

#### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

#### LEVEL ONE

#### DA 1: FINANCIAL ACCOUNTING

#### MONDAY 12 JUNE 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.
- 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 Financial statements differ from management accounts in that they:
  - A. Are prepared monthly for internal control purposes.
  - B. Contain details of costs incurred in manufacturing.
  - C. Are summarized and prepared for external users of accounting information.
  - D. Provide information to enable the trial balance to be prepared.

(2 marks)

- 1.2 The capital of a sole trader would change as a result of:
  - A. A payable being paid through his private A/C.
  - B. Raw materials being purchased on credit.
  - C. Non-current assets being purchased on credit.
  - D. Wages being paid in cash.

(2 marks)

1.3 The correct entries needed to record the returns of office equipment that had been bought on credit from PYO and not yet paid for are:

	Debit	Credit
A.	Office equipment	sales
Β.	Office equipment	PYO
C.	PYO	Office equipment
D.	Cash	Office equipment

(2 marks)

- 1.4 A business entity buys an item of machinery for long-term use. Which of the following is NOT capital expenditure?
  - A. The purchases price of K2,000
  - B. Delivery fees of K1,250
  - C. K350 spent on training employees to use the machine.
  - D. K500 incurred on testing the machine.

(2 marks)

1.5 A VAT-registered company buys a machine for K10,000 (excluding VAT) and pays by cheque. If VAT is at a rate of 16%, this transaction should be recorded as follows:

	Debit	Credit		
Α.	Machinery A/C K10,000	Bank A/C	K10,000	
В.	Machinery A/C K10,000	VAT A/C Machinery A/(	K1,000 C K9,000	
C.	VAT A/C K1,000 Machinery A/C K10,000	Bank A/C	K11,000	
D.	Machinery A/C K11,000	Bank A/C K1	1,000	(2 marks)

- 1.6 A sole trader has not yet accounted for a cash discount allowed of K1,050. When the correct accounting entries have been made, which one of the following statements is correct?
  - A. Gross profit and net profit will increase by K1,050.
  - B. Gross profit and net profit will decrease by K1,050.
  - C. Gross profit will be unaffected but net profit will increase by K1,050.
  - D. Gross profit will be unaffected but net profit will decrease by K1,050.

(2 marks)

1.7 BCD has an accounting year end of 31 December and pays K300 per quarter for electricity.

At 1 January 2021 the statement from the electricity supplier showed that BCD had prepaid by K25. BCD then received electricity bills for the next four quarters starting on 1 January 2021 and ending on 31 December 2021 for K350, K375, K275 and K300 respectively.

Which of the following are the correct entries for electricity in BCD's statement of profit or loss and Statement of financial position for the year ended 31 December 2021?

	Statement of profit and loss	Statement of financial position
Α.	K1,300	K75 accrual
Β.	K 1,300	K75 prepayment
C.	K1,200	K125 accrual
D.	K1,200	K125 prepayment

(2 marks)

1.8 A business usually has a mark-up of 20% on cost of sales. During the year, its sales were K90,000.

What was the cost of sales?

A. K15,000B. K75,000

C. K18,000

D. K72,000

(2 marks)

- 1.9 How is a bank overdraft classified in the statement of financial position?
  - A. Non-current asset.
  - B. Current asset.
  - C. Current liability.
  - D. Non-current liability.

(2 marks)

1.10 What sort of data is input into a receivable ledger system?

- A. Amendments.
- B. Transaction data.
- C. Adjustment to terms.
- D. All of the above.

(2 marks)

#### **SECTION B**

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

#### **QUESTION TWO**

The following trial balance has been extracted from the ledgers of JKE at 31 December 2021:

	К	Κ
Sales (all on credit)		971,100
Inventories (1 January 2021)	23,100	
Trade receivables and payables	124,276	62,904
Credit purchases	482,811	
Carriage inwards	19,884	
Carriage outwards	48,690	
Electricity	10,491	
Local business tax	13,410	
Wages and salaries	207,438	
Postages and stationery	10,476	
Rent	21,900	
VAT		31,677
Motor vehicles at cost	74,100	
Accumulated depreciation		31,860
Bank deposit account	135,000	
Bank current account	115,860	
Ordinary shares of K1 each		75,000
Retained earnings		114,895
-	1,287,436	1,287,436

#### The following notes are also relevant:

- (i) Inventories at 31 December 2021 were valued at K29,210.
- (ii) Prepaid rent amounted to K4,200
- (iii) Accruals are estimated as follows:

Electricity	K1,419
Wages and salaries	K3,696

- (iv) Depreciation on motor vehicle is to be calculated at 25% per annum using reducing balance method.
- (v) Accrued interest on the bank deposit amounts to K10,800
- (vi) An accrual for income tax of K45,000 is to be made on the profit for the year.

#### **Required:**

- (a) Prepare JKE's Statement of profit or loss for the year ended 31 December 2021. (9 marks)
- (b) Prepare JKE's Statement of financial position as at 31 December 2021. (9 marks)
- (c) List two (2) disadvantages of operating as a partnership rather than as a sole trader.

(2 marks) [Total: 20 Marks]

#### **QUESTION THREE**

(a) Public sector organisations are funded mainly by central government. These institutions also raise their funds through various means. Accountability is achieved through preparation of financial reports communicated to users who in turn make decisions that affect the community in more ways than one. Public sector organisations may be required to have a pre-audit system in place in order to ensure that the funding is secured.

#### **Required:**

- (2 marks) (i) Briefly explain the main mandate of IPSASs
- (ii) Give five (5) main reasons the pre-audit process seeks to achieve in a public sector environment. (5 marks)
- (b) It has been argued that 'profit' does not always give a useful or meaningful picture of the operations of the company. This is due to the fact that the company's performance and prospects depend not so much on the 'profit' earned in a period, but more realistically on liquidity or cash flows.

#### **Required:**

Give four (4) benefits of the cash flow statements to their users. (4 marks)

(c) A database is defined as a file of data structured in a such a way that it can serve a number of applications without being dictated by any particular function.

#### **Required:**

Briefly explain four (4) major objectives of a database (4 marks)

(d) Inventory is one of the most important assets in a company's Statement of financial position. To this effect, IASB issued IAS 2 dealing with the valuation and presentation of inventory in the accounting books and financial statements.

#### **Required:**

Explain how the accrual principle applies in the way inventory is treated in the statement

of profit or loss account.

(2 marks)

(e) There are various forms of business entities one would establish. This includes sole trader, partnership, limited liability company etc.

#### **Required:**

Briefly explain why incorporating a business as a limited liability company could be preferred to partnership business. (3 marks)

#### **QUESTION FOUR**

F. Banda and O. Chanda are in partnership sharing profits and losses in the ratio 3:2. At the close of business on 31 December 2022 the following Trial Balance was extracted from their Books.

		K	K
Capital Accou	unts – F. Banda		10,000
	O. Chanda		7,000
Drawings	– F. Banda	4,100	
	O. Chanda	3,800	
Current Acco	unts on 1 January 2022		
	F. Banda		1,050
	O. Chanda		850
Trade Receiv	vables	9,300	
Trade Payabl	les		4,600
Sales			41,650
Purchases		20,850	
Discounts		1,200	950
Rent and Rat	tes	2,600	
Wages and S	Salaries	5,200	
Office furnitu	ire	3,000	
Inventory 1	January 2022	5,900	
Irrecoverable	e Receivables w/off	550	
General office	e expenses	1,250	
Bank		<u> </u>	
		66,100	66,100

#### **Additional Information**

- 1. Interest of 5% is allowed on the Capital Accounts.
- 2. O. Chanda is entitled to a partnership salary of K2,500 but no entries have yet been made concerning this.
- 3. Wages of K750 were owing at 31 December 2022.
- 4. Rent prepaid at 31 December 2022 is K150.
- 5. Provide for Depreciation on office furniture for K300.
- 6. Inventory at 31 December 2022 is K5,100.

#### **Required:**

- (a) Prepare the Partnership Statement of profit or loss account for the year ended 31 December 2022.  $(10^{1/2} \text{ marks})$
- (b) Prepare Partnership Statement of financial position as at 31 December 2022.  $(9^{1/2} \text{ marks})$

#### **QUESTION FIVE**

Mint Ltd is a private company that was established five years ago manufacturing solar powered bulbs. The company has grown rapidly due to the demand for the products brought about by government policies of promoting environmentally friendly products. This demand has resulted into an increase in the payables and receivables figures. In order to ensure arithmetic accuracy of the payable and receivable figures in the statement of financial position, the company prepares the control accounts for each ledger which is later reconciled to individual ledgers. The control account also helps the company to locate errors that may have been made when posting individual invoices or payments to accounts. Fraud is also prevented as reconciliation of control accounts to individual ledger accounts are done frequently every month.

Mint Ltd Companies' information for the month of December 2021 is as follows:

- (a) The payable ledger control balance as at 31 December 2021 was K30,800,000.
- (b) The total of the listing of the individual ledger account balances at 31 December 2021 was K25,420,000 credit balance
- (c) The following errors were discovered upon investigation:
  - (i) The purchases day book total for the month of December was under cast by K 500,000
  - (ii) An individual debit balance of K300,000 had been incorrectly treated as credit on totaling the list of individual ledgers account.
  - (iii) The total of discount received for the month amounting to K2,400,000, has not been entered in control account.
  - (iv) Contra settlements with the sales ledger amounting in total to K4,000,000 were correctly entered in the individual ledger accounts but omitted in the control account.
  - (v) The total Returns outwards journal for the month was over cast by K100,000.
  - (vi) The opening credit balance of one individual ledger account of a payable was under cast by K100,000.
  - (vii) A cheque payment to a supplier amounting to K80,000, had been correctly treated in the control account but was entered in the supplier's individual ledger account as K160,000.

#### **Required:**

1. Explain five (5) benefits of preparing control accounts for companies such as Mint Ltd.

(5 marks)

- 2. Prepare Mint Ltd's corrected payable ledger control account. (5 marks)
- 3. Explain how Mint Ltd will deal with errors in (ii), (vi) and (vii) above. (4 marks)
- 4. Prepare a reconciliation statement, reconciling the original total of the individual balances with the corrected control account balance. (6 marks)

#### **QUESTION SIX**

Chali Ltd had the following balances on its motor vehicle accounts at 1 January 2021

-	Motor vehicles at cost	K20,000
-	Allowance for Depreciation on motor vehicles	K8,000

During the year to 31 December 2021, the following transactions occurred.

- 1 April 2021, bought a motor van (ABG 5391) costing K18,000.
- 1 June 2021, sold a motor vehicle (ABG 5010) for K1,000, which had originally cost K8,000 in April 2018.

During the year to 31 December 2022, the following transactions occurred.

- 20 May 2022, bought a motor vehicle (ACR 4598) costing K24,000.
- 31 July 2022, traded-in a vehicle bought on 1 April 2021 (ABG 5391) for a new vehicle (AAG 4080) costing K28,000. The Trade-In-Allowance was K14,800

Chali Ltd accounts for depreciation on its motor vehicles at the rate of 25% per annum using the reducing balance method. It is company policy to make a full year's charge against all vehicles held at the end of its financial year (31 December each year).

#### **Required:**

Required to prepare the following ledger accounts for 2021 and 2022.

		[Total: 20 Marks]
(c)	Motor Vehicles Disposal Account.	(4 marks)
(b)	Allowance for Depreciation on Motor Vehicles Account.	(10 marks)
(a)	Motor vehicles at cost Account.	(6 marks)

#### END OF PAPER

### DA1 FINANCIAL REPORTING SUGGESTED SOLUTIONS

### SOLUTION ONE

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

#### SOLUTION TWO

(a)	JKE's Statement of Profit or Loss for the year ended 31 March 2021:		
	Salec	K OOO	071 100
	Jales Opening inventory	22 100	5/1 100
	Durchages	23 100	
	Purchases	482 811	
	Carriage inwards	19 884	
	Closing inventory	<u>(29 210)</u>	
			<u>(496 585)</u>
	Gross profit		474 515
	Carriage outwards	48 690	
	Electricity (10 491 + 1 419)	11 910	
	Business tax	13 410	
	Wages and salaries $(207\ 438\ +\ 3\ 696)$	211 134	
	Postage and stationery	10 476	
	Rent (21 900 – 4 200)	17 700	
	Depreciation (74 100 – 31 860) 25%	10 560	
		<u>10 500</u>	<u>(323 880)</u>
	Operating profit		150 635
	Interest receivable		10 800
	Profit before tax		161 435
	Income tax		(45,000)
	Profit for the period		116 435
			110 400

# (b) JKE's Statement of financial position as at 31 March 2021.

Assets	Cost K'000	Acc Dep'n K'000	NBV K'000
Non-current assets			
Motor vehicles	74 100	42 420	31 680
Current Assets:			
Inventories	29 210		
Receivables	124 276		
Interest receivable	10 800		
Prepayments	4 200		
Bank deposit account	135 000		
Bank current account	115 860		
			419 346
Total assets			<u>451 026</u>
Fauity and liabilities:			
Ordinary shares of K1 each			75 000
Retained earnings (114 895 + 116 435)			231 330
			306 330
Current liabilities:			
Pavables	62 904		
Accrual expenses (1 419 + 3 696)	5 115		
Income tax	45 000		
VAT	31,677		
	<i>i</i>		

#### Total equity plus liabilities

- (c) Benefits of operating a partnership rather than a sole trading business:
  - There is potential for continuation of business in an event one partner dies as the remaining partner(s) continue to spearhead business operations.
  - More capital can be raised as partners will be two or more.
  - In bad years, when business incurs losses, these are shared among the partners hence effect made lighter.
  - Different partners have different skills and expertise; hence the business is better managed.
  - Unnecessary disruptions to conducting business are minimized as absence of one partner leaves the other(s) in charge of operations.

#### SOLUTION THREE

(a)

#### (i) MANDATE OF IPSASS

- It focusses on accounting and financial reporting needs of national, regional and local governments.
- It Issues standards and provides guidance for accountants working in public sector.

#### (ii) MAIN REASONS PRE-AUDIT PROCESS SEEKS TO ACHIEVE

- To ensure appropriate funds are available
- To ensure financial transactions are legal and proper
- To ensure documentation is authentic
- To ensure transactions are approved by appropriately authorised persons
- To ensure transactions are accurately recorded

#### (b) Four (4) benefits of cash flow statement to its users.

- To explain the difference between the reported profit or loss in the statement of profit or loss account and the cash and bank balances reported in the statement of financial position. The reported profit is calculated under the accruals basis and so includes non-cash items.
- To communicate the solvency of the company, i.e. whether the entity has sufficient cash resources to support continuity of business. Solvency is much more critical than mere liquidity. Liquidity problems can be solved by borrowing whereas an insolvent company cannot borrow funds from anywhere, having exhausted all possible means.
- To serve as a source of information for making cash flow forecasts. Management can make projections of future cash receipts and payments, having regard to proper timing of cash.
- To show the actual liquidity position of the company. Cashflow statements show the actual cash at bank and cash in hand.

#### (c) Four (4) major objectives of a database

- Data should be shared. Different users should be able to access the same data in the database for their own processing applications (and at the same time in some systems) thus removing the need for duplicating data on different files.
- The integrity of the database must be preserved. This means that one user should not be allowed to alter the data on the file so as to spoil the database records for other users. However, users must be able to update the data on file, and also make valid alterations to the data
- The database system should provide for the needs of different users, who each have their own processing requirements and database access methods. In other words, the database should provide for the operational requirements of all its users.
- The database should be capable of evolving, both in the short term (it must be kept updated) and in the longer term (it must be able to meet the future data processing needs of users, not just their current needs)

#### (d) Application of accruals to inventory

Accrual requires costs to be matched with associated revenues for the same period. To achieve this, costs incurred for goods which remain unsold at the year-end must be carried forward in the statement of financial position and matched against future revenues.

# (e) Why incorporating a business as a limited liability company could be preferred to partnership business:

Limited liability companies offer limited liability to members (their owners). This means that in an event the company becomes insolvent, the maximum loss or claim is limited to the extent of the capital injected in the business. This is not the case with a partnership, where the liability for debt is unlimited. This means that the company owners can loss even personal assets or be suited in their own capacity.

- Raising capital under a limited liability company is easier than to a partnership.
- Retirement or death of one of the members under limited liability company does not necessitate dissolution and reformation of the firm as the case maybe under partnership.

#### SOLUTION FOUR

#### (a) **F. Banda and O. Chanda's** Statement of profit or loss appropriation account for year to 31 December 2022

	К	К
Sales		41,650
Opening inventory	5,900	
Purchases	20,850	
	26,750	
less Closing inventory	<u>(5,100)</u>	(21,650)
Gross Profit		20,000
Discount Received		<u> </u>
		20,950
less: Depreciation on Office furniture	300	
Discount allowed	1,200	
Rent and Rates (2,600 - 150)	2,450	
Wages and salaries (5,200 + 750)	5,950	
Irrecoverable Receivables	550	
General Office expenses	1,250	<u>(11,700)</u>
		9,250
less Appropriations:		
- Partnership salary: O. Chanda		<u>(2,500)</u>
		6,750
- Interest on Capitals: F. Banda (5% x 10,000)	500	
O. Chanda (5% x 7,000)	350	(850)
		5,900
- Share of Profit: F. Banda $(^{3}/_{5} \times 5,900)$	3,540	
- O. Chanda ( <sup>2</sup> / <sub>5</sub> x 5,900)	2,360	<u>(5,900)</u>

15

	К	К
NON-CURRENT ASSETS		
Office furniture (3,000 – 300)		2,70
CURRENT ASSETS		
Inventory	5,100	
Trade Receivables	9,300	
Bank	8,350	
Prepaid Rent	150	22,90
		25,60
REPRESENTED BY		
Capital Accounts: F. Banda	10,000	
O. Chanda	7,000	17,000
Current Accounts:		
F. Banda (1,050 + 500 + 3,540 – 4,100)	990	
O. Chanda (850 + 2,500 + 350 + 2,360 - 3,800)	2,260	3,250
CURRENT LIABILITIES		
Trade payables	4,600	
Accrued wages	750	5,350
		25,600

#### SOLUTION FIVE

#### 1. Explanations of five (5) benefits of preparing control accounts for Mint Ltd.

- a) Control accounts provide a check for accuracy of the figures in the personal accounts of the trade payables and receivables ledgers.
- b) The reconciliation of the list of individual ledgers and the control accounts, help to ensure correct figures for receivables and payables are reported in the statement of financial position.
- c) Control accounts help to prevent fraud as reconciliation of control accounts to individual ledger accounts done by separate personnel.
- d) It helps in the extraction of the total payable and receivable figure quicker than compiling individual balances in the payable and receivable ledgers.
- e) Control accounts assist an organization in the location of errors.
- f) Control accounts provide a quicker method of extracting the payable and receivables figures required in a statement of financial position.

#### 2. Mint Ltd Company corrected payable ledger control account at 31 December 2021

	K′000		K′000
Discount received	2,400	Balance bld	30,800
Contra settlements	4,000	Purchases day book under cast	500
Balance c/d	25,000	Returns outwards journal over cast	100
	31,400	-	31,400

#### 3. Explanation of treatment of transactions in:

- (ii) The K300,000 debit balance is correct except this was wrongly treated as credit so Mint Ltd just has to pick the correct balance.
- (vi) The undercast led to an incorrect closing balance and a top-up amendment of K100,000 is needed to remedy the situation.
- (vii) The recording of this receipt as K160,000 instead of K80,000 led to overstatement of an amount paid and understatement of the account balance or due to this supplier. S reversal of K80,000 (K160,000-K80,000) is needed to correct the error.

# 4. Reconciliation statement, reconciling the original total of the individual balances with the corrected control account balance.

		K UUU
Balan	ce b/d 31 <sup>st</sup> Dec 2021	25,420
Add:	Opening balance under cast	100
	Cheque payment to a supplier overstated (160 – 80)	80
Less:	individual debit balance treated in error as credit (300 $\times$ 2)	<u>(600)</u> 25,000

#### SOLUTION SIX

(a)

#### **Motor Vehicles at cost Account** 2021 2021 Κ Κ b/f 20,000 8,000 Jan. 1 Balance June 1 Disposal 18,000 April 1 Bank Dec. 31 Balance c/d 30,000 38,000 <u>38,000</u> 2022 18,000 30,000 Jan. 1 Balance b/f July 31 Disposal May 20 Bank 24,000 Dec. 31 Balance 64,000 c/d 13,200 July 31 Bank (28,000-14,800) July 31 Disposal 14,800 82,000 <u>82,000</u> 2023 Jan. 1 64,000 Balance b/f

(b)

#### Allowance for Depreciation on Motor Vehicles Account.

2	021			K	2021			K
Ju	une 1	Disposal (w1)		4,625	Jan. 1	Balance	b/f	8,000
D	ec. 31	Balance	c/d	<u>10,031</u>	Dec. 21	Profit or Loss	(w3)	6,656
				<u>14,656</u>				<u>14,656</u>
2	022				2022			
Ju	Jly	Disposal (w2)		4,500	Jan. 1	Balance	b/f	10,031
D	ec. 31	Balance	c/d	<u>20,148</u>	Dec. 31	Profit or Loss	(w4)	<u>14,617</u>
				<u>24,648</u>				<u>24,648</u>
					2023			
					Jan. 1	Balance	b/f	20,148

(c)

#### Motor Vehicle Disposal Account

2021			2021		
Jan 1	Motor vehicles	8,000	June 1	Allowance for Depn. (w1)	4,625
			June 1	Bank	1,000
			June 1	Profit or Loss- Loss on	<u>2,375</u>
		8,000		disposal	8,000
2022			2022		
July	Motor vehicles	18,000	July 31		4,500
31	Profit or Loss-Profit on	1,300	July 31	Allowance for Depn.	<u>14,800</u>
July	disposal	<u>19,300</u>		Motor vehicles Trade-In-	<u>19,300</u>
31				Allowance	

#### <u>Workings</u>

1. Accumulated Depreciation on motor vehicle AGG 5010.

			К
-	Year 2018	25% x 8,000	2,000
-	Year 2019	25% x (8,000 – 2,000)	1,500
-	Year 2020	25% x (8,000 – 2,000 – 1,500)	<u>1,125</u>
	Total		4,625
-	Net Book value a	t Disposal 8,000 – 4,625 = K3,375	

- Loss on Disposal K3,375 - K1,000 = K2,375

#### 2. Accumulated Depreciation on motor vehicle ABG 5391

	·		К
-	Year 2021	25% x 18,000	4,500
-	Year 2022	Net Book value K18,000 – 4,500 =	13,500
		Trade-In-Allowance =	14,800
		∴ Profit on Disposal	1,300

### 3. Total Depreciation for 2021

	•		К
-	Old vehicles	25% x (20,000 - 8,000 - 3,375)=	2,156
-	New vehicle	25% x 18,000 =	<u>4,500</u>
		Profit or Loss	6,656

#### 4. Total Depreciation for 2022

			K
-	Old vehicles	25% x (12,000 - (2,156-3,375))=	1,617
-	New vehicles	25% x (24,000 + 28,000)	<u>13,000</u>
		Profit or Loss	<u>14,617</u>

#### **END OF SOLUTIONS**



#### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

#### LEVEL ONE

#### DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 14 JUNE 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.
- 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 formale book must be provided to you. **Request for one if not** given by the Invigilator.

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

#### **SECTION A – (Compulsory)**

## Attempt all ten (10) multiple choice questions <u>QUESTION ONE</u>

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

1.1 If X and Y are independent events P(X) = 0.4 and P(Y) = 0.5. Find the  $P(X \cup Y)$ .

- A. 0.9
- B. 0.7
- C. 0.2
- D. 1.25

(2 marks)

1.2 The cash flows of a simple project for two 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. K 64.22.
- B. K 21.31.
- C. K 42.09.
- D. K106.31

(2 marks)

- 1.3 All the following can be classified as continuous data except;
  - A. The number of degree programmers at a university.
  - B. The height of individuals enrolled for military training
  - C. The time taken complete voting for a candidate in a booth
  - D. The age of a job applicant

(2 marks)

1.4 The following data is used to forecast sales using a multiplicative model and the following seasonal variations apply:

Quarter	1	2	3	4
Seasonal	1.6		0.85	0.85
variation				

The seasonal variation for the 2<sup>nd</sup> quarter is

- A. 1.00
- B. 2.30
- C. 0.70
- D. -2.30

(2 marks)

1.5 The variance of a random variable X is given by.....

A. E(X - E(X))B.  $E(X^{2})$ C.  $E(X^{2}) - (E(X))^{2}$ D.  $E(X)^{2}$ 

(2 marks)

- 1.6 If the annual rate of inflation is 9%, find the price of a good at the end of a year if its price at the beginning of the year is K100.
  - A. K109
  - B. K91
  - C. K92
  - D. K118

(2 marks)

- 1.7 The following scores are observed for the times taken to complete a task 13, 35, 16, 18, 24, 12, 20, 14, 11. What is the mean score in minutes?
  - A. 18
  - B. 16
  - C. 18.11
  - D. 16.50

(2 marks)

1.8 The regression equation assessing the change of price (Y) of rentals in township households due to size of the house (x) in square meters is equal to  $\hat{y} = 20.5 + 12.5x$ . Determine the rental value if house size is 350 square meters

(2 marks)

1.9 A hospital orders a shipment of 100 rats a week, 52 weeks per year, from a rat supplier for experiments that the hospital conducts. Prices for each weekly shipment of rats follow the distribution below:

Price	200	250	300
Probability	0.3	0.2	0.5

How much should the hospital budget for the next year's rat orders assuming this distribution does not change, (i.e., what is the expected price)?

- A. K13,780
- B. K260
- C. K2,600
- D. K6,500

(2 marks)

- 1.10 You have borrowed K15,000 from your sister and you have promised to pay her K17,500 after three (3) years' time with annual compounding, find the implied rate of interest for this loan.
  - A 5.72%
  - B. 6.25%
  - C. 5.27%
  - D. 4.35%

(2 marks) [Total: 20 Marks]

#### **SECTION B**

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

#### **QUESTION TWO**

(a) As Manager for a store, you have to embark, on new strategies to increase your profits. There are three (3) possible strategies and the profits for each depend on two (2) possible scenarios: high inflation, or low inflation. Historical data shows that the expected profits are:

Profit pay offs	Pay – off table of profits			
		High	Low	
Stratagios	1	2 000	3 000	
Sudleyles	2	875	2 800	
	3	-300	4 500	

- (i) Assume complete uncertainty for the inflation outlook. Use the Laplace criterion to make a decision. (3 marks)
- (ii) Use the maximax criterion to make a decision. Compare with the answer in (i)

(3 marks)

- (iii) Now assume probabilities can be assigned to the inflation outcomes; the probability of high inflation is 0.75 as estimated from data. Which strategy will you follow in this case if you use expected monetary value as your criterion. (4 marks)
- (b) Suppose a manufacturer of printed circuits has a stock of 200 resistors, 120 transistors, and 150 capacitors. They are required to produce two (2) types of circuits. These are;
  - 1. Type X requires 20 resistors, 10 transistors and 10 capacitors
  - 2. Type Y requires 10 resistors, 20 transistors and 30 capacitators

If the profit on type X circuits is K50 and that on type Y circuits is K57, how many of such circuit should be produced in order to maximize profit? (10 marks)

#### **QUESTION THREE**

The following table shows the assessed values and the selling prices of six (6) houses, constituting a sample of all the houses sold recently in a metropolitan area

Assessed value (thousands of Kwacha (X)	12	13	15	19	20	21	25	30
Selling price (thousands of Kwacha) (Y)	8	10	20	16	35	45	60	80

#### **Required:**

- (a) Draw the scatter plot of the above data. (3 marks)
- (b) Fit the regression model y = a + bx.
- Determine the selling price of the house if the assessed value was K40,000. (c)

(2 marks)

(11 marks)

(d) Calculate the Pearson coefficient of correlation and interpret the result appropriately.

(4 marks)

#### [Total: 20 Marks]

#### **QUESTION FOUR**

Zambia Institute of Chartered Accountants monitored the time spent on consultations with a (a) random sample of 120 of their clients. The times, to the nearest minute, are summarised in the following table:

Time	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49
Number of Clients	2	5	17	33	27	25	7	4

#### **Required:**

(i) Calculate the mean number of minutes for the data.	(4 marks)
(ii) Estimate the median of the data.	(3 marks)
(iii) Calculate the standard deviation of the data.	(5 marks)

(b) (i) A principal of K20,000 is invested at a rate of 10% compounded annually. After how many years will the investment first exceed K200,000? (4 marks) (ii) Determine the annual equivalent rate of interest of a deposit account that has a nominal rate of 8.5% compounded monthly.

(4 marks)

#### **QUESTION FIVE**

(a) A farmer collected 20 bean leaves and wrote down their lengths, in cm. Here are her results

#### **Required:**

(i)	Present these results in a frequency table	(2 marks)
(ii)	Write down the modal length	(1 mark)
(iii)	Compute the range	(1 mark)

(b) The probability of a random customer ordering a vegetarian meal in the XYZ restaurant is 0.2. A random sample of 50 customers was taken. Determine the probability that in 50 orders there will be:

	(i)	Exactly 11 vegetarian orders	(2 marks)
	(ii)	At least 8 but no more than 10 vegetarian orders	(3 marks)
	(iii) (iv)	Find the mean of the vegetarian meals in a total of 50 orders. Find the variance of the vegetarian meals in a total of 50 orders.	(2 marks) (2 marks)
(c)	The ra	ndom variable X follows a normal distribution with mean of 20 and variand	ce
	of 9.	Find the value of $a$ such that $P(X > a) = 0.0668$ .	(3 marks)
(d)	Mc M	lay purchases a house for K1 500 000. She agrees to pay for the house	in seven $(7)$

(d) Ms. Max purchases a house for K1,500,000. She agrees to pay for the house in seven (7) equal installments at the beginning of each year. If the money is worth 4.5%. What should be the size of each installment? (4 marks)

#### [Total: 20 Marks]

#### **QUESTION SIX**

(a) A family man has monthly income of K14,400. He makes a budget and his monitory allocations are as shown below:

Item	Expenditure (Kwacha)
Rent	K 4000
Food	K 5400
Education	K 2800
Clothing	K 1800
Savings	K 400

#### **Required:**

(i) Construct a pie chart to display the above given budget data.

(7 marks) (2 marks)

(ii) What was the percentage of budgetary allocation for education?

(b) There is an assumption that high cost of fuel has kept Zambians from driving longer distances. A provincial survey of various drivers was conducted measuring how many days they spent in one month driving on the road on their longest trip. Consider the following partial probability distribution for the random variable X=Number of days for the longest car trip.

Variable X	4	5	6	7	8
Probability	0.10	0.20	0.25	р	0.3

		[Total: 20 Marks]
(iv)	Calculate the standard deviation for the days of longest trip.	(4 marks)
(iii)	What is the expected number of days for the longest trip?	(3 marks)
(ii)	Find $P(X \ge 6)$	(2 marks)
(i)	Find the missing probability $p$ of driving for seven (7) days.	(2 marks)

#### **END OF PAPER**

# DA 2 QUANTITATIVE ANALYSIS SUGGESTED SOLUTIONS

### SOLUTION ONE

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

#### SOLUTION TWO

(a) Using Laplace method which is the average method, we get  $L(1) = \frac{2\ 000 + 3\ 000}{2} = 2\ 500$ 

(i)

$$L(2) = \frac{875 + 2800}{2} = 1,837.50$$
$$L(3) = \frac{-300 + 4500}{2} = 2100$$

Using Laplace STRATEGY (1) (2 500) will adopted

(ii) Using the Maximax

	High	low	maximum	
1	2 000	3000	3 000	
2	875	2800	2 800	
3	-300	4500	4 500	maximum

Using the Maximax criterion, we adopt STRATEGY (3) (4 500)

Using Laplace Criterion, STRATEGY (1) (2 500) was chosen as opposed to Maximax Criterion in which we choose STRATEGY (4) (4 500)

- (iii) Using the Expected Monetary Value (EMV)  $EMV(1) = 0.75(2\ 000) + 0.25(3\ 000) = 1\ 500 + 750 = 2\ 250$ EMV(2) = 0.75(875) + 0.25(3800) = 656.25 + 950 = 1606.25EMV(3) = 0.75(-300) + 0.25(4500) = -225 + 1125 = 900Using EMV STRATEGY (1) (2 250) will be adopted
- (b) Let x and y be the number of Type X and Type Y produced We summarize the given information in the table below:

	Resistors	Transistors	Capacitors	profit
Туре Х	20	10	10	50
Туре Ү	10	20	30	57
Availability	200	120	150	

Then maximize Z = 50x + 57ySubject to  $20x + 10y \leq 200$  (1)  $10x + 20y \le 120(2)$  $10x + 30y \le 150$  (3)  $x, y \ge 0.$  (4)

Find the intercepts for each of the given lines. See the graph attached.

Line	x intercept	y intercept
1	(0,20)	(10,0)
2	(0,6)	(12,0)
3	(0,5)	(15,0)

The corner points from the graph are as follows:

corner	Point	Z = 12x + 15y
A	(0,5)	75
В	(0,0)	0
С	(10,0)	120
D	$\binom{28 \ 4}{2}$	132
	$\left(\overline{3},\overline{3}\right)$	
E	(6,3)	117

The number which must be produce is  $\frac{28}{3}$  and  $\frac{4}{3}$  and get a maximum profit of K132.

#### SOLUTION THREE



x	У	<i>x</i> <sup>2</sup>	xy	$y^2$
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
$\sum x = 155$	$\sum y = 274$	$\sum x^2 = 3265$	$\sum xy = 6375$	$\sum y^2 = 14070$

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}}$$
$$= \frac{6375 - \frac{(155)(274)}{8}}{3265 - \frac{(155)^2}{8}}$$

$$=\frac{1066.25}{261.875}$$

 $\approx 4.07$ 

$$a = \bar{y} - b\bar{x}$$

$$=\frac{274}{8}$$
 - (4.07)  $\left(\frac{155}{8}\right)$ 

 $\approx -44.61$ 

Therefore the required answer is  $\hat{y} = -44.61 + 4.07x$ 

Note: Award marks for correct use of their sums in the expressions for a and b.

(c) 
$$\hat{y} = -44.61 + 4.07x = -44.61 + 4.07(40) = 118.19$$

The selling price will be K118 900

#### (d) Correlation coefficient r is

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

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

#### SOLUTION FOUR

#### (a)

Summary statistics table:

Class	Х	f	fx	F	$f(Xi-\bar{x})^2$
10 - 14	12	2	24	2	675.28125
15 - 19	17	5	85	7	894.45313
20 - 24	22	17	374	24	1192.3906
25 - 29	27	33	891	57	375.89063
30 - 34	32	27	864	84	71.296875
35 - 39	37	25	925	109	1097.2656
40 - 44	42	7	294	116	945.98438
45 - 49	47	4	188	120	1105.5625
		120	3645		6358.125

#### (i) Mean:

$$\frac{1}{n}\sum nf = \frac{1}{120}(3645) = 30.375$$

(ii) To find the median, first locate the median class which is the class that fall on the mid of the values of cumulative frequency, then find the lower limit of the median class and the class width, and calculate using the formula

$$median = L_k + \frac{w}{n_k}(\frac{n}{2} - cf_{k-1}).$$
  $k = 5$ 

$$30 + \frac{4}{25} \left( \frac{120}{2} - 57 \right) = 30.48$$

#### (iii) Standard deviation

$$s = \sqrt{\frac{\sum f(x - \overline{x})^2}{f - 1}} = \sqrt{\frac{6358.125}{120 - 1}} = 7.31$$

(b) (i) We want to save a total of K200,000 starting with an initial investment of K20,000. The problem is to determine the number of years required for this on the assumption that the interest is fixed at 10% throughout this time. The formula for compound interest is:

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

$$P = K20,000, \quad S = 200,000 \quad r = 10\%, \quad n = ?$$

$$200000 = 20000 \left(1 + \frac{10}{100}\right)^{n}$$

$$\left(1 + \frac{10}{100}\right)^{n} = 10$$

$$n \log 1.1 = \log 10$$

$$n = \log 10 \div \log 1.1$$

Therefore it will take approximately 25 years.

(ii) The AER is the overall rate of interest, which can be calculated using scale factors. If the account offers a return of 6.6% compounded monthly, then each month the interest is

*n* = 24.2

$$\frac{8.5}{12} = 0.71\%$$

of the amount invested at the beginning of that month. The monthly scale factor is

$$1 + \frac{0.71}{100} = 1.0071$$

so in a whole year the principal gets multiplied by

$$(1.0071)^{12} = 1.09$$

which can be written as

$$1 + \frac{9}{100}$$

So the AER is 9%.

#### SOLUTION FIVE

(a) (i)

Length in cm	Tally	Frequency
2	I	1
3	I	1
4	IIII	4
5	IIII I	6
6	III	3
7	III	3
8	II	2
	Total	20

(ii) Modal length=5cm

(iii) Range = Highest length – Lowest length = 8 - 2= 6cm

(b)

(i) 
$$P(X = x) = {n \choose x} p^{x} (1-p)^{n-x}$$
  
 $n = 50, \quad p = 0.2, \quad 1-p = 0.8$   
 $P(X = 11) = {50 \choose 11} (0.2)(0.8)$   
 $= 0.1271$ 

(ii) 
$$P(X \ge 8) = P(X = 8) + P(X = 9) + P(X = 10)$$
  
=  $\binom{50}{8} (0.2)^8 (0.8)^{50-8} + \binom{50}{9} (0.2)^9 (0.8)^{50-9} + \binom{50}{10} (0.2)^{10} (0.8)^{50-10}$   
= 0.1169 + 0.1364 + 0.1398  
= 0.3931

(iii)  $E(X) = np = 50 \times 0.2 = 10$ 

(iv)  $Var(X) = npq = 50 \times 0.2 \times 0.8 = 8$ 

(c)  $X \square N(20,9)$  Means that  $\mu = 20$  and  $\sigma = 3$ .

$$P(X > a) = 0.0668$$

$$P\left(Z > \frac{a - 20}{3}\right) = 0.0668$$

$$P\left(Z < \frac{a - 20}{3}\right) = 1 - 0.0668$$

$$P\left(Z < \frac{a - 20}{3}\right) = 0.9332$$

$$\frac{a - 20}{3} = 1.50$$

$$a - 20 = 4.50$$

$$a = 24.50$$

d) let *R* be the size of each installment 'A' the present value of the house is K1 500 000 and payment is being made at the beginning of each year i.e., annuity due

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

$$1\ 500\ 000 = R(1.045) \left[\frac{1-(1.045)^{-7}}{0.045}\right]$$

$$R = \frac{1\ 500\ 000}{6.1578782483} \approx K243\ 590.62$$

The size of installment is K243 590.12
### SOLUTION SIX

(a)	(i)
(~)	<b>\'</b>

Item	Expenditure (Kwacha)	DEGREES
Rent	K 4000	$400/14400 \times 360 = 100^{\circ}$
Food	K 5400	5400/14400× 360 = <b>135</b> °
Education	K 2800	$2800/14400 \times 360 = 70^{\circ}$
Clothing	K 1800	$1800/14400 \times 360 = 45^{\circ}$
Savings	K400	$400/14400 \times 360 = 10^{\circ}$



 $\frac{70}{360}$ . 100% = 19.4%

(b)

Variable X	4	5	6	7	8
Probability	0.10	0.20	0.25	р	0.3

(i) 0.1+0.2+0.25+p+0.3=1 P=1 - 0.85 P= 0.15

(ii) 
$$P(X \ge 6) = 0.25 + 0.15 + 0.3 = 0.7$$

(iii) Expected value = 
$$\sum xp(x) = 4(0.1) + 5(0.2) + 6(0.25) + 7(0.15) + 8(0.3)$$
  
= 6.35

(iv) 
$$V(x) = E(x^{2}) - [E(x)]^{2}$$
$$E(x^{2}) = \sum x^{2}p(x)$$
$$= 4^{2}(0.1) + 5^{2}(0.2) + 6^{2}(0.25) + 7^{2}(0.15) + 8^{2}(0.3)$$
$$= 42.3$$
$$V(x) = E(x^{2}) - [E(x)]^{2} = 42.3 - (6.35)^{2} = 2.46$$
Standard deviation = $\sqrt{variance} = \sqrt{2.46} = 1.57$ 

### **END OF SOLUTIONS**



### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

### LEVEL ONE

### DA 3: BUSINESS ECONOMICS

### TUESDAY 13 JUNE 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 The relation of \_\_\_\_\_ is by the law of demand.
  - A. the quantity and price of commodity
  - B. the price and income of commodity
  - C. demand quantity and demand-supply of commodity
  - D. income and demand quantity of a commodity

(2 marks)

- 1.2 The demand curve will be \_\_\_\_\_ when the demand elasticity is zero.
  - A. Horizontal
  - B. Vertical
  - C. Touching y-axis
  - D. Passing through the origin

(2 marks)

- 1.3 With fixed costs of K400, a firm has average total costs of K3 and average variable costs of K0.50. Its output is:
  - A. 200 units.
  - B. 400 units.
  - C. 800 units.
  - D. 160 units.

(2 marks)

- 1.4 If an industry lacks barriers to entry and each of the many firm faces a demand curve with a negative slope, the industry is
  - A. Monopolistically competitive.
  - B. A monopoly.
  - C. An oligopoly.
  - D. Perfectly competitive.

(2 marks)

- 1.5 To internalize a positive externality, an appropriate government policy would be to
  - A. Ban the good that creates the externality.
  - B. Subsidize the good.

- C. Tax the good.
  D. Produce the good until the value of an additional unit is zero. (2 marks)
  The Government provides public goods because
  A. Private markets are incapable of producing these types of goods.
  B. Free-riders make it difficult for private markets to supply the socially optimal. quantity.
  C. Markets are always better off with some government oversight.
  D. External benefits will accrue to private producers. (2 marks)
  In a simple closed economy, all investment spending must come from:
  A. Saving.
  B. Money creation.
  - C. Debt issuance.

1.6

1.7

D. Foreign borrowing

(2 marks)

- 1.8 According to the monetarists an increase in the money supply, other things equal, shifts the aggregate \_\_\_\_\_ curve to the \_\_\_\_\_.
  - A. Demand; right
  - B. Demand; left
  - C. Supply; left
  - D. Supply; right

(2 marks)

- 1.9 Suppose the only revenue taken in by the government is in the form of income tax, and the tax rate is 10 percent. If aggregate income is K800 billion, and government outlays are K100 billion then the government budget has:
  - A. A deficit of K20 billion.
  - B. A surplus of K20 billion.
  - C. A deficit of K700 billion.
  - D. A deficit of K80 billion.

(2 marks)

1.10 Read the two (2) statements and choose the correct answer.

I. Acquisition of a domestic (Zambian) company by a foreign (USA) company will be recorded on the credit side of Zambia's Balance of Payment Account.

- II. This leads to an outflow of foreign exchange from the domestic (Zambian) economy.
- A. Both statement (I) and (II) are true.
- B. Both statement (I) and Reason (II) are false.
- C. Statement (I) is true but (II) is false.
- D. Statement (I) is false but (II) is true.

(2 marks) [Total: 20 Marks]

### **QUESTION THREE**

Demand is the cornerstone of understanding consumer behaviour.

(a) Define an 'inferior good' as used in economics (2 marks)
(b) Explain any four (4) factors that would shift the demand curve for beer (8 marks)
(c) Explain the importance of price elasticity of demand to a sales manager (5 marks)
(d) Discuss the effect of sales tax on business operations (5 marks)

# The table below shows the quantity of "Tex" with corresponding total variable cost and total cost produced at TKM Limited:

week(units)	variable cost(TVC)	cost(TC)	cost(MC)	variable costs(AVC)	total cost (ATC)
0	K 0	K250			
1	50	300			
2	90	340			
3	115	365			
4	200	450			
5	300	550			
6	420	670			

Marginal Average

### **Required:**

- (a) Determine the firm's fixed costs (FC)
- (b) Complete the columns for Marginal Cost (MC), Average variable cost (AVC) and average total cost (ATC) (9 marks)
- (c) Explain the concept 'scarcity'.
- (d) Outline any three (3) benefit of state ownership of the means of productions.

(6 marks)

(3 marks)

### [Total: 20 Marks]

### [Total: 20 Marks]

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

### 1. MICROECONOMICS

Output per Total

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

Total

## SECTION B

**QUESTION TWO** 

(2 marks)

Average

### **QUESTION FOUR**

There are different market structures that firms can operate in. Each of the market structures has a different way of determining how much to produce and at what price to sell the product in order to maximise profits.

### **Required:**

- (a) Outline any four (4) characteristics of Perfection Competition. (8 marks)
- (b) Explain reason why the long run economic profit is always zero under perfect competition? (4 marks)
- (c) Explain why marginal revenue is always the same as the average price under Perfect Competition. (4 marks)
- (d) Explain with some justification if it is necessary for the government to intervene in the operations of firms under Perfect Competition as the case is with monopoly.

(4 marks) [Total: 20 Marks]

### 2. MACROECONOMICS

### Attempt any two (2) questions out of the three (3) questions from FIVE to SEVEN.

### **QUESTION FIVE**

Assume a simple two sector closed economy with no Government consisting of private firms who carry out investment, with no international trade, and that households are exclusive net savers in this closed economy.

### **Required:**

(a)	Write down a mathematical identity formulae for this closed economy.	(1 mark)
(b)	Briefly elaborate the variables in the formulae in (a) above.	(3 marks)
(c)	Illustrate the appropriate circular flow diagram for this closed economy.	(6 marks)
(d)	Using appropriate equations and brief explanations, distinguish between Net D Product at Factor Cost and Net National Product.	omestic (4 marks)

(e) The best practice for Monetary Authorities is its independence which guarantees the attainment of national economic objectives. State and explain any three (3) types of Independence that Central Banks generally seek. (6 marks) [Total: 20 Marks]

**QUESTION SIX** 

- (a) The Zambia Statistical Agency produces quarterly report which includes a forecast for inflation. The September 2022 report indicated that prospects for low and stable inflation in the Zambian economy had improved previously. The report revealed that the reasons for expecting inflation would remain low include:
  - Recent rises in market interest rate in Zambia that slowed down aggregate spending.
  - Recent inflation figure were less than had been expected by the bank as the baseline inflation figure was too low.
  - The growth average earnings were below expected earnings.
     Using both knowledge of standard economic theory and the material contained in the extract, answer the following questions:

### **Required:**

- (i) State what is meant by the term inflation. (2 marks)
- (ii) Show how inflation is measured. (2 marks)
- (iii) Explain the concept of demand-pull-inflation, and show how it is used in the extract above. (6 marks)

- (b) Using both standard economic theory and material contained in the table above, answer the following questions:
  - (i) Distinguish between direct and indirect taxes, giving two (2) examples of each

(6 marks)

(ii) Distinguish between progressive tax and regressive tax, giving one (1) example of each.(4 marks)

### [Total: 20 Marks]

### **QUESTION SEVEN**

(a) The foreign exchange market has performed impressively well in the third quarter under review for the Kwacha as considered by the Monetary Policy Committee with which appreciated by 3.4 per cent against the US dollar to an average of K16.31/US \$ .The Kwacha's strength rose mainly from increased supply of foreign exchange.

### **Required:**

- (i) Explain any four (4) roles that foreign exchange market plays to the Zambian economy (4 marks)
- (ii) By giving three (3) differences, distinguish between fixed exchange rate regime and floating exchange rate regime (6 marks)
- (b) State and briefly explain any five (5) factors that influence the rate of consumption in an economy such as Zambia.
   (10 marks)

### [Total: 20 Marks]

### **END OF PAPER**

### **DA3 - BUSINESS ECONOMICS SUGGESTED SOLUTIONS**

### SOLUTION ONE

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

### SOLUTION TWO

- (a) The fixed cost is K250
- (b) The table is given below:

Output per week(units)	Total variable cost(TVC)	Total cost(TC)	Marginal cost(MC)	Average Variable costs(AVC)	Average total cost (ATC)
0	0	250	-	-	-
1	50	300	50.00	50.00	300.00
2	90	340	40.00	45.00	170.00
3	115	365	25.00	38.33	121.67
4	200	450	85.00	50.00	112.50
5	300	550	100.00	60.00	110.00
6	420	670	120.00	70.00	53.33

(c) Scarcity is the condition of not being able to have all of the goods and services one wants. It exists because human wants for goods and services exceed the quantity of goods and services that can be produced using all available resources.

- (d) The following are the benefits of state ownership are:
  - Fair distribution on the basis of need and entitlements
  - Resources are devoted to building the economy
  - Avoidance of wasteful duplication and competition
  - Avoidance of pollution and making of undesirable product
  - Equality in income distribution

### SOLUTION THREE

- (a) The term inferior good is a good whose quantity demanded decreases with an increase in consumers' incomes. Consumers buy less quantity of the good when their incomes have increased.
- (b) Factors that affect demand for beer include:
  - A rise in household income (including a reduction in direct taxes)
  - A change in the price of substitutes
  - A change in the price of complements
  - A change in tastes towards this product
  - An expected rise in the price of the product
  - An change in population
  - Marketing efforts(advertising)
- (c) Price elasticity of demand measures the responsiveness of the quantity demanded to a change in price. The Sales Manager needs to understand the price elasticity of demand to anticipate the reaction of buyers when the price is changed. This is important in achieving the goal of maximizing sales and profit.
- (d) Sales tax increases the selling price of a taxable good. This increase in selling price (assuming it is fully paid by the buyers) means that buyers have to pay more which reduces the quantity demanded.

### SOLUTION FOUR

- (a) The following are the characteristics of perfect Competition:
  - There are many buyers and many sellers of a product
  - Each seller is a price taker as none has influence over the price
  - There is freedom of entry into and exit from the market
  - There is perfect information regarding the quality of the product
  - There is perfect mobility of the factors of production
- (b) The fact that there are no barriers to entry and exit means that when existing firms are earning economic profit some firms will enter the industry thereby increasing the quantity supplied. Similarly, when existing firms are suffering economic losses, some firms will leave the industry thereby reducing the quantity supplied. This ensures that in the long run, firms under perfect competition can only earn normal profit. A Perfectly Competitive firm faces a perfectly elastic demand curve. This means that the seller cannot increase or reduce the selling price in order to sell more. Since the selling price is constant, the change in Total revenue (marginal revenue) will always be equal to the price.
- (c) A Perfect Competitor's marginal revenue is the same as the price of its products because its demand curve is a horizontal demand curve described as perfectly elastic. This is because a Perfect Competitor is a price-taker hence has no influence on the price of the product. For this reason, MR = AR = P under Perfect Competition.
- (d) There is no justification for government intervention under Perfect competition because a perfect Competitor produces at point where marginal cost to society (Supply) is equal to marginal benefit to society (Demand). This means that under perfect Competition, resources are allocated efficiently.

### SOLUTION FIVE

(a) Y = C + I

(b) *Y* = *National Output or Gross Domestic Product* 

It is the total output of resident producing units of a country within a calendar year.

- C = Private Consumption: It is the total expenditure on goods and services by households
- *I* = *Private Investment* : Additional physical and financial resources by private firms.
- (c) Circular flow diagram:



### (d)

Net Domestic Product at Factor Cost	Net National Product at Market Price
1. $NDP = NDP$ at Market Price –	1. NNP = GNP - Depreciation
Indirect Taxes + Subsidies	
2. Income generated from wages, rent,	2. This is Gross National Product that is
interest and profits within an economic	free of fixed capital consumption
territory	

(e) Central bank independence:

- **Operational Independence**: Right of the Central Bank to ascertain the best way of achieving its policy goals which includes choice of instruments.
- **Legal Independence**: Independence of the Central Bank that is backed by constitution of the country
- **Management Independence**: The bank has authority to run its day to day activities such as hiring and firing of staff
- **Goal Independence**: The right to set its policy goal such as inflation targeting and money supply targeting

### SOLUTION SIX

(a) Inflation:

- (i) Inflation is a continuous increase in the general level of prices which produces a decline in the purchasing power of money.
- (ii) It is Calculated using indices such as Consumer Price Index (CPI), where prices of basket of goods are expressed as a percentage of their price at an earlier prices
- (iii) Demand pull inflation occurs when "too much money chases too few goods". Demand for goods and services measured as aggregate rises but the supply of the supply is fixed or inelastic, or an economy has no spare capacity and excess demand mounts. The rise in aggregate demand could be as a result of fiscal, monetary or international factors such as falling interest rates that expands credit access, fiscal factors like tax cuts.

From the extract, the rise in Zambia's interest rate and low growth of earnings would suggest a decrease in aggregate demand or from the extract, the mention of competitive pressures on producers suggests excess capacity and stocks of goods.

(b) Tax:

(i) A direct tax is levied on wealth or income whereas indirect taxes are levied on expenditure

Direct taxes	Indirect Taxes
Income taxes	Value added tax
Social Security tax	Excise duties
Corporate tax	

(ii) A progressive tax is where the proportion of tax paid increases income, wealth and expenditure whereas regressive tax the proportion of tax paid decreases income, wealth and expenditure

Progressive taxes	Regressive taxes
Corporate tax	Value added tax

### **SOLUTION SEVEN**

- (a) Foreign exchange market:
  - (i) The roles of the foreign exchange market are:
    - Payment of foreign debt
    - Payment of imports
    - Transfers funds or purchasing power from one nation to another
    - Performs the credit function through letters of credit
    - Provides hedging and speculative activities
    - (ii) Difference between fixed and floating exchange rate systems are:

Fixed exchange rate regime	Floating exchange rate regime
1. Exchange rate is kept at parity	1. Exchange rate is varies according to market
	conditions
2. The central bank determines the rate	2. The forces of demand and supply
	determines the exchange rate
3. The parity value of the exchange rate	3. The depreciation of the current is not
when depreciation occurs is financed by	financed by international reserves
drawing down the international reserves	

- (b) Factors affecting consumption:
  - Changes in disposable income, and marginal propensity to consume: Changes in disposable income and MPC are affected by factors such as changes in taxes as well as changes in household income and wealth
  - **Change in income distribution**: Changes in disposable income have some redistribution effects which affects consumption
  - **Government Policy**: Central government can affect consumption through taxation and spending
  - **Interest rates**: Changes in interest rate affects the rate at which households and individuals save and subsequently spend.
  - Wealth of consumers: Wealth of consumers has direct influence on consumption.

### **END OF SOLUTIONS**



### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

### LEVEL ONE

### DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

### WEDNESDAY 14 JUNE 2023

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

### **INSTRUCTIONS TO CANDIDATES**

- 1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
- 2. This paper is divided into TWO (2) sections:
  - Section A: Ten (10) compulsory multiple choice questions. Five (5) on Information Technology and five (5) on Communication.
  - Section B: There are three (3) questions on **Information Technology.** Attempt any two (2) questions.

There are also three (3) questions on **Communication.** Attempt any (2) questions.

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

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

### SECTION A - (COMPULSORY)

### Attempt all Ten (10) multiple choice questions

### **QUESTION ONE**

Each of the following sub-questions has only <u>one</u> correct answer. Write the <u>letter</u> of the correct answer you have chosen in your answer booklet. Marks are indicated against each question.

- 1.1 What name is given to an organisational network that is accessible to authorised outsiders?
  - A. Extranet
  - B. Intranet
  - C. Internet
  - D. WAN

(2 marks)

- 1.2 Which one below is an example of operational level support system
  - A. Input device in form of a bar code reader captures product details from bar codes on a product in a warehouse floor
  - B. Captured sales data in a spread sheet used to focus future profits
  - C. Management uses tax knowledge base to determine how to calculate tax in an overseas company
  - D. Management uses summaries inventory data to determine reorder level

(2 marks)

- 1.3 Which one below is a function of a search engine.
  - A. Linking webpages together using a hypertext mark-up language protocol
  - B. Retrieving information from a webserver using a browser and a Universal Resource Locator (URL)
  - C. Use to open webpages
  - D. Interfacing between the hardware and software

(2 marks)

- 1.4 Which one below is an input device?
  - A. Bar code reader
  - B. Printer
  - C. Hard drive

- D. Memory stick
- 1.5 Information on databases is retrieved using SQL. State the acronym SQL in full.
  - A. Structured Questioning Language
  - B. Sequential Query Language
  - C. Sequential Question Language
  - D. Structured Query Language

(2 marks)

(2 marks)

(2 marks)

(2 marks)

(2 marks)

### 1.6. Which section of a report indicates the action(s) to remedy the situation?

- A. Recommendations
- B. Suggestions
- C. Conclusions
- D. Findings

1.7 *`Tell me more about yourself?* is an example of \_\_\_\_\_\_.

- A. A closed question
- B. An open question
- C. A leading question
- D. A funnelling question

1.8 Which of the following is **NOT** one of the receiver's roles?

- A. Initiating communication
- B. Establishing purpose of communication
- C. To select suitable medium of communication
- D. Providing feedback
- 1.9 Which of the following is an example of a facial expression?
  - A. Faster breathing
  - B. Frowning
  - C. Perspiring
  - D. blushing

- 1.10 Which of the following best describes an agenda?
  - A. An announcement of a meeting.
  - B. Items to be discussed in a meeting.
  - C. A record of what was discussed in the previous meeting.
  - D. An invitation to attend a meeting

(2 marks)

[Total: 20 Marks]

### **SECTION B**

This section has two (2) parts:

### 1. INFORMATION TECHNOLOGY

- 2. COMMUNICATION
- **1. INFORMATION TECHNOLOGY**

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

### **QUESTION TWO**

(a) Define the term 'encryption'. (2 marks)
 (b) Explain the term intellectual property as regards to downloading internet resources. (6 marks)
 (c) Explain three (3) ways accountants could make use of social media in their area of work. (6 marks)
 (d) Discuss the following threats to information eccurity threats stating how they could be dealther and the state to information eccurity threats at the state of the state to dealther at the state of the state of

- (d) Discuss the following threats to information security threats stating how they could be dealt with.
  - (i) Social Engineering
  - (ii) Eavesdroppers

(3 marks) (3 marks) [Total: 20 Marks]

### **QUESTION THREE**

(a) A commercial farming establishment based in Mkushi possesses various farming equipment ranging from tractors, disc ploughs and harrows. Most of this equipment is rented out to neighbouring farms. As a professional accountant, you assist setting up a spread sheet below (Ploughing for Mr. Chilesho)

A	A1 🔹 : 🗙 🗸 🏂 Payment for Tractor Services											
	А	В	С	D	E	F	G	Н	1	J	К	L
1	Payment f	or Tractor	Services									
2												
3	Ploughing	for Mr. Ch	ilesho									
			Numnber									
4	Cost per a	cre	of acres	Total cost								
5	700		3	2,100.00		Indicate form	ular for tot	tal cost				
6												
7	Less fuel o	ost										
	number											
	of liters	cost per		Total Cost								
8	bought	liter K		of Fuel K								
9	19.45	27.3		530.99		indicate form	ular for to	tal fuel(no	of liters b	y cost per l	iter)	
10					1,569.02	•	indicate fo	ormular foi	r gross prot	fit ( total co	ost less tot	tal fuel)
11	comission											
12	12 20% payment to operator 313.80 + show formular for operator commision											
13	net profit				1,255.21	$\leftarrow$	show forn	nular for ne	et profi			
14												
15												

### **Required:**

Using cell referencing show formulas relating to the above worksheet

(i)	Total cost of ploughing	(2 marks)
(ii)	Total cost of fuel	(2 marks)
(iii)	Gross profit	(2 marks)
(iv)	Operator commission at 20% of gross profit	(2 marks)
(v)	Net profit (gross profit less operator commission)	(2 marks)

(b) Elaborate five (5) benefits of an Enterprise Resource Planning (ERP) System to business operations. (10 marks)

### [Total: 20 Marks]

### **QUESTION FOUR**

(a) A client–server architecture, in comparison to the peer to peer model, depends on a primary server computer or group of server machines linked to a network, generally in a data centre. Clients or ordinary computers linked to the internet or a local network, send packets to the server to request data from it.

Explain five (5) common types of servers that can be used in a computer network.

(15 marks)

(5 marks)

(b) Explain a data dictionary stating its use.

[Total: 20 Marks]

### **QUESTION FIVE**

You sat for DA4 – Information Technology and Communication in the last ZICA examinations session. However, when results were published, your grade indicated Not Examined (NE). You decided to visit ZICA Headquarters in Lusaka to have your exam results corrected and was advised to put your request in writing.

### **Required:**

(a) Write a letter to the ZICA Examination Officer requesting for correction of your results.

(15 marks)

(b) Outline any five (5) reasons written communication would be ideal in this situation.

(5 marks)

### [Total: 20 Marks]

### **QUESTION SIX**

In light of the surge of communicable diseases such as the Covid-19, organizations have resorted to working remotely and having virtual meetings as opposed to physical ones.

### **Required:**

(a) Explain any five (5) benefits of conducting virtual meetings. (10 marks)

(b) Outline any five (5) things you can do to have a good PowerPoint presentation.

(10 marks)

### [Total: 20 Marks]

### **QUESTION SEVEN**

Your organisation is conducting interviews for the position of accountant. You have asked some junior officers to be part of the panel for interviews. They, however, tell you that they are not sure of the type of questions to ask during that session and you therefore wish to highlight to them the type of questions to ask in daily business operations.

### **Required:**

- (a) State any four (4) types of questions that are commonly used in business activities. (4 marks)
- (b) Write a memo to all employees highlighting any five (5) reasons questioning skills are important. (16 marks)

[Total: 20 Marks]

### **END OF PAPER**

### **DA4 - INFORMATION TECHNOLOGY AND COMMUNICATION**

### SOLUTION ONE

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

### SOLUTION TWO

- (a) Encryption is the scrambling of data into a code that cannot be understood by anyone who accesses the data without authority
- (b) IP refers to a personal idea resulting in development of a product or design which should be protected. Internet is full of software programs which are protected by the developer, in this case, extra care should be taken by employees not to violate copyright laws when downloading software. Copyright, database right, confidentiality and trade secrets.

The copyright itself is a legal form of protection that is given to the author. In order to meet the requirements for copyright protection, the authors of the software have to prove that programs contains an original expression of ideas.

The integrity of the author's code should not be compromised. If the codes, it should only be distributed further using a different name.

The rights that are attached to the software should apply to all who received the software without any additional license.

- (c) (i) Marketing always look at who is commenting on your posts and reply to build engagement. This will help build marketing personas and a broader strategy
  - (ii) Advertisement create a content strategy and schedule your posts, so that the tone and themes of your posts are consistent. This helps to ensure that the followers you acquire are continually interested in what you have to say on your products or services. Can also be used to build brand awareness, by including the firm's mission, core values and attributes that set you apart from the competiting
  - (iii) customer service management spend time asking your clients which social media platforms they use, this will help gain similar clients on those platform
  - (iv) collection of information increase engagement and build followers by asking questions, as this encourages users to respond directly when collecting relevant informaton
  - (v) sharing documents increate website traffic by sharing relevant content from your website using blogs, articles or videos

### (d) (i) **Social engineering**

It is a malicious attempt to manipulate an individual into revealing their or an organisation's sensitive information. It heavily depends on human interaction.

Do not open emails and attachment from suspicious sources. If you do not know the sender in question, you do not need to answer an email. Even if you do know them and are suspicious about their message, cross-check and confirm the news from other sources, such as via telephone or directly from a service provider's site.

### (ii) Eavesdroppers

Eavesdropping is when someone listens or intercepts data or information during transmission over a network. This can be prevented by encrypting data before transmission.

Put security measures in place to safeguard data/information from unwanted access. It's best not to use an open network in public places as they are not secured. Even if you must, using a VPN to access website is essential and never open to sensitive data/information

### SOLUTION THREE

(a)

(i) =A5\*C5 (ii) =A9\*B9 (iii) =D5-D9 (iv) =0.2\*E10 (v) =E10-E12

### (b) Benefits of using ERP system to business operations

- (i) Higher management performance ERP solutions serve as a data centre that establishes links between all aspects of enterprise activities that require management, including human resources, production, sales, customer support, inventory and supply with the help of computer technologies by reducing paperwork
- (ii) Better accuracy and availability of information the ERP systems enables effective and centralized collection, processing and storage of information on production, sales, suppliers or customers. A single data system is used and maintained instead of a number of separate databases that need regular checks to remove duplicated records
- (iii) Improved coordination ERP software reduces the communication delays across the whole organisation, enhancing its efficiency. This is especially beneficial if an organisation has a distributed network.
- (iv) Precise planning the convenient access to the bulk of business information greatly facilitates its analysis in order to plan for further development
- (v) Enhanced reports As a result of reduced paperwork and improved communication among departments, ERP software offers the convenient environment for quick and easy submitting all kinds of reports fro financial to inventory
- (vi) Scalability and Flexibility this is determined by its modular structure that allows adjusting its scale according to current needs and conditions to handle all these changes.
- (vii) Cost-effectiveness ERP allows cutting costs on administrative needs, reduce paperwork and optimisation of daily routines
- (viii) Improved customer service a centralized data storage accumulates all necessary information on sales and clientele, which makes it easier for sales managers and customer support staff to communicate with clients and reduces the delay before reacting to customer's request

### **SOLUTION FOUR**

(a)

- **Web Server** these establish a connection between your computer and any saved data from an internet website. Information for the internet is stored on web servers and is obtained using "HTTP" code before being transferred to your web browser.
- Proxy Server it operates as a bridge between a host server and client. After passing via the proxy's server, a proxy transfers data from a website to the IP address of the machine. Since the information is requested and then transported from the source to the proxy server rather than straight from a client to another user, this method offers an extra degree of protection.
- Application Server these servers link clients to software programs, which enable users to access programs without downloading data to their own devices. It can efficiently host big volumes of application data for numerous users at once.
- File Transfer Protocol (FTP) Server it transfers files from one computer to another, FTP servers are utilised. Downloaded files are extracted onto your device from the server, while uploaded files go from your PC to the server. To connect computers securely and transmit data, this process is known as the file transfer protocol.
- Database Server it acts as substantial data repositories that business may access and utilize to operate a variety of applications. Any database design is not necessary for a database server to function.
- Mail Server it stores and delivers messages for users via platforms that provide email services. Users don't need to run any software on their own devices to access their email since mail servers are configured to be connected to a network constantly.
- File Server multiple users' data files are kept on a file server. They enable quicker file
  writing to computers and faster data retrieval. When many users require access to files
  that are more readily and securely saved on a server than on a PC
- Printer Server to print across a network, it establishes remote connections with nearby computers. Businesses now have the option of using a single printer to support a whole department.
- (b) A data dictionary is a document that database designers prepare to help individuals enter data. The data dictionary explains several pieces of information for each attribute, such as its name, whether it is a key, the type of data expected and valid values. Data dictionaries can include information such as why the data items are needed, how often it should be update and on which forms and reports the data appears.

Data dictionaries can be used to enforce business rules, such as who has authority to update a piece of data are captured by the designers of the database and included in the data dictionary to prevent illegal or illogical entries from entering the database.

### SOLUTION FIVE (a)

Letter

Juba Investments LTD P.O Box 123 Lusaka

24th January 2022

### **Examination Officer**

ZICA Headquarters Plot 00000 Thabo Mbeki Rd, Accountants Park Lusaka, Zambia

Dear Sir/Madam,

### Re: Request for Correction of Results – DA4 (Information Technology)

Reference is made to the above captioned subject.

My name is Ruth Banda [student number] and I am a ZICA student who recently undertook ZICA examinations in the December period. However, when results were published, it was indicated "Not Examined (NE)" as my result. I visited the ZICA Headquarters and was advised to put my request for a results appeal in writing, hence, my writing.

I wrote my DA 4 – Information Technology and Communication – Examinations on 10<sup>th</sup> December, 2022. I have attached evidence of the exam slip and marked register which indicate that I was present and handed over the answer booklet. I am therefore surprised that the results are indicating that I was absent. It is against this background that I kindly request for my results to be corrected.

I look forward to your quick response in this matter.

Yours faithfully,

[Signature]

Ms. Ruth Banda.

### SOLUTION FIVE (b)

### **Reasons for written communication**

- Keeps permanent record
- Can be used as reference
- Is more formal
- There is less distortion of messages
- Can be used as evidence
- Different stake holders will receive the same information without any alteration.
- It can produce multiple copies from one message.

### SOLUTION SIX (a)

### **Benefits of Virtual meetings**

- People do not need to travel long distances as they can attend meetings in the comfort of their homes
- It is less expensive as it does not require transport logistics
- It may help prevent the spread of deadly diseases such as Covid-19
- It can be conducted any time
- It is easy to set up.
- It allows the possibility to record the meetings so that minutes can be produced

### SOLUTION SIX (b)

### Good PowerPoint presentation has the following features

- The 6x6 rule
- Do not have too many slides
- Do not write whole sentences
- Do not read the slides
- Do not over-use special effects and animations
- Use graphs

### **SOLUTION SEVEN**

### (a) **Types of questions**

- open
- Closed
- funnel
- leading

### (b) Memo

Makungu General dealers

Memorandum

Ref : Mak/011/23

Date: Any date during the exam time

To: All Accounts staff

From: The Assistant accountant

Subject: Importance of questioning skills

It has been observed that most staff do not realise that Questioning skills are essential for business. It is for this reason that I wish to share with you some of the reasons on the importance of questioning skills.

Some of the reasons questioning skill is important are as follows:

- -To obtain more information
- To control and direct a conversation
- To show an interest in another person
- To clarify understanding
- To encourage people to be more open
- -To test knowledge and ability
- To encourage further thought

I hope that this information shared will be helpful. You are at liberty to seek

for any further clarification

Senders signature

Name of the sender.

### **END OF SOLUTIONS**



### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

### LEVEL ONE

### DA: 5 COST ACCOUNTING

### TUESDAY 13 JUNE 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.
- This paper is divided into TWO (2) sections: Section A: One (1) Compulsory question. Section B: Five (5) Optional Questions. Attempt any Four (4) questions.
- 3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
- 4. Do **NOT** write in pencil (except for graphs and diagrams).
- 5. **Cell Phones** are **NOT** allowed in the Examination Room.
- 6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
- 7. All workings must be done in the answer booklet.
- 8. Present legible and tidy work.
- 9. Graph paper (if required) is provided at the end of the answer booklet.

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

### **SECTION A – MULTIPLE CHOICE**

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

### **QUESTION ONE**

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

- 1.1. A Chief Accountant has calculated a K10,000 adverse direct material variance by subtracting its flexed budget direct material cost from its actual material cost for the period. What caused the variance?
  - (i) An increase in direct material price.
  - (ii) An increase in raw material usage per unit.
  - (iii) Units produced being greater than budgeted.
  - (iv) Units sold being greater than budgeted.
  - A. (ii) and iii) only
  - B. (iii) and iv) only
  - C. (i) and ii) only
  - D. (i) and iv) only

(2 marks)

(2 marks)

1.2 Rodrick Modern Village Company uses an overhead absorption rate of K350 per machine hour, based on 32,000 budgeted machine hours for the period. During the same period the actual total overhead expenditure amounted to K10,887,500 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. Over absorbed by K387,500
- B. Under absorbed by K387,500
- C. Under absorbed by K312,500
- D. Over absorbed by K312,500
- 1.3 BMK plant operates a standard absorption costing system. Last month 25,000 production hours were budgeted and the budgeted fixed production cost was K125,000. Last month the actual hours worked were 24,000 and standard hours for actual production were 27,000. What was the fixed production overhead capacity variance for

last month?

- A. K5,000 (A)
- B. K5,000 (F)
- C. K1,000 (A)
- D. K1,000 (F)

(2 marks)

1.4 Which of the following statement is correct in relation to costs?

A. Prime costs include rental expenses, direct material costs, and direct labour costs.

- B. Cost codes can only be used and are only possible in a computerized environment that ease the recording and identification process.
- C. Profit Centre will be involved in the planning and monitoring of company direct costs which have a significant impact of company profits.
- D. The process of attributing distinct numerical sequence numbers to items is an example of progressive coding system. (2 marks)
- 1.5. The following information was extracted from the internal reports of a manufacturing company:

Budget labour hours	1,700
Budget overheads	K29,750,000
Actual labour hours	1,586
Actual overheads	K29,240,000

Based on the information above, what is the overhead absorption rate?

- A. K18,000 per hour
- B. K17,500 per hour
- C. K35,000 per hour
- D. None of the above

- 1.6 What is the most suitable basis when apportioning insurance cost of an equipment?
  - A. Floor area
  - B. Number of operators of the equipment
  - C. Book value of the equipment
  - D. Physical count of the individual equipment the company owns.

(2 marks)

1.7. GAC Ltd produces a range of fast moving consumer goods in Zambia. You have been provided with the following regarding one of the products. Fixed production overhead absorption rate is K1,500 per direct labour, with each unit requiring 2 direct labour hours to produce. The opening inventory for the product was 14,600 units and the closing inventory was 18,250 units.

What is the difference in profits reported for the month using absorption costing compared with marginal costing in K'000?

- A. Absorption costing profit would be 10,950 greater
- B. Absorption costing profit would be 10,950 less
- C. Absorption costing profit would be 20,212 less
- D. Absorption costing profit would be 100,100 greater

(2 marks)

- 1.8. J & B Ltd, is a company dealing in trading of many motor vehicle spare parts in large volumes. The company ordered K3,500 worth of merchandize in 2022. No safety stock is held by the company, the average holding cost per unit per year is K1.2. With an annual demand of 35,000 units, what is the annual holding cost?
  - A. K3,000
  - B. K25,000
  - С. К9,000
  - D. K21,000

(2 marks)

1.9. A start- up company based in Mansa produced 76 units at a total cost of K788,000 in the month of June 2022. In the following two months, units produced were 69 at K720,000 and 83 at K855,000 respectively. With the use of high – low method, which of the following represents the startup company's total monthly fixed cost?
- A. K61,101.64
- B. K54,642.86
- C. K59,642
- D. K90,642.86

(2 marks)

1.10. Mercy had the following information for the year 2019.

	Budgeted	Actual	
Sales units	620	600	
Selling price per unit	K30,000	K29,000	
What is the selling price variand	ce?		
A. K700,000 Adverse			
B. K890,000 Favourable			
C. K600,000 Adverse			
D. K620,000 Adverse		(2 r	marks)
		[Total: 20 M	arks]

73

#### **SECTION B**

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

#### Attempt any FOUR (4) questions.

#### **QUESTION TWO**

Mwendabai Mwendabai, a craft certificate in mechanics holder from Lusaka trades has opened a garage using Constituency Development Funds (CDF) he received as an entrepreneur last year. He is specialized in four (4) types of brands of motor vehicles which are: **BMW**, **TOYOTA**, **FORD and ISUZU**.

In the month of January 2023 Mwendabai Mwendabai recorded the following transactions for the service of motor vehicles:

	Job BMW	Job Toyota	Job Ford	Job Isuzu
Cost to date:	К	К	К	К
Direct materials	1,000			
Direct labour	1,350			
Garage overheads	1,250			
Total	3,600			
Direct materials issued	5,000	6,500	4,500	4,400
Direct labour hours for each	400	600	300	450
service				
Completed jobs sent to	K17,500	K20,030	K15,000	K13,000
customer and invoices				

#### **Additional Information:**

- Materials for K600 were transferred from Job Ford to Job Toyota.
- Material for K950 were transferred from Job BMW to Job FORD.
- Material for K1,000 were returned to Stores from Job BMW.
- Material for K500 were returned to Stores from Job ISUZU.
- Labour Cost is charged at K10 per hour while garage overheads are absorbed per direct labour hour at K5.
- Administrative and Marketing overheads are added to cost of sales at the rate of 30% of total servicing cost.

#### **Required:**

- (a) Prepare the job accounts for each individual job during January 2023. (10 marks)
- (b) Prepare the summarized job cost cards for each job and calculate the profit for each job. (6 marks)
- (c) Explain the following terms as used in cost accounting:

(i) Historic costs	(2 marks)
(ii) Economic Value	(2 marks)

#### [Total: 20 Marks]

#### **QUESTION THREE**

Having completed your Diploma in Accountancy, you secured an internship in one of the leading chain stores in the country as an Assistant Cost Accountant. The Stores' Manager requests you to undertake a review of the client's inventory system by determining the critical inventory levels, economic order quantity, cost of issues and valuation of closing inventory.

The client file contains the following schedules in relation to inventory:

Minimum usage	500 units per working week
Maximum usage	3,000 units per working week
Average usage	2,500 units per working week
Lead time	10 – 20 days
Ordering Costs	K360 per order
Purchase cost	K5 per unit
Holding cost	8% of purchase cost per year

Note: assume working week has five (5) days.

#### **Required:**

(a)	Calculate the following:				
	(i) Inventory Re-order level	(4 marks)			
	(ii) Minimum Inventory level	(4 marks)			
	(iii) Economic Order Quantity	(4 marks)			
	(iv) Maximum Inventory level	(4 marks)			
(b)	State four (4) assumptions on which the EOQ theory is based.	(4 marks)			

#### [Total: 20 Marks]

#### **QUESTION FOUR**

(a) The accounts in the cost ledger take the information from the nominal ledger, and analyze it into greater detail in order to establish the cost of products, services or processes.

#### **Required:**

Define the following terms:

(i)	Integrated accounts (	(1 mark)
(ii)	Interlocking accounts (	1 mark)

#### (b) The following information for ABC Ltd has been made available:

		К
Opening balances of:	Raw materials	40,000
	Work-in-progress	30,000
	Finished goods	160,000
Transactions recorded in the period: Material purchases Direct materials issued to production Indirect materials issued to production		800,000 420,000 60,000
Indirect materials issued to administration		120,000
Indirect materials issued to selling		100,000
Gross wages Direct wages Indirect wages in production Indirect wages in administration		600,000 220,000 140,000 80,000
Indirect wages in selling		160,000
Indirect production expenses		150,000
Indirect administration expenses		200,000
Indirect selling expenses		60,000
Overheads charged to production Production completed Production cost of goods sold		350,000 980,000 1,040,000

#### **Required:**

Prepare the following accounts:

- (i) Stores control
- Wages control (ii)
- (iii) Production overheads
- Administration overheads (iv)

- (v) Selling and distribution overheads
- (vi) Work –in-progress
- (vii) Finished goods
- (viii) Cost of sales

(18 marks) [Total 20 Marks]

#### **QUESTION FIVE**

Banana company has developed two drinks products Dela and Bela. Banana Company uses labour hours to absorb the overheads into the product cost.

The data below refers to Dela and Bela Products made in period one

Total Costs:	<u>Dela</u>	<u>Bela</u>
Direct Material	2,500	1,200
Direct Labour	3,500	1,700
Units produced	4,500 Units	4,700 Units
Labour Hours per Unit	1,500 Hours	1,000 Hours

<b>Overhead Costs:</b>	К	Cost Drivers:	Dela	Bela
Machine	10,000	Machine Hours.	350	400
Dispatching	8,000	Material Movements	150	100
Handling	5,000	Material Requisitions	50	50
Inspection	6,000	Number of Inspections	25	35
Factory Arrangements	12,000	Factory Set Ups	15	20
IT Support	<u>15,000</u>	IT Support Hours	80	70
Total	56,000			

#### **Required:**

(a) Calculate the cost per unit of Dela and Bela products using:

	(i)	Absorption Costing	(6 marks)
	(ii)	Activity based Costing	(8 marks)
(b)	Descril	be any two (2) reasons why over and under absorpt	tion of overheads occur.

					[Total:	20 Marks]
(c)	Explain any two	(2) feature	s of traditional a	absorption costing	].	(2 marks)
	-		-			(4 marks)
· · ·						

#### **QUESTION SIX**

Joseph Mutale Ltd operates a standard marginal costing system and manufactures a single product called "Magic Touch".

The following quantities, costs and prices data have been extracted for the period just ended March 31, 2022 in respect of Magic Touch:

Standard cost card:				
Direct materials	15g at K10 per gram	150		
Direct labour	8 hours at K6 per hour	48		
Variable overheads	8 hours at K4 per hour	32		
Standard contribution pe	r unit	_25		
Standard selling price per unit				
Budgeted production/sale	es units	1,500		

#### Actual results for the period ended March 31,2022 were as follows:

Production and sales		1,650 units
Sales		K420,000
Direct materials	23,760g costing	K308,880
Direct labour	10,725 hours costing	K 85,800
Variable production ov	K 68,000	

#### **Required:**

(a)	Calcu	Calculate the following variances for Mutale Ltd for the period ended March 31 2022:				
	(i)	Materials price and usage variances.	(4 marks)			
	(ii)	Labour rate and efficiency variances.	(4 marks)			
	(iii)	Variable production overhead expenditure and efficiency variances.	(4 marks)			
	(iv)	Sales price and volume variances.	(4 marks)			
(b)	State	one (1) possible reason for material price variance and labour rate varia	nce.			

		(2 marks)
(c)	Explain any two (2) types of performance standards.	(2 marks)

[Total: 20 Marks]

#### **END OF PAPER**

### **DA5 - COST ACCOUNTING SUGGESTED SOLUTIONS**

#### SOLUTION ONE

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

#### SOLUTION TWO

(a	)
-	-

Job BMW				
DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT	
Balance b/f	3600	Material transfer	950	
Direct materials	5,000	Material returned to stores	1,000	
Direct labour	4,000			
Factory overhead	2,000	Cost of sales ( Balancing fig)	12,650	
Total	14,600	Total	14,600	

#### **Job TOYOTA**

DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT
Direct materials	6,500		
Direct labour	6,000		
Factory overhead	3,000		
Materials transfers (Job Ford)	600	Cost of sales ( Balancing fig)	16,100

Total	16,100	Total	16,100		
Job FORD					
DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT		
Direct materials	4,500	Materials transfers	600		
Direct labour	3,000				
Factory overhead	1,500				
Materials transfers (Job BMW)	950	Cost of sales ( Balancing fig.)	9,350		
Total	9,950	Total	9,950		
Job ISUZU					

DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT
Direct materials	4,400	Materials returned to stores	500
Direct labour	4,500		
Factory overhead	2,250		
		Cost of sales ( Balancing fig.)	10,650
Total	11,150	Total	11,150

(b)

	JOB	JOB	JOB	JOB
ACTIVITY	BMW	ΤΟΥΟΤΑ	FORD	ISUZU
Direct Materials	4,050	7,100	4,850	3,900
Direct Labour	5,350	6,000	3,000	4,500
Factory Overhead	3,250	3,000	1,500	2,250
Factory Costs	12,650	16,100	9,350	10,650
Admin & Marketing Costs	3,795	4,830	2,805	3,195
Cost Of Sales	16,445	20,930	12,155	13,845
Invoice Value	17,500	20,030	15,000	13,000
Profit /(Loss)	1,055	(900)	2,845	(845)

(c)

- (i) **Historic value** is the value at which the transaction (item) originally cost and is recorded.
- (ii) **Economic value** is a measure of the 'most' an individual is willing to give up in other products and services in order to obtain a product or service.

#### SOLUTION THREE

```
(a)
```

- (i) Inventory Re-order level
  - = Maximum usage per day x Maximum Lead Time (in days)
  - = 600 units per day x 20 days

#### = <u>12,000 units</u>

(ii) Minimum Inventory Level

- = Re-order level (Average usage per day x Average lead time in days)
- = 12,000 units (500 units per day x 15 days)

#### = <u>4,500 units</u>

(ii) Economic Order Quantity

=  $\sqrt{2CD/H}$ ; Where C is Cost per order. D is annual demand. H is holding cost per annum.

= √2xK360x130, 000 / (K5 x 8%)

=√234,000,000

#### = <u>15,297 units</u>

(iv) Maximum Inventory Level

- = (Reorder level + EOQ) (Minimum Usage x Minimum Lead Time)
- = (12,000 units + 15,297) (100 units per day x 10 days)
- = <u>26,297 units</u>

(b) Four (4) assumptions on which the economic order quantity is based included: -

Economic Order Quantity is an optimum order quantity for inventory items that may be used in the management of inventory by businesses that do not use Just in Time (JIT) inventory management systems. The aim of the EOQ is to minimize the total cost of holding and ordering inventory. It is based on the following assumptions:

Annual holding cost per unit of inventory is known with certainty. This is a variable cost that directly varies with the level of inventory.

- There is a known and fixed cost incurred every time an order is placed called the order cost. The total order cost reduces as the re-order quantity increases.
- The annual demand is known and constant.
- There is no lead time, meaning orders are received almost immediately once placed.
- There is no buffer inventory held as it is not needed.
- Purchase price of the inventory item is known and it is constant throughout the whole year.

#### **SOLUTION FOUR**

#### (a) Definitions

- (i) Integrated accounts are a set of accounting records which provides both financial and cost accounts using a common input of data for all accounting purposes. *(CIMA, Official Terminology)*
- (ii) Interlocking accounts are a system in which the cost accounts are distinct from the financial accounts, the two sets of accounts being kept continuously in agreement by the use of control accounts or reconciled by other means. *(CIMA, Official Terminology)*

(b) Accounts	2,,,		
	(i) Raw Mate	erials Control Account	
	K		К
Opening inventory	40,000	Work –in-progress	420,000
Payables account	800,000	Production overheads	60,000
		Administration overheads	120,000
		Selling & distribution overheads	100,000
		Closing inventory (balancing figure)	140,000
	840,000		840,000
			,
	(ii) Wages cont	trol account	
	К		K
Bank	600,000	Work –in-progress	220,000
		Production overheads	140,000
		Administration overheads	80,000
		Selling & distribution overheads	160,000
	600,000		600,000
	(iii) Production	overheads account	
	K		K
Stores account	60,000	Work –in-progress	350,000
Wages control account	140,000		
Payables/Bank	150,000		
	350,000		350,000
	/	'	,
	(iv) Administ	ration overheads account	
	K		K
Stores account	120,000	Profit or loss	400,000
Wages control account	80,000		
Payables/Bank	200,000		
	400,000		400,000

(v) Selling and distribution Overheads Account

Stores account Wages control Payables/Bank	100,000 160,000 60,000	Profit or loss	320,000
	320,000		320,000
	(vi) Work-in-	progress(WIP) account	
	K		К
Opening inventory	30,000	Finished goods	980,000
Wages control account	420,000		
Production overheads account	350,000	Closing inventory (balancing figure)	40,000
	1 020 000		1 020 000
Opening inventory Work-in-progress	( <u>vii) Finishec</u> K 160,000 980,000	goods account Cost of sales Closing inventory	K 1,040,000 100,000
	1,140,000		1,140,000
	(viii) Cost of	sales account	
Finished goods	к 1,040,000	Profit or loss	к 1,040,000
	1,040,000		1,040,000

#### SOLUTION FIVE

## (a) (i) Tranditional Costing

Labour OAR	<u>K56,000 =</u>	<u>K22.4/hour</u>
	2,500 hrs	Bola
	Dela	DCIa
Output Units	4,500	4,700
	К	К
Direct Material	2,500	1,200
Direct Labour	3,500	1,700
OverHead costs for each batch	33,600	22,400
Total Batch Cost	<u>39,600</u>	<u>25,300</u>
Units	4,500	4,700
Unit Ciost	<u>8.80</u>	<u>5.38</u>

(ii)	ABC	Dela	Bela	Total
	Output (Units)	4,500	4,700	9,200
	Costs	K	K	
	Direct Material	2,500	1,200	3,700
	Direct Labour	3,500	1,700	5,200
	Overheads:			
	Machine Related Costs	4,667	5,333	10,000
	Dispatching Cost	4,800	3,200	8,000
	Handling Cost	2,500	2,500	5,000

Inspections	2,500	3,500	6,000
Factory Arrangement Costs	5,143	6,857	12,000
IT Support	8,000	7,000	15,000
Total Batch Cost	33,610	31,290	64,900

#### Unit Cost per product <u>K7.47/unit</u> <u>K6.66/unit</u>

(b) Reasons for over and under absorption of overheads

- (i) Actual activity different from budgeted activity
- (ii) Actual cost different from budgeted costs
- (iii) Actual activity and actual cost is different from budgeted activity and budgeted costs

(c) The features of absorption costing are:

- All manufacturing costs are assigned to products.
- Both fixed and variable manufacturing costs are assigned to products.
- Cost of goods sold includes both fixed and variable manufacturing costs.
- Inventory includes both finished goods and work in progress.
- It uses Budgeted overhead absorption rates
- It is common to have over or under absorptions

### SOLUTION SIX

(a)	
(i) Material price variance	К
23,760 g should have cost X K10 per g	= 237,600
But did cost	= <u>308,880</u>
Variance	<u>71,280 (A)</u>
Material usage variance	
1,650 units should have used X 15 g per unit	= 24,750 g
But did use	= <u>23,760 g</u>
	990 g (F)
	<u>X K10</u>
Variance	<u>K 9,900 (F)</u>
(ii) <u>Labour rate variance</u>	
10,725 hours should have cost X K6 per hour	= K64,350
But did cost	= <u>K85,800</u>
Variance	<u>K21,450 (A)</u>
Labour Efficiency variance	
1,650 units should have taken X 8 hours per unit	= 13,200 hours
But did take	= <u>10,725 hours</u>
	2,475 hours (F)
	<u>X K6</u>
Variance	<u>K14,850 (F)</u>
(iii) Variable production overhead expenditure variance	
10,725 hours should have cost K4 per hour	= K 42,900
But did cost	= <u>K68,000</u>
Variance	<u>K25,100 (A)</u>
Variable production overhead efficiency variance	
1650 units should have taken X 8 per unit	= 13,200 hours
But did take	= <u>10,725 hours</u>
Variance	<u>2,475 hours (</u> F)

Standard rate per hour	<u>X K4</u>
Variance	<u>K9,900 (F)</u>
(iv) <u>Sales price variance</u>	
1650 units should have sold X K255 per unit	= K420,750
But did sell for	= <u>K420,000</u>
Variance	<u>K750 (A)</u>
Sales Volume contribution variance	
Budgeted sales units	= 1,500 units
Actual sales units	= <u>1,650 units</u>
	150 units (F)
Standard contribution per unit	<u>X K25</u>
Variance	<u>K3,750 (F)</u>

#### (b) (i) Possible reasons for material price variance

- Inflation Increase on price of material when purchased compared to price at time of budgeting
- Shortage of materials
- Increase in demand for a product
- (ii) <u>Possible reasons for labour rate variance</u>
- Rise or fall in the rate of pay than the budget.
- Use of less skilled or none skilled labour than budget.
- Idle time.

(c) Two types of performance standards

#### **Ideal standards**

These are standards which can be achieved under perfect working conditions. There is no

allowance for inefficiencies, idle time, wastages and breakdown.

#### Attainable standards

These are standards which can be achieved if production is carried out efficiently, if materials are properly used and if machinery is properly operated. There is an allowance for idle time, machine breakdown and wastages.

Other types are **Basic** and **Current** standards

#### **END OF SOLUTIONS**



#### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

#### LEVEL ONE

#### DA 6: BUSINESS LAW

#### FRIDAY 16 JUNE 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.
- This paper is divided into TWO (2) sections: Section A: One (1) Compulsory scenario question. Section B: Five (5) Optional Questions. Attempt any Four (4) questions.
- 3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
- 4. Do **NOT** write in pencil (except for graphs and diagrams).
- 5. **Cell Phones** are **NOT** allowed in the Examination Room.
- 6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
- 7. All workings must be done in the answer booklet.
- 8. Present legible and tidy work.
- 9. Graph paper (if required) is provided at the end of the answer booklet.

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

#### **SECTION A- (Compulsory)**

#### Attempt all ten (10) multiple choice questions

#### **QUESTION ONE**

Each of the following questions 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 type of law governs the sale of goods between businesses?
  - A. Contract law
  - B. Tort law
  - C. Criminal law
  - D. Property law

(2 marks)

- 1.2. Who is responsible for a breach of warranty in a contract for the sale of goods?
  - A. The seller
  - B. The buyer
  - C. Both the seller and the buyer
  - D. Neither the seller nor the buyer

(2 marks)

- 1.3. What type of business entity is characterized by having limited liability for its owners, but also has centralized management and a tax structure that differs from a partnership?
  - A. Sole Proprietorship
  - B. Partnership
  - C. Corporation
  - D. Limited Liability Company (LLC)

(2 marks)

- 1.4. In a negligence claim, which of the following elements must be proven by the plaintiff?
  - A. Intent to harm
  - B. Breach of duty
  - C. Malicious conduct
  - D. Physical contact

- 1.5. What is the effect of a counter offer?
  - A. It alters the invitation to treat
  - B. It results into acceptance of an offer
  - C. It transforms an offer into an invitation to treat
  - (2 marks) D. It revokes an offer
- 1.6. Government consists of different arms and workers. Civil servants belong to the ..... arm of the Government
  - A. Civil Service
  - B. Parliament
  - C. Judiciary
  - D. Executive
- 1.7. Parties to a contract may both make mistakes or one party may make the mistake. Which of the following is an example off a common mistake?
  - A. Unknowingly buying something that belongs to you.
  - B. Each party believes that there is an understanding with the other and does not realize that there is a misunderstanding.
  - C. One party is mistaken and the other is aware of it.
  - D. Innocent misrepresentation when the contract is made.

(2 marks)

- 1.8. Employers and employees have duties to each other. Which of the following is not a duty of an employer?
  - A. Pay remuneration
  - B. Reasonable competence
  - C. Provide work
  - D. Healthy and Safety at work

(2 marks)

- 1.9. ..... is **not** an example of a tort?
  - A. Trespass to land and negligence
  - B. Civil defamation
  - C. Trespass to a person
  - D. Criminal defamation

(2 marks)

(2 marks)

- 1.10. Employees can be dismissed from employment in different ways. Dismissing an employee on the grounds of economical necessity is known as.....
  - A. Retrenchment
  - B. Redundancy
  - C. Wrongful dismissal
  - D. Unfair dismissal

(2 marks) [Total: 20 Marks]

#### **SECTION B**

## There are five (5) questions in this section. Attempt any four (4) questions <u>QUESTION TWO</u>

Tom is a construction worker who negligently damages a neighboring Wall Fence owned by Bob while performing construction work. Kelly Bob's visitor who was standing by the Wall Fence at the time it collapsed suffers physical damage.

(a) Who is responsible for the damages suffered by Kelly?

(5 marks)

(b) Identify any five (5) differences between an employee and independent contractor.

		(5 marks)
(c)	What is the difference between criminal law and civil law?	(5 marks)
(d)	What is the relationship between law and justice	(5 marks)

#### [Total: 20 Marks]

#### **QUESTION THREE**

A partnership agreement between two (2) partners stated that all major business decisions must be made by both partners. One partner made a significant business decision without consulting the other partner.

(a) What legal remedies does the non-consulted partner have in this situation?

		(6 marks)
(b)	What is the doctrine of consideration in contract law?	(6 marks)
(c)	Identify any four (4) ways of dissolving a partnership.	(8 marks)
		[Total: 20 Marks]

#### **QUESTION FOUR**

Kwazinkosi, the 'The Furry Biker' as he is popularly known by the people in his compound, sells motorbikes and motorbike spares. He is trading as 'Fast Bikers'. Kwazinkosi also repairs motorbikes and runs a motorbike riding school.

One of his loyal customers by the name of Abigail asked him on phone which bikes he had and he said he had '2022 model of Honda and Yamaha motorbikes'. Based on that, Abigail sent him the money for a ' Honda Motorbike 2022 Model'. However, The 'Furry Biker' sent her a '2021 Honda Motorbike' which is essentially the same as the one he told her on phone, except on the fact that the 2021 model had a shorter chassis than the 2022 model. Abigail is not happy and has come to you for advice as to whether she should take this matter to court or not.

- (a) In an event that you decided to advise her to sue, do you think she can succeed? Support your answer with case law and or statute. (10 marks)
- (b) Last week Monday, Kwazinkosi's Fast Bikes sold two motorbikes to Mungo Lemisa who promised to pick them on Tuesday morning, but did not show up. On Friday, he called that he was on the way and would be at Fast Bikers by 13:00 hrs. Kwazinkosi told him that, since Friday was a half day knocking off at 12:00 hours, he would leave them with the security guard at the gate and he would find them there and he agreed. At 15:00 hours, there was a fight on the road near the shop and the guard went to watch the street fight, in the process the bikes were stolen. Mungo Lemisa came at 17:00 hrs to get the bikes and was surprised to be told that the bikes had been stolen.

Mungo Lemisa now wants his money back for the two stolen motorbikes or be given other motorbikes as replacement, which Kwazinkosi has refused.

Citing relevant authorities to support your answer, advise Mungu Lemisa as to whether he will succeed in his claims or not. (10 marks)

#### [Total: 20 Marks]

#### **QUESTION FIVE**

On the 8 of March, being an International Women's Day. Lizzie Sichone, the organiser of the day's event booked her workmates (Mutinta, Charity and Sharon) at Kaoma Town Eaters' Café for lunch. The meal was well – cooked and served with the popular exotic strawberry lips drink. As Mutinta, was about to enjoy her vegetable salads, she saw a red beetle on the plate and she quietly, to avoid disturbing others, called one of the waitresses to exchange her plate with another one. The waitress did exactly that and a new plate of freshly prepared salads was given to her, she enjoyed the meal. However, after the meal, she told her friends, Charity and Sharon, who are qualified lawyers about what she found and they advised her to sue for damages.

#### **Required:**

 (a) Will Mutinta succeed or not if she follows the advice to sue? Your answer must be supported by case law. (12 marks) (b) Kaoma Town Eaters' Café is an agent for KCF, a multinational fast food restaurant. State four (4) duties of KCF to Kaoma Town Eaters' Café. (8 marks)

#### [Total 20 Marks]

#### **QUESTION SIX**

- (a) Explain how agency relationship is created under commercial law. (6 marks)
- (b) Discuss the reciprocal duties that owed between the agent and principle in the law of agency in commercial law. (10 marks)
- (c) Discuss the principle of law established in *Grover and Grover Ltd. V Matthews* (1910) with regard to agency relationship. (4 marks)

[Total: 20 Marks]

#### **END OF PAPER**

#### **DA6 - BUSINESS LAW SUGGESTED SOLUTIONS**

### SOLUTION ONE

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

#### SOLUTION TWO

(a)

Tom, as the construction worker who negligently damaged the neighboring property, could be held liable for the damage suffered by Kelly under the law of torts. Tom's negligence caused the damage, and as a result, he could be liable for any damage suffered by Kelly as a result of the construction work.

(b)

- An employer is vicariously liable for the torts of the employee while an independent contractor is liable for his wrongs.
- An employee does not suffer financial loss while an independent contractor does.
- An employee is provided with tools, safety and a place to work by the employer while an independent contractor fends for him/herself.
- An employee's pay as you earn is paid by the employer while an independent contract pays for him/herself.
- An independent employee enjoys paid sick leave, holiday's maternity and paternity leave while an independent contractor does not.

(c)

Criminal law is a branch of law that deals with offenses that are considered to be harmful to society as a whole, and are punishable by the state. Civil law, on the other hand, deals with disputes between individuals or organizations and is primarily concerned with compensation for damages or enforcement of rights. Criminal law cases are brought by the state, while civil law cases are initiated by individuals or organizations.

(d)

Law and justice are closely related concepts. Law provides the framework for society and sets out the rules and regulations that govern human behavior. Justice, on the other hand, refers to the fair and equitable treatment of individuals within the framework of the law. The objective of the legal system is to ensure that the law is applied in a manner that promotes justice and fairness.

#### SOLUTION THREE

(a)

The non-consulted partner can file a lawsuit against the other partner for breach of contract. In this case, the non-consulted partner can seek damages or a court order requiring the consulted partner to follow the partnership agreement.

(b)

The doctrine of consideration is the legal principle that requires that each party must receive something of value in exchange for their promise in a contract. Consideration can be anything of value, such as money, goods, or services, and is necessary for a contract to be enforceable.

(C)

- Expiry of fixed date
- By death
- Bankruptcy
- Notice

#### **SOLUTION FOUR**

(a) This question is anchored on **sale by description** provided for under Section 13 of the Sale of Goods Act 1893. A sale by description occurs where words are used to identify the goods sold. When there is a sale by description, *there is an implied condition that the goods must correspond with the description*.

In this case, when Abigail called Kwazinkosi on phone, she asked for the motorbikes available for sale and sent her money specifically for the described motorbike '2022 Model, Honda Motorbike'. What Kwazinkosi, 'The Furry Biker', did was in breach of the Sale of Goods Act because the goods he sent her were '2021 Model Honda Motorbikes' and not the ones he described to her through the phone. In *Beale v Taylor (1967)* a sale of a car which was joined of two different models entitled the buyer to damages in the court of law. Further in *Bowes v Shand (1877)* it was held that you can't contract to sell peas and force the other party to receive beans. Thus Abigail should go to court and sue for damages for breach of contract if he does not give her the goods they agreed on the phone and the ones she paid for. Further, she can avoid the contract and seek for a refund.

(b) This question is based on the *Transfer of Risk*. The general rule is that risk of accidental loss or destruction passes with ownership. Thus, unless otherwise agreed, the goods remain at the seller's risk until the property in them is transferred to the buyer. However, when the property in them is transferred to the buyer, the goods are at buyer's risk whether delivery has been made or not.

Where delivery has been delayed through the fault of either the seller or buyer, the goods are at the risk of the party at fault in respect of any loss which might not have occurred, but for the fault. Thus in the case at hand, the delivery had been delayed by the fault of the buyer, the goods were ascertained and left with the guard to guard them up to 14:00 hrs when Mungo Lemisa said he would collect them. The fight started much later than the agreed time. Following the case of **Demby**, **Hamilton and Co. Ltd v. Barden (1949)** where the buyer who neglected to collect the goods on time after they were parked for him was held liable to pay the price as the delay in delivering them was his own fault. Therefore, he cannot recover the money she paid, it was his fault.

#### SOLUTION FIVE

- (a) This question is based on one of the elements of **Tort of Negligence**, which is **Damage**, i.e. the injury that the plaintiff suffered as a result of the defendant's breach of the duty of care imposed by law. The damage must not be too remote a consequence of the defendant's actions. Coming to the case at hand, Mutinta will need to prove actual damage, *Michael Chilufya Sata v Zambia Bottlers (2003)*. She will need to produce medical evidence that she suffered a loss or injury as a result of the red beetle she found in the food, *Continental Restaurant and Casino Ltd v Arida Mercy Chulu (2000)*. In the case above, there was no actual damage suffered, no medical evidence to prove injury, actually, she quietly called the waitress for another plate, never lost appetite, never felt like vomiting, etc, thus she will not succeed.
- (b) In this case, KCF is a principal and Kaoma Town Eaters' Café is the agent. Duties of the principal to the agent would include:
  - (i) Duty to pay the agent the agreed remuneration or commission for work done.
  - (ii) Duty not to prevent the agent from performing duties for which he will receive remuneration.
  - (iii) Duty to indemnify the agent for expenses legitimately incurred.
  - (iv) Duty not to pay the agent where an event for which the agent was supposed to bring in occurrence, but it occurs without the agent's actions.

#### SOLUTION SIX

(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 preincorporation 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:

- (i) duty of loyalty that is, the agent is not supposed to compete with the business of the agent but to act in good faith.
- (ii) 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. Duty not use his position as agent to acquire for himself property, contract or business opportunities which should be acquired for the principal.
- (iii) Duties owed by the principal to the agent include:
- (iv) Duty to provide the agent with the relevant documentation and information related to the goods concerned.
- (v) 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.
- (vi)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.

#### **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

#### LEVEL ONE

DA 7: PRINCIPLES OF MANAGEMENT

MONDAY 12 JUNE 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.

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

#### SECTION A - COMPULSORY

#### Attempt all ten (10) multiple choice questions

#### **QUESTION ONE**

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

- 1.1 Production Management is responsible for short term operational decisions. Give an example of short term decisions from the following:
  - A. production planning and control.
  - B. Job design.
  - C. The location and layout of factories.
  - D. The selection of equipment.

(2 marks)

- 1.2 State one (1) feature of a limited company.
  - A. The company tasks may be done by family members.
  - B. It has a separate legal personality from its owners.
  - C. It is the simplest business organization to be formed.
  - D. It can be formed up by to 20 people.

(2 marks)

- 1.3 Which of the following is a characteristic of a project?
  - A. It has well defined objectives, costs and time schedules.
  - B. It should have materials available all the time.
  - C. It has a specific start time only.
  - D. It has to come to an end at one point.

(2 marks)

- 1.4 What is a public sector organization?
  - A. One owned by an individual.
  - B. One owned and run by the public.
  - C. One owned and run by the government and local government.
  - D. One owned and run by the local government only.

(2 marks)

- 1.5 State one (1) example of coaching from the following:
  - A. An individual is taught how to do the job by a highly experienced staff or supervisor.
  - B. An individual giving advice to a work colleague.
  - C. An individual being couched asking questions.
  - D. A highly experienced supervisor taking part in work activities.

(2 marks)

(2 marks)

(2 marks)

- 1.6 Identify a correct sequence in a planned change process as suggested by Lewin.
  - A. Change or movement, refreeze and unfreeze.
  - B. Unfreeze, refreeze and change or movement.
  - C. Unfreeze, change or movement and refreeze.
  - D. Change or movement, refreeze and Unfreeze.
- 1.7 State two (2) types of organizational culture
  - A. Production and task culture.
  - B. Role and output culture.
  - C. Power and production culture.
  - D. power and task culture.
- 1.8 Define the term" Morale"
  - A. The state of mind or spirit of the group relating to satisfaction.
  - B. The impact of job dissatisfaction.
  - C. The impact of high productivity.
  - D. The impact of low productivity.

(2 marks)

- 1.9 Which one (1) of the following indicates the interests of share holders.
  - A. The value of their shares.
  - B. Security of a loan.
  - C. Job satisfaction.
  - D. Career development.

(2 marks)

- 1.10 State one barrier to an effective appraisal system
  - A. Employer's self-evaluation.
  - B. Appraisal as an annual activity.
  - C. Appraisal as a regular activity.
  - D. Appraisal as a regular feedback activity.

(2 marks)

[Total: 20 Marks]

#### **SECTION B**

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

#### **QUESTION TWO**

Most case interviews are conducted face-to-face with the interviewer or a panel. Your case will be given to you either verbally or in writing, and you'll be required to describe the assumptions, strategies and steps you're using to solve the case out loud within a designated time frame. Most interviewers will provide pen and paper or a whiteboard and marker so you can record important information, perform mathematical calculations, or visually demonstrate your thinking process by using flow charts or diagrams. Less common case interview formats include written exercises or role plays. However, it is advisable to understand the industry but more so the company you have applied for.

#### **Required:**

(a)	List a	List and Explain the importance of four (4) key activities of HRM cycle. (8 marks)		
(b)	) Explain the following terms relating to disadvantages of interviews:			
	(i) Ha	llo Effect,	(3 marks)	
	(ii) St	ereotyping	(3 marks)	
(c)	Define the following relating to public sector operations.			
	(i)	Commercialization	(2 marks)	
	(ii)	Non-governmental organization	(2 marks)	
	(iii)	Parastatal organizations	(2 marks)	
			[Total: 20 Marks]	

#### **QUESTION THREE**

Mintzberg, a writer on management and organization, has suggested five 'building blocks' in an organization, and the way that the organization operates depends on which of those elements is dominant. In addition, he also pointed out that the performance of an organization depends partly on efficient decision-making process. Decision making authority within an organisation may be centralized or decentralized.

#### **Required:**

		[Total: 20 Marks]
(c)	Define the decentralized decision structure	(2 marks)
(b)	Identify and explain four (4) decisional roles as suggested by Mintzber	g. (8 marks)
(a)	Draw the diagram for Mintzberg' s five (5) 'building blocks'.	(10 marks)

#### **QUESTION FOUR**

- (a) With the help of a well labeled diagram, explain a functional organization structure and state any two (2) advantages and any two (2) disadvantages of this type of structure. (8 marks)
- (b) Explain the use of the business environment analysis tool called PESTEL in the management of a business. (12 marks)

#### [Total: 20 Marks]

#### **QUESTION FIVE**

(a) Henri Fayol, a French industrialist popularized the concept of that 'University of management principle'. As a scholar of management.

#### **Required:**

Identify five (5) functions of management which applies to any organization according to Fayol.

(10 marks)

(b) Rensis Likert argued that the motivation of individuals is affected by the Leadership style of their boss. He identified four (4) distinctive management styles each of which has a different impact on motivation.

#### **Required:**

Identify the four (4) distinctive management styles according to Likert. (8 marks)

(c) What is Authority?

(2 marks) [Total 20 Marks]
## **QUESTION SIX**

Today management pays more attention towards motivation of employees. The main task of management is to direct the working force in such a way so that by their collective efforts objectives of the enterprise are achieved.

## **Required:**

		[Total: 20 Marks]
(c)	Illustrate the importance of motivation?	(4 marks)
(b)	Identify five (5) different types of theories of motivation.	(10 marks)
(a)	Describe three (3) factors that affect an employee's motivation.	(6 marks)

#### **END OF PAPER**

## DA 7 PRINCIPLES OF MANAGEMENT SUGGESTED SOLUTIONS

## SOLUTION ONE

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

#### SOLUTION TWO

- (a) Human resource management activities and their importance
  - Recruitment and selection- ensures that the organization obtains people with the skills and qualities required.
  - Appraisal- identifies skills and performance gaps, and provides information for relevant reward level.
  - Training and development- ensure skills remain up to date, relevant and compatible with the best in the industry.
  - Reward- motivates and ensure valued staff are retained
- (b)
- (i) Halo effect- the tendency for interviewers to make an initial general judgment about a person based on a single obvious attribute. That is, a single initial attribute affect later perceptions about a person.
- (ii) Stereotyping –The putting of people together based on certain general common characteristic.
- (c)
- (i) Commercialization- Adopting the strict commercial principles in the operations of a state owned by providing goods and services at a profit.
- (ii) Non- governmental organization –An independent voluntary association of people acting together for some common purpose.
- (iii) Parastatal organization- public corporations partly owned by the state with a motive of making profit within reasonable limit

#### SOLUTION THREE

#### (a)



#### (b)

#### DECISIONAL ROLES

1. **Entrepreneurship** role- a manager initiates projects to improve the department/organisation or help it react to a changed environment. He takes risks in the process of identifying and evaluating business opportunities and allocating resources thereto in order to make profit.

2. **Disturbance handler**- moves quickly to take corrective action to deal with unexpected problems facing the organization. A manager has to respond to unexpected pressure, taking decisions when there is deviation.

3. **Resource allocator** – A manager takes decisions relating to the mobilization and distribution of limited resources to achieve the objectives. A manager allocates limited resources among competing activities and functional areas within the organization.

4. **Negotiator**- A manager negotiates both internal and external with trade unions, suppliers, distributors etc. in order to reach an agreement. Both inside and outside the organization, negotiation takes up a great deal of management time.

(c) Decentralized decision-making is any process where the decision-making authority is distributed throughout a larger group. It also connotes a higher authority given to lower level functionaries, executives, and workers

#### **SOLUTION FOUR**

(a)

**Functional Organizational Structure** 



This is a type of structure grouped according to the area of specialization or expertise of an employee such as accounts, marketing, production etc

#### Advantages

- (i) There are economies of scale because workloads may be handled efficiently.
- (ii) It encourages the development of expertise because employees concentrate on fostering specialties within the department. For example under Accounts department some may focus on accounting and others in auditing.
- (iii) There is easy coordination within the department since the activities performed are similar.
- (iv) Supervision is easy because the manager is an expert and there is functional relationship.

#### Disadvantages

- (i) There could be poor communication and coordination across functions that may delay decision making at organisation level
- (ii) Functional conflicts may arise due to limitation in the allocation of resources.
- (iii) Functional members develop attitudes and behaviours of showing loyalty to the department and not to the organisation as a whole.
- (b) PESTEL is an acronym that stands for political, economy, social, technology, environment and legal factors.

These factors that constitute the business environment are important as they help management to critically analyse them in order to formulate strategic plans used to effectively manage a business. Business organizations are operating in a business environment that is undergoing continuous, rapid changes that are having far reaching effects on both the organisation and its strategies. The business environment has become unstable and unpredictable hence the need to use the PESTEL tool to help in strategic planning.

#### SOLUTION FIVE

(a)

- (i) Planning- Planning is the first function of management. Planning is an attempt to predict the future of the organization and to determine the measures needed to transition to this new state.
- (ii) Organizing- The organization is the second function of management. Organizing is the activity by which the company receives everything it needs for its operation raw materials, tools, capital, and personnel.
- (iii) Commanding- Commanding is the third function of management. The order aims to achieve the optimal effect of the efforts of workers, in the interest of the whole organization.
- (iv) Coordinating- Coordination is the fourth function of management. Coordination aims to ensure optimal harmony between the various activities of the organization.
- (v) Controlling- Controlling is the fifth function of management. Control is designed to ensure compliance with everything that happens in the organization with pre-defined plans, principles, and standards of work.

#### (b)

#### The Four Management Systems

- (i) Exploitative Authoritative.
- (ii) Benevolent Authoritative.
- (iii) Consultative.
- (iv) Participative.

### (c)

Authority refers to the commanding of subordinates, the issuing of orders and instructions, and the process of exacting obedience from a workforce

### SOLUTION SIX

- (a) Following factors affect an employee's motivation,
  - (i) Attitude
  - (ii) Interests
  - (iii) Needs
- (b) Various theories for motivation:
  - (i) Maslow's hierarchy of needs
  - (ii) Herzberg's two Factor
  - (iii) Vroom's expectancy theory
  - (iv) McGregor's theory X and Y
  - (v) McClelland's theory of needs
  - (vi) Likert's organizational management styles
  - (vii) Adam's Equity theory
  - (viii) Locke and Latham's Goal setting theory needs
  - (ix) Likert's organizational management styles
- c) What is the importance of motivation?
  - (i) Reduction in Resistance to Change
  - (ii) Reduction of Employee Turnover and Absenteeism:
  - (iii) Motivation Builds Human Relations
  - (iv) Stability in Work Force
  - (v) Motivation increases your productivity
  - (vi) Improves Performance Level

## **END OF PAPER**



#### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL TWO

DA 8: FINANCIAL REPORTING

MONDAY 12 JUNE 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**

On April 1, 2022, Pineapple acquired 15 million equity shares in Melon by an exchange of two shares in Pineapple for every four shares in Melon, plus K1.25 per acquired Melon share in cash. The market price of each Pineapple share at the date of acquisition was K6 and the market price of each Melon share at the date of acquisition was K3.25.

Additionally, on 1 April 2022, Pineapple acquired 30% of the equity shares of Kiwi at the cost of K7.50 per share in cash. Only the cash consideration of both investments has been recorded by Pineapple.

The summarized draft statements of financial position of the three companies at 31 March 2023 are:

ITEM	Pineapple	Melon	Kiwi
	K′000	K′000	K′000
ASSETS			
Non-current Assets:			
Property, Plant and Equipment	94,500	52,000	90,000
Investment in Melon and Kiwi	63,750		
Financial Asset	32,500		
Total non-current assets	<u>190,750</u>	<u>52,200</u>	<u>90,000</u>
Current Assets:			
Inventory	34,500	31,000	18,000
Trade Receivables	11,000	5,500	7,500
Bank	<u>5,000</u>	<u>2,000</u>	<u>4,500</u>
Total current assets	<u>50,500</u>	<u>38,500</u>	<u>30,000</u>
Total Assets:	<u>241,250</u>	<u>90,500</u>	<u>120,000</u>
Equity and Liabilities:			
Equity Shares at K1.00 each	50,000	20,000	20,000
Retained Earnings:			
@ 31 <sup>st</sup> March 2022	80,000	30,000	55,000

For the year ended 31 March 2023	<u>46,250</u>	<u>14,500</u>	<u>25,000</u>
	<u>176,250</u>	<u>64,500</u>	<u>100,000</u>
Non-Current Liabilities:			
7% Loan Notes	25,000	5,000	5,000
Deferred tax	12,500	5,000	-
Current Liabilities	<u>27,500</u>	<u>16,000</u>	<u>15,000</u>
Total Equity & Liabilities	<u>241,250</u>	<u>90,500</u>	<u>120,000</u>

- (i) At the date of acquisition, Melon had an internally generated Brand name. The Directors of Pineapple estimated that the fair value of the Brand name was K5 million, with a useful economic life of 5 years. Additionally, the fair values of items of property, plant and equipment were equal to their carrying amounts except for an item of plant. The fair value of the item of plant at the date of acquisition was K6 million in excess of its carrying amount and had a remaining useful life of 5 years.
- (ii) During the year ended 31 March 2023, Melon sold goods to Pineapple for K13.5 million. Melon had marked up these goods by 50% on cost. Pineapple had a half of the goods still in its inventory at 31 March 2023. As a result of these intra-group trading activities, Pineapple had payables of K2 million and Melon had receivables of K5 million respectively. Melon's receivable balance differed from the payables balance of Pineapple due to a K3 million payment from Pineapple not being received by Melon until 10 April 2023.
- (iii) Pineapple has a policy of valuing non-controlling interest at Fair value at the date of acquisition. For this purpose, the share price of Melon at this date should be used.
- (iv) Impairment tests on 31 March 2023 concluded that consolidated goodwill was impaired by 10% and the value of the investment in Kiwi had been impaired by K10 million.
- (v) The financial asset in Pineapple is a 15% investment in Tanji and is included at its Fair value on April 1, 2022. The investment is classified as a Fair Value Through Profit or Loss instrument and its fair value at 31 March 2023 was K45 million. This change in fair value is not yet incorporated in the individual financial statements of Pineapple.
- (vi) No dividends were paid during the year by any of the companies.

#### **Required:**

Prepare the consolidated statement of financial position for Pineapple as at 31 March 2023. [Total: 25 Marks]

#### **QUESTION TWO**

You are the Accountant of Mukwa Plc. The Finance Manager has given you the draft statement of financial position as at 31 March, 2023 for your review and finalization.

Mukwa draft statement of financial position as at 31 March, 2023

Assets	K′ 000
Non-current assets	
Property at valuation (land K4,000; buildings K33,000 (note (iii)) Plant and equipment (note (iii))	37,000 <u>36,100</u> <u>73,100</u>
<b>Current assets</b> Inventory (note (ii)) Trade receivables (note (v)) Bank	16,800 10,440 <u>3,260</u> <u>30,500</u>
Total assets	<u>103,600</u>
Equity and liabilities	
Equity shares of K1 each Revaluation reserves Retained earnings	58,000 3,600 <u>21,800</u> 83,400
Non-current liabilities Deferred tax (note (vi)) Loan notes (note (iv))	3,840 <u>8,000</u> <u>11,840</u>
Current liabilities Trade payables	8,360
Total equity and liabilities Additional relevant information:	<u>103,600</u>

The retained earnings of K21.8 million include the profit for the year ended 31 March 2023 of K2.46 million. This profit is before taking into account the notes below.

- (i) At 31 March 2023, a sale of goods for K0.52 million was included in revenue, and the goods were excluded from the year-end inventory count. These goods will be delivered to the customer in May 2023. A profit margin of 25% is applied on all sales.
- (ii) The inventory at 31 March 2023 was valued at cost of K16.8 million. This includes K0.250 million of slow moving goods. According to the independent valuation expert report, these goods have a net realisable value of K0.15 million.
- (iii) The non-current assets have not been depreciated for the year ended 31 March 2023. Mukwa has a policy of revaluing its land and buildings at the end of each financial year. The values in the above statement of financial position are as at 1 April 2022 when the

buildings had a remaining life of 15 years. A qualified property surveyor has valued the land and buildings at 31 March 2023 at K36 million. Plant and equipment is depreciated at 20% on the reducing balance basis.

- (iv) The K8 million loan note was issued at par on 1 April 2022. No interest will be paid on the loan; however, it will be redeemed on 31 March 2025 for K10.648 million which gives an effective finance cost of 10% per annum.
- (v) Management discovered a material trade receivables fraud of K0.45 million at 31 March 2023. An analysis revealed that K0.30 million had been stolen in the year to 31 March 2022 with the rest being stolen in the current year. Mukwa is not insured for this loss.
- (vi) A provision of K2.28 million is required for current tax for the year ended 31 March 2023 and at this date the deferred tax liability was assessed at K4.24 million. Deferred tax is also charged on revaluation gain. The applicable income tax rate is 30%. Mukwa does not make transfers from revaluation reserves to retained earnings.

#### **Required:**

- (a) Briefly explain the accounting treatment for changes in accounting policies, changes in accounting estimates and prior period errors. (3 marks)
- (b) Prepare a statement showing the recalculation of profit/(loss) for the year ended 31 March 2023 according to IFRS/IAS requirements. (10 marks)
- (c) Prepare the corrected statement of financial position as at 31 March, 2023 according to IFRS/IAS requirements. (12 marks)

[Total: 25 Marks]

#### **SECTION B**

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

#### **QUESTION THREE**

(a) You are the Management Accountant of Mbuzi Limited. Its financial statements for the year ended 31 March 2023 including comparatives are shown below:

A	31 March 2023	31 March 2022
Assets	K' UUU	K' 000
Non-current assets		
Property, plant and equipment	56,000	42,800
Intangible assets	4,000	
Total non-current assets	<u>60,000</u>	<u>42,800</u>
Current assets		
Inventory	13,200	15,200
Trade receivables	11,800	8,800
Bank	200	<u> </u>
Total current assets	<u>25,200</u>	<u>29,200</u>
Total assets	<u>85,200</u>	<u>72,000</u>
Equity and Liabilities		
Equity shares of K1 each	32,000	32,000
Revaluation reserves	5,400	-
Retained earnings	<u>12,800</u>	7,000
	<u>50,200</u>	<u>39,000</u>
Non-current liabilities		
8% loan notes	5,600	12,500
Deferred tax	6,000	3,200
lease obligation	<u>4,800</u>	<u>3,600</u>
	<u>16,400</u>	<u>19,300</u>
Current liabilities	2.000	2 400
Lease obligation	3 000	2,400
I rade payables	10,600	8,400
Current tax payable	<u>5,000</u>	<u>2, 900</u>
The ball is see the second of the ball of	<u>18,600</u>	<u>13,700</u>
lotal equity and Liabilities	<u>85,200</u>	<u>/2,000</u>

## **Statement of comprehensive income extracts at 31 March 2023**

Profit before interest and tax	13,600
Finance costs	(1,600)
Tax expense	<u>(4,000)</u>
Profit for the year	<u>8,000</u>
Revaluation surplus	8,000
Deferred tax	<u>(2,600)</u>
Other comprehensive income	5,400

#### Additional relevant information:

- (i) On 1 April 2022, Mbuzi revalued its property upwards by K8 million. There were no disposals of non-current assets during the year.
- (ii) Depreciation of property, plant and equipment was K3.6 million and amortisation of intangible assets was K0.8 million for the year ended 31 March 2023.
- (iii) During the year, Mbuzi acquired additional property under a lease arrangement that had an initial right of use value of K6 million.
- (iv) Mbuzi paid equity shareholders dividends during the year.

#### **Required:**

Prepare the statement of cashflows for the year ending 31 March, 2023 according to IFRS/IAS requirements. (19 marks)

(b) The management of Mbuzi is also interested in financial analysis because it believes financial analysis provides useful additional information which the statement of cashflows does not provide.

#### **Required:**

Explain the importance of the financial ratios below to management and shareholders of Mbuzi.

- 1. Return on capital employed
- 2. Trade receivables collection period
- 3. Trade payables payment period
- 4. Inventory holding period
- 5. Debt/equity ratio
- 6. Earnings per share

(6 marks) [Total: 25 Marks]

#### **QUESTION FOUR**

(a) The Metro City was given permission to run the transportation system in the capital city following the expansion of business. The following are the draft financial statements of the company presented in segment formats:

## Statement of profit or loss for the years ended 31 December 2022

	Train Operations	Railway Construction	Total
	K 000	K 000	K 000
Revenue	2 500	900	3 400
Cost of Sales and other	(940)	(630)	(1 570)
Other Operating expenses	( <u>85</u> )	( <u>62)</u>	<u>(147)</u>
Operating profit	1 475	208	1 683

Common costs:

Directors' remuneration	()	545) Legal
costs and expenses	(328)	Taxation of
income	( <u>235)</u>	
	<u>475</u>	

#### Additional information:

The segment for Train Operations includes results for a local train operation and an intercity train operation. The terms of the contract of the Local train operation require that the Local Authority sets the fees, collects proceeds from members of the public and pays Metro City for the service to the public a fixed amount agreed in the contract. On the other hand, Metro City sets the fees for the Inter City Train operations, and collects the fees from members of the public pay. Metro City is required to pay only applicable taxes and levy under the contract.

#### **Required:**

- (i) Explain what an operating segment is according to *IFRS 8 Operating Segments*. (2 marks)
- (ii) Outline conditions upon which segments may be combined according to IFRS 8 Operating Segments. (2 marks)
- (iii) Discuss the appropriateness or otherwise of combining Train Operations segment results to would-be investors in Metro City. (4 marks)
- (iv) Recommend the criteria upon which common costs would appropriately be allocated to the segments (1 mark)
- (b) Machokoto has had a farm for many years but it has not grown to the size of a commercial farm. It is located in an agricultural prime geographical area, and investors have shown interest in expanding operations. He has approached you for knowledge of terms used in IAS 41 *Agriculture*, as he expects the investors to demand that accounts be prepared applying the required accounting standard.

#### Required:

- (i) Explain the difference between biological assets and agricultural produce, giving two (2) examples of each. (4 marks)
- (ii) Distinguish between bearer and consumable assets, giving one example of each. (4 marks)
- (iii) Explain the measurement criteria that apply to agricultural produce before recognition in financial statements at year ends. (4 marks)
- (c) IAS 10 governs the accounting treatment of adjusting events and non-adjusting events.

#### **Required:**

Distinguish between adjusting event and non-adjusting event.

(4 marks)

#### [Total: 25 Marks]

#### **QUESTION FIVE**

You work for Changa Limited and you are required to deal with the matters below:

(a) You are aware that International Accounting Standards Board (IASB) revised "The Conceptual Framework for Financial Reporting (the Framework)" in 2018.

#### **Required:**

- (i) Explain the "fundamental" qualitative characteristics of useful financial information. (3 marks)
- (ii) Explain the importance of "timeliness" and "comparability" to users of financial statements. (2 marks)
- (iii) Briefly, discuss whether the use of "Current Value" accounting overcomes the problems of "Historical Cost" accounting. (3 marks)
- (iv) Briefly, outline the progress of international harmonization of IASs/IFRSs.

(2 marks)

(b) Your entity has been engaged by government to measure the performance of Public Sector Organisations. You will be responsible for the measurement of performance of a Public Hospital.

#### **Required:**

Briefly, explain with examples how the performance of a Public Hospital can best be measured. (6 marks)

(c) Your entity's functional and presentation currency is Kwacha (K). On 1 March 2023, your entity sold goods to a foreign customer in South Africa for R115, 000, when the exchange rate was R1.25 to K1. The amount has not been paid as at 31 March 2023. The closing exchange rate as at 31 March 2023 is R1.15 to K1.

#### **Required:**

Explain how your entity should account for this foreign currency transaction for the period ending 31 March 2023 according to the relevant IASs/IFRSs. (5 marks)

(d) Your entity is carrying out research and development to develop a new product and K5,000, 000 development costs have been incurred so far. You are aware that under IAS 38, development costs can only be capitalised when the criteria is met.

## **Required:**

Clearly, state the criteria that should be met for development expenditure (costs) of K5,000, 000 to be capitalised. (4 marks) [Total: 25 Marks]

## **END OF PAPER**

## **DA 8 FINANCIAL REPORTING**

## SOLUTION ONE

[All amounts in workings are represented by K'000 even if not included as column heading.]

Pineapple Group Consolidated statement of financial position as at 31	<b>March 2023</b> K.000
Non-current asset:	
Goodwill (W2)	17,100
Property, Plant and Equipment (94,500+52,000+4,800)W3	151,300
Intangible asset – Brand name (W3)	4,000
Financial asset (W9)	45,000
Carrying amount of Investment in Kiwi (W8)	42,500
Total non-current assets	<u>259,900</u>
Current assets:	
Inventory (34,500+31,000-2250 (W4)	63,250
Trade receivables (11,000+5,500-3,000-2,000)W5	11,500
Bank (5,000+2,000+3,000) W5	10,000
Total current assets	<u>84,750</u>
Total Assets	<u>344,650</u>
Equity and liabilities:	
Equity:	
Equity charge at $K1$ each (50000+7 500 W(10)	57 500
	57,500
Share premium (W10)	37,500
Retained earnings (W7)	142,362
Non-controlling interest (W6)	<u>18,288</u>
	255,650

### Non-current liabilities:

Total equity and liabilities	<u>344,650</u>
Current liabilities (27,500+16,000-2,000)	<u>41,500</u>
Total non-current liabilities	47,500
Deferred tax (12,500 + 5,000)	17,500
7% Loan (25,000+5,000)	30,000

#### WORKINGS:



2.	Goodwill on	acquisition of Melo	<b>n</b> K′000	K′000	
	Purchase cons	sideration:			
	Share exchan	ge (75%X 20,000/4 sł	nares x2 shares x K6)	45,000	)
	Cash (15,000,	,000 x K1.25)		18,750	)
	NCI at acquis	ition (5,000,000 share	s x K3.25)	16,2 <u>50</u>	<u>)</u>
				80,000	)
	Less net asse	ts at acquisition:			
	Share capital		20,000		
	Retained earn	ings	30,000		
	Fair value adj	ustment:			
	Brand name		5,000		
	Plant		<u>6,000</u>	<u>(61,00</u>	0)
	Gross Goodwi	II		19,00	0
	Less impairme	ent loss (10% * 19,00	0)	<u>(1,90</u>	<u>)0)</u>
	Net Goodwill			<u>17,1(</u>	<u>)0</u>
3.	Fair value a	djustments:			
		AT acquisition	movement	@ reporting	date
		K′000	K′000	K′000	
	Plant	6,000	(1,200)*	4,800	

(1,000)\*\*

4,000

5,000

Brand

*6,000/5 yrs = 1200
**5000/5 yrs = 1,000

4.	<b>Provision for unrealized p</b> Total sales value	rofit on sale	of goods	by M	elon	13,500
	Held in inventory by Pineappl Profit element on $(50/150 \times 6)$	e (1/2 x 13,50 5,750)	)0)			<u>6,750</u> 2,250
	PUP = 2,250 DOUBLE ENTRY	Y BEING:				
	DR Group retained earnings ( DR Non-controlling interest (2 Cr group inventory (100%)	75%) 25%)	1,687	563	2250	
5.	Intra group balance cance	ellations:				
		Pinear K'000	ople		Melon K'000	
	Receivables				5,000	
	Payables	2,000				
	The difference in receivables/ for as follows:	payables is du	ie to cash	in trar	nsit of K3	3 million to be accounted
	Dr Cash (melon)	3,000				
	Cr receivables (Melon)				3,000	
	To recognize cash not yet rec	cognized by Me	elon.			
	Then intra group balance can	cellation as fo	llows:			
	Dr group payables	2,000				
	Cr group receivables				2,000	
6.	Non-controlling interest NCI at acquisition(W2) NCI share of M's share (25% NCI share of impairment loss Closing NCI	x 10,050) (25%*1,900)			16,250 <u>(475)</u> 18,28	) 2,513 <u>8</u>
7.	<b>Carrying amount of invest</b> Cost of investment (30% × P's share of K's post acquisition Impairment loss of investment	t <b>ment in Kiw</b> ( 20,000) x K7 on Ret Ear (30 nt in Kiwi	i .5 )% x 25,00	)(W8	<b>K'000</b> 45,000 8)7,500 (10,000) 42,500	)
8.	Group retained earnings:	<b>Pineapple</b> K'000	<b>Melon</b> K′000		<b>Kiwi</b> K'000	

	Per question	126,250	44,500	80,000	
	Less pre-acquisition Ret Earn		(30,000)	<u>(55,000</u>	)
	Fair value depreciation- Brand	d	(1,000)	25,000	
	Fair value depreciation-Plant		(1,200)		
	PUP (W4)		(2,250)		
	Fair value gain – Fin Asset(W	9) 12,500			
			10,050		
	P's share of M (75%*10,050)	7,537			
	P's share of K (30%* 25,000)	) 7,500			
	P's share of G/W Imp loss (75	5%)(1,425)			
	Imp loss of Inv in Kiwi	<u>(10,000)</u>			
		<u>142,362</u>			
9.	Fair value of financial ass	ets:			
	Fair value at 1 April 2022				32,500
	Fair value gain				<u>12,500</u>
	Fair value at 31 March 2023				<u>45,000</u>

## **10.Share exchange values:**

No. of shares arising in P [75%\*20,000/4\*2 = 7,500 shares]

X K1 K7,500,000 To equity X K5 K37,500,000 to share premium

#### SOLUTION TWO

#### (a) Accounting policies, accounting estimates and prior period errors

- 1. Change in accounting policy is accounted for retrospectively.
- 2. Change in accounting estimate is accounted for prospectively.
- 3. Prior period errors Material prior period errors are accounted for retrospectively.

## (b) Mukwa statement of corrected profit/(loss) for the year ending 31 March 2023

	Profit given Overstated profit [520 w1 – 390 w1] Overstated inventory w2 Depreciation on property w3 Depreciation on plant and equipment w3 Finance cost w4 Fraud loss w5 Tax expense w6 Corrected profit / (loss) for the year	<b>K' 000</b> 2,460 (130) (100) (2,200) (7,220) (800) (150) (2,320) (10,460)
(c)	Mukwa statement of financial position as at 31 March 2023	
	Assets	K′ 000
	<b>Non-current assets</b> Property: Land and buildings w3 Plant and equipment w3 Total non-current assets	36,000 <u>28,880</u> <u>64,880</u>
	<b>Current-assets</b> Inventory 16,800 +390 w1 -100 w2 Trade receivables 10,440 - 520 w1 - 450 w5 Bank Total assets	17,090 9,470 <u>3,260</u> <u>29,820</u>
	Total assets	<u>94,700</u>
	Equity and liabilities	
	Equity shares Revaluation surplus 3,600+1,200 w3 - 360 w6 Retained earnings 21,800 - 2,460 - 10,460 - 300 w5 Total equity <b>Non-current liabilities</b>	58,000 4,440 <u>8,580</u> <u>71,020</u>
	Deferred tax Loan note w4	4,240 <u>8,800</u> 13,040
	Current liabilities	<u>13,040</u>
	Trade payables 8,360+2,280 w6	<u>10,640</u>
	Total equity and liabilities	<u>94,700</u>

#### **Solution Two Workings**

#### W1: Sales - 520 Trade receivables -520 520 x 75% = 390 Cost of sales - 390 Inventory +390 W2: 250 - 150 = 100Cost of sales +100 Inventory - 100 W3: Depreciation and N.B.V Buildings Dep: 33,000/15yrs = 2,200 N.B.V 33,000 - 2,200 = 30,800 N.B.V 30,800+4,000 = 34,800 Revaluation surplus: 36,000 - 34,800 = 1,200 N.B.V = 36,000Plant and equip Dep: 36,100 x 20% = 7,220 N.B.V = 36,100 - 7,220 = 28,880 W4: Loan note O/Bal interest@10% (payment) C/Bal 8,000 800 8,800 (0) W5: Trade receivables - 450 - 300 Retained earnings - 150 Profit W6 Deferred tax on revaluation surplus $1,200 \times 30 = 360$ Tax expense Trial Balance fig 0 2,280 Estimate Deferred tax [4,240 - 3,840] 400 Tax on revaluation surplus (360) P/L fig 2,320

#### K' 000

## SOLUTION THREE

(a) Mbuzi statement of cash flows for the year ending 31 March 2023

Cash f Profit l Finance Depree Amort Cash f Decrea Increa Increa Cash g Finance Tax pa Net ca	lows from operating activities before tax (8,000+4,000) ce cost ciation isation lows before working capital changes ase in inventory (13,200 - 15,200) ise in receivables (11,800 - 8,800) ise in payables (10,600 - 8,400) generated ce cost paid aid w4 ish from operations	K' 000 12,000 1,600 3,600 800 18,000 2,000 (3,000) <u>2,200</u> 19,200 (1,600) (1,700) 15,900
Cash f Cash p Cash p Net ca	flows from investing activities baid for new property, plant and equip w1 baid for new intangibles (4,000+800) sh used in investing activities	(2,800) <u>(4,800)</u> <u>(7,600)</u>
Cash f Loan r Lease Equity Net ca Net de Last ye Currer	flows from financing activities notes repaid (5,600-12,500) liability repaid w3 dividends paid w2 sh used in financing activities ecrease in cash and cash equivalent ear cash and cash equivalent nt year cash and cash equivalent	(6,900) (4,200) (2,200) (13,300) (5,000) <u>5,200</u> 200
Soluti	ion Four workings	К′ 000
W1:	Property, plant and equipment O/Bal Rev surplus Leased property Depreciation Cash paid C/Bal	42,800 8,000 6,000 (3,600) (2,800) 56,000
W2:	Retained earnings O/Bal Profit for the year Dividends paid C/Bal	7,000 8,000 <u>(2,200)</u> <u>12,800</u>
W3:	Leases liabilities O/Bal [2,400+3,600] New lease fair value (ROU) Cash paid C/Bal [3,000+4,800]	6,000 6,000 <u>(4,200)</u> <u>7,800</u>

W4: Taxes

Taxes	
O/Bal [2,900+3,200]	6,100
Tax expense – P/L	4,000
Deferred tax – OCI	2,600
Cash paid	<u>(1,700)</u>
C/Bal [5,000+6,000]	11,000

(b) Importance of financial ratios

- 1. Return on capital employed This measures the return earned on capital employed or invested in the business. Higher return is better for management and shareholders.
- 2. Trade receivables collection period This measures the period that the entity takes to collect its debts / trade receivables. Shorter period is better for cashflow purposes, management and shareholders.
- Trade payables payment period This measures the period that the entity takes to pay its debts/trade payables. Longer period is better for cash flow purposes, but may damage the reputation of the entity.
- 4. Inventory holding period This measures the period that inventory is held in stock before it is sold. Shorter period is better for cashflow purpose, management and shareholders.
- 5. Debt/equity ratio

This measures the entity's debt against its equity to determine the debt risk level. Lower ratio is better because it means the entity is a low risk investment.

6. Earnings per share

This measures the shareholders return (earning) per share held in the business. Higher earning/return per share is better for management and shareholders.

#### SOLUTION FOUR

(a)

- (i) An operating segment is a unit of an organization that is separately identifiable into its own assets and liabilities and is capable of generating revenue independent of other segments. It is also a unit whose performance can be reviewed by a chief operating decision maker.
- (ii) Segments may be combined if they have similar operating characteristics and their revenue and profits are less than 10% of the total revenue of the whole enterprise.
- (iii) The combined segments appear to have dissimilar characteristics because for the local train operation, Metro City, is paid a fee by the Local Authority, whereas for the Intercity Train operation the company determine the fees to charge and receives cash from passengers. This indicates that the two operations are under separate contracts whose terms are different. Further, there is no indication of how much profit or loss each segment is making, and the percentage of the total cannot be calculated. It would be misleading to combine a loss-making segment with a profit-making segment as this amounts to cross subsidization.
- (iv) Criteria upon which common costs would be allocated should take into account the degree or extent to which the segment utilized the services involved.
- (b) (i) Difference between biological assets and items of agricultural produce

Biological assets are living plants and animals. Items of agricultural produce are items harvested from biological assets. For example, a cocoa plant is a biological asset, whereas cocoa fruit harvested from the tree is agricultural produce. Vines are biological assets, whereas the grapes are items of agricultural produce

#### Distinction between bearer Biological assets and consumable biological assets:

(ii) Bearer assets are those animals or plants that are used in the production or supply of agricultural produce or are expected to bear produce for more than one period, and has a remote likelihood of being sold as agricultural produce. Examples include vines and cocoa trees, also daily cows from which milk is harvested for as long as the animal lives.

Consumable biological assets are those that are expected to be harvested within a particular period. For example, maize plants are harvested within one period. Tomato plants are also consumable assets because the produce is harvested within a period and the plant is abandoned.

# (iii) Measurement criteria that apply to agricultural produce before recognition in the financial statements:

The nature of agricultural produce precludes the use of historical cost modes of measurement because gradual physical expansion which increases the value of the asset has no cost attached to it. This leaves the fair value less cost to sell as the most readily available mode of measurement of agricultural produce. Cost less accumulated depreciation and impairment is used only where there is no reliable measurement based on fair value.

When initial measurement at fair value less cost to sell is compared to subsequent measurement done at the end of the period on the same basis, a gain or a loss may need to be recognized in the statement of profit or loss.

(c) Adjusting event and non-adjusting event

#### Adjusting event

An event, favourable or un-favourable that provides additional evidence of conditions that existed at the reporting date.

This requires financial statements to be adjusted.

#### Non-adjusting event

This is indicative of a condition that arose after the reporting date.

This does not require financial statements to be adjusted. If material, it is disclosed in the financial statements.

#### SOLUTION FIVE

(a) (i) Fundamental qualitative characteristics

#### Relevance

Information should be capable of making a difference in the decisions made by users of such information. It should have predictive value or confirmatory value, or both.

#### **Faithful representation**

Information should represent what it purports to represent (economic substance and not legal form). It should be complete, neutral, and free from error.

#### (ii) **Timeliness and comparability importance**

#### Timeliness

Information will only be relevant, if it is provided to users of financial statements timely. Information provided late is not likely to influence decisions of users of that information.

#### Comparability

Comparable information helps users of financial statements to make meaningful comparisons about the single entity or between the entity and its competitor(s) or industry indicators due to consistency.

#### (iii) Current Cost accounting over Historical Cost accounting

- 1. Current cost accounting does not understate the assets values because the current market values are used.
- 2. Current cost accounting does not overstate profit during period of high inflation.
- 3. Current cost accounting may provide more relevant information than historical cost accounting.

#### (iv) **Progress on harmonization of IFRSs/IASs**

There has been a steady progress in respect of harmonisation of IFRSs because:

- 1. Many countries in the world have adopted International Financial Reporting Standards (IFRSs). E.g. in Europe, Asia, Africa, etc
- 2. In many countries, companies with shares or securities listed on public stock exchange (e.g. LUSE) are required to comply with IFRSs.
- 3. International Organisations such as European Union (EU) have made it mandatory for Member States to comply with IFRSs.
- (b) Public sector performance measurement

#### Measuring economy

Economy means acquiring things at a lowest possible cost without compromising the quality of the things acquired.

E.g. Acquiring drugs at the lowest cost without compromising the quality of drugs.

#### **Measuring efficiency**

Efficiency means using minimum inputs to achieve a given output, or maximising outputs for a given level of input.

E.g. Doctors attending to more patients per hour than other public hospitals.

#### Measuring effectiveness

Effectiveness means achieving the intended objectives using given resources/inputs. E.g. diagnosing or treating the diseases successfully.

(c) Foreign currency transaction

In the income statement (profit or loss), the gain of K8, 000 (w3) will be reported at 31 March 2023.

In the statement of financial statement, the carrying amount of K100, 000 (w2) will be reported as at 31 March 2023.

Working

W1:	1.3.2023	R115, 000 / R1.25	= K92, 000
W2:	31.3.2023	R115, 000 / R1.15	= K100, 000
W3:	31.3.2023	K100, 000 – K92, 000	= K8, 000

(d) Criteria (conditions) to be met for development expenditure to be capitalised- IAS 38.

- 1. Probable future economic benefits will flow to the entity.
- 2. Intention to complete and use or sell the product.
- 3. Resources adequate and available to complete and use or sell the product
- 4. Ability to complete and use or sell the product.
- 5. Technically feasible that the product will be completed/available for use or sell.
- 6. Expenditure can be measured reliably.

#### **END OF SOLUTIONS**



### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

## LEVEL TWO

DA 9: MANAGEMENT ACCOUNTING

TUESDAY 13 JUNE 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**

GAC Limited management is reviewing operations of the company in order to make operational decisions for the following month. The company manufactures a number of products. Details of some of the products manufactured by the company are given below:

Products	AR2	GL3	HT4	XY5
Selling price per unit	K21	K28.5	K27.3	
Material R2 Kg per unit	2	3	3	
Material R3 Kg per unit	2	2.2	1.6	3
Direct labour hours per unit	0.6	1.2	1.5	1.7
Variable production overheads per unit	1.1	1.3	1.1	1.4
Fixed production overheads per unit	1.5	1.6	1.7	1.4
Expected demand for next month (units)	950	1,000	900	

Product AR2, GL3 and HT4 are sold to GAC Limited's customers. Product XY5 is a component that is used in the manufacture of other products. GAC Limited manufactures a wide range of products in addition to those detailed above.

Material R2, which is not used in any of GAC's other products, is expected to be in short supply next month due to industrial action at a major producer of the material. GAC Limited has just received delivery of 5,500 Kg of material R2. This is expected to be the amount held in inventory at the start of next month. The company does not expect to be able to obtain further supplies of material R2 unless it pays the premium price. The normal market price is K2.50 per Kg.

Material R3 is available at a price of K2 per Kg. GAC Limited does not expect any problems in securing supplies of this material. Direct labour is paid at a rate of K4 per hour.

KUKE Limited has recently approached GAC Limited with an offer to supply a substitute for product XY5 at a price of K10.20 per unit. GAC Limited would need to pay an annual fee of K50,000 for the

right to use this patented substitute.

### **Required:**

(a) Determine the optimal productions schedule for products AR2, GL3 and HT4 for the following month on the assumption that additional supplies of material R2 are not purchased.

(12 marks)

(b) If GAC Limited decides to purchase further supplies of material R2 to meet demand for products AR2, GL3 and HT4, what should be the maximum price per kg that the company is prepared to pay.

(4 marks)

(c) Discuss whether GAC Limited should manufacture product XY5 or buy the substitute offered by KUKE Ltd. Your answer should be supported by appropriate calculations.

(9 marks)

## [Total: 25 Marks]

## **QUESTION TWO**

The Kanyembo Family runs a number of businesses in the southern part of the country where they are involved in tourism packages to both local and foreign tourists. Lately the business is struggling in meeting their daily cash demands. The business has approached you for possible advice why the business is failing in that regard. The business has a bank overdraft limit of K4.5 million and has proposed to increase it.

The following is their financial statements presented to you.

## STATEMENT OF INCOME FOR THE YEAR ENDED 31 DECEMBER 2022

	K′000
Sales	220,000
Cost of sales	<u>(145,500)</u>
Gross profit	74,500
Administration expenses	(51,700)
Selling and Administration expenses	(15,500)
Finance costs	<u>(2,300)</u>
Net profit before taxation	5,000
Tax @30%	<u>(1,500)</u>
Net profit after taxation	<u>3,500</u>

#### STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

	K′000	K′000
Non-current assets		27,800
Current assets :		
Inventories	8,500	
Receivables	<u>36,137</u>	
Total current assets		<u>44,637</u>
Total assets		<u>72,437</u>
Capital and liabilities:		
Ordinary share capital	(K1 per share)	11,467
Retained profit		<u>3,500</u>
Shareholders' funds		14,967
Non-current liabilities:		
16% Secured bank loan		6,500
Current Liabilities:		
Payables	45,803	
Taxation	1,833	
Dividend declared	167	
Bank overdraft	<u>3,167</u>	
		<u>50,970</u>
		<u>72,437</u>
Required:		
(a) Calculate and briefly in	nterpret the following ratios.	

(i) Current ratio	(3 marks)
(ii) Acid Test ratio	(3 marks)
(iii) Average Receivables Collection period	(3 marks)

(b) Discuss the key factors to be considered when formulating a working capital funding policy.(7 marks)

(c) Explain the term overtrading and state its possible causes. (4 marks)

(d) Describe how the Baumol model can be employed to reduce the costs of cash management and discuss the drawbacks of the Baumol cash management model.

(5 marks)

[Total: 25 Marks]

#### **SECTION B**

## There are THREE (3) questions in this section. Attempt any two (2) questions. <u>QUESTION THREE</u>

(a) Juicy Tech Limited has recently developed a drink called Masuku Smoothie which is packaged in two (2) litre containers and it has become a household name to the customers. The company is now considering what price to charge per 2 litre container. The company has produced the following forecasts of demand at three potential selling prices.

Selling price per 2 litre container	K25	K35	K45
Sales per annum of 2 litre container	10,000	8,000	6,000
Fixed costs per annum	K80,000	K50,000	K20,000

Variable costs are forecast at K22 per 2 litre container at any activity level.

#### **Required:**

Calculate, for each potential selling price, the budgeted profit, the breakeven point in units and the margin of safety percentage.

(11 marks)

(b) 'The analysis of total costs into its behavioural elements is essential for effective cost and Management accounting.'

#### **Required:**

		[Total: 25 Marks]
		(3 marks)
(iii)	Explain three (3) advantages of breakeven analysis.	
		(5 marks)
(ii)	Describe five (5) limitations of breakeven analysis.	
(i)	Critically comment on this statement.	(6 marks)

#### **QUESTION FOUR**

Super Rice Merchants Ltd (SRML) processes and sells rice in large quantities. The process starts by buying unshelled rice and then by using a relatively simple processes, the company shells the rice, sorts the grain and weighs the rice in readiness for packaging and distribution. The company uses a variance analysis system to monitor its performance.

In September 2022 the following data applies:

**Standard costs** for 1 tonne of mongu rice as finished product:

- 1.4 tonnes of unshelled rice are needed at a cost of K600 per tonne.
- It takes 2 labour hours of work to produce 1 tonne of rice and labour is normally paid K180 per hour.
- 2 hours of variable overhead at a cost of K300 per hour.
- The standard selling price is K2,400 per tonne.

**Budget information** for September 2022 were as follows:

- Fixed costs were budgeted at K2,100,000 for the month.
- Budgeted production and sales were 8,400 tonnes.

The **actual results** for September 2022 were as follows:

- Actual production and sales were 8,000 tonnes.
- 12,000 tonnes of unshelled rice were bought and used, costing K6,600,000
- 15,800 labour hours were paid for costing K3,033,600.
- Variables production overhead cost were K4,800,000.
- Fixed costs were K2,000,000.
- Sales revenue achieved was K18,000,000.

#### **Required:**

- (a) Calculate the variances for September 2022 in as much detail as the information allows and reconcile the budgeted profit to the actual profit using marginal costing principles. You are not required to comment on the performance of the business or its managers for the month of September 2022. (20 marks)
- (b) In many organizations, variance analysis is seen as a role of the cost and management accountant, and not the financial accountant. However, in some small organisations, a single accountant performs both roles.

#### **Required:**

Contrast management accounting from financial accounting. (5 marks)

[Total: 25 Marks]

#### **QUESTION FIVE**

An association of chamber of commerce based in a border town near a country called Mwaimwena, recently organized a one-day investment forum where there were many credible speakers and financial experts invited to give talks. The company you work for as an accountant had received an invitation to attend this investment forum. Your company intends to expand its operation due to conducive investment environment in the country. Your boss attended this forum and the high number of participants to the forum prevented him from seeking clarifications to ask the presenters about of the key terms used at the conference.

He is keen to brief the board on certain topics that were discussed at the conference and he has requested you as an accountant to prepare him a report.

#### **Required:**

Prepare a report that explains the following terms for inclusion in his report to the board. Your report should include reference to the following:

- (a) Brief explanation of the term overtrading and state its possible causes. (6 marks)
- (b) The relevance of the product life cycle in considering alternative pricing policies for a technologically advanced product.
  (6 marks)
- (c) Brief description of the target costing process and how it can impact your company if it is adopted at an early stage in the product development process. (8 marks)
- (d) Explanation of how "backflush accounting" differs from a traditional transaction tracking system.

(5 marks) [Total: 25 Marks]

## **END OF PAPER**
# DA 9 MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

## SOLUTION ONE

(a)

	<u>AR2</u>	<u>GI3</u>	<u>HT4</u>
	<u>K</u>	K	<u>K</u>
Selling price	<u>21</u>	<u>28.5</u>	<u>27.3</u>
<u>Material R2 (K2.5x2/3/3)</u>	<u>(5)</u>	<u>(7.5)</u>	<u>(7.5)</u>
Material R3 (K2x2/2.2/1.6)	<u>(4)</u>	<u>(4.4)</u>	<u>(3.2)</u>
D/labour (K4x0.6/1.2/1.5)	<u>(2.4)</u>	<u>(4.8)</u>	<u>(6.0)</u>
<u>VPOH</u>	<u>(1.1)</u>	<u>(1.3)</u>	<u>{1.1)</u>
Contribution per unit	<u>8.5</u>	<u>10.5</u>	<u>9.5</u>
Kg per unit	<u>2</u>	<u>3</u>	3
Contribution per unit	<u>K4.25</u>	<u>K3.5</u>	<u>K3.17</u>
Ranking	<u>1st</u>	2 <sup>nd</sup>	<u>3rd</u>

## **OPTIMAL BUDGET**

<b>Ranking</b>	<b>Product</b>	Demand	Kg	<u>Total</u>	<b>Contribution</b>	<b>Total Contribution</b>
			<u>/unit</u>	<u>kg</u>	<u>/kg</u>	<u>K</u>
<u>1<sup>st</sup></u>	<u>AR2</u>	<u>950</u>	2	<u>1,900</u>	<u>K8.50</u>	<u>8,075</u>
<u>2<sup>nd</sup></u>	GL3	<u>1,000</u>	<u>3</u>	<u>3,000</u>	<u>K10.50</u>	<u>10,500</u>
<u>3<sup>rd</sup></u>	HT4	200	3	600	<u>K9.50</u>	<u>1,900</u>
					Total	<u>20.475</u>

## **Optimal Production**

AR2	<u>950 units</u>
<u>GL3</u>	<u>1,000 units</u>
<u>HT4</u>	<u>200 units</u>

# (b) Maximum price the company will pay

	К
Material R2 (3 x K6.01)	18.01
Material R3 (1.6 xK2)	3.20
Labour (K4 x 1.5)	<u>6.00</u>
Variable overheads	27.30
Selling price	<u>27.30</u>
Hence contribution	00.00

Further supplies of material R2 will be used to produce additional units of product HT4 since we already produced the required quantities for the maximum demand of AR2 and GL3. The ruling market price for R2 is K2.50 and the contribution per Kg of material R2 for product HT4 is K3.53. In order to cover the costs the product should recover an amount equal to the additional cost incurred.

Hence if GAC limited pays K3.353 +K 2.50 =K6.03 per Kg for Material R2, the additional units of product HT4 produce will make a zero contribution towards fixed costs. K6.03 is therefore the maximum price.

This is because we increased the cost of material R2, to an extent that resulted in the total cost of the produced HT4 being equal to its selling price.

The total cost when material R2 is purchased at K6.03 per Kg.

	K per unit
Material R3 (3 x K 2)	6.00
Labour (1.7 x K 4)	6.80
Variable overhead:	1.40
	14.20
Price offered by KUKE limited	(10.20)
Saving per unit	<u>4.00</u>

(c) The variable cost of product XY5

The substitute offered by KUKE limited gives a saving of K4 per unit. However, GAC limited would also pay an annual fee of K50,000 for the right to use the substitute. In order to make the buying option cheaper we need to manufacture as many numbers of units that will lead to the total buying cost (fixed fee K50,000 plus per unit cost K10.20) to be less than the existing in house manufacturing cost.

Minimum number of units to be manufactured so that in house costs and buying costs are the same:

	K
Annual fixed fee	50,000
Saving per unit by buying substitute	4
Units to be manufactured (K50,000/K4) units per year	12,500
Units to be manufactured per month (12,500/12)	1,042

The company would need to manufacture more than 12,500 units per year of product XY5, or 1,042 units per month, in order for the offered substitute to be financially acceptable. If it needed less than 12,500 units of product XY5 per year, it would be cheaper to manufacture the product in house.

## SOLUTION TWO

- (a)
  - (i) Current ratio

Current assets/Current liabilities

= 44,637/50,970

= <u>0.88</u>

The current ratio is a liquidity ratio that **measures a company's ability to pay shortterm obligations or those due within one year**. It tells investors and analysts how a company can maximize the current assets on its statement of financial position to satisfy its current debt and other payables.

The ideal current ratio is **2:1 or greater**.

(ii) Acid Test ratio

(Current assets - inventories)/Current liabilities

= (44,637 - 8,500)/50,970

=<u>0.709</u> or 0.71

The quick ratio **represents the extent to which a business can pay its short-term obligations with its most liquid assets**. In other words, it measures the proportion of a business's current liabilities that it can meet with cash and assets that can be readily converted to cash

The ideal quick ratio is 1:1 or greater

(iii) Average Receivables Collection Period

(36,137/220,000) x 365 days = <u>60 days</u>

The average collection period is **the average number of days it takes a business to collect and convert its accounts receivable into cash**. It is one of six main calculations used to determine short-term liquidity, that is, the ability of a company to pay its bills (current liabilities) as they fall due.

(b) When considering working capital financing, assets should be divided into non-current assets, permanent current assets and fluctuating current assets.

A matching funding policy would balance risk and profitability, avoiding the extremes of a conservative or an aggressive funding policy. Other key factors in working capital funding strategies include **managerial attitudes to risk, previous funding decisions and organisation size**.

Various factors influence the requirement of <u>working capital</u>. These factors include the majority of activities of the business; the magnitude of the influence of each factor can be different

(c) Overtrading refers to the excessive buying and selling of inventories by either a broker or an individual trader.

## Common causes for overtrading

- Making a big capital investment before revenue is generated.
- Late invoice payments from customers or clients.
- Accruing unexpected costs.
- A sudden increase in demand or seasonal business trends.
- A sharp increase in inventories.
- (d) Baumol model of cash management trades off between opportunity cost or carrying cost or holding cost & the transaction cost. As such the firm attempts to minimize the sum of holding cash & the cost of converting marketable securities to cash.

Baumol proposed a model similar to EOQ for cash management too. The model **helps in determining the cash conversion size which means how much cash should be arranged by selling marketable securities in each transaction**.

**Assumes a constant disbursement rate**; in reality cash outflows occur at different times, different due dates etc.

**Drawbacks** of Baumol model are that it is unlikely that future cash requirements will be predicted easily. Further, it does not allow for buffer inventory of cash hence costs associated with cash out will be incurred.

Finally, there will be other costs that are associated with holding cash which will increase with cash held.

## SOLUTION THREE

(a) Budgeted profit, breakeven point and margin of safety

(i) Budgeted profit			
	K25	K35	K45
	К	К	К
Contribution (w1)	3	13	23
Fixed costs	80	50	20
Profit/(loss) K' 000	<u>(50)</u>	54	118
(ii) Break-even point i	i <b>n units</b> 80,000/3	50,000/13	20,0000/23
	= <u>26,667units</u>	<u>3,846 units</u>	<u>870 units</u>
(iii) Margin of safety ra	atio		
	<u>10,000-26,667</u>	<u>(8,000 – 3,846)</u>	<u>(6,000 – 870)</u>
	10,000	8,000	6,000
	<u>(167%)</u>	52%	<u>85.5%</u>
Working 1			
	K per unit	K per unit	K per unit
Selling price	25	35	45
Variable cost	22	22	22
Contribution per unit	3	13	<u>23</u>

(b) (i) A knowledge of cost behaviuor is vital when fulfilling the aims of cost accounting of planning, control and review.

## Planning

At the planning stage, budgets based on units to be sold can only be prepared if the costs incurred to produce the relevant output levels are known.

#### Control

If the accountant is not aware of how costs should behave, no comparison can be made with actual costs incurred.

#### **Decision making**

Management need to understand the effect on costs of different decisions they make. The key distinction is between fixed and variable costs.

**Fixed costs** remain the same whatever the level of activity; they will not be affected by management decisions as they are costs which relate to a period such as insurance.

**Variable costs** vary directly with the volume of output, and this will have to be taken into account when preparing a production budget.

## (ii) Limitations of breakeven analysis

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

## (iii) Three advantages of breakeven analysis

- Graphical representation of cost and revenue can be more easily understood by nonfinancial managers
- A breakeven model enables the determination of profit or loss at any level of activity within the range for which the model is valid, and the contribution to sales ratio can indicate relative profitability for different products.
- Highlighting the breakeven point and the margin of safety gives managers some indication of the level of risk involved, and as such is an aid to production and sales.

## SOLUTION FOUR

(a) Calculation of standard contribution

Details	K per tonne of rice
Selling price	2,400
Material cost (1.4 x K600)	(840)
Labour cost (2 hrs x K180)	(360)
Variable overheads (2 hrs x K300)	<u>(600)</u>
Standard contribution	<u>600</u>

	<u>   600,000</u> (F)
But did cost	<u>K6,600,000</u>
12,000 tonnes should have cost (x K600)	K7,200,000
Material price variance	
Sales price variance; (2,400 x 8,000) – K18, 000,000	= K1,200,000 (A)
Sales volume variance; (8,400 – 8,000) x K600 = K24	ł0, 000 (A)

# Material usage variance

-	
8,000 tonnes should have used (x 1.4)	11,200 tonnes
But did use	<u>12,000</u> tonnes
Variance in tonnes x standard cost per tonne	<u>800</u> tonnes (A)
	x K600
	K480,000 (A)
Labou rate variance	
15,800 hours should have cost (x K180)	K2,884,000
But did cost	K3,033,600
	<u>K189,600 (A)</u>
Labour efficiency variance	
8,000 tonnes should have taken (x 2 hours)	16,000 hours
But did take	<u>15,800 hours</u>
Variance in hours	<u>200 hours</u> (F)
x standard rate per hour	x K180
	<u>K36,000 (F</u> )

Variable overhead expenditure variance	
Budgeted variance production overhead (15,800 x K300)	K4,740,000
Actual expenditure	K4,800,000
	<u>K60,000 (A</u> )
Variable overhead efficiency variance	
8,000 tonnes should take (x 2 hours)	16,000 hours
But did take	15,800 hours
Variance in hours	200 hours (F)
X standard rate per hour	x K300
	<u>K60,000 (F)</u>
Calculation of budgeted profit	
Total budgeted contribution (K600 x 8,400)	K5,040,000
Budgeted fixed costs	K2,100,000
Budgeted profit	<u>K2,940,000</u>

# Super Rice Merchants Ltd

Operating statement for the month of September 2022

Details	K′000	K′000	K′000
Budgeted profit			2,940
Budgeted fixed cost			<u>2,100</u>
Budgeted contribution			5,040
Sales volume contribution variance			(240)
Standard contribution on actual sales			4,800
Sales price variance			<u>(1,200)</u>
			3,600
	А	F	
Material price		600	
Material usage	480		
Labour rate	189.6		
Labour efficiency		36	
Variable overheads efficiency		60	
Variable overhead expenditure	60		

Total	<u>729.6</u>	<u>696</u>	
Net variance			<u>(33.6)</u>
Actual contribution			3,566.40
Actual fixed costs			<u>(2,000.00)</u>
Actual Profit			<u>1,566.40</u>

**Check** 

Actual profit	<u>K1,566,400</u>
Actual fixed costs	<u>(K2,000,000)</u>
Actual contribution	K3,566,400
Variable overheads	<u>(K4,800,000)</u>
Labour cost	(K3,033,600)
Material cost	(K6,600,000)
Actual sales revenue	K18,000,000

(b) Contrast of financial accounting and management accounting

- Generally, financial accounting is externally oriented whereas Management Accounting is for internal reporting
- Secondly the format is prescribed by law for financial reports unlike with the management accounting
- Thirdly, financial reports on the whole organisatrion whereas Management reports are specific to units or centres
- Fourthly, financial information is monetary in nature whereas management accounting incorporates non-monetary measures.
- Financial accounts are historical whereas management accounts are a future planning tool.

## SOLUTION FIVE

## Report

To: Managing Director

## From: Accountant

Date: Date of the examination

Subject: Explanation of Latest Terminologies in Accounting and Finance

Following your recent attendance at the investment forum where certain key terms in accounting and finance were discussed, I set out below the explanation.

- (a) Overtrading
  - Sometimes referred to as under capitalization
  - A business is expanding rapidly to the detriment of working capital and noncurrent assets in line with the increase in sales.
  - Can easily arise in a relatively young business which has insufficient capital base.
  - Errors and miscalculations may also result in overtrading such as failure to forecast level of profits and cash flows.
  - Poor receivable management policies too can contribute.

(b) The product life cycle – Introduction, Growth, Maturity and Decline

- At introduction, products are priced to achieve market strategy using either penetration or skimming policies.
- At growth stage, the initial supplier should reduce the price to crowd out competitors.
- At maturity stage, oligopolistic competition creeps in.
- At decline stage, only loyal group of customers may continue to pay a reasonable price.

(c) Target costing

- Begins by specifying a product an organization wishes to sell
- Involves extensive customer analysis, considering features valued by customers and those they do not.
- Only features valued by customers will be included in the product design.
- There is heavy emphasis on external analysis before any consideration is made of internal cost of the product.
- A desired margin is the deducted from the price to get the target cost.
- Cost for the product are then calculated and compared to the target cost.
- Competitors are taken into account at an early stage

- Only valuable features by customers will be taken into account
- Cost control begins much earlier in the process

## (d) Backflush accounting

- Method of costing associated with JIT production system, which applies cost to the output of a process.
- Costs do not mirror the flow of products through the production process, but are attached to the output when products are sold.
- Budgeted or standard costs are used to work backwards to flush out manufacturing costs for the finished units when they are sold.

## Conclusion

I hope the information provided herewith is helpful but should you need more information, do not hesitate to contact me.

## Signed: Accountant

# **END OF SOLUTIONS**



## DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL TWO

# DA 10: TAXATION

## THURSDAY 15 JUNE 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.
- 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

## **DA10 TAXATION TABLE**

## Income Tax

Standard personal income	tax rates	
Income band	Taxable amount	Rate
K0.01 to K57,600	first K57,600	0%
K57,601 to K81,600	next K24,000	20%
K81,601 to K106,800	next K25,200	30%
Over K106,800		37.5%
Income from farming for in	dividuals	
K0.01 to K57,600	first K57,600	0%
Over K57,600		10%
Company income tax rates		
On income from manufacturing	g and other	30%
On income from farming		10%
On income from mineral proces	ssing	30%
On income from mining operat	ions	30%
On income of Banks and other	Financial	30%
Institutions		
	Capital Allowances	
Implements, plant and mac	hinery and commercial vehicles:	
Wear and Tear Allowance –	Standard wear and tear allowance	25%
	Used in manufacturing and leasing	50%
	Used in farming and agro-processing	100%
	Used in mining operations	20%
Non- commercial vehicles		
Wear and Tear Allowance		20%
Industrial Buildings:		
Wear and Tear Allowance		5%
Initial Allowance		10%
Investment Allowance		10%
Low Cost Housing	(Cost up to K100,000)	100/
Wear and Tear Allowance		10%
Initial Allowance		10%
Commercial Buildings		
Wear and Tear Allowance		2%
Farming Allowances		
Development Allowance		10%
Farm Works Allowance		100%
Farm Improvement Allowance		100%

# **Presumptive Taxes**

Turnover Tax	
Annual Turnover	
K0.01 to K12,000	0%
K12,001 to K800,000	4%

# **Rental income Tax**

K0.01 to K12,000	0%
K12,001 to K800,000	4%
On income above K800,000	12.5%

## **Presumptive tax for transporters**

Seating capacity	Tax per annum	Tax per quarter
	К	K
Less than 12 passengers and taxis	1,080	270
From 12 to 17 passengers	2,160	540
From 18 to 21 passengers	4,320	1,080
From 22 to 35 passengers	6,480	1,620
From 36 to 49 passengers	8,640	2,160
From 50 to 63 passengers	10,800	2,700
From 64 passengers and over	12,960	3,240

## Property transfer tax

5%
5%
5%
10%
10%

#### Value Added Tax

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

# Customs and Excise duties on used motor vehicles

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

Aged 2 to 5 years Aged 5 years and over

Motor cars and other motor vehicles principally designed for the transport of	Customs	Excise	Customs	Excise
persons including station wagons and	duty	duty	duty	duty
racing cars	К	К	К	К
Sedans				
cylinder capacity not exceeding 1000 cc Cylinder capacity exceeding 1000 cc but not	12,490 16,058	10,824 13,917	7,136 8,564	6,185 7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
Hatchbacks				
cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642
Station wayons		21 500	0.024	11 771
Cylinder capacity not exceeding 2500 cc but not	16,545 18,049	21,508 23,463	9,024 13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463
Cylinder canacity not exceeding 2500 cc	21 057	27 374	0 024	11 732
Cylinder capacity not exceeding 2500 cc	21,057	21,377	12 257	17 500
exceeding 3000 cc	24,005	31,204	10,000	17,590
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	Aged 2 to	o 5 years	Aged 5 ye ove	ears and er
with compression-ignition internal	Customs	Excise	Customs	Excise
combustion piston engine (diesel or semi- diesel):	duty	duty	duty	duty
Single cab	К	К	К	K
GVW exceeding 1.0 tonne but not exceeding 1.5	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs	30,697	13,302	24,119	10,452

GVW exceeding 3 tonnes but not exceeding 5				
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, with spark ignition internal combustion piston engine	33,766	14,632	26,531	11,497
Panel Vans				
GVW not exceeding 1.0 tonne GVW exceeding 1.0 tonne but not exceeding 1.5	13,353 15,348	5,786 6,651	7,630 8,770	3,061 3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
Trucks				
GVW up to 2 tonnes	13,907	10,662	6,413	4,916
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	15,453	11,847	7,726	5,923
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	9,272	7,108
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes GVW exceeding 20 tonnes, <b>with spark</b>	51,898 37,086	0 28,432	19,462 13,907	0 10,662
ignition internal combustion piston engine				
Surtax On all motor vehicles aged more than five (5) year	rs from year	of manufact	ture	K2,000
Customs and Excise on New Motor vehicles Duty rates on:				
<ol> <li>Motor cars and other motor vehicles (i principally designed for the transport of including the driver: Customs Duty: Percentage of Value for Duty Purposes Minimum Specific Customs Duty</li> </ol>	ncluding s of less that	tation wag n ten perso	ons) ns,	30% K6,000
<b>Excise Duty:</b> Percentage of Value for Duty Purposes for E Cylinder capacity of 1500 cc and less Cylinder Capacity of more than 1500 cc	Excise Duty	Purposes		20% 30%
2. Pick-ups and trucks/lorries with gross tones:	weight no	ot exceeding	g 20	
<b>Customs Duty</b> Percentage of Value for Duty Purposes Minimum specific Customs Duty <b>Excise Duty:</b>				15% K6,000
Percentage of Value for Duty Purposes for F	- - - - - - - - - - - - - - - - - - -	Purposes		10%

3.	Buses/coaches for the transport of more than ten persons			
	Customs Duty:	1 50/		
	Percentage of value for Duty Purposes	15%		
	Minimum Specific Customs Duty	K6,000		
	Excise Duty:			
	Percentage of Value for Duty Purposes for Excise Duty Purposes			
	Seating Capacity of 16 persons and less	25%		
	Seating Capacity of 16 persons and more	0%		
4.	Trucks/lorries with gross weight exceeding 20 tonnes			
	Customs Duty:			
	Percentage of Value for Duty Purposes	15%		
	Excise Duty:			
	Percentage of Value for Duty Purposes for Excise Duty Purposes	0%		

# SECTION A - TWO (2) COMPULSORY QUESTIONS

## Attempt BOTH questions in this section.

## **QUESTION ONE**

Kazungula Farms Plc, a Zambian resident company based in Southern province, is engaged in maize and soya beans farming. The company listed its shares on the Lusaka Securities Exchange (LuSE) in January 2022 and 30% of its issued shares were taken up by indigenous Zambians. At the start of the tax year 2023, the company estimated the provisional income tax for the year to be K354,822. This was paid on the appropriate due dates during the year.

For the year ended 31 December 2023, the company made a net profit before tax as per the statement of profit or loss amounting to K1,510,200. This profit figure was arrived at after taking into account the following items of income and expenditure:

- (1) Profit on sale of farm land amounting to K240,000. The farm land was sold in order to raise funds for increasing soya beans production. The farm land was acquired six (6) years ago at a cost of K300,000,000. The sale proceeds were K3,240,000 while the open market value was K3,500,000.
- (2) Investment income amounting to K480,000. This amount is made up of royalties amounting to K360,000 (gross) and dividends amounting to K120,000 (gross). Withholding tax has already been deducted at source in each case.
- (3) Depreciation of non-current assets amounting to K640,200 and impairment losses arising from intangible assets of K249,000.
- (4) Irrecoverable debts expenses of K1,380,000 which included trade debts written off amounting to K1,020,000, increase in general provision of K510,000, increase in specific provision of K240,000, trade debts previously written of now recovered of K300,000 and loans to former employees previously written off now recovered of K90,000.
- (5) Wages and salaries of K35,295,600. These included the Managing Director's emoluments amounting to K4,850,400, who is accommodated in a company owned house. The balance relates to employees' wages and salaries.
- (6) Professional and legal fees of K2,220,000 which included K480,000 for collection of trade debts, K780,000 for accountancy and audit services, K312,000 for recovery of loans from former employees, a penalty of K228,000 for late payment of the balance of income tax for the tax year 2022 and K420,000 for defending title to the company's farm land.
- (7) Entertainment expenses of K1,080,000 which included K366,000 incurred in entertaining suppliers, K288,000 in entertaining customers and the balance incurred in entertaining employees.
- (8) General expenses of K10,720,800 which included distribution expenses of K4,744,200 administration expenses of K3,486,000 canteen expenses incurred in providing meals to members of staff amounting to K1,446,000 and gifts of calendars bearing the company's name each costing K75 amounting to K1,044,600.

## **Other information**

On 1 January 2023, the company had the following implements, plant & machinery:

	Income tax value	Original cost
	К	K
Toyota Prado car (3,500cc)	720,000	1,200,000
Office equipment	112,500	450,000

The Toyota Prado car is used by the Managing Director on a personal-to-holder basis. The private use of the car has been agreed with the Commissioner General to be 60%.

The company incurred the following capital expenditure during the tax year 2023:

	К
Fencing	180,000
Ploughs	510,000
Dwelling houses for farm employees each costing K180,000	720,000
Irrigation equipment	360,000
Fuso truck	720,000
Clearing and stumping	132,000
Combine harvester	300,000

#### **Required:**

(a) Calculate the amount of capital allowances claimable by the company for the tax tea	r 2023.
(b) Calculate the tax adjusted farming profit of the company for the tax year 2023	(10 marks)
(b) Calculate the tax adjusted farming profit of the company for the tax year 2023.	
(c) Calculate the income tax payable by the company for the tax year 2023.	(6 marks)

## [Total: 25 Marks]

## **QUESTION TWO**

Tafuna has been employed by Star Plc, a Zambian resident company as a Business Development Manager for many years until 31 October 2023, when he was declared redundant.

During his tenure of employment with Star plc in the tax year 2023, his annual salary was K480,000 and he was entitled to the following emoluments:

Housing allowance	30% of his basic annual salary
Fuel allowance per month	К 3,500
Utility allowance per month	K 2,500
General purpose allowance per year	K20,000

During the tax year 2023, Tafuna was reimbursed an amount of K30,000 for the medical expenses he incurred in respect of the medical treatment of his sick wife. The company also paid K15,000 in respect of the school fees for Tafuna's children. On 1 May 2023, Tafuna received a labour day award comprising cash amounting to K35,000 and a dining suite valued at K32,000.

Tafuna received the following additional benefits on 31 October 2023:

	К
Gratuity	840,000
Repatriation pay	94,000
Accrued Leave pay	45,000
Severance pay	85,200

During the tax year 2023, Tafuna following payments and deductions were made from his gross emoluments:

	ĸ
Insurance premiums	12,400
Income tax deducted under PAYE	85,600
Professional subscriptions	7,000
Donation to an approved Public Benefit Organization	22,400
Donation to a political party	10,000
Employee's NHIMA contributions	3,333
Employee's NAPSA contributions	13,337

Tafuna received the following income from his investments:

	K
Bank deposit interest	6,000
Dividends from ZX Ltd	30,600
Royalties	51,750
Interest on Government bonds	8,500

The above amounts of investment income are the actual amounts of cash received in each case. Withholding tax has been deducted at source.

## **Required:**

- (a) Explain the income tax treatment of the investment income received by Tafuna for the tax year 2023. Your answer should include a computation of the amount of withholding tax paid on each item of investment income.
   (8 marks)
- (b) Calculate the amount of income tax payable Tafuna for the tax year 2023. You should indicate in your computation using a zero (0), any benefits received by Tafuna which are not taxable and any payments made which are not allowable. (17 marks)

[Total: 25 Marks]

## **SECTION B**

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

## **QUESTION THREE**

Soko is a sole trader, dealing in auto parts and hardware in the Central Business District of Lusaka. His annual turnover has always exceeded K800,000. During the year to 31 December 2023, Soko prepared the following statement of profit or loss:

	K	К
		972,000
	6,800	
	<u>15,300</u>	
		<u>22,100</u>
		994,100
(Note 1)	357,000	
(Note 2)	31,500	
	45,000	
(Note 3)	77,400	
(Note 4)	64,500	
(Note 5)	40,500	
(Note 6)	27,000	
(Note 7)	4,500	
(Note 8)	37,500	
(Note 9)	21,000	
(Note 10)	<u>20,100</u>	
		<u>(726,000)</u>
		268,100
	(Note 1) (Note 2) (Note 3) (Note 3) (Note 4) (Note 5) (Note 5) (Note 6) (Note 7) (Note 8) (Note 9) (Note 10)	K 6,800 <u>15,300</u> (Note 1) 357,000 (Note 2) 31,500 (Note 3) 77,400 (Note 3) 77,400 (Note 4) 64,500 (Note 5) 40,500 (Note 5) 40,500 (Note 5) 40,500 (Note 6) 27,000 (Note 7) 4,500 (Note 7) 4,500 (Note 8) 37,500 (Note 9) 21,000 (Note 10) <u>20,100</u>

The following additional information is available:

## Note 1: Salaries and Wages

Included in the wages and salaries figure is the annual salary for Soko's Son of K24,000. The other employees who performs similar work as Soko's son earns K18,000 per annum.

## Note 2: Light and heat

It has been agreed with the Commissioner General that that two-thirds (2/3) of the total expenses on light and heat relates Soko's private residence.

#### Note 3: Rent and Rates

It has been agreed with the Commissioner General that 15% of the expenditure on rent and rates relates to Soko's residence.

# Note 4: Travelling and entertaining expenses

These included the following:

-	К
Soko's business travelling expenses	31,050
Entertaining clients	13,800
Entertaining suppliers	16,500
Christmas gifts to staff	1,500
Gifts to customers of calendars bearing the business name each costing K50	<u>1,650</u>
	<u>64,500</u>

#### Note 5: Bad debts

These included the following:

-	К
Increase in specific provision for bad debts	10,500
Trading debts written off	22,500
Loan to employee written off	10,200
Trade debt recovered (written off last year)	<u>(2,700)</u>
	<u>40,500</u>

#### Note 6: Motor car expenses

Motor car expenses were incurred on Soko's motor car. It has been agreed with the Commissioner General that his business use of the car is 25%.

## Note: 7 Sundry expenses

These included the following:

	К
Donation to a political Party	600
Wedding gift to an employee	270
Advertising in the trade press	1,950
Donation to an unapproved charity	1,500
Donation to an approved Public benefit organization	<u>180</u>
	<u>4,500</u>
Note 8: legal and professional fees	
These included the following:	
	К
Accountancy & audit fees	27,150
Cost of renewing a lease of business premises	1,500
Penalties for non-compliance with health and safety regulations	6,900
Legal fees in connection with investigation of tax discrepancies	<u>1,950</u>
	<u>37,500</u>
Note: 9 Repairs and Renewals	
These included the following:	
	K
Repairs to the office computer	1,050
Painting the office	2,850
Purchase of a new printer for the office	3,900
Duiluing a Digger Store room	<u>13,200</u> 21.000
	21,000

#### Note 10: Telephone expenses

Soko makes business calls from his private telephone. It has been agreed with the Commissioner General that his business use of the phone is two thirds (2/3).

#### Note 11: Provisional income tax

Soko paid provisional income tax amounting to K79,114 during the tax year 2023.

#### Note 12: Implements, plant and machinery

On 1 January 2023, there were no implements, plant and machinery qualifying for capital allowances.

Soko acquired the following additional assets during the year ended 31 December 2023:

Date of purchase	Asset purchased	Original cost
•		К
12 February 2023	Motor car	80,000
20 April 2023	Office furniture	40,000
2 May 2023	Office computer	20,000
10 June 2023	Delivery Van	110,000

The motor car is used by Soko 25% for business purposes.

## Required:

(a) Calculate the amount of capital allowances claimable by Soko for the tax year 2023.

		(7 11101K5)
(	(b) Calculate Soko's final taxable profit for the tax year 2023.	(12 marks)

(c) Calculate the final income tax payable by Soko for the tax year 2023. (6 marks)

## [Total: 25 Marks]

(7 marks)

## **QUESTION FOUR**

- (a) Nelson Mainza has been in business as a sole trader for many years. Nelson made the following disposal of assets during the year ended 31 December 2023, in order to raise some capital to finance the expansion of his business:
  - (1) He sold a freehold office building with a market value of K550,000 to his son Chimuka. The office building was purchased on 1 June 2019 for K420,000 and has always been used by Nelson for business purposes. Chimuka paid his father K120,000 for the office building.
  - (2) He sold a freehold warehouse with a market value of K230,000 to his nephew. The warehouse was purchased on 1 October 2020 for K225,000, and has never been used by Nelson for business purposes. The nephew paid Nelson K130,000 for the warehouse.

- (3) He sold a motor car with a market value of K120,000. The motor car was purchased on 1 September 2019 for K135,000, and has always been used by Nelson for business purposes. He received proceeds of K50,000 from the sale for the car.
- (4) Nelson sold 10,000, K1 ordinary shares in Universe Limited, a private company for K65,000. The market value of the shares on this date was K90,000. The shareholding was purchased on 10 July 2018 at a cost of K35,000.
- (5) He sold 25,000 K1 ordinary shares in Busha Plc, a company listed on the Lusaka Securities Exchange for K105,000. Nelson had originally purchased his holding of shares in Busha Plc on 19 June 2020 at a cost of K34,000.

## **Required:**

- (i) Explain how the realized value is determined in respect of transfers made to members of the immediate family. (3 marks)
- (ii) Explain the property transfer tax implications arising from the transfer of the assets in notes (1) to (5) above. Your answer should include a computation of property transfer tax payable.
   (10 marks)
- (iii) State any four (4) documents required for the refund of property transfer tax.

(2 marks)

(b) Timmy Musonda imported a six (6) year old second hand Toyota Noah Station Wagon with an engine capacity of 3,200cc on 1 March 2023 from Dubai at a cost price of US\$10,400. He paid insurance charges of US\$1,800, freight charges of US\$3,500 and other incidental costs of US\$1,300 up to the Nakonde border post. The transport costs from Nakonde border to Lusaka were K7,550. The exchange rate quoted by his bank which he used to pay for the car was K18.20 per US\$1. However, the exchange rate approved by the Commissioner General was K18.60 per US\$1.

## **Required:**

- (i) State any four (4) types of goods which are prohibited from importation into Zambia. (2 marks)
- (ii) Calculate the total amount of import taxes paid at the Nakonde border post on the importation of the vehicle. (8 marks)

[Total: 25 Marks]

#### **QUESTION FIVE**

- (a) Explain the three (3) advantages and three (3) disadvantages of voluntary VAT registration. (6 marks)
- (b) Mabuku has been in business supplying hi-tech equipment to Telecommunication companies. Mabuku has identified Pollen Lwindi a South African resident specialised in hi-tech equipment production, to provide installation support to his clients in the near future. Currently, he uses Zambian specialists to provide installation support to the clients. Mabuku is registered for Value Added Tax (VAT), and his sales are all standard rated.

The following information relates to Mabuku's VAT return for the month of December 2023.

- (1) Standard-rated sales amounting to K2,000,000 were made during the month.
- (2) Equipment with a value of K100,000 was returned by customers during month of December 2023.
- (3) During the month Mabuku decided to sell second-hand furniture, which was surplus to his business requirements to Ben a non VAT registered for K35,000.
- (4) Standard-rated purchases amounted to K476,000. This figure includes K76,000 worth of equipment bought from a supplier who is not registered for VAT.
- (5) Operating expenses amounted to K250,000. These expenses are made up of business entertainment expenses of K65,000, irrecoverable debts of K38,000, expenses incurred on the domestic accommodation of directors amounting to K28,000 and other revenue expenses K119,000.
- (6) The irrecoverable debt expenses of K38,000 referred to in note (5) above are made up of two (2) invoices with the value of K23,000 and K15,000 which were due for payment on 15 November 2019 and on 1 January 2020 respectively. The invoices were written off on 1 December 2023.
- (7) On 30 December 2023 Mabuku purchased a motor car at a cost of K294,640 and office equipment at a cost of K157,760. Both figures are inclusive of VAT. The motor car is used for exclusively for business purposes.
- (8) Unless stated otherwise all of the above figures are exclusive of VAT.

## **Required:**

- (i) Explain the meaning of reverse VAT.
- (ii) Explain the VAT implications of engaging the South African resident to provide installation support services. (3 marks)
- (iii) List any five (5) conditions to be met for input VAT to be claimed by a trader.

(5 marks)

(iv) Calculate the amount of VAT payable by Mabuku for the month of December 2023. You should indicate by the use of a zero (0) all items on which VAT is not chargeable or recoverable. (9 marks)

[Total: 25 Marks]

## **END OF PAPER**

(2 marks)

# **DA10 TAXATION SUGGESTED SOLUTIONS**

## SOLUTION ONE

(a)	KAZUNGULA FARMS PLC		
COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 20			E TAX YEAR 2023 Capital allowance
	Implements, plant & Machinery	K	K
	Toyota Prado car		
	ITV b/f	720,000	
	W & T @20% of 1,200,000	<u>(240,000)</u>	240,000
	ITV c/f	<u>480,000</u>	
	Office equipment		
	ITV b/f	112,500	
	W & T @25% of 450,000	<u>(112,500)</u>	112,500
	ITV c/f	<u>Nil</u>	
	Ploughs		
	Cost	510.000	
	W & T @100% of 1,020,000	(510,000)	510,000
	ITV c/f	<u></u>	
	Irrigation equipment	260.000	
	COSL W & T @100%	(360,000)	360 000
	ITV c/f	<u>(300,000)</u> Nil	500,000
	Combine harvester	<u></u>	
	Cost	300,000	
	W & T @100%	<u>(300,000)</u>	300,000
	ITV c/f	<u>Nil</u>	
	Fuso truck		
	Cost	720.000	
	W & T @25%	(180,000)	180,000
	ITV c/f	540,000	
	Form Improvements		
	Faill Improvements		
	Dwelling houses		
	(Restricted to K100,000 x 4 x 100%)		400,000
	Fencina		
	$(K180,000 \times 100\%)$		180,000
			,
	Farm works		
	Clearing & stumping		122.000
	(K132,000 X 100%) Total capital allowancos		<u>132,000</u> 2 414 500
			2,414,300
(h)			

(b) KAZUNGULA FARMS PLC COMPUTATION OF TAX ADJUSTED FARMING PROFITS FOR THE TAX YEAR 2023

Κ

	Profit before tax		1,510,200
	Depreciation	640,200	
	Impairment loss	249,000	
	Increase in general provision	510,000	
	Free residential accommodation:		
	(K4,850,400 x 37.5%)	1,818,900	
	Recovery of loans from former employee	s 312,000	
	Penalty for late payment of tax	228,000	
	Entertaining suppliers	366,000	
	Entertaining customers	288,000	
	Canteen expenses	1,446,000	
	Personal-to-holder	<u>48,000</u>	
			<u>5,906,100</u>
	Less		7,416,300
	Less: Drefit on colo of land	240.000	
	Profit on sale of land	240,000	
	Royallies	120,000	
	Light to former employee recovered	120,000	
	Capital allowances (b)	90,000	
	Capital allowances (D)	2,414,500	(3.224.500)
	Adjusted farming profit		4 191 800
	Adjusted furning profit		1,191,000
(c)	KAZUNGULA FARMS PLC		
(0)	COMPANY INCOME TAX COMPUTATION	FOR THE TAX	YEAR 2023
			К
	Farming profit		4,191,800
	Non farming income		
	Royalties		<u>360,000</u>
	Total taxable income		<u>4,551,800</u>
	Company income tax		
	Farming income: K4 191 800 x 10%		419 180
	Non-farming income: K360,000 x 30%		108.000
	Income tax liability		527.180
	Less:		
	Provisional income tax paid		(354,822)
	WHT- royalties (K360,000 x 15%)		<u>(54,000)</u>
	Income tax payable		118,358

#### SOLUTION TWO

- (a) Income tax treatment of investment income received by Tafuna
  - (1) Bank deposit interest

Interest on bank deposit accounts received by individuals is subjected to withholding tax at a rate of 0% which is the final tax. Therefore, Tafuna will not pay any tax on the bank deposit interest.

(2) Dividends from ZX Ltd.

Dividends received from Zambian companies not listed on the Lusaka Securities Exchange (LuSE) are subjected to withholding tax at a rate of 15% which is the final tax. This means that there will be no further tax to be assessed on dividends. The withholding tax paid on dividends is: K30,600 x 15/85 = K5,400.

(3) Royalties

Royalties received by individuals is subjected to withholding tax at a rate of 15% which is not the final tax. This means that there will be a further assessment to be made on royalties. The withholding tax paid is:  $K51,750 \times 15/85 = K9,132$ .

(4) Interest on GRZ bonds

Interest on GRZ bonds received by individuals is subjected to withholding tax at a rate of 15% which is the final tax. Therefore, there will be no further tax assessment to be made. The withholding tax paid is:  $K8,500 \times 15/85 = K1,500$ .

. /

#### (b) TAFUNA'S

PERSONAL INCOME TAX COMPUTATION FOR TAX YEAR 2023

	ĸ	ĸ
Salary 10/12 x K480, 000)		400,000
Housing allowance (30% x K400, 000)		120,000
Fuel allowance (K3, 500 x 10)		35,000
Utility allownace (K2, 500X 10)		25,000
General purpose (K20, 000 x 10/12)		16,667
School fees for children		15.000
Leave pay		45,000
Reimbursement of medical expenses		0
Gratuity		0
Repatriation pay		0
Severance pay		0
Labour day award (cash & dining suite)		0
Investment income:		
Royalties (K51, 750x 100/85)		<u>60,882</u>
		717,549

0
0
0
0
(7,000)
( <u>22,400</u> )
<u>688,149</u>
0
4,800
7,560
218,006
230,366
(85,600)
<u>(9,132)</u>
<u>135,634</u>

## (a) COMPUTATION OF CAPITAL ALLOWANCES FOR THE TAX YEAR 2023

	K
New printer	
Wear & tear (K3,900 x 25%)	975
Store room	
Wear & tear (K13,200 x 2%)	264
Motor car	
Wear & tear (K80,000 x 20% x 25%)	4,000
Office furniture	
Wear & tear (K40,000 x 25%)	10,000
Office computer	
Wear & tear (K20,000 x 25%)	5,000
<u>Delivery van</u>	
Wear & tear (K110,000 x 25%)	<u>27,500</u>
Total capital allowances	<u>47,739</u>

## (b) SOKO'S

COMPUTATION OF TAXABLE PROFITS AND INCOME TAX PAYABLE FOR THE TAX YEAR 2023

	К	К
Net profit		268,100
Add:		
Wages & salaries (K24,000 - K18,000)	6,000	
Light & heat (2/3 x K31,500)	21,000	
Depreciation	45,000	
Rent & rates (15% x K77, 400)	11,610	
Entertaining clients	13,800	
Entertaining suppliers	16,500	
Loans to employee written off	10,200	
Motor car expenses (K27, 000 x 75%)	20,250	
Donation to a political party	600	
Donation to an unapproved charity	1,500	
Penalties for non-compliance	6,900	
Legal fees – tax investigation	1,950	
Purchase a new printer	3,900	
Private telephone expense (K20,100 X	1/3) 6,700	
Building a new store room	<u>13,200</u>	
		<u>179,110</u>
		447,210
Less:		
Dividends	6,800	
Royalties	15,300	
Capital allowances	( <u>47,739)</u>	
		<u>(69,839)</u>
Taxable income		<u>377,371</u>

(c)	SOKO	
	PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2023	3
	Business profits	377,371
	Investment income	
	Royalties (k15,300 x 100/85)	<u>18,000</u>
	Taxable income	<u>395,371</u>
	Income tax:	
	On first first 57,600 x 0%	0
	On Next 24,000 X 20%	4,800
	On Next 25,200 X 30%	7,560
	On Excess (K395,371 – K106,800) x 37.5%	<u>108,214</u>
		120,574
	Less:	
	WHT on royalties (K18,000 x 15%)	2,700
	Provisional income tax	<u>(79,114)</u>
	Income tax payable	38,760

#### **SOLUTION FOUR**

- (a) Property transfer tax
  - (i) Transfers to immediate family members
    - A member of the immediate family is any of the following; a spouse, own blood child, duly adopted child or step child.

Where a person transfers property to a member of the immediate family, the realized value of such property is the actual price received by the transferor, if any.

This means such transfers will be treated as having a realized value of nil if no price has been charged. As a result, when a person makes a gift of property to a member of the immediate family, PTT would not be payable.

- (ii) Property transfer tax implications
  - (1) The transfer of a freehold office building is chargeable to property transfer tax even though it was to the immediate member of the family because a consideration was paid by his son. Therefore, the realized value is K120,000.

Property transfer tax =  $K120,000 \times 5\% = K6,000$ 

(2) The transfer of a freehold warehouse is chargeable to PTT because the nephew is not an immediate family member. The realized value is therefore K230,000.

Property transfer tax =  $K230,000 \times 5\% = K11,500$ 

- (3) The transfer of a motor car has no realized value because PTT is not chargeable on movable properties or chattels. Therefore, no PTT would be charged on the transfer of the motor car.
- (4) The transfer of shares to is chargeable to PTT because the company is not listed on the LuSE. The realized value is therefore K90,000, being higher than both the nominal value and the actual proceeds received.
   Property transfer tax = K90,000 X 5% =K4,500
- (5) The transfer of shares in a company listed on the Lusaka Securities Exchange market has a realized value is nil and therefore no PTT is chargeable.
- (iii) The following documents are required for a refund of PTT:
  - (1) Original Tax receipt voucher
  - (2) Original Tax Clearance Certificate
  - (3) Original PTT returns
  - (4) Any proof that the transaction did not take place (e,g. confirmation from Registrars from Ministry of Lands or Local Authorities).
  - (5) Formal letter of sale from the vendor, or their legal representatives.

#### (b) Customs and excise duty

- (i) The following are some of the items prohibited from importation:
  - (1) Base or counterfeit coins
  - (2) Any goods which are indecent, obscene or objectionable
  - (3) Any goods which may tend to corrupt the morals of the inhabitants, or any class of the inhabitants of Zambia
  - (4) Any goods whose importation is prohibited by, or under the authority of any law

## (ii) <u>COMPUTATION OF VALUE FOR DUTY PURPOSES (VDP)</u>

	, ,	<u>-</u> \$
Purchase price		10,400
Insurance charges		1,800
Freight charges		3,500
Other incidental costs		<u>1,300</u>
CIF		<u>17,000</u>
VDP (K17,000 X K18.60)		<u>K316,200</u>
		-
	Value	laxes
	K	K
VDP	316,200	
Customs duty	<u>18,049</u>	18,049
	334,249	
Excise duty	<u>23,463</u>	23,463
	357,712	
VAT @ 16%	57,234	57,234
Surtax	2,000	2,000
	<u>416,946</u>	
Total import taxes paid		<u>100,746</u>

## SOLUTION FIVE

- (a) Advantages of VAT registration
  - (1) The trader will be able to reclaim input VAT on expenses as long as that input VAT is recoverable.
  - (2) The impression of a substantial business will be given since traders should only register if the turnover is substantial
  - (3) The business will compete well with other businesses which are registered for VAT in that their costs will not be distorted by being VAT inclusive.

Disadvantages of VAT registration

- (1) VAT registration results in increased administration. The traders administrative costs will rise as a result of registering for VAT purposes.
- (2) Non –registered customers who get supplies from the trader will have an increased cost.
- (3) Penalties will be charged if the trader fails to pay VAT or submit the VAT return.
- (b) Value added tax
  - (i) Reverse VAT is a transfer of liability to account for and pay VAT on imported services from the person making the supply (i.e. the supplier) to the person receiving the supply (i.e. the recipient).

It is levied on all imported services provided by a non-resident supplier where a tax agent has not been appointed.

This means that whenever services are imported into Zambia, the Zambian trader who has imported the services is required to account for and pay VAT on the imported services.

(ii) The implications of engaging Pollen Lwindi to provide installation support services are that Mabuku, as the recipient of the services, will be required to account for and pay VAT on the value of the services since the non-resident supplier has not appointed a tax agent.

Reverse VAT is calculated at a rate of 16% of the value of the services imported and its paid and accounted for as output VAT.

Mabuku will not be able to claim reverse VAT as input VAT as this this VAT is irrecoverable. This can be avoided by the non-resident supplier appointing a tax agent in Zambia who will be invoicing the recipient of the services in Zambia.

- (iii) The following are the conditions to be met for input VAT to be recoverable:
  - (1) The trader should have been registered for VAT at the time the supply was made.
  - (2) The supply should have been made to a taxable person making the claim
  - (3) The person making the claim must use the goods or services for business. All personal or private expenses do not qualify.
  - (4) The input VAT to be claimed should be one which is recoverable.
  - (5) The input VAT cliam should be supported by evidence which is normally a tax invoice.
  - (6) The input VAT should be one which is accurately calculated.

(iv)	VAT payable for the year ended 31 December	er 2023	
. ,		K	K
	Output VAT		
	Sales: (K2,000,000 x 16%)		320,000
	Sales returns (K100,000 x 16%)		(16,000)
	Sale of furniture (K35,000 x 16%)		<u>5,600</u>
			309,600
	Input VAT		
	Purchases (K476,000 – K76,000) x 16%	64,000	
	Business entertainment	0	
	Irrecoverable debts		
	(K15,000 +23,000) x 16%	6,080	
	Staff refreshments	0	
	Other revenue expenses		
	(K119,000 x 16%)	19,040	
	Motor car	0	
	Office equipment (K157,760 x 4/29)	<u>21,760</u>	
			<u>(110,880)</u>
	VAT payable		<u>198,720</u>

# **END OF SOLUTIONS**


## DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

## LEVEL TWO

## DA 11: PRINCIPLES OF AUDITING

## THURSDAY 15 JUNE 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.
- 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 - (COMPULSORY)**

Easy Computers Ltd refurbishes old computers that are imported from a range of suppliers. As part of the interim audit work, you have been tasked to test the procurement and purchases systems.

Easy Computers Ltd has four (4) stores each managed by a Stores Manager who periodically reviews inventory levels. As the number of computer units reduces to minimum levels, an alert e-mail is sent to the procurement department which then initiates purchase orders. When the computers are received, the import documents are checked against the Goods Received Note to ensure that they agree. This is done using a computerized system which is able to generate a special number used to identify the exact import order that was sent to the supplier.

The Stores Clerk confirms order and receipts physically to check whether there are any discrepancies. If discrepancies are noted, then the information is forwarded to the supplier in good time for amendments before invoices are received. Easy Computers Ltd maintains a computerized stores system and the levels of inventory are updated electronically.

When payments are due, suppliers send an invoice via Data Interchange Information systems together with the statement of account. On receipt of the invoice, the accounts clerk prints out a copy of the Goods Received Note and compares it with the invoice. Once these are agreed, a copy of the invoice together with a statement of account is sent to the accounts department so that payment can be processed.

Management at Easy Computers Ltd has doubts on the outstanding balance as submitted to the company by one (1) of the suppliers. Consequently, Easy Computers Ltd disputed the balance from this supplier. You intended to seek confirmations from accounts payables but management of Easy Computers Ltd denied you permission to do this.

#### **Required:**

- (a) Explain five (5) audit procedures that can be used to test the purchasing system of Easy Computers Ltd.'s system. (5 marks)
- (b) Suggest the response that should be taken in view of management's refusal to authorize a request for payables confirmation. (4 marks)
- (c) Explain four (4) reasons why differences (exceptions) can exist between the stated balance on request from Easy Computers Ltd.'s and supplier's balance. (4 marks)
- (d) Describe the control procedures on payables that you would expect to have been put in place by management in Easy Computers Ltd. (4 marks)
- (e) Explain four (4) disadvantages of using Computer Audited Assisted Techniques (CAATs) during the audit of Easy Computer Ltd. (4 marks)
- (f) List and explain any four (4) factors that should be considered when planning attendance for stock taking of Easy Computers Ltd. (4 marks)

[Total: 25 Marks]

## **QUESTION TWO – (COMPULSORY)**

Bentos Ltd is a company that manufactures handmade jewelry for high income customers and celebrities. Some of the jewelry is sold in up market stores and luxury resorts. The crafting of custom made jewelry begins when a customer sends a picture of the engraving they want to appear on the jewelry.

The business is managed by Mr. Tembo the Director and his nephew. It was previously owned by his late father, a seasoned jewelry craftsman and management of the business was given to Mr. Tembo upon the demise of his father. Unlike his father, Mr. Tembo is a teacher by profession with no prior experience in the jewelry business. Most of the jewelry crafting is sub-contracted to trained jewelry craftsmen while finishing, polishing and engraving of the customer's preferred picture is done by Bentos Ltd. The sub-contractors often do not complete crafting of jewelry on time and in most cases, they are behind schedule by a month.

Tembo works on part time basis and spends most of his time supervising his private schools and other business ventures and only visits the jewelry shop once a week to look at financial statements prepared by the accounting staff. The company does not have a Finance Director. Its credit policy requires customers to pay 60% up front and the final payment is made upon the delivery of the jewelry.

Bentos Ltd counts its inventory after the year end. The company uses standard costs that were computed three (3) years ago to value its inventory. Due to an increase in demand for its handmade jewelry, the company acquired an old building to be used as showroom. The building was refurbished with state of the art fittings in order to provide a lifetime shopping experience to its esteemed customers. The refurbishment was made possible through a secured loan repayable within a year. One (1) of the conditions of the loan was that Bentos Ltd was to pay 25% of its sales in every quarter towards the loan. Further, the company was not expected to dispose of any equipment without a written consent of the bank.

Bentos Ltd acquired a computerized accounting package which is custom made and was expected to reduce errors and produce financial statements on a timely basis.

Your firm, Chello & Co, has been appointed as auditor for Bentos Ltd. The audit is at the planning stage. In order to have a thorough understanding of internal controls, among other means of recording internal controls that can be used are Internal Control Questionnaires (ICQs) and Internal Control Evaluation Questionnaires(ICEQs).Despite the advantages of using ICQs and ICEQs , there a number of disadvantages of using ICQs and ICEQs which your firm should be aware of.

#### **Required:**

- (a) Identify and explain five (5) audit risks arising at the planning stage of the audit of the financial statements of Bentos Ltd. (10 marks)
- (b) For each risk identified in (a) above, describe a suitable audit response. (5 marks)
- (c) Explain the meaning of Information Technology audits and state one (1) example of control in the acquired computerized accounting package acquired by Bentos Ltd. (2 marks)
- (d) Explain two (2) disadvantages of using ICQs and ICEQs when recording internal control systems for Bentos Ltd. (6 marks)

(e) State four (4) examples of information that the auditor needs to gain an understanding of at the planning stage of the audit.
 (2 marks)
 [Total: 25 Marks]

## **SECTION B**

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

## Attempt TWO (2) questions.

## **QUESTION THREE**

Kangaroo Ltd is a family owned company that sells beds, mattresses and other bedroom furniture. For a long period of time the company has not put in place an internal audit department. This has led to a duplication of roles for staff in the accounting function that have been called upon to perform internal audit work in addition to their work. There have been recommendations by the Finance Director that an internal audit department be established in order to help safeguard organisational assets. He argues that additional benefits could arise in having an internal audit department because the external auditors may rely on the work of internal auditors in determining the extent of audit work to be performed.

Your firm is auditor of Kangaroo Ltd and it is considering relying on the internal controls in designing work that should be done. The Audit Manager requested you to briefly explain the elements of internal controls as described in ISA 315(Revised) *Identifying and assessing the risks of material misstatements through understanding the entity and its environment* so that an Audit Assistant may be assigned to perform audit procedures on assessing internal controls.

Inventory is a material figure in the financial statements of Kangaroo Ltd. The company is considering one (1) of three (3) options as follows to determine the value of closing inventory:

- 1. Counting inventory at the end of the year.
- 2. Counting inventory before or after the end of the year
- 3. Counting inventory on a continuous basis or perpetual inventory basis.

In case the company uses perpetual inventory, auditors will need to conduct a verification of such a system used by management regarding inventory quantities and values of inventory found at the end of the year.

#### Description of the inventory system

The company's year-end is 31 December and Bentos Ltd has opted for option 1 and the inventory count will take place at the year-end. The company maintains up-to-date computerized inventory records.

When the company sells goods, a deposit is received from the customer and customers are invoiced for the balance after the delivery. Some goods that are in inventory at the year-end have been paid for in full. Customers who pay by cash or credit cards are allowed to collect goods immediately.

Staff at the company's warehouse and shop will conduct the year-end inventory count because they are familiar with inventory under their control. Being the festive season, management has decided that business will not close during inventory count because the company may lose on sales. Supervisors have been advised to monitor stock movements during stock-take.

#### The following inventory count instructions have been provided to staff at Kangaroo Ltd.

1. The count will be supervised by Mr. Lengwe, the Inventory Controller. All staff will be provided with pre-printed, pre-numbered inventory counting sheets that are produced by the

computerized system. Mr. Lengwe, will ensure that all sheets are issued, and collected at the end of the count.

- 2. Counters will work on their own, because there is insufficient staff to work in pairs, but they will be supervised by Mr. Lengwe and Mr. Zulu, an experienced shop manager will check on the work performed by counters. Staff will count inventory they are mostly familiar with in order to ensure that the count is completed as quickly and efficiently as possible.
- 3. Any inventory that is known to be old, slow moving or already sold will be highlighted on the inventory sheets. Staff is required to highlight any inventory that appears to be soiled or damaged.
- 4. All inventory items counted will have a piece of paper attached to them that will show that they have been counted. All inventory that has been delivered to customers but that has not yet been paid for in full will be added back to the inventory quantities by Mr. Lengwe.

#### **Required:**

- (a) (i) Explain five (5) matters that statutory auditors need to verify when Management uses a perpetual inventory stem to value inventory. (5 marks)
  - (ii) Explain five (5) audit procedures that are performed as follow up procedures after an inventory count. (5 marks)
- (b) (i) Identify and explain five (5) weaknesses in the planned inventory count of Kangaroo Ltd. (5 marks)
  - (ii) Recommend action to be taken to remedy the weaknesses in (b) (i) above. (5 marks)
- (c) State and explain the five (5) elements of internal controls. (5 marks) [Total: 25 Marks]

## **QUESTION FOUR**

(a) Quants Chartered Accountants invited applications from school leavers who are interested in joining the firm as Trainee Auditors. The successful applicants will undergo induction to be conducted by the Audit Training Manager. Among other issues that will be discussed during induction are the five (5) fundamental ethical principles and the elements of assurance engagements.

#### **Required:**

- (i) Explain, giving an example in each case, the five (5) Fundamental Ethical Principles. (10 marks)
- (ii) Explain to the Trainee Auditors the elements of an assurance engagement.

(5 marks)

(b) Cheetah Ltd is a private limited company that deals in hardware. The company has grown in size with more than ten (10) new branches that were opened in the past six (6) years. Each branch is managed by a Branch Manager with two (2) sales staff and one (1) Accounts

Assistant. The company operates a computerized accounting system. The Head Office is managed by a General Manager, with a Chief Accountant who supervises the Branch Accounts Assistants.

Despite the growth and complex business activities the company has been experiencing, there has been no independent internal audit department. This has led to excessive work for the Chief Accountant who usually relies on the integrity of individual accountants at branch level.

In order to increase its market share, Cheetah Ltd entered into an agreement with several distributors who are allowed to sell its hardware on commission basis. This is only done on condition that sales agents sell in areas where Cheetah Ltd has not established a store.

Last year, inventory worth K4,000 was lost through suspected fraud. This involved various hardware items that were sold at different locations but the money was not accounted for prompting the Chief Accountant to recommend that the company establishes an independent internal audit department. However, management contended that this will be a costly activity and that they already have an accounts function which can conduct periodic audits as well in order to cut down on costs. According to management, it would rather outsource internal audit services whereby it can ask for services as and when they are required. Further, management at Cheetah Limited is of the view that external auditors are responsible for ensuring that internal controls are functioning properly and they should check all the accounting records when they are conducting audits.

In obtaining evidence on the receivables balances, the auditors of Cheetah Ltd are considering direct confirmations of the receivables using the negative method of confirmation.

#### **Required:**

- (i) Explain three (3) differences between internal and external auditors. (6 marks)
- (ii) Explain four (4) factors that should be present for an external auditor to use a negative confirmation. (4 marks)

#### [Total: 25 Marks]

#### **QUESTION FIVE**

(a) You are an Audit Senior in Mwenzo, a firm of Chartered Accountants and have been tasked to review the current audit files before finalizing the audit reports. The following extracts contain draft opinions that were given in relation to misstatements from four (4) of your firm's clients.

#### Client 1

Antelope Ltd is a private Company in the Food and Beverage Industry. The sales revenue was understated by K60, 000. The Annual sales amounted to K500,000. The matter was assessed as material but not pervasive. The draft opinion suggested is an adverse opinion.

#### Client 2

Zebra Micro-Fin (Z) Limited is a Micro-lending Institution. A purchase invoice relating to a computer costing K7,000 which was bought during the year, was omitted from the books of accounts but later discovered during the audit. The matter was considered material and pervasive. The total value of net assets for the year ended 31 December 2020, is K240,000. The auditor in charge suggested that the appropriate opinion is a disclaimer of opinion.

## Client 3

Ostrich Ltd is a company that manages twenty-five (25) grain storage facilities on behalf of the government. The management at Ostrich Ltd refused the auditors to conduct audits in eighteen (18) of the twenty five(25) storage facilities stating that there were little accounting activities and only allowed them to collect audit evidence from seven (7) storage facilities. The matter was considered material and pervasive due to insufficient audit evidence. The suggested opinion by the auditor is a qualified opinion.

#### Client 4

Lion Enterprises Ltd prepared all its financial statements that included Profit or loss account, the Statement of Financial Position and the Statement of Cash flows and Changes in Equity, in accordance with International Accounting Standards in all material respects. The auditor concerned expressed an unmodified audit opinion.

#### **Required:**

Comment on whether the draft audit opinions in respect of each of the four (4) clients were appropriate or not, and recommend, where necessary, an appropriate audit opinion.

(12 marks)

(b) Reedbuck Ltd is a Small Enterprise in the construction sector. It has five (5) Directors. The Board of Directors consists of Jeremy who is the founder member of the company and four (4) others drawn from within the company. Jeremy is the Managing Director and Chairman of the board. He is the only qualified person from Engineering Institute. Currently there is no Director with financial background. Jeremy recently attended a workshop at the invitation of the Institute of Directors. The purpose of the workshop was to share new ideas relating to good corporate governance practices.

Upon returning from the workshop, Jeremy organized an in-house training for other directors and proposed some changes to the board structure. Among the proposals made, was the inclusion of Non-Executive Directors (NEDs) on the board and the need for separating the roles of senior Directors. However, the proposal was not accepted by the other Directors who felt the company is still small stating the roles of NEDs will be conflicting with those of full time directors. The other proposal was the formation of an audit committee on the board. This proposal was equally turned down as the other directors felt there was no need for such a committee as it will just increase the cost of operations.

The country's construction sector has not been performing well. This has not spared Reedbuck Ltd as most of its credit customers have not been paying. This has worsened its profitability and liquidity positions. As a result, the company has been struggling to meet most of its financial obligations such pension contributions and tax obligations including failing to recruit qualified accounts staff. Further, the company has one (1) member of staff with limited technical knowledge with regards to computer information systems. Most of the work related to information technology is outsourced.

Due to the poor performance of the construction sector, Reedbuck Ltd. is considering valuing its inventory at a value less than its cost.

## **Required:**

- (i) Identify two (2) weaknesses in the governance structure of Reedbuck Ltd and explain how to overcome the weaknesses identified. (4 marks)
- (ii) List four (4) factors that can cause Reedbuck Ltd. to record its inventory at a value below cost. (4 marks)
- (iii) Explain five (5) challenges that Reedbuck Ltd will face when developing governance structures and systems of internal controls. (5 marks)

[Total: 25 Marks]

## **END OF PAPER**

## DA 11 PRINCIPLES OF AUDITING SUGGESTED SOLUTIONS

#### SOLUTION ONE

- (a) The audit procedures for testing the purchases system are:
  - (i) Review the correspondence between the Stores Manager's details with that from the information stored on computer files.
  - (ii) Obtain the import order documentation and match with the goods received note are matching with the updated inventory quantities.
  - (iii) Obtain a purchase invoice, confirm is the details on the computer data base
  - (iv) Obtain the total purchases amount and compare with the amount posted to the ledger are agreeing.
  - (v) Obtain a sample of individual supplier amounts on the invoice and trace these to the balances to confirm if these are agreeing.
- (b) The following responses can be taken by external auditors if management of Easy Computers Ltd refuses to grant them permission to contact suppliers:
  - (i) Auditors will have to find out the reason why management is refusing to grant the request. If management gives the reason then, obtain and review related audit evidence.
  - (ii) External auditor shall also evaluate the refusal by Easy Computers Ltd.'s management of the risk assessment with regards to misstatements.
  - (iii) Where alternative audit procedures exist, auditors need to perform such audit procedures in order to ascertain validity of the refusal by management.
  - (iv) Auditors will also need to communicate with those charged with governance in case they completely fail to obtain audit evidence with regards to supplier's confirmations.
  - (v) Re-valuate the integrity of management and the reliability of other evidence provided by management.
  - (vi) Consider the impact of the refusal on the audit report and opinion.
  - (vii) Goods in transit and not received by Easy Computer's Ltd will have been accounted for by the suppliers and remain unaccounted for by Easy Computer's Ltd at the year end.
- (c) The four possible reasons for disputed balance are:
  - (i) Disputes- a dispute between clients over the amount in question. Easy Computers Ltd needs to make an allowance for this amount.
  - (ii) The dates when the suppliers' close the books of accounts could be difference from those of Easy Computers Ltd.
  - (iii) It is also possible that the difference is caused by timing differences. The time Easy Computer Ltd is sending the payment could about the same time it received the invoices.
  - (iv) Teaming and lading. This occurs where suppliers who are owed money may have their accounts closed by payables clerks at Easy Computers Ltd who may hide the actual cash that was intended to pay the suppliers.
  - (v) It can also happen that the payments for suppliers have been paid into wrong and similar accounts of suppliers.

- (d) The following control procedures are expected with regards to Easy Computers Ltd.'s payables;
  - (i) All the imports of computers must have been authorized by senior responsible managers.
  - (ii) The personnel involved in the requisitioning of computers should not be the ones to place orders and make the payments for such computers. Duties should be segregated.
  - (iii) The Goods Received Notes should match with the invoices from the suppliers of Easy Computers Ltd.
  - (iv) All supplier invoices should be recorded promptly.
  - (v) Reconciliations of payables control balances should be made with a list of supplier's balances.
  - (vi) Regular monthly reconciliations between the payables ledger and the payables control account which should be independently checked.
- (e) The following are the disadvantages of CAATs:
  - (i) The acquisition of CAATs can be expensive for a small audit firm. It also takes time to set up CAATs. Therefore the auditor has to set aside some amount for capital expenditure specifically for CAATs.
  - (ii) The client should be ready to spend some money on training audit staff .This could be done by conducting an in-house training by inviting an expert outside the audit firm such as a specialised training provider
  - (iii) Compatibility –the use of CAATs does not mean it will fit every client accounting system. Others may be incompatible.
  - (iv) When CAATs are used on the client system , there is a possibility of the audit team members having access to confidential client data .It is also possible that client's data can be corrupted and even lost during an audit when CAATs are being used.
- (f) The following are the factors to consider when planning an inventory attendance:
  - (i) Risk of material misstatements auditors should take into account the extent of material misstatements relating to inventory.
  - (ii) Controls internal controls that management has put in place relating inventory should be taken into account when planning an inventory attendance.
  - (iii) Counting instructions –there will be a need to consider the adequacy of instructions to given to counters.
  - (iv) Timing of the count-it will be important to determine the time and allocation of the count of inventory.
  - (v) Inventory counting system-Auditors should take into account whether the client maintains perpetual or yearend inventory count.
  - (vi) Establish whether there will be need to use the services of an auditor expert.
  - (v) Determine the value of inventory at the other locations and decide which locations the inventory count will be attended.

## SOLUTION TWO

(a) Audit risk	Explanation	(b) Audit response
1. Chello & Co. as new auditors.	Chello & Co .has just been appointed as auditors of Bentos. There is possibility of the company not having sufficient knowledge of Bentos operations. This will increase detection risk as the audit form will not be able to identify significant transactions that have a bearing on the financial statements,	External auditors should adopt procedures that consider how opening balances are brought forward. Review previous working papers and consider performing additional procedures on opening balances
2. Directors working on part- time (Mr. Tembo).	This will result in the internal controls being weak as there will be no adequate oversight.	There is a need for the Managing Directors to get involved and appoint a Finance Director to direct the accounts department with regards to financial statements.
3. Customer advance payment.	This could result in an increase in sales revenue when deliveries are not yet made.	Discuss with management at what time the entity recognises its revenue, Examine deposit documents and posting to the ledger to verify whether advance payments are included in the sales revenue.
4. Using old standard cost to value inventory.	The valuation of inventory will make the inventory value to be misstated.	Collect a sample of values for material in order to compare actual prices on invoices. Evaluate any potential differences and assess any impact on the value of inventory in the financial statements.
5. Refurbishing of old warehouse.	This will result in the misclassification of expenditure as either revenue or capital expenditure.	Examine a sample of invoices for capitalized amounts and confirm that they relate to capital expenditure and not revenue expenditure. Also examine a sample of revenue expenditure in the repairs account and confirm correctly classified as such.
6. Loan acquisition.	The loan has covenants which Bentos has to abide by. Failure to follow these covenants can result in loss of its valuable assets.	Obtain and review covenants for any breaches. If there have been any breaches, an assessment should be made

		whether the bank will enforce
		covenants.
7. Appointed auditors for the first time	There is a risk that opening balances may be misstated resulting in the current year financial statements being misstated on account that the prior year financial statements were audited by different auditors.	Perform audit procedures for opening balances and look out for evidence in the current year related to opening balances.
8. New audit	Being the first time that the firm will be auditing this client, detection risk is high in that the audit team may not be experienced enough to detect material misstatements.	Close supervision of the audit team by senior members in the firm and emphasis to the audit team to apply professional skepticism throughout the audit.

(c) An information technology audit is a type of audit in which the auditor performs procedures with a view to test the controls in the specific areas of the business.

Examples of controls being in a computerized system are the use of passwords and authorization of data for processing.

- (d)(i) The following are the disadvantages of using ICQs:
  - ICQs need to be drafted properly in order for them to be properly understood by the users who are auditors. If they are not drafted properly, there is a chance of being misinterpreted.
  - In companies that are big and complex, there is a possibility of recording all internal controls regardless of how important they can be. It is therefore possible that even internal control of little use can be recorded.
  - Most of the business activities are predictable. However, there certain instances that transactions that are one-off happen and they are not expected.
  - (ii) Disadvantages of ICEQs are:
    - Not all transactions are of value and significant in nature. Using ICQEs, it will be difficult to tell the relative importance of internals from the answers. This is because some of the answers are in form of either 'NO' or 'YES'. The degree of significance of one NO maybe not be distinguished from another NO and vice-versa.
    - Not all clients would like to give out accurate information. Most of them would like to be seen to be doing something concerning internal controls. Therefore, there is a possibility of them giving the auditor volumes of controls more than what is actually obtaining in the company.
- (e) Examples of information that can help external auditors to gain an understanding of the entity and its environment:
  - Industry data relating to the entity
  - The product manufactured by the client
  - The accounting system being used by the entity
  - o Internal controls
  - Nature of the entity and its operations

- Company objectives and strategies
- Laws and regulations relating to the industry

#### SOLUTION THREE

- (a) (i) External auditors need to verify the following in case management uses perpetual inventory count system:
  - $\circ~$  To verify whether management and staff at Kangaroo Ltd count inventory lines at least once in a year.
  - To verify whether management at Kangaroo Ltd have adequate documentation relating to inventory which are up date.
  - External auditors for Kangaroo Ltd need to verify whether management has applied satisfactory inventory count policies for testing and counting. There will be a need to confirm if inventory counting instructions are robust just like those used for year-end inventory counts
  - In case of any material differences, auditors will need to document and any discrepancies should be corrected. The corrections need to be done by a manager who is not involved in inventory stock taking.
  - To confirm if there are some slow moving goods that could have a value above its cost or recoverable value. Such inventories could be slow moving inventory that will require to be written-off by management at Kangaroo Ltd.
  - (ii) The following are follow up procedures after inventory count:
    - $\circ$   $\;$  Auditor shall test count and trace the items that were test counted.
    - Obtain inventory count records and observe whether staff counting inventory at Kangaroo Ltd have been counting all items of inventory.
    - Obtain all supporting documents to consider whether and confirm if all final inventory sheets are duly supported
    - Obtain the details of the last serial numbers of Goods received notes and goods dispatch notes by stores staff at Kangaroo Ltd and take note the dates to ensure cut-off was done correctly.
    - Obtain all confirmations from third parties of Kangaroo Ltd and review all of them.
    - Obtain a schedule of all calculated inventory to consider whether it has been done correctly.
    - If there any discrepancies and queries, these must be forwarded to management at Kangaroo Ltd for clarification.

- (b) The following are weaknesses and recommendations:
  - (i)

(ii)

Waaknassas	Commont	Decommondations
		Recommendations
do counts.	Having staff involved in the custody of inventory do the counts could result in falsification of the counts in order to conceal any fraud that may have taken place.	in the custody of inventory should be part of those to do the counting of inventory.
2. Counts by one person.	Staff working on their own during the count doing both functions of counting and recording on the inventory sheets could result in errors not being detected. Such could result in a misstatement of the inventory value.	Counters should be in pairs of at least two people. One will do the count and the other record on the inventory sheet.
3. Lack of segregation of duties	There is too much responsibility concentrated in the hands of Mr. Lengwe. He is responsible for the assets (inventory) , the records , the staff and the adjustments to the records	There is a need to segregate roles of the personnel. Understandably so being a family business, it will be important to try segregating duties as this will then ensure proper existence and occurrence relating to inventory counts
4. No closure on day of inventory count.	The decision by management that business should open on the day of the inventory count means that the count will take place when sales are also taking place. Movements of goods in and out could result in cut off problems and also incorrect counts which could result in a misstatement of the year-end inventory.	Management should reverse the decision to open for business on the day of inventory count and close so that no movements of goods in and out take place.
5. Adding back inventory	The add-back of inventory delivered but not paid for is not correct. Sales would have taken place and property to such inventory is in the customers and Kangaroo Ltd has no rights to this.	It is important that inventory which delivered but not paid for should not be added back because this inventory belongs to the customers.

## (c) The following are the elements of internal controls:

- Control environment-this includes the seriousness, awareness and actions of those charged with governance and management. Internal controls can only operate if those charged with governance attach a strong willingness to maintain effective internal controls. It is within a strong control environment in which management at Kangaroo Ltd needs to exhibit a culture of honesty and ethical behavior.
- Entity's risk assessment process this is a process that is in place by management to deal with risks in an entity. The auditor needs to obtain an understanding of whether management has a process for identifying business risks that can prevent the company from achieving its aims and objectives and estimating the impact of such risks. It is also important that auditor assess whether the entity has a process that can assess the possibility of the risk materializing and then deciding on what actions to deal with those significant risks.

#### • Information system relevant to financial reporting-

Financial reports are prepared from a computerised financial information system. Therefore the integrity of such a system is important and if not, then it casts doubts on the integrity of the financial statements. This element includes procedures and records that help to initiate a transaction, record it and prepare reports for the company.

- **Control activities**-these are practical steps management put in place in order to ensure that internal controls are actualized. Control activities include authorisation, approval and control documents, control over computerised applications, checking arithmetic accuracy of records and reconciliations and segregation of duties.
- **Monitoring activities** –this is a process of ensuring controls and objectives are functioning properly. It includes the monitoring of controls regularly and putting in place measures that can correct the situation when controls are not effective.

#### SOLUTION FOUR

(a) (i) The following are the definitions and examples of professional ethics to be explained to Audit Trainees during induction.

As public accountants, auditors are expected to abide by a set of ethics that shape their profession. The five fundamental ethical principles that underpin professional conduct as public accountants are:

1. **Integrity** –the principle states that accountants are expected to be honest and straight forward as they carry out their duties. Public accountants are not expected to be dishonest or being crooked as they carry out their accounting duties.

For example an accountant is not expected to falsify accounting records for his or her personal advantages or even steal company money.

- 2. **Objectivity**-the principle states that accountants are not expected to show or promote a biased position when faced with a situation that requires them to exercise judgment such as expressing an opinion on particular audit evidence. For instance an accountant should not promote financial interest of their own or a certain group of shareholders at the expense of other. They are expected to be as fair as possible.
- 3. **Professional behavior** –as public accountants, they are expected to show good behavior during and off work that does not discredit or put the profession into disrepute.

For example a public accountant engaging themselves in fights or disputes that contradicts their professional standing.

- 4. Confidentiality –accountants do come across privileged information that belongs to the client or employer which may be deemed confidential. They are not expected to disclose this information to any other third party without the consent of the client or employer. For example, auditors may come across trade secrets of a client, they are not supposed to pass on such information to competitors of the client company.
- 5. Professional skills and care-Auditors are professionals who are engaged to conduct audits due to the accounting and audit skills they have acquired. It is unethical for auditors to solicit or acquire work for which they are not qualified to do so. There is a standard procedure for one to qualify. This involves training and qualification and a minimum number of years for one to provide assurance services to individuals and companies.

For example a trainee accountant who has not met minimum qualifying standards, he or she cannot obtain work and purports to be a qualified auditor.

- (ii) The elements of an assurance engagement:
  - 1. Suitable Criteria- this is the standard that is used in order to judge a particular position. It consist measurements that are used to come to a conclusion. For example criteria used in order to arrive at an audit opinion.
  - 2. An assurance report this is the expected outcome of an audit that includes the opinion on the financial statements.
  - 3. Evidence –audit evidence consist of facts about client financial information in form of source documents, financial statements and contract documents.
  - 4. A Subject matter- this relates to the subject matter under investigations. This refers to the financial statements prepared by management and are subject of the engagement for the auditors to perform audit procedures and form an opinion.
  - 5. A Three party relationship-this involves the management (preparer), auditor (assurer), and the shareholders (principal).

Factor	Internal auditor	External auditor	
Factor			
Objectives	The purpose is to add value	The main aim is to enable	
	and make the company	auditors to express an audit	
	operations efficiently and	opinion on the financial	
	effective.	statements of the client	
Scope of work	The work is internal in nature	The work relates clients	
	relating to the company's	transactions, document	
	activities.	verifications and financial	
	statements		
Reporting	They are regarded as	s They report to shareholders	
	members of staff and report	who usually are the appoint	
	to management them		
Deletienskin			
Relationship	They are members of staff	They are independence of the	
	but internal auditors can be	company and its	
	outsourced. management.		
Planning and	Their work is long term in	They carry out audits in order	
collection of	nature and compliments	to ascertain truthfulness and	
evidence	corporate strategies .Their	fairness. They also set	
	work follow management	materiality levels and often	
	roquiroments and the work is	use rick based appreach	
	not risk based	during the audit.	

(b) (i)

- (ii) The following factors should be present negative confirmation to be used:
  - The clients should have a strict internal control system which can reduce risks to an acceptable low level.
  - For a negative confirmation to be used, external auditors should have obtained adequate audit evidence regarding relevant internal controls.
  - It is expected that there will not be much difference between what the receivable will state and what the clients balance will be.
  - There are certain times when customers would refuse to reply. Therefore when using the negative confirmation, the auditor assumes that there are no reasons for them to refuse to comply with the request.
  - The sample of selected requests big and that account balances are more or less the same.

## SOLUTION FIVE

(a)

Client	Appropriateness of draft audit opinion	Recommended audit opinion
Client 1- Antelope	The adverse opinion that had been expressed was inappropriate. This is due to the fact that an adverse opinion can only be used when the matter is both material and pervasive.	The appropriate audit opinion in this case should be a qualified opinion as the matter is material but not pervasive.
Client 2- <b>Zebra</b>	A disclaimer of opinion that had been given was inappropriate. This is due to the fact that the matter is both material and pervasive. Disclaimer opinion can only be given when the matter is both material and pervasive due to insufficient audit evidence.	The appropriate audit opinion is an adverse opinion as the matter is both material and pervasive.
Client 3- Ostrich	A qualified opinion that has been given is not appropriate. This is due to the fact that there's insufficient audit evidence and the matter is both pervasive and material.	The appropriate audit opinion should have been a disclaimer in the given situation.
Client 4- Lion	Unmodified opinion that has been given is appropriate. Unmodified audit opinion is given when the financial statement shows a true and fair view, in all material respect in accordance with acceptable reporting framework.	Unmodified audit opinion that was given was appropriate audit opinion and no other recommendation is required.

# (b) (i)

weakness number 1	Explanation of how to overcome the
Good Corporate governance requires	weakness
the separation of roles especially that of	There is a need for Jeremy to relinquish one
the Managing Director Chief Executive	position in order to allow for accountability and
Officer and the chairman. This	effective operations and Board level. He
guarantees accountability and	cannot be the chairman and CEO. There is a
transparency as well. This is not the	possibility of him intimidating other Board
case as Jeremy is both a Managing	members and rubber stumping of his decisions
Director and a chairman.	
Weakness number 2	The other board members should allow for an
There are no NEDs on the Board of	inclusion of NEDs on the Board. This will
Directors. This will lead to lack of	enhance variety and exchange of different
independence and objectivity in the	ideas and independence / integrity of board
manner board decisions are made.	members.
Therefore checks and balances will be	
lacking and this may lead to poor and	
biased decisions at board level that may	
not be in the interest of shareholders.	

- (ii) The following factors can make Reedbuck to record its inventory below its cost:
  - $\circ$   $\,$  When the cost of inventories rising or there is reduction in the selling price of the goods.
  - $\circ$   $\;$  When the condition of the inventory has greatly worsened from bad to worse.
  - Generally the products cannot be sold at an open market and Reedbuck fears that it will sell the products at a loss.
  - $\circ$   $\,$  When Reedbuck has made poor estimation in the cost of production or purchasing of its products.
- (iii) The following are the challenges that Reedbuck Company Limited will face when developing governance structures and systems of internal controls:
  - Reedbuck is a small company which is experiencing financial difficulties. It will be difficult for the company to have enough financial resources to hire qualified accounting personnel in order to effect proper segregation of duties with regards to accounting.
  - Jeremy is likely to dominate most of activities and can override internal controls.
  - The size of management at Reedbuck is small which entails that they will have a lot of responsibilities which can make them spend less time on accounting and financial reporting.
  - The company has no directors with knowledge of accounting and reporting. This will compromise the integrity of the accounting department in as far as effective internal controls and financial reporting is concerned.
  - Effective controls over computerised information system will be compromised due to the lack of in-depth technical knowledge by staff in IT.

## **END OF SOLUTIONS**



#### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

#### LEVEL TWO

## DA 12: GOVERNANCE AND CORPORATE LAW

#### FRIDAY 16 JUNE 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: There are two (2) compulsory questions. Section B: There are three (3) questions. Attempt any two (2) questions.

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

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

## SECTION A - TWO (2) COMPULSORY QUESTIONS

## Attempt BOTH questions in this section. <u>QUESTION ONE</u>

It is believed that the bottled mineral water industry is very profitable in Zambia due to extremely high temperatures. However, Serenity Ltd has not made a profit since it was incorporated in 2019. Sampa a shareholder in the company and holds 36% shares is convinced that Serenity Ltd has not made a profit because it is being mismanaged by the directors Charles and Mabvuto. Sampa believes that if Serenity Ltd was run by other directors it would make a profit commensurate with other profitable mineral water businesses. Sampa decides that the best way forward is to vote Charles and Mabvuto out of office as directors and appoint directors who are more capable of running the company at a profit than the two. To put his plan into action Sampa starts to buy up shares from the other investors in the company. Charles and Mabvuto are approached by one of the private investors who explained that Sampa has offered to purchase his shares and is planning to vote Charles and Mabvuto out of office.

Charles and Mabvuto think the best response is to issue and allot 12,000 extra ordinary shares. They offer to sell the shares to Olive. Unfortunately, Olive does not have sufficient money to purchase the shares. Olive has K 5,000 which she offers in part payment for the shares. Serenity Ltd loans Olive an additional K 3,000 towards purchase of the shares. Charles and Mabvuto then issue the shares at a discount and allot to Olive. Olive uses her voting rights under the shares to block the vote to remove Charles and Mabvuto from office as directors. After defeat at the vote Sampa decides he no longer wants to be a shareholder in Serenity Ltd and decides to sell his shares. Serenity Itd purchases the shares back from Sampa and the shares are then cancelled. Charles and Mabvuto decide that now Sampa is no longer with the company they will recommend a dividend at a rate of 20 percent per share. Olive is delighted with the return on her investment and agrees. The dividend is declared and paid out.

#### **Required:**

		[Total: 25 Marks]
(c)	Highlight five (5) duties of a liquidator.	(5 marks)
(b)	Explain how a liquidator is appointed.	(5 marks)
	Directors.	(15 marks)
(a)	Advise Serenity Ltd on legal issues from the above scenario and duties breached by the	

#### **QUESTION TWO**

John has been a shareholder in PD Engineering Ltd, a private company, for a number of years. He has recently been asked to consider whether he would be prepared to become a Director of the company. John has little knowledge or expertise of matters relating to the legal regulation of companies and he comes to you seeking advice.

#### **Required**:

- (a) Advise him on the rules regulating the appointment of Directors, their qualifications and the circumstances directors may be disqualified.
  (12 marks)
- (b) The meaning of different 'class rights' in relation to different classes of shares and the manner, extent and implication of the variation of class rights. (8 marks)
  (c) Explain to him Public Issuance of Shares. (5 marks)

[Total: 25 Marks]

#### **SECTION B**

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

"Woman of Calibre", is a Cooperative based in Lusaka. It provides catering services and training of women in home crafts such as sewing, home maintenance and family care. Despite most of the members not having any basic education, the cooperative has really been doing fine and they would like to convert it into a limited liability company. They have organized a one day workshop at which they want you to explain to them the following:

		[Total: 25 Marks]
(e)	Procedure for registration of Limited Liability Companies in Zambia.	(5 marks)
(d)	Powers of Directors	(5 marks)
(c)	Active stakeholders	(5 marks)
(b)	Voluntary disclosure in Governance and corporate law.	(5 marks)
(a)	Limited liability in company law.	(5 marks)

#### **QUESTION FOUR**

The Companies Act No. 10 of 2017 provides for circumstances under which different types of meetings of a company may be held.

- (a) Explain under what circumstances a class meeting can be held. (12 marks)
- (b) Illustrate the two (2) main ways through which lifting of the veil of incorporation can be done. (10 marks)
- (c) Define loan capital.

(3 marks)

#### [Total: 25 Marks]

#### **QUESTION FIVE**

Phenister Fashions PLC is a fast growing company started and owned by Ms. Phenister Mwiinga of Solwezi, Northwestern Province. Her business has expanded at a very fast rate that she has opened branches in Lusaka and all other provincial centers. Her dream is to make the company a multinational with presence in all Southern African countries and start selling not only clothes, but doing home interior designing and landscaping. For this to work out, the company needs to raise

more capital, and has issued out a prospectus as required by law. However, the prospectus did not include the financial statements of the company for the past two (2) years.

## **Required:**

(a)	What do the letters 'PLC' following her business name mean?	(2 marks)
(b)	Explain the purpose of a prospectus to Phenister Fashions Plc.	(5 marks)
(c)	What would be the implications of the omissions or untrue statements on the issued by this company?	prospectus (8 marks)
(d)	One of the Directors based at Lusaka has resigned due to a minor difference h Phenister Mwiinga, the founder of the company. Other than resignation, expl other ways a director may vacate office.	ne had with ain five (5) (10 marks)

## [Total: 25 Marks]

## **END OF PAPER**

#### DA12 GOVERNANCE AND CORPORATE LAW SUGGESTED SOLUTIONS

#### SOLUTION ONE

(a)

The case of Serenity Ltd has **five primary** legal issues that need to be addressed by directors Charles and Mabvuto; otherwise, they may result in serious problems. The first issue (1) is that shareholders have not received any dividends paid out for four years, which is an indicator of mismanagement as the bottled water business is considered profitable. Further, and the previous biggest shareholder of the company Sampa, who held a 36% stake, sold his share after he was convinced that the company's operation had resulted in no profits.

The law requires directors to act "in good faith" towards the promotion of a company's success to the benefit of all members. Directors should take into account the long-term impact and consequences of their actions, the interest of employees, relationship with customers and suppliers and acting in a manner that is fair to shareholders. In analyzing the facts of the case, Serenity Ltd has not had a long-term increase in value i, e high profit hence dividends have not been paid for the last four years, and the company is losing shareholders. In addition, they allotted shares to Olive at a discount. They have also paid extravagant dividends, which reveals disregard of how such actions may affect the company in the long term. A company is not allowed to issue shares at a discount. **Ooregum Gold Mining Company of India Ltd v. Roper 1892** 

The directors have only acted towards their own interests, and other stakeholders continue to benefit, while shareholders' interests have not been reasonably considered. The actions of the directors do not have a long-term perspective on the success of the business. When the shareholders do not benefit from their investments in the company, they will likely withdraw from the company, just like Serenity Ltd has lost Sampa with a 36% stake. If the current trend continues, the company will lose even more shareholders. Subsequently, the company will find it challenging to attract new investors. In a manner, the directors will be considered not to have exercised diligence, care, and due skill to ensure that the company's long-term success is safeguarded.

In conclusion, if the directors are found in breach of their duty, the consequences would be the same as those of the common law rule or the equitable principle applied. This would be equivalent to the common law breach of fiduciary duty. If it is proved that the directors breached their fiduciary duties, they can be charged fines for damages, including legal costs and indirect damages.

The second issue is the directors have private dealings, which conflict with the companies interests. The company's directors allotted Olive extraordinary shares so that she is able to block Sampas's decision to remove Charles and mabvuto from office. The law requires the directors to avoid conflict of interests with the interests of the company. This involves utilizing the company opportunities and information towards personal gains. The directors are required to declare personal conflicts of interest they have been involved in through the business transactions through writing to the board or during a board meeting. The only way such dealing with Olive may be permitted is if it is contained in the company's articles of association and the directors have disclosed the matter to the board of the organisation. The above authorization can only be valid if the directors involved in the conflict of interest are not involved in making the decisions and directors in question are not allowed to vote.

In analysis, there is a transactional and situational conflict of interest. The directors at Serenity Ltd are engaging in a transactional conflict of interest by using the information that Sampa wants to remove them as directors of the company. As such, they bring Olive in and allot extraordinary shares to, which is illegal. At this point, Serenity Ltd has not entered into an agreement with Serenity ltd, but they have created a conflict of interest for personal gain. The transaction purely enables Olive to block Sampa's power to vote them out of the board.

In conclusion, failure to declare a conflict of interest and to have it approved is considered a breach of the Company Act, and the concerned directors may be liable for a fine.

The third issue is the allotment of shares. The law prohibits directors from allotting shares from private companies. Additionally, loaning money to Olive to buy company shares requires shareholder approval if one sells shares of 100 000 Kwacha or 10% of the company's shares (whichever is lower).

In analysis, the company directors have decided to allot extraordinary shares to Olive in order to give her enough power to veto Sampa's decision to remove them as company directors. Even worse, the shares are sold to her at a discount of 33% of their original value. Additionally, the company has issued Olive a loan to purchase the shares. These decisions are made without involving shareholders. The decision is also not made in consideration of the long-term benefits of the company but a personal interest to continue operating as directors. In conclusion, directors that knowingly allot shares are liable for a fine upon conviction or indictment.

The fourth issue is the creation of extraordinary shares. The law requires shareholder approval in the creation of a new class of shares. The directors should act within the company's powers, which give authorization for their actions. In analysis, the directors have created a new class of shares (extraordinary shares) without shareholders' approval. The class of shares allows Olive more

powers, as she can veto Sampa's decision, who has 20,000 shares with only 12 000 shares. In conclusion, the company directors breached the stipulations of the Act and breached their fiduciary duty, which makes the directors liable for a fine as a remedy.

The fifth issue is the Serenity Itd purchases the shares back from Sampa, and the shares are then cancelled. The law allows the company to buy back its shares even when it does not have enough distributable profits. Buying back can only be limited if the company's articles of association explicitly prohibit the company from buying back the shares. Additionally, the agreements with shareholders must not contain pre-emption rights. These rights require that a company initially offers the shares to the existing shareholders prior to transferring to another entity, including itself. Shares bought back are paid by the company after the tractions. Upon purchase of off-market shares, the company must cancel them or hold them in treasury. Therefore, if the articles allowed, the company was with its powers to buy and cancel the said shares.

(b)

A Liquidator is a Licensed Insolvency Practitioner that is appointed either by the shareholders or the creditors of a limited company. He is appointed by the shareholders during the meeting. He can also be appointed by creditors in an event that creditors choose their own. The creditors' choice will prevail. Further, a liquidator can be appointed by petitioning the court.

(c)

A liquidator is appointed to:

- Investigate your company's financial affairs
- Establish what caused it to fail
- Investigate possible offences by your company or directors of your company, and
- Identify and sell the unsecured assets of your company to repay your debts.

#### **SOLUTION TWO**

(a) The Companies Act of Zambia regulates the appointment of directors.

Most commonly, directors are appointed by the shareholders at the Annual General Meeting (AGM), or in extreme circumstances, at an Extraordinary General Meeting (EGM). A resolution for the appointment is put to a vote, and passed if a majority of shares are voted in favour.

#### **Qualifications for Directors**

- 18 years and above
- An undischarged bankrupt under **Zambian** Laws
- Of Sound Mind.

#### Grounds for removing a director;

- A shareholder can apply to the court to have a company director removed on the grounds that they have been involved in serious misconduct or are otherwise unsuitable to continue serving in their role.
- Misleading the board
- Missing meetings
- Conflict of interest
- (b) A company having a share capital may have separate classes of shares. Class rights refer to the privileges or entitlement of a particular class of shares. A type of share will form a separate class if the rights attached to it differ from those attaching to other shares of the company

Variation of share class rights is **allowed by passing a special resolution for a limited company**. Every share has its own rights attached to it. The rights typically cover matters such as voting rights, rights to dividends and rights to a return of capital on winding up. The most common classes of shares are ordinary shares and preferential shares.

(c) An initial public offering (IPO) refers to the process of offering shares of a private corporation to the public in a new stock issuance. Companies must meet requirements by exchanges and the Securities and Exchange Commission (SEC) to hold an IPO.

#### **SOLUTION THREE**

The explanations to the Women of Calibre Cooperative would be as follows:

(a) *Limited Liability* – This means that the liability of members is limited to the amount of unpaid, if any, on the shares they hold or amount guaranteed. The liability is limited either by way of shares or guarantee. Where it is limited by guarantee, the member must sign a declaration of guarantee specifying the amount he undertakes to pay. Therefore, the members of the cooperative once turned into a company will have limited liability.

(b) *Voluntary disclosure* – This is disclosure above the mandated minimum. It is disclosing information voluntarily, going beyond what is required by law or listing rules. This is good in that it provides wider information, different focus of information, assurance about management, consultation with equity investors.

(c) *Active stakeholders* – Stakeholders are people or entities that can affect or are affected by the business' activities. Active stakeholders are those stakeholders who seek to participate in the organisation's activities. Active stakeholders include managers, employees and institutional shareholders, etc

(d) *Powers of directors* – Directors have the duty to manage the business and exercise all powers that are not required by the Companies Act 388. They have the power to borrow money, appoint an attorney and sign cheques, etc. They must exercise their powers in what they honestly believe to be the interests of the company and the power must be exercised for proper purposes for which it was give.

(e) *Procedure for registration of a limited liability company* – the procedure is applicant delivers a completed application form either online or manually to PACRA. The information required is proposed name, general name of business, names of applicants, commencement date inter alia. Once no such name exists or similar to the applicant's proposed name, the business will be registered.

## SOLUTION FOUR

These meetings of a particular class of shareholders e.g. ordinary or preferential shareholder only. It is provided for under section 140 of the Companies Act.

(a) A meeting of members of a particular class may be convened:

- by the directors when they think fit; or
- by two or more members of that class, holding not less than one-twentieth of the total voting
- rights of all the members having a right to vote at meetings of that class
- the Act provides for the holding of a general meeting of holders of a class of shares
- for the purpose of varying the rights attached to that class off shares
- The quorum for class meetings is two persons, holding one-third of the issued Shares of the class

(b) Lifting of the veil of incorporation can be done in two main ways:

- By the judiciary- there are a number of circumstances under which a judge lift a veil of incorporation as to counter fraud, sharp practice, oppression and illegality. In a company, member or creditors or any affected person can apply for lifting of the veil of incorporation.
  Gilford Motor Co. v Horne 1933
- By statute-there are a number of ways through which the veil cab be lifted by statute, the common one being where the number of members falls below the statutory requirement for more than six months.

(c) Loan capital is the money that is raised through borrowing from lenders such as banks and other financial institutions. Once a company borrows, it pays back with interest.

#### **SOLUTION FIVE**

(a) **PLC** stands for 'Public Limited Company'.

(b) The purpose of a prospectus is to invite members of the public to buy or subscribe for debentures or shares in a public limited company. It can be in form of a notice, advertisement, circular, etc. Thus Phenister Mwiinga can use it for that purpose.

(c) Implications of an omission or an untrue statement on the prospectus are that: The above principles are explained below:

(i) (**Civil Liability**) Payment of compensation to any person who suffer loss or injury due to the untrue statement or omission, Section 129 (1) and (2) of the Companies Act.

(ii) (**Criminal Liability**) The makers of the statement may be criminally liable, i.e. be ordered by the court to pay a fine or be imprisoned for the untrue statements or omissions, Section 130 of the Companies Act.

(iii) Other civil reliefs may be sought such as winding up the company, firing of directors who signed and prepared the prospectus, delisting the company from the stock market, etc 9 marks

- (d) Other ways of vacating the office other than Resignation are:
  - (i) *Disqualification* A director can be disqualified from office if she is
    - absent from meetings for more than 6 months without consent of the other directors,
    - uses her office for secret profits,
    - fails to disclose her interest in a contract, etc.
  - (ii) *Retirement* A director may retire due to old age or as provided for in the company's articles of association.
  - (iii) Removal Can be removed by the shareholders when he does something wrong, contrary to the ethics of a company.
  - (iv) Expiry of Contract or term of office A director can vacate office when her contract comes to an end or expiry of the time during which she is to work as a director
  - *(v) Insanity* If he becomes insane and unable to carry out the duties as required by the office of director.

- (vi) Death If the director dies, it means the office will become vacant.
- (vii) Bankrupt If declared bankrupt by the court, etc

## **END OF SOLUTIONS**