,000
Decrease in general provision
24,000
Dividends received
Debenture interest received
Bank interest received
45,000

Capital allowances (a)
Tax adjusted business profit
(c) MUMENA PLC

COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX YEAR 2022

|  |  | K |
| :---: | :---: | :---: |
| Tax adjusted business profit |  | ,961,400 |
|  |  |  |
| Gross debenture interest rec | 68,000 |  |
| Gross bank interest (34000 x 100/85) | 40,000 | 108,000 |
| Total taxable income |  | 3,069,400 |
| Income tax liability |  |  |
| 30\%-2\%=28\%x3,066,700 |  | 859,432 |
| LESS |  |  |
| Provisional income tax paid | 500,000 |  |
| WHT debenture interest ( $68,000 \times 15 \%$ ) | 10,200 |  |
| WHT bank interest (40,000 x 15\%) | 6,000 |  |
|  |  | $(516,200)$ |
| FINAL INCOME TAX PAYABLE |  | 343,232 |

## SOLUTION TWO

(a) Advantages of the provisional income tax:

- There is inflow of revenue to the Government throughout the year.
- The burden on the part of the taxpayer is reduced as the huge amount of tax will not be payable at once at the end of the charge year.
(b) There are several ways through which the central government can raise revenue other than from tax:


## (1) Privatisation of state owned enterprises

This is the process of transferring state owned enterprises to the private sector. Huge amounts of revenue can be raised while there are state owned enterprises to sell.
(2) Borrowing from the international financial institutions

The government can borrow from the International Monetary Fund (IMF) and the World Bank to finance certain projects only.
(3) Through issuing government securities/ domestic borrowing

Instead of borrowing from the international institutions, the government may be able to borrow locally through issue of government bonds and treasury bills.
(4) Donor funding

Various donor agencies have been set up to provide funding to poor countries. However, these donors provide funds for clearly defined projects and cannot provide the funds for the government to meet all public expenditure.
(c) Capital allowances are available at a higher rate of wear and tear of $100 \%$ on cost in respect of all implements, plant and machinery that are used directly in farming such as ploughs, tractors and combined harvesters.

Farming improvements are permanent works that are used for farming purposes. Examples include; farm dwellings, fencing and buildings used for the welfare of employees.

Farm works are works in respect of which expenditure is incurred on farming and land for farming purposes. Examples are stumping and clearing, boreholes, digging wells etc.

## (d) FARMTECH LTD

COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX YEAR 2022

| Profit from manufacturing $(320,000-38,200)$ | 281,800 |
| :--- | ---: |
| Bank interest $(34,000 \times 100 / 85)$ | 40,000 |
| Debenture interest | $\underline{20,000}$ |
| Total non-farming income | $\underline{376,800}$ |
| Farming profits $(650,000-273,500(\mathrm{w}))$ | $\underline{718,300}$ |
| Total taxable income | 102,540 |
| Company income tax on non-farming income |  |
| $30 \% \times 341,800$ | $\underline{37,650}$ |
| Company income tax on farming income | 140,190 |
| $10 \% \times 376,500$ |  |
|  |  |
| Less income tax already paid: | $(6,000$ |
| WHT - Bank interest (40,000 x $15 \%)$ | $(3,000)$ |
| WHT - debenture interest (20,000 x 15\% | $\underline{(62,750)}$ |
| Provisional income tax | $\underline{68,440}$ |
| Final company income tax payable |  |

WORKINGS:
COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2022

Implements, plant and machinery
Combined harvester (125,000 x 100\%) 125,000
Farm improvement allowance
Storage barn (23,500 x 100\%) 23,500
Farm dwellings ( $20,000 \times 2 \times 100 \%$ ) 40,000
Fencing (70,000 x 100\%) 70,000
Farm works allowance
Stumping and clearing (15,000 x 100\%) 15,000
Total capital allowances $\underline{273,500}$

## SOLUTION THREE

(a) Under the cash accounting scheme VAT is accounted for on the basis of receipts and payments of cash.

Therefore, the tax point becomes the time when payment is made. This means that VAT payments and recoveries are dealt with in the return, for tax period in which cash is paid and received.

Jean will not be permitted to register under the cash accounting scheme as the scheme is only available to members of ABCEC.
(b) Advantages of the cash accounting scheme
(1) VAT is only payable if customers have made payments
(2) It is easy to prepare the VAT return as the cash book can be used to do so.
(3) Bad debt relief occurs automatically since no VAT is payable if the customers have not made payments.

Disadvantages of the cash accounting scheme
(1) Input VAT cannot be claimed until payment has been made to suppliers. The means that input VAT credit will be delayed if payments are not made early enough to the suppliers.
(2) The scheme is not open to all kinds of traders and therefore small scale traders in sectors other than the construction sector cannot benefit from it.

Normally the Bank of Zambia discount rate plus 2\%.

## (c) JEAN KAZEMBE

COMPUTATION OF VAT FOR THE QUARTER ENDED 30 SEPTEMBER 2022

K K
OUTPUT VAT
Standard rated sales (600,000 x 16\%)
Zero rated sales (210,180 x 0\%)
Exempt sales
96,000

| 0 |
| :---: |
| 0 |
| 96,000 |

INPUT VAT
Standard rated credit purchases (85,000 x 16\%) 13,600
Standard rated cash purchases 0
Zero rated purchases (25,000 x 0\%) 0
Exempt purchases 0
Entertaining customers 0
Bad debts written off ( $10,900 \times 2 \times 16 \%$ ) 3,488
Diesel
Motor vehicle repairs ( $28,300 \times 16 \%$ ) 4,528
General overheads (98,000 x 16\% x 90\%) 14,112
Motor car
0
Manufacturing equipment $(174,000 \times 4 / 29) \underline{24,000}$
$(59,728)$
VAT payable 36,272

## WORKINGS

The recoverable non- attributable input VAT will be computed as shown below:

$$
\begin{aligned}
\text { Recoverable input VAT } & =\frac{\text { Taxable supplies }}{\text { Total supplies }} \times 100 \% \\
& =\frac{K 810,180}{K 900,200} \times 100 \% \\
& =90 \%
\end{aligned}
$$

(d) The daily return for the late submission of VAT returns is the higher of:
(1) 1,000 penalty units ( K300); and
(2) $0.5 \%$ of the amount of VAT payable

Interest is charged on overdue tax at prescribed rate of interest. This rate is the BOZ discount rate plus $2 \%$ per annum.

## SOLUTION FOUR

(a) (i) Total amount of import taxes paid by Mwansa when importing the motor vehicle

(ii) Complete Customs clearance procedure for a motor vehicle.

- Presentation of genuine import documents.
- Revaluation by customs, if necessary.
- Payment of customs duty, VAT and processing fee.
- Processing of the declaration in form CE20 by customs.
(b) MWANSA

PERSONAL INCIOME TAX COMPUTATION FOR THE TAX YEAR 2022

|  | K | K |
| :--- | :---: | :---: |
| Salary (K420,000x 9/12) |  | 315,000 |
| Housing allowance $(\mathrm{K} 315,000 \times 30 \%)$ | 94,500 |  |
| Transport allowance $(\mathrm{K} 3,500 \times 9)$ | 31,500 |  |
| Telephone allowance $(\mathrm{K} 950 \times 9)$ | 8,550 |  |
| School fees | 24,250 |  |
| Insurance premiums(K2,000 x9) | $\underline{18,000}$ |  |
|  | 491,800 |  |

Investment income

| Royalties (K56,850 x 100/85) | $\underline{66,882}$ |  |
| :--- | :--- | :---: |
| Less: | 558,682 |  |
| Professional subscription | 4,500 |  |
| Donation to approved charity | $\underline{12,000}$ | $\underline{(16,500)}$ |
|  |  | 542,182 |
| Taxable income | 0 |  |
| Income Tax |  | 900 |
| First K54,000 @ 0\% |  | 7,560 |
| Next K3,600 @25\% | $\underline{172,268}$ |  |
| Next K25,200@ 30\% | 180,728 |  |
| Balance K459,382 x37.5\% |  |  |
| Income tax liability |  |  |
| Less: | 107,232 | $\underline{(117,264)}$ |
| PAYE | 10,032 | $\underline{63,464}$ |
| WHT-Royalties (K66,882 x 15\%) |  |  |

## SOLUTION FIVE

(a) Code of ethics
(i) Integrity

This principle imposes an obligation on the member providing tax services to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.
This means that a member providing taxation services must not willingly be associated with reports, returns, communications or other information where the member believes the information:
(i) Contains a materially false or misleading statements or calculations
(ii) Contains statements or information furnished recklessly

## Confidentiality

This principle imposes an obligation on the member to respect the confidentiality of information acquired as a result of professional and business relationships.

This means that members should not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for personal advantage of the member.
(ii) The following are the consequences of tax evasion
(1) Loss of revenue for government. Government loses revenue that affects capacity to provide services and fund government programmes.
(2) People who comply with the law shoulder a heavier tax burden than they should because they must compensate for others who are not tax compliant.
(3) Businesses that comply with the tax law face unfair competition from those who are not compliant.
(b) Property transfer tax
(i) The realized value of shares is determined as the higher of:
(1) The nominal value of the shares and;
(2) The actual proceeds received from transfer of shares or the market value of the shares.

The realized value of the buildings is determined as the higher of:
(1) Actual proceeds received from transfer of the building and;
(2) The open market value of the building.
(ii) The following are the property transfer tax implications:
(1) Gideon will be required to pay property transfer tax on the transfer of the residential plot. Property transfer tax is paid at a rate of $5 \%$ of the realized value.

The realized value in this case is the open market value of K80,000 which is the higher of actual proceeds.
Property transfer tax paid: K80,000 $\times 5 \%=K 4,000$.
(2) He will not be required to pay property transfer tax on the transfer of the Isuzu Double Cab Van. This is because a motor vehicle is not property, hence it falls outside the scope of property transfer tax.
(3) He will be required to pay property transfer tax on the transfer of the house to his niece. The niece is not a member of the immediate family, therefore the normal rules of determining the realized value will be used.

The realized value will be which ever is higher between the actual proceeds received and the open market value which is K600,000.

Property transfer tax paid will be: K600,000 $\times 5 \%=K 30,000$.
(4) He will be required to pay property transfer tax on the transfer of shares which are not listed on the Lusaka Securities Exchange. The realized value is the higher of the nominal value and the open market value of the shares or actual proceeds received.

Nominal value: K1 x 1,800 = K1,800.
Proceeds received: $\mathrm{K} 15 \times 1,800=\mathrm{K} 27,000$
Open market value: $\mathrm{K} 16.50 \times 1,800=\mathrm{K} 29,700$
The realized value, in this case is K29,700 which is higher.
Property transfer tax paid: K29,700 x 5\% = K1,485.
(5) He will not be required to pay property transfer tax on the transfer of shares. This is because the shares transferred are listed on the Lusaka Securities Exchange.

## END OF SOLUTIONS



Zambia Institute of Chartered Accountants
DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

LEVEL TWO

DA 11: PRINCIPLES OF AUDITING

THURSDAY 23 MARCH 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. 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 THE QUESTION PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.

## SECTION A-TWO COMPULSORY QUESTIONS

Attempt BOTH questions in this section.

## QUESTION ONE.

Impala Ltd is a company that deals in the import and export of used agricultural equipment. You are an auditor in Reddy Bees a firm of Chartered Accountants and have been assigned to the audit of property, plant and equipment of Impala Ltd for the year ended 31 December 2021. Reddy Bees Chartered Accountants has been auditor for Impala Ltd for many years.

You obtained the following schedule of non-current asset movement and analysis of additions from the company's accountant:

|  | Property | Plant and equipment | Total |
| :---: | :---: | :---: | :---: |
| Cost or valuation | K'000 | K'000 | K'000 |
| 1 April 2020 | 340 | 275 | 615 |
| Additions |  | 123 | 123 |
| Disposals |  | (72) | (72) |
| Revaluations | $\underline{120}$ | ---- | $\underline{120}$ |
| 31 March 2021 | 460 | 326 | 786 |
| Accumulated depreciation |  |  |  |
| 1 April 2020 | 24 | 213 | 237 |
| Provision for the year | 5 | 30 | 35 |
| Written back on disposal |  | (65) | (65) |
| Adjustment on revaluation | (24) |  | (24) |
| 31 March 2021 | 5 | 178 | 183 |
| Written down value | 455 | $\underline{148}$ | $\underline{603}$ |

## Schedule of additions (Plant and equipment):

| Supplier | Description | Cost |
| :--- | :--- | ---: |
| K |  |  |

The company's accountant informed you that the property was revalued by the company's Property Manager who is a professionally qualified valuer.

At the end of the financial year, there was an amount of bank balance of K12, 500, which the client claims was a reconciled figure and there was no need for further audit evidence. However, the Audit Senior advised that you need to obtain a bank confirmation of the balance per bank records.

One(1) of the members on the audit team was informed of a possibility of them coming across contingencies due to claims against the company due to faulty agricultural equipment supplied during the year.

## Required:

(a) Explain, with reasons, procedures relating to accuracy and opening balances you would perform on the schedules above.
(4 marks)
(b) Explain substantive audit procedures, for five (5) financial statement assertions, that should be performed in verifying additions to plant and equipment.
(10 marks)
(c) Describe three (3) audit procedures applicable to verifying the revaluation of property.
(6 marks)
(d) Explain the procedure for obtaining a bank confirmation request and state two (2) pieces of information they should contain.
(4 marks)
(e) State two (2) examples of contingent liabilities that Impala Ltd. should disclose in its financial statements.
(1 mark)
[ Total: 25 marks]

## QUESTION TWO

Prada Ltd is a manufacturer of an energy drink. The production of the energy drink and the information requirement is highly technical. The workers have a vibrant manager who has managed to motivate the employees who generally regard one another as family. The rate of staff turnover has been very low since its establishment. The company has grown rapidly in size over the past six (6) years and is considering either establishing an internal audit department or outsourcing internal audit services. As a result, the current accounting staff is failing to cope with increased workloads relating to the accounts department. A suggestion was made that it will be cheaper and efficient to outsource internal audit services from the same audit firm than having a permanent internal audit department. However, one of the directors objected to outsourcing internal audit services arguing that the disadvantages of outsourcing outweigh the costs of establishing an internal audit department.

You are planning the audit of the financial statements of Prada Ltd for the year ended 31 December 2021. Due to time pressure you wish to perform some audit procedures at the interim audit visit while the rest of the audit work will be performed during the final audit. Most of the work required to be included in the audit strategy has been completed and you are remaining with completing the audit plan. The Audit Manager has requested you to provide him with information with regards factors that should be considered in determining materiality for the financial statements as a whole in accordance with the provisions of ISA 320 Materiality in planning and performing an audit.

In order to improve on the quality of audits, your firm introduced automated working papers. It is hoped that time will be saved compared to traditional methods of maintaining working papers.

## Required:

(a) Explain five (5) disadvantages to Prada of outsourcing internal audit services.
(b) Explain five (5) factors that should be considered by auditors when determining materiality benchmarks.
(c) (i) Explain, giving three(3) examples, information that should be included in an audit plan.
(ii) Distinguish between interim and final audits. You are also required to state two (2) activities each that can be carried out at an interim and final audit.
(4 marks)
(iii) Explain five (5) benefits to the auditors of using automated working papers.
(5 marks)
[Total: $\mathbf{2 5}$ Marks]

## SECTION B

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

## Attempt any TWO (2) questions.

## QUESTION THREE

(a) External Auditors are expected to abide by rules of professional ethics. In addition, they are expected to be regulated by professional bodies to which they belong. In Zambia, all accountants are regulated by the Zambia Institute of Chartered Accountants (ZiCA). In order to keep abreast with International standards, ZICA has adopted the IESBA Code of Ethics for Professional Accountants and the International Financial Reporting Standards.

## Required:

State and explain four (4) ways in which the Zambia Institute of Chartered Accountants regulates accountants in Zambia.
(4 marks)
(b) Your firm is auditor of two (2) different organisations. One is a trading company called Reliable Stores Ltd and the other is a non-profit making organisation known as Peace to All Nations (PTAN) whose objective is to remove street kids from the streets of Lusaka and reuniting them with their families.

The following are the descriptions of operations pertaining to the two (2) organisations:
Reliable Stores Ltd.:
Reliable Stores Ltd (RS) is a family controlled company established ten (10) year ago. The company deals in electronic equipment. The directors are Mangani and Mary. Mangani is Managing Director while his young sister Mary is Finance and Administration Director. Recently there has been an increase in the demand for electronic equipment on the Copperbelt. As a result, six (6) more branches were opened on the Copperbelt. Three (3) new directors namely Commercial Director, IT Director and Legal Services Director were employed.

Mangani, the Managing Director was sponsored by the company to attend a workshop organized by the Institute of Directors at which the concepts of cooperate governance were being discussed. The main speakers at the conference explained that the Organisation for Economic Cooperation and Development (OECD), developed cooperate governance frameworks that could be used as a foundation for individual countries to come up with their own principles of good corporate governance.

During the Annual General meeting (AGM), it came to light that some minority shareholders complained of not being treated fairly and equally as compared to the majority shareholders. It was mentioned at the same AGM that some of the decisions that directors made were not made with the knowledge of the shareholders. This was sighted as an example of lack of transparency and accountability. One of the shareholders emphasised that the lack of good corporate governance at RS Ltd could prevent the company from transforming itself into a public listed company adding that it will be difficult for the company to achieve most of its corporate and social objectives.

## Peace To All Nations Charity (PTAN):

PTAN is a not for profit making organisation whose main objective is to remove street kids from the streets and reuniting them with their families. It is managed by a Regional Manager who is in charge of fundraising and disbursement of funds. The sources of funding and some of the activities for PTAN are as follows:

1. European source-a similar organisation to PTAN, contributes funds amounting to $\$ 10,200$ annually, according to the budgeted requirements of PTAN. The money is deposited in the account of the Regional Manager's personal account. PTAN has not opened its own bank account from the time it started its operations.
2. Local donors-The donations include cash and food supplies that are donated to PTAN through supper markets. The deliveries are made to the Head Office of the PTAN. No documentation is kept for both cash and food donated.
3. PTAN organizes fundraising walks accompanied by a brass band to alert motorists on the road and donations are collected in tins. The tins are returned to the office by volunteers the following day after the fundraising walk when cash collected is counted and recorded.
4. PTAN receives regular donations from covenant deeds and at times donations are received through the post.

Recently, there were concerns from the government regarding misuse of funds from the donors by some local Non-Governmental (NGOs). Consequently, the government enacted laws that include filing of financial statements on yearly basis. In addition, the financial statements will be required to be audited by independent auditors.

Your firm, Bruno \& Co, has been appointed as auditors of both RS Ltd and PTAN for the first time. This will be the first time of auditing a not-for profit making organization. In view of the fact that PTAN has not prepared financial reports in the past, the trustees have requested that your firm prepares a summary of all the income and expenditure of the charity from inception.

## Required:

(i) Explain five (5) principles of corporate governance according to the Organisation for Economic Co-operation and Development (OECD).
(5 marks)
(ii) Identify and explain two (2) audit risks, under inherent risk, control risk and detection risk, in relation to the audit of PTAN.
(6 marks)
(iii) Explain four (4) controls that should be put in place by PTAN regarding cash donations.
(6 marks)
(c) Explain, what an agreed upon procedure is and state the type of assurance that is expected from such an engagement.
(4 marks)
[Total: $\mathbf{2 5}$ marks]

## QUESTION FOUR

Isoka Best Contractors Ltd is a company in the construction industry. Its administrative works are centralized. However, the other operations are decentralized so that separate construction sites can make independent decisions.

All the departments are networked with a server located at each site to enable direct communication and data transfer. Access to files on the Head Office server is permitted to each of the other sites although it is the responsibility of each manager to restrict this access as they consider appropriate.
All members of staff are paid on a salary basis. The company has fifteen (15) members of staff at Head Office and six (6) at each of the sites. The company payroll is managed at Head Office by the Payroll Manager who relies on monthly inputs from respective managers.

All members of staff have to submit a timesheet at the end of the month showing the number of hours worked during the month. In cases where they worked less than the minimum hours, they are required to provide a reason for these themselves which is later approved by the Site Manager. If the Site Manager finds out that the reasons for absence given are not valid, then a deduction is made from the amount of payment due at the end of the month. The standard time sheet has details to record sickness, maternity leave, holidays and any other statutory absences.

At the end of each month, the Site Managers are required to complete a summary that indicates sicknesses, maternity leave and other absences. All absences are supported by the supervisors form explaining the reasons and the same for absence due to sickness which should be accompanied by a doctor's signed sick note.

Each Site Manager is responsible for recruitment of staff and is required to inform the Head Office of all cases related to staff under their site. However, the recruitment of new staff is only done with the permission of the Managing Director who is located at the Head Office. All inputs relating to the payroll from all construction sites to Head Office are made via email.
You are an Audit Senior working for Probity \& Co. a firm of chartered accountants on the audit of Isoka Best Contractors Ltd and you have been tasked to perform audit procedures on salaries and wages. You have two (2) Junior Auditors to help you with the audit.

## Required:

(a) Explain to the Audit Juniors five (5) control objectives for the salaries and wages system.
(5 marks)
(b) Identify five (5) weaknesses in the payroll system of Isoka Best Contractors Ltd.
(5 marks)
(c) Suggest five (5) ways in which the weaknesses can be overcome . (5 marks)
(d) Suggest five (5) tests of control for the wages and salaries system of Isoka Best Contactors Ltd.
(5 marks)
(e) Suggest five (5) substantive procedures that can be performed on the details relating to wages and salaries system of Isoka Best Contactors Ltd.
(5 marks)
[Total: $\mathbf{2 5}$ marks]

## QUESTION FIVE

(a) ISA 265 Communicating deficiencies in internal controls to those charged with governance and management gives guidance to external auditors when reporting on deficiencies in internal controls. The deficiencies in internal controls are contained in the report of management. The weaknesses relate to the design, implementation or the operating effectiveness of internal controls which could have come to their attention during the audit. The report to management is also referred to as a letter of weakness in internal controls.

## Required:

Explain five (5) matters that should be included in the report to management.
(b) Zambia Educational Publishing Company Ltd (ZEPC Ltd) is a government owned company that manufactures educational materials. Most of its raw materials are acquired from suppliers on credit and payments are made after 30 days. The company was successful when the government was giving free education as its operations were mostly funded through government grants and donor agencies.

The advent of new entrants in the publishing of educational materials made it difficult for ZEPC Ltd to continue enjoying its market share. An increase in private companies supplying educational materials has been observed resulting in a reduction in the revenue of ZEPC Ltd. In addition, the company lagged behind in meeting its deadlines for payments of statutory obligations such as pension contributions and at times workers go for months without salaries and major suppliers have withdrawn credit facilities.

During the year, key operations staff resigned sighting lack of improvements in their conditions of service. The financial ratios were also indicating a downward trend coupled with a negative net working capital while the cash flow statement showed a decrease in cash and cash equivalents. Further, it was becoming difficult for ZEPC Ltd to meet its overhead costs such electricity and rentals for most of its branches across the country.

You are an auditor in Zenith and Co. a firm of Chartered Accountants. This is the second audit that you have been involved in and you have been reviewing the audit working papers for ZEPC Ltd. It has come to your attention that management was not willing to extend the assessment of the company as a going concern. They were suggesting that the responsibility of assessing the going concern ability of ZEPC Ltd rests with the auditors. The audit is nearing completion and you have been tasked to review the current file that contained an adverse opinion. This was in reference to the fact that management was not willing to extend its assessment on going concern despite visible uncertainty in terms of going concern indicators at ZEPC Ltd.

## Required:

(i) Identify and explain three (3) indicators of going concern uncertainty in ZEPC Ltd under financial, operational and other indicators.
(ii) Comment on the assertion by management that the responsibility for assessing the appropriateness of the going concern of ZEPC Ltd lies with the auditors.
(2 marks)
(c) You are an Audit Manager in Sable \& Co responsible for the audit of Goose Co, a company which develops and manufactures health and beauty products that it distributes to wholesalers. The final audit is due to commence shortly and the following matters have been brought to your attention:

## Capital expenditure:

The company has plant and equipment that has a book value of K10m.The equipment was bought ten (10) years ago and is estimated to have a scrap value of K2m. The company uses straight line method to depreciate its non-current assets. Owing to the remaining useful life of three (3) years, management is considering acquiring new state of the art milling machinery which should cope with the demands of mealie meal and other products such as flour. The cost of additions is estimated at K9m.The company maintains a capital expenditure budget and that meetings have to be held at which capital expenditure is approved.

## Provision for pending claims from the court case:

The company was sued by a customer who contracted a skin disease after using a type of beauty lotion supplied by the company. The case is in and out of court after the company's appeal failed. Consequently management provided K10, 000 as provision for possible claims pending from this case and the company lawyers have been helping the company with legal matters.

## Director's emoluments:

Goose Co. has six (6) directors whose emoluments in their contracts include salaries, bonuses and fees amount to K2.5m per year. A contract for each director has been signed. During the year, two (2) directors resigned while three (3) joined the company on two (2) year contacts.

## Cash in hand K1m:

The company has not conducted physical cash count at the year end. It has relied on the counting machines and integrity of the cashiers who have been working for Goose Co. for the last 15 years. So far the cashiers have not had any case of theft or fraud that has been brought to the attention of management. Senior cashiers have been authorizing I Owe You (IOUs) and related certificates.

## Required:

Describe suitable substantive procedures the auditor should perform to obtain sufficient and appropriate audit evidence in relation to the following:
(i) Plant and equipment.
(ii) Provision for court claims.
(iii) Director's emoluments.
(iv) Cash in hand.
(3 marks)
[Total: 25 Marks]

## END OF PAPER

## DA 11 PRINCIPLES OF AUDITING SUGGESTED SOLUTIONS

## SOLUTION ONE

(a) Procedures relating to accuracy of the schedule:

- The schedule has been prepared by the accountant .I would obtain the schedule and verify the schedule to and from amounts recorded in the nominal ledger and with the draft financial statements.
- Recalculate the amounts for correctness of additions and other calculations on the schedule


## Procedures relating to opening balances:

- Obtain the opening balances and agree with the previous balance in the previous audit file. This will be done in order to ensure that any amendments to the previous year's closing balance agreed during the audit had been properly recorded in the company's books of accounts.
- The audit of the plant and equipment, reliance will be placed on audit procedures performed in the previous years in verifying assets brought forward at the beginning of the year.


## (b) Audit procedures for occurrence:

- The cost of additions should be vouched against that of supplier's invoices
- Obtain the delivery notes and goods received notes to confirm delivery of the items before the end of year.
- Examine purchase orders, requisitions and other evidence, such as board minutes for purchase approvals.
- Obtain invoices to confirm whether the serial numbers on those invoices are the ones on the items bought.
Audit procedures for completeness:
- Analyse the repairs and maintenance to machinery to ensure that no items charged to this account should not have been capitalized by Sable \& Co.
- Obtain details in the cash budget to confirm whether the items bought where those that were budgeted for.
Audit procedures for rights and obligations:
- Obtain the purchase documentation to confirm if it is in the name of the company
- Obtain purchase documentation and other relevant documents to confirm if the asset is on hire or not.
Audit procedures for valuation:
- Obtain the total of invoices to confirm whether all the cost components such duties are included and any delivery costs have been recorded in accordance with IAS 16 Property Plant and Equipment.
- Confirm whether any subsequent measurement has been done in accordance with I.A.S 16 Property Plant and Machinery


## Audit procedures for disclosure:

- Consider whether the items property meets the definition of Plant and Machinery and are properly recorded as such.
- Consider whether the methods used in the calculation of depreciation has been disclosed in accordance with the provisions of IAS 16 Property, Plant and Equipment.
(c) Audit procedures for revaluation of properties:

The following audit procedures are required on revaluations

- Competence and objectivity of value

The valuer in question is an employee of the entity. Auditors should verify the independency and objectivity of the valuer and that the valuation was done correctly. The past record of the valuer should be obtained for last and confirm if there was a follow up valuation by an independent expert.

- Professional competence of valuer

Auditors should make enquiries into the professional qualifications and expectations of the valuer to ensure that he or she is suitably qualified to perform valuations and sufficiently experienced in valuations of the type undertaken.

## Scope of work

- Obtain the report and confirm that it is consistent with the valuations recorded in the financial statements
- Confirm whether the bases of valuations are consistent with acceptable basis of financial statements valuations, such as open market value.
- Enquire whether there were undue restrictions that could have been placed on the valuer's access to information that has a bearing on the valuation.
(d) The following procedures should be carried when obtaining a bank confirmation request:
- The auditors should request the client to write to the bank confirming the amounts of cash balance in the cash books
- In order for the bank to reply , they will need clearly written authority from their client for them to disclose such confidential information
- The request from the auditors should refer to the clients letter that asked the bank to provide details about their bank account details
- In case where the accounts are jointly owned, signatures from both parties to the account will be needed.
- The confirmation request should be done at least a month in advance and should indicate the previous year's and current years financial statements dates
- External auditor should review the confirmation from the bank to consider whether all the requested information had been included.


## Two pieces of information contained in a bank letter are:

- The amount of the balance.
- Bank should provide separate details on current, deposit loan and other relevancy accounts.
(e) Examples of contingent liabilities are:
- Discounted bills of exchange since Impala Ltd receives bills of exchange form foreign suppliers.
- Lawsuits or claims pending for cases against the company for supplying faulty agricultural equipment.


## SOLUTION TWO

(a) The following are the disadvantages of outsourcing internal audit services:
(i) It will be the same auditor for Prada Ltd who will be providing audit services as well as internal audits. This will create problems of independence .Further external auditors will not be objective when carrying out internal audits.
(ii) The cost of internal audits will be an added cost in addition to audit fees. This will overburden the company in terms of cash flows.
(iii) Currently there is a lot of coercion among employees for Prada's Ltd and are highly motivated. The hiring of internal auditors from the same audit firm may demoralize them and cause them to resign
(iv) The Prada Ltd is highly specialised in terms of its internal processes. It may be difficult for internal auditors to gain an in-depth understanding of the work that goes on in the organisation regarding internal controls.
(iv) Accounting staff at Prada Ltd have gotten used to the accounting system and have built sufficient skills and knowledge regarding internal operations. If this skill is outsourced, the current accounting staff will lose their core skills they acquired over a long period of time.
(b) Factors that must be considered in determining materiality:

External auditors are expected to take the following factors into account when coming up with materiality benchmarks:
(i) The materiality should relate to key elements of the financial statements such as assets, liabilities, equity, revenue and expenses.
(ii) The materiality should measure items on which users of financial statements base their economic decision on.
(iii) The type of business sector and economic environment - each type of industry has certain factors that affect it and not others. The economic environment can affect the level of materiality as well. In a depressed economy, the level of materiality for certain assets such as inventory may be different from companies in economies that are performing well.
(iv) The entity's ownership structure. If the company is owner managed, internal controls may not be followed, therefore the level of materiality may be different from a corporate entity which is not owner managed.
(v) The volatility of the benchmarks-if the element of financial statements changes frequently, then there will be a need to take the frequent changes of that element into account.
(c) (i) The type of information contained in an audit plan:

- The risk assessment procedures that external auditors will be carrying out are expected to appear in an audit plan.
- Any planned further audit procedures that external auditors shall use at assertion level need to be on an audit plan
- Other audit procedures that external auditors will be using and performed in accordance with ISAs will be documented.


## Examples are:

- Audit time tables and the actual audit work to be carried out
- Each member is expected to be given tasks to perform which should also be included in the audit plan.
- Auditors should also include in the plan audit procedures for major elements of financial statements such as inventories and cash in the audit plan.
(ii) An interim audit in an audit that takes place each time the auditor visit a client to conduct an audit, his could be on regular basis as well. Final audits are mainly conducted at the year end.

Activities that are usually carried out during an interim audit are:

- Carrying out an assessment of the presence of inherent risk
- Documenting and taking note of the client's internal control system
- Auditors wanting to evaluate the effectiveness of internal controls
- Verifications of transactions against amounts recorded in the books of accounts

Activities that are usually carried out during a final audit are:

- Carrying out substantive procedures between items in the income statement and those of the statement of financial position
- Confirmation of information in from related and third parties of the client such as banks and receivables
- Performing ratio analysis on the financial statements in form of substantive audit procedures.
(iii) The benefits of using automated working papers are:
- Human mistakes that are made occasionally by auditors when conducting auditing are reduced.
- It is quite smart to review electronically than manual working papers that may require redrawing.
- The use of electronic working papers will help the firm to save time.
- The auditor does not need to carry and use paper files which are standardized such as checklist when conducting an audit
- There will be no need for an auditor to physically transport audit files to the head office. These can be transmitted electronically using e-mails as attachments.


## SOLUTION THREE

(a) The following are the main ways in which ZICA regulates accountants:
(i) Education -whoever wants to become an accountant needs to obtain sufficient training in practice subjects such as auditing and group financial statements.
(ii) Supervision -an accountant has to be supervised or mentored by a qualified member who should monitor their work or guide them towards attaining practical experience.
(iii) Eligibility - ZICA has set some minimum qualifications for one to qualify as an accountant. For one to be qualified accountant there is a need for that person to be a member of ZICA with a practicing license.
(iv) Examination -these aspiring to become chartered accountants should be to demonstrate that they passed examinations set by ZICA and are able to apply this knowledge in a practical situation.
(v) The ZiCA has an inspectorate department which can review work carried out by a member such as statutory auditors and require observance of regulations.
(vi) The ZiCA can displine erring members of the institute according to the law.

## (b) (i) OECD principles on corporate governance:

- The frameworks should bring about efficiency, transparency, accountability and an efficient means of allocating scares resources.
- Corporate governance frameworks will advance and protect the rights of all shareholders whether those in minority and majority shareholders.
- By embracing co-operate governance frameworks, capital markets will be provided with incentives that should able to provide efficient financial markets.
- Corporate governance formworks will result in collaboration between RS and its stakeholders in creating their wealth.
- Corporate governance frameworks will ensure that strategic objectives of the company are achieved. It will also promote effective board monitoring and the board's management.
- Corporate governance framework will all important and material matters with regards to the operations of the company are issued on a timely basis to enable to owners to make informed economic decisions.
(ii) The following are the audit risks in relation to the audit of PTAN:

Inherent risks- non-profit organisations are complex entities that are regulated differently from profit making organisations.

- It is not easy to determine precisely how much PTAN had collected at the end of the day due to challenges in having proper internal controls.
- Most of its funds are donated which pose a challenges in ascertaining the future of cash flows


## Control risk-

- Due to lack of full time staff, it may not be possible to monitor all controls.
- The board of directors may not meet regularly as it is not mandatory for them to do so.
- There may not be proper segregation of duties as there are few directors who are full time.


## Control environment -

- The directors may not be adequately supervised as they mostly work independently.
- There are volunteers in place who may not appreciate the importance of an effective organizational culture that promotes accountability.
(iii) The following are the controls that should be put in place regarding cash donations:
- Collection boxes and tins -all boxes and tins must be numbered numerically.
- There must be satisfactory sealing of boxes so that any attempt to open before they are delivered to the office is easily noticed.
- Postal receipts-ensure that a review on the mail is done to confirm if it has not been opened.
- Mail should be opened in the presence of two persons
- Deeds of covenants -these should be regularity checked and followed up to ensure that the correct amount is received and recorded.
(c) An agreed upon procedure is a type of audit in which an auditor, an entity's management and any third party agree on the procedures to be undertaken. Thereafter the auditor provides a report containing findings to the client and who ever had agreed on the procedures.

The auditor does not provide an assurance on the findings of the agreed upon procedures and it is up to the interested parties to conclude.

## SOLUTION FOUR

(a) The following are the control objectives for salaries and wages system:
(i) Salaries should only be paid for employees of Best Contractors Ltd.
(ii) Wages and salaries should only be paid when salaries have been authorised by the respective senior managers.
(iii) The correct payments should be made to correct members of staff of Isoka Best Contractors Ltd.
(iv) The salaries paid should be agreed to the completed time sheets which have been approved.
(v) All deductions should be recorded as liabilities in the financial statements .These are tax and Pay As You Earn (PAYE).
(vi) The wages and salaries will be paid on time in accordance with the agreed terms
(vii) All deductions should be done with the consent of employees.
(b) Weaknesses in the system of Isoka Best Contractors Ltd:
(i) There is a possibility that the salaries and wages may be paid to staff that may not exist since Site Managers are the ones entering details regarding number of hours.
(ii) Payments may be made to persons who are not even employees of the company.
(iii) The salaries may not be paid on time especially if submission of time sheets is made late.
(iv) Payments to members of staff may be delayed as corrections are being made due to errors in amendments, additions and omissions on the payroll.
(v) There is a possibility of data being corrupted as it is being transported to the head office via e-mails.
(vi)There is a possibility of unauthorised access to data and the information could be manipulated and leading to loss of confidential information.
(vii) There is a possibility of payroll staff making unauthorised deductions
(viii) There is a possibility of incorrect or late payments to tax authority which may result into fines and penalties
(ix) Time sheets could be easily manipulated to the advantage of staff or employees.
(c) The following are recommendations to overcome the weaknesses:
(i) There should be periodical check of number of employees against records to ensure the numbers agree.
(ii) There is a need to keep a register of all employees which should be kept at accounts and payroll.
(iii) There is a need to have a cut-off point for the payroll so that all sundries and any omissions are attended to in time to avoid frustrating workers.
(iv) There should be access restrictions and only authorised staff should have access to such files and they this should be reviewed in time.
(v) Employees should be encouraged to check the deductions that have been made. A senior person should be in charge of reviewing the work done by junior employees or whoever has worked on the payroll.
(vi) In order to avoid late computations of payroll costs which could result into penalties, it would be important for the staff concerned to prepare the payroll for signaling in order for proper deductions to be made.
(vii) Time sheets should not be completed by employees on their own. These should be kept in secured place and only senor staff is allowed to do a compilation or adding up the totals.

## (d) The tests of controls are as follows;

(i) Obtain a sample of time sheets that were completed and confirm whether appropriate signatures have been properly used.
(ii) External auditors should perform analytical reviews on the time sheets and compare on a month by month basis to take note of any disparities or anomalies.
(iii) Obtain time sheets or details of were some amendments have been made and confirm is such have been authorized.
(iv) Examine a sample of amendments to confirm whether they have been processed on a timely and accurate basis.
(v) Ascertain whether or not internal auditors have performed a review of salaries in the financial year and if so evaluate the work that they have performed on the payroll.
(vi) Inspect and re-perform a reconciliation to ensure its accuracy, approvals and that it is has been done on time.
(vii) Review access controls procedures in the salaries to confirm whether or not they have been complied with.
(e) The substantive procedures related to wages and salaries system:
(i) Obtain a sample of timesheets and recast it to confirm if the totals are correct.
(ii) Obtain as ample of personnel records to confirm whether salaries that were paid where at correct amounts and that any changes to payroll were authorized.
(iii) Obtain information about employees who had resigned and to confirm if they have been paid correctly and that both payroll and human resources records have been updated accordingly.
(iv) Select a sample of payrolls during the year and test check timesheets to ensure that employees have clocked the minimum hours necessary.
(v) Re-perform computations for tax and social services insurance by references to tax and insurance tables and confirm whether correct rates had been used.
(vi) Compare the payroll costs with what was posted to the ledger and confirms whether it agrees.
(vii) Recast the total of payments for tax and social insurance, and test totals of any payments to employees. E.g. any leavers.
(viii) Select a sample of payroll transmission reports and verify that the totals agree with the original submitted documents.
(ix) External auditors can perform computer audit assisted techniques in order to test the accuracy of built in computerized controls.

## SOLUTION FIVE

(a) The following are the matters that should be included in the report of management:
(i) The letter should indicate that only it discusses only deficiencies in internal controls that were came to the attention of the auditor.
(ii) The report should indicate that the letter of weakness is meant for use by management and not third parties.
(iii) Brief details of the internal control weaknesses observed.
(iv) The implication of the control weakness observed on the organization.
(v) Recommendations should also be included in the report to management as well.
(vi) The management response on the observed internal control weaknesses.
(b) (i) The following are the indicators of going concern in ZEPC Ltd;

- Financial indicators- The Company is in deep financial problems .This has resulted in failure to pay its suppliers on time. Overhead costs are not being paid for as well. This will impact negatively on the operations of the company. Furthermore, it is not able to meet salaries for its workers and that is why a number of senior staff resigned.
- Operational indicators-the company has lost key members of staff- these are strategic members who have a lot of experience. Therefore their loss will affect the quality of the products that they make.
- Other indicators-the company has been facing a lot of competition in the educational sector. This is due to the liberalization of the education sector with new entrants that are selling educational products cheaply.
(ii) The assertion by management that the responsibility for assessing the ability of ZEPC Ltd as a going concern is not correct. Management is responsible for assessing the ability of the company as a going concern. The auditor's responsibility is to assess the appropriateness of management's assessment.

The auditors will review management's assessments by evaluating the assumptions made by management and also review any cash flow statements made by management. If the auditor concludes that the company is not a going concern this will be reported in accordance with the provisions of ISA 570 Going concern depending on disclosures made by management.

## (c) Audit procedures:

## (i) Capital expenditure (Plant and equipment):

The following audit procedures will be carried out:

- External auditors need to confirm that the asset does exist by conducting an inspection.
- The auditors need to obtain the invoices pertaining to the acquisition of plant and machinery and compare whether the names on the invoice agree with that of sable \& Co.
- Review the details of actual cost and compare with the budget cost. In addition auditors can obtained depreciation rates, recalculate and then compare with the amounts recorded in the Income statement.
- Recalculate the schedule of Property, Plant and Machinery to confirm if the total transferred to the balance sheet is correct.


## (ii) Provisions for pending court case:

- Auditors need to discuss and make enquiries on such matter from legal advisers of the company in order to get to know in detail the extent of the problem
- There should have been correspondence between the legal advisors and the entity. By reviewing the minutes of the current year's audit for any concerns that should have been recorded.
- The expenses concerning the court case should have been expensed in the Income Statement. Auditors will therefore obtain the cash book details for payments and confirm that they have been recorded and expensed in the Income statement.
- Review the notes to accounts to confirm if disclosures have been done in accordance with IAS 37 Provisions, contingent liabilities and Contingent assets.


## (iii) Director's emoluments:

- The director's emoluments consist of salaries, bonuses and other fees as per condition of service.
- Recalculate the individual director's total payments and confirm that the breakdown agrees to the total.
- The disclosure requirements that have been made in the financial statements should be checked against disclosure requirements in accordance with an applicable accounting standard.
- Obtain the previous payroll amounts concerning the directors for the current year and then compare with the previous year. Make enquiries for any leavers and those who could have joined and agree with the closing amounts.
- Obtain directors contracts to assess whet the payments are in accordance with conditions of service in each director's contract.
(v) Cash in hand:
- The cash balances on hand must be counted and verified with the recorded amount. In case the cashier gave out some I Owe You (IOU), these must be added with payments and then agree with the balances available at the end of the year.
- The external auditor need to confirm that the cash balance reflected in the cash book is the one that was the outcome of the reconciliation.
- Compare certified amounts of cash with actual certificates that have been signed by mandated officials.


## END OF SOLUTIONS

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO
$\qquad$
DA 12: GOVERNANCE AND COMPANY LAW

FRIDAY 24 MARCH 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

Musenga has just been appointed company secretary of one of the leading companies in Lusaka after just graduating with an accountancy degree. Among his duties, would be to organise and provide secretarial functions for Board of Directors' meetings and other meetings of the company. He needs equally to be acquainted with certain positions within companies and what role they play in the management of a company. He has approached you for guidance on the same. Guide him on the following:

## Required:

(a) Explain to Musenga at least five (5) duties of a Chief Executive Officer.
(10 marks)
(b) Explain to Musenga at least five (5) attributes of a director.
(c) Explain to Musenga the importance of Annual General Meetings and the business conducted at such meetings.
[Total: $\mathbf{2 5}$ Marks]

## QUESTION TWO

JACKPO Limited is a company incorporated under the Zambian Companies Act with its registered office at Lusaka. Jackson Mumba, Poel Zulu and Keziah Kondowe are all shareholders and hold shares of $50 \%, 10 \%$ and $15 \%$ respectively.

At their last meeting, it was agreed that Aaron Chibwe and Yoyo Lupupa be appointed so as to replace the first directors who have not performed to the expectation of the company.

Immediately after their appointment as directors, Aaron and Yoyo moved the company to 100 \% profitability a move which made the shareholders have trust in them fully.

After five (5) years of trading, it was found that the above directors and accountants did not have sufficient qualifications for their position. Hence, an external audit was carried out and certain issues arose whose answers are needed for a better solution. The said audit found several irregularities like failure to adhere to the instructions, not being qualified for the duty as directors and company information being linked to the outside world.

During the audit, it was also observed that several duties were breached by the directors which included obedience, performance, skill and confidence and conflict of interest.

You have been retained to urgently help the company understand the current situation so that the company should know the steps to take.

## Required:

(a) Describe the relationship that exist between Jackson Mumba, Poel Zulu, Keziah Kondowe on one hand and Aaron Chibwe and Yoyo Lupupa on the other hand.
(b) With reference to the facts above, explain how the duties mentioned ought to have helped the company.
(15 marks)
(c) With reference to professional competence and auditing standards, discuss the importance of audit in the above company.
(5 marks)
[Total: $\mathbf{2 5}$ Marks]

## SECTION B

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

Attempt any TWO (2) questions.

## QUESTION THREE

(a) Explain two (2) benefits of dissolution of a company by striking it off the register of companies.
(b) Distinguish between a partnership and a sole trading business.
(c) Distinguish between a fixed charge and a floating charge.
(d) State three (3) symptoms of poor corporate governance in a board of directors.

## QUESTION FOUR

(a) Describe the functions of audit committees.
(b) Explain the consequences of separate legal personality.
(c) Describe the Characteristics of a rules- based approach.
[Total 25 Marks]

## QUESTION FIVE

(a) Explain the three (3) ways the articles can be made unalterable.
(b) Explain the advantages of incorporation

## END OF PAPER

## DA 12: GOVERNANCE AND COMPANY LAW SUGGESTED SOLUTIONS

## SOLUTION ONE

a) The following are the duties of a CEO

## 1. Develop strategic objectives and direction

Carrying the weight of the company on their shoulders, the CEO is responsible for devising new strategic plans and policies to bring their visions to reality. By setting out clear aims and objectives, the CEO helps employees and the BoD to better understand upcoming expectations for business growth, both in the short and long-run.

## 2. Implement proposed plans

CEOs direct and oversee the business's overall strategic direction, developing high-quality business strategies and plans that align with both their short-term and long-term objectives. It's their duty to communicate their approach across the company so as to ensure that its operations are working in accordance with its overarching strategy, with the end goal of maximizing profits, increasing shareholder value, and improving market position.

## 3. Budgeting and forecasting

To the dismay of many, not all of a CEO's financial responsibilities can be passed on to the Chief Financial Officer (CFO). Rather, a yearly budget has to first be set by the CEO to allocate capital in consideration of factors like net income, cash flow, and the valuation they wish to achieve.

With the help of the CFO, CEOs then consider variables such as industry fluctuations in calculating potential expenses, revenue, and profitability for the upcoming year. Only then is the burden
lifted, with the CFO managing cash flow and performing fiscal and financial analysis throughout the year.

## 4. Public relations

The public naturally associates the CEO as being the face of the company, making them an almost obligatory marketing tool. As the business's primary representative, the CEO is largely expected to exemplify model behavior, with their public values and actions, both good and bad, having a great impact on the reputation of the company.

## 5. Communicating with the Board of Directors

The board can easily become one of two things - a CEO's greatest ally or the cause of his/her demise. Just as expectations must be communicated to employees, the board should be kept informed of important - and sometimes difficult - business decisions through regular board meetings. Communication between the board and the CEO is of the utmost importance, with transparency being key.

## 6. Tracking company performance

An executive understanding of the company's performance, relative to other competitors, is a key part of the CEO's role. Actionable insights can be derived from revenue growth, gross profit margins, and cumulative sales. These can then be used to shape further key performance indicators (KPI) to guide necessary adjustments and help the company meeting its new targets. In addition, monitoring the market - whether that involves potential acquisitions or significant regulatory developments in the industry - is crucial to helping the company withstand outside forces and progress towards its long-term goals.

## 7. Establishing working culture

From interns to managers to senior executives, everyone looks up to the CEO to a certain extent. Creating a healthy working culture means leading by example. By exhibiting the same working attitudes you expect of others, CEOs will gain respect and serve as better motivation for employees to reciprocate and do the same for them. A positive working environment should sit in line with company values, visions, and goals. With a productive working culture - and a clear
set of company values, CEOs are able to better drive consistent, high levels of performance across the whole company.
a) A director should have the following attributes

Skill, knowledge, experience, vision and mission, strategic thinking, good judgment.
b) The company's annual general meeting is an important event. The meeting must be held within 3 months of each financial year. It is important for a company to hold an AGM because its where important issues of the company are discussed and done such as;

- Appointment of auditors and fixing of their remuneration
- Declaration of a dividend if any
- Consideration of the accounts, balance sheets and reports of directors and auditors
- Election of directors in place of those retiring
- Special business.

It's important also for a newly incorporated company to hold an AGM at least within 18 months of its incorporation. If default is made in holding the AGM, the registrar may, on the application of any member call, or direct the calling of a general meeting and give such directions as he thinks fit including direction that one member of the company present in person or by proxy shall be deemed to constitute a meeting.

## SOLUTION TWO

(a) Agency and stakeholder's agency relationships is a contract under which one person another pissing decision-making authority to the agent. There is a significant issue in Corporate Governance because of the dominance of the company limited by shares as a form of business organization. For larger companies this has led to The Separation of ownership for the company from its management. The shareholders can be seen as the Principal the management of the company as the agents.

Ordinary shareholders are the owners of the company to home the board of directors is accountable, the actor powers of shareholders change to be restricted. They normally have no right to inspect the books of accounts, and future prospects are gleaned from the annual reports and accounts, Stockbrokers, and daily newspapers.

The day-to-day running of a company is the responsibility of the directors and other managers to whom the directors derogate not the shareholders. For these reasons therefore there is the potential for conflict of interest between management and shareholders.
(b) The duties mentioned are obedience, skill, conflict of interest, performance and confidence

## Performance

The agent as he agrees to enter into this relationship agrees to personal perform for the principal. Any delegation to another person is a breach of the relationship. The agent who agrees to act as agent for rewards has contractual obligation to perform his agreed task. An unpaid agent is not bound to carry out his agreed duties. An agent may refuse to perform an illegal act.

This duty could have helped the company because the directors could have been performing to their expectation but they were not qualified.

## Skill

When an agent is engaged to perform a specific task, there is an assumption that the said agent has the required skill. The agent also owes a duty of care to the principal. Therefore, a paid agent undertakes to maintain the standards of skill and care to be expected of a person in his profession.

This duty could have helped the company but the directors employed individuals who were not qualified or who had no skill for the task that they were given.

## Conflict of interest

A duty of conflict of interest is very vital as the agent is mostly found in conflicting situation as he deals with third parties on behalf of the principal. The agent owes a duty of care to his principal not to put himself in a situation where his own interests' conflict with those of the principal. For example, he must not sell his own property to the principal even if the sale is at a fair price.

This duty could have the company in that the directors not have a conflict of interest with the company and theirs.

## Obedience

The duty to be obedience is among the most import ones because it borders on the instructions of the principal. If the agent is not obeying to lawful instructions of the principal, he may be bound or held liable personally. The agent must act strictly in accordance with his principal's instructions provided these are lawful and reasonable. Even if he believes disobedience to be in his principal's best interest, he may not disobey instructions. Only if he asked to commit an illegal act may he do.

## Confidence

This duty entails that information that the agent comes across during his work, he ought not to tell other but keep in confidence. The agent must keep in confidence what he knows of his principal's affairs even after the agency relationship has ceased.

## (c) Professional competence and auditing standards

The Accountant Act provides that acts that a chartered accountant shower apply for a practicing certificate or a non-audit practicing certificate in the prescribed manner and form upon payment of the prescribed fee. In order to make an application, the accountant must have been certified by the accounting body that they have passed all education and training requirements as well as the competent practice examination. The application can only be made after confirming that the account has at least 7 years of post-qualifying experience and has passed the education and training requirements.

On the other hand, auditing standards are needed in the running of companies. The Accountant Act provides that a chartered accountant shall perform an audit in accordance with the auditing standard determined by the institute and such agreed procedures as the client contract may specify and such facts shall be discussed in the audit report.
In relation to the facts, it can be seen that the internal audit was not been handles by qualified persons hence financial discrepancies that saw that company go down.
Qualified personnel with the right competencies and good auditing standards were needed.

## SOLUTION THREE

(a) Benefits of winding up by striking off the register of companies.

- Cost:- It is less costly for the company as the lengthy process of liquidating the company through the court process and other liquidation processes are avoided. The only fee to be paid will be those for dissolution at PACRA and for advertising to notify the public of the process.
- Efficiency:- It is efficient in that it saves time as the only thing required is giving of notice at least three months in advance. In the absence of anything to the contrary, the company will be struck off the register after three months.
(b) Distinction between partnerships and Sole trading business.- A sole trading business is owned and run by one person, the capital is contributed by the single owner, it has no separate existence from the owner, the business is a one man business, does not share profits/losses with any other person.

On the other hand, a Partnership is owned and run by at least two people, the owners contribute the capital, may have separate legal identity where it has a limited liability partners which is not the case with a sole trading business. The owners share profits and losses; they sign a partnership deed which is not the case with the sole trading business.
(c) Distinction between a fixed charge and a floating charge:- Floating Charge:- This is a charge where the chargee's rights are not attached to a specific property (shifting fund of assets) and the charge (business) is free to use them in any way until they crystalise into a fixed charge on default or wounding up of business.

On the other hand, a Fixed Charge is a form of protection given to secured creditors relating to specific assets of a company. It is a fixed (specific) charge which attaches to the particular assets. The borrower is not free to deal with the attached assets in certain ways without authority from the lender, e.g. a mortgage may not allow the borrower to sell the property without authority to do so from the lender.
(d) Three symptoms of poor corporate governance in a board of a company are: -

- Domination by a single individual - This is where the organisation's board is dominated by a single powerful person or a small group of people which makes it less objective in decision making. That makes a board weak.
- Lack of involvement of board:- This is where a board meets irregularly ad does not really aware of what goes on in the company.
- Lack of supervision:- Where the board is not involved in what really goes on in the company and lack of segregation of key roles in a company. This may result in incompetence, negligence and fraud as the company has less or no supervision.


## SOLUTION FOUR

a)

- The primary purpose of a company's audit committee is to provide oversight of the financial reporting process,
- They audit process,
- They audit the company's system of internal controls
- They audit levels compliance with laws and regulations.
b) The following are the consequences of separate legal personality;
- Shareholders have limited liability;
- Property and assets of a company belong to the company;
- Profits belong to the company;
- Debts and liabilities of the company belong to the company;
- Shareholders have no right to manage the business or enter into Transactions on behalf of the company
- A company may enter into contracts with its shareholders because it's a person separate from its shareholders;
- A company may sue or be sued in its own name;
- A company enjoys perpetual succession.
c) A rules-based approach to corporate governance is based on the view that companies must be required by law (or by some other form of compulsory regulation) to comply with established principles of good corporate governance. The rules might apply only to some types of company, such as major stock market companies.


## SOLUTION FIVE

a) The following are the ways of making the articles unalterable;

1. The articles may give a member additional votes so that he can block a resolution to alter articles on particular points; this includes the removal of the weighed voting rights from the articles. However, for this to be effective, the articles must also limit the powers of members to alter the articles that give extra votes.
2. The articles may provide that when a meeting is held to vote on a proposed alteration of the articles the quorum present must include the member concerned. They then deny the meeting quorum by absenting themselves.
3. A company may entrench provisions in its articles. This means specific provisions may only be amended or removed if certain conditions are met which are more restrictive than a special resolution such as agreements of all the members. However, such entrenched provisions cannot be drafted so that the articles can never be amended or removed.
b) The following are the advantages of incorporation;

## Corporate Personality

An incorporated company is a legally recognized entity that exists separately from its owners and shareholders, which is different from partnership companies.

## Limited Liability

In the event of a company being shut down, the members of the company are solely liable to contribute to the assets and liabilities of the company.

However, in the case of companies that have been incorporated, none of its members is legally bound to contribute to anything more than the nominal value of shares held by the member which still remain unpaid.

The advantage of having limited liability for its members is one of the major reasons for setting up an incorporated company.

## Perpetual Succession

In spite of any changes in members of the company, the company will be the same entity with the same privileges, immunities, estate, and possessions.

The death or insolvency of individual members does not affect the incorporated company in any way or form. The company will continue to exist indefinitely till the company is shut down.

As the Companies Act states, 'Members may come and members may go, but the company can go on forever.'

## Transferable Shares

The shares or other interest of any member in a company shall be movable property, transferable in the manner provided by the articles of the company.'

This leads to the investment of funds in shares. It is done so that members can earn cash shares at any given time upon their will.

It also serves the purpose of providing liquidity to the investors. They can sell shares, anytime they are willing to, on the open market or the stock exchange.

## Separate Property

An incorporated company as a recognized legal entity is permitted to own its own funds and also other assets. 'The property of the company is not the property of shareholders; it is the property of the company.'
'The company is the real person in which the property is vested, and by which it is controlled, managed and disposed of.' And thus, under the law, if a majority shareholder of the uses the company's resources for personal reasons, he is liable to be held for criminal misappropriation of company funds.

## Capacity to Sue

As a separate legal entity, an incorporated company has the right to sue other people in addition to companies. In turn, it can be sued by other companies and people.

However, the managing directors and other directors are not liable to be sued in the name of the company.

## Flexibility and Autonomy

The company has an autonomy and independence to form its own policies and further, implement them. However, they are subject to the general principles of law, equity and a good conscience. In accordance with the provisions that are mentioned in the Companies Act, Memorandum and Articles of Association.

## END OF SOLUTIONS

