



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 1: FINANCIAL ACCOUNTING

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MONDAY 18 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## **SECTION A – (COMPULSORY)**

**Attempt all ten (10) multiple choice questions.**

### **QUESTION ONE**

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

1.1 At the end of each financial year, public limited companies are required to present their financial statements. Which of the following is not part of the financial statements presented at the AGM:

- A. The statement of profit or loss.
- B. Bank reconciliation statement.
- C. The statement of financial position.
- D. Cash flow statement.

(2 marks)

1.2 Jacaranda Ltd Company disposes off its non-current assets whenever they become obsolete so as to replenish them with new technological assets.

Machinery which was bought at the original cost of K240,000 five (5) years ago was sold for K185, 000 during the accounting period. Its net book value was valued at K204,000.

Calculate profit or loss on disposal?

- A. K221,000 Loss.
- B. K149,000 Profit.
- C. K221,000 Profit.
- D. K19,000 Loss.

(2 marks)

1.3 Name the type of an error in which the correct amount is entered but in a wrong personal account.

- A. Error of original entry.
- B. Error of principal.
- C. Error of commission.
- D. Error of complete reversal.

(2 marks)

1.4 The accounting equation is presented in form of a statement of financial position. Below are figures relating to Banda's business which started two years ago: Assets; K400, 000, liabilities; K100,000, Drawings; K20,000, profit; K55,000.

Calculate the Capital figure for Banda's business?

- A. K400,000.
- B. K280,000.
- C. K265,000.
- D. K320,000.

(2 marks)

1.5 Prime cost is comprised of:

- A. Direct materials, direct labour and direct expenses.
- B. Direct materials, direct expenses and opening work in progress.
- C. Direct labour, direct expenses and production cost.
- D. Direct materials, direct labour and factory overheads.

(2 marks)

1.6 Chapa & Company had in its previous statement of financial position closing balances of equity and reserves as followings:

	<b>K</b>
Ordinary share capital (25 Ngwee per share)	200,000
Share premium	40,000
Retained earnings	350,000

In the current year, the company decided to make a bonus issue of 3 for every 2 shares held.

What will be the current closing balances of equity and reserves after taking into account the bonus issue?

- A. Capital; K500,000, share premium; K40,000, retained earnings; K350,000.
- B. Capital; K200,000, share premium; K40,000, retained earnings; K50,000.
- C. Capital; K500,000, share premium; nil, retained earnings; K90,000.
- D. Capital; K200,000, share premium; nil, retained earnings; K90,000.

(2 marks)

1.7 Fitness Club financial year end is 31 December. The club has 50 members. During the year 2022, the club received subscription from its members of K200,000. Subscription owing at 31 December 2021 was K25,000 whereas subscription prepaid at 31 December 2021 was K50,000.

What is the amount of subscription to be shown in the income and expenditure account for the year ended 31 December 2022?

- A. K175,000.
- B. K125,000.
- C. K225,000.
- D. K275,000.

(2 marks)

1.8 There are many bases under which items in the financial statements can be valued. Which of the following is not part of the bases used?

- A. Fair value.
- B. Net realisable value.
- C. Business entity.
- D. Historical cost.

(2 marks)

1.9 JKL Ltd Company's bank column of the cash book showed a debit balance of K50,000 whereas a bank statement showed a closing balance of K63,000. Upon investigation, it was revealed that the opening balance of the cash book was overstated by K5,000. Dividends received of K10,000 was recorded on the bank statement but not in the cash book. Cheques issued to customers of K8,000 were recorded in the cash book but not presented at the bank for payments.

Calculate a revised cash book balance?

- A. K47,000.
- B. K55,000.
- C. K35,000.
- D. K57,000.

(2 marks)

1.10 What is the source document for the returns outwards journal once the transaction has been confirmed by the client?

- A. Invoice.
- B. Copy credit note.
- C. Cash sale slip.
- D. Original credit note.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

Attempt any FOUR (4) questions.

### QUESTION TWO

Copperbelt Minerals Ltd is the company specialised in mineral extraction. The Trial Balance of the company as at 31 December 2022 is given below:

	<u>K'000</u>	<u>K'000</u>
Sales revenue		48,450
Fixed deposit bank balance	24,000	
Cost of sales	21,660	
Allowance for receivables		3,840
Ordinary shares of K1 each		18,000
Inventory at end	14,010	
Receivables	28,350	
Prepayments	1,110	
Bank current ccount	9,900	
Share Premium		6,000
Accrued expenses		7,260
Distribution costs	3,600	
Administration expenses	5,400	
Finance costs	450	
Property, plant and equipment	45,000	
Accumulated depreciation		21,780
Retained Earnings 1 January 2022		25,620
6% Loan Note (repayable 2025)		15,000
Trade payables		17,280
Income tax expense	960	
Suspense account balance	8,790	
	<b><u>163,230</u></b>	<b><u>163,230</u></b>

Most of the year end accruals had been accounted for except the ones that follow after the Trial Balance; however, you are informed that the accountant did not consider the following information when preparing the list of balances in the Trial Balance above:

1. Mineral royalty was correctly computed based on the correct value and paid to the Zambia Revenue Authority.
2. Interest received on the fixed deposit account of K1,200,000 was credited to the account, but had not been included in the balances above.

3. A bonus issue of shares, at par, of 1 for every 5 shares held by existing shareholders had taken place during the year.
4. The allowance for receivables should be adjusted to 10% of the receivables at the end of the year.
5. Accruals and prepayments of expenses at the end of the period had been provided for, except the estimate accrued income tax on profits of K2,340,000.
6. Finance costs comprise interest on loan only which was paid during the period.
7. The accountant had accounted for depreciation correctly.
8. The suspense account balance represents:
  - (i) Mineral royalty payment made of K6,000 000. The cashbook was updated accordingly however; the payment was not considered when preparing the Statement of profit or loss for the year.
  - (ii) Import duty on purchases of K 2,790,000.

**Required:**

- (a) Prepare the Statement of profit or loss for Copperbelt Minerals Ltd for the year to 31 December 2022. (10 marks)
- (b) Prepare the Statement of Financial Position for Copperbelt Minerals Ltd as at 31 December 2022. (10 marks)

**[Total:20 Marks]**

**QUESTION THREE**

Dr Pollen recently started running a business that has two departments: Fertilizer department which specialises in manufacturing organic fertilizer and Beer department. Dr Pollen is contemplating on closing one department so that he can focus on one line of business as the costs of running both departments have proven high. The information below was taken from his books as at 31 December 2023, the end of his financial year:

	<b>Fertilizer</b>	<b>Beer</b>	<b>Unspecified</b>
	<b><u>K'000</u></b>	<b><u>K'000</u></b>	<b><u>K'000</u></b>
Sales	1,320	2,883	
Purchases	889	1,110	
Opening inventory	330	450	
Wages	162	252	
Other expenses	101	241	
Rent and rates			90
Electricity			33
Furniture and fittings (cost)			960
Motor vehicles (cost)			1,200

Accumulated depreciation:

Furniture and fittings	192
Motor vehicles	360

Bank loan note 120

**Notes:**

- (1) Motor vehicles are used equally between the two departments.
- (2) Furniture and fittings are used 4/5 in the fertilizer department and 1/5 in the Beer department
- (3) inventory is K510,000 and K150,000 respectively for fertilizer and Beer.
- (4) Depreciation policy is 20% straight line on Furniture and fittings and 40% reducing balance method on motor vehicles.
- (5) Rent paid in advance amounted to K18,000, and electricity owing is K3,000. These expenses are both apportioned on the basis of floor area occupied by each department as follows: 2/3 fertilizer and 1/3 Beer.

**Required:**

- (a) Prepare departmental Statement of profit or loss for the year ended 31 December 2023. (10 marks)
- (b) Comment on the performance of each department, stating possible reasons for the results and advise Dr Pollen accordingly. (5 marks)
- (c) The business World has in the recent past argued that entities in different jurisdictions should be given a choice in matters of financial reporting on grounds that application of accounting standards in some business environments where these companies operate maybe detrimental to the quality of such reporting.

**Required:**

- (i) Explain the objective of general purpose of financial reporting. (2 marks)
- (ii) Give three (3) arguments in favour of application of both national and international accounting standards. (3 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

Mr. R. Banda, a sole trader, has been so busy since he commenced business on 1 January 2022 that he has neglected to keep adequate accounting records. R. Banda's opening capital consisted of his life savings of K60,000 which he used to open a business bank account.

Below are transactions in his bank account during the year ended 31 December 2022:

<b><u>RECEIPTS</u></b>	<b>K</b>
8% Loan note obtained on 1 April 2022	40,000
Takings	171,920

## **PAYMENTS**

Purchases of goods for resale	106,080
Electricity for period to 30 September 2022	3,040
Rent of premises for 15 months to 31 March 2023	14,000
Rates for premises	4,800
Wages and salaries	58,800
Purchase of van on 1 April 2022	30,400
Purchase of holiday caravan for his private use	17,000
Van running expenses	1,000

## **Additional Information**

1. While the intention was to bank all takings intact, you are informed that, in addition to cash drawings, the following payments were made out of takings before banking:

	<b>K</b>
Van running expenses	3,560
Postage and other sundry expenses	1,420

2. Inventory on 31 December 2022 was K7,600

3. The normal rate of gross profit on the goods sold is 50% on sales.

4. Depreciation is to be provided on the Van on the straight line basis and it is estimated that the Van will be disposed of after 5 years' use at K400.

5. Electricity charges accrued at 31 December 2022 were K720.

6. Accounts payable for purchases at 31 December 2022 amounted to K3,520 while accounts receivables at 31 December 2022 totalled K9,200

## **Required:**

(a) Prepare R. Banda's statement of Profit or Loss for the year ended 31 December 2022.

(9 marks)

(b) Prepare R. Banda's statement of Financial Position as at 31 December 2022.

(11 marks)

**[Total: 20 Marks]**

## **QUESTION FIVE**

The bookkeeper of Chanda Musonda failed to balance the trial balance at 30 June 2023; the end of the financial year. She opened a suspense account into which she entered the amount by which she was out of balance.

The following errors were subsequently discovered in the books:

(i) The purchase day book had been under cast by K10,000.

(ii) Goods bought on credit for K5,000 had been posted as K50,000.

(iii) A new machine costing K70,000 had been posted to the debit side of the repairs of the machinery account.

(iv) A customer, returned goods valued at K10,000. This had been entered in the sales returns day book and posted to the debit of the receivables control account.



- (v) The sale on credit of various items of plant and machinery at their book value of K300,000 had been recorded in the sales day book.
- (vi) K60,000 owed by a customer, had been overlooked when drawing up trade receivables control account.
- (vii) An item of cash discount allowed of K2,000 had been correctly entered in the cash book, but had not been posted in the trade receivables account.
- (viii) Business rates, treated as having been paid in advance in the previous accounting period, amounting to K45,000 had not been brought down as a balance on the business rates account at the start of the accounting period. Instead, it was included in the prepayment's accounts.

**Required:**

- (a) (i) Prepare the journal entries for each of the errors above. (8 marks)
- (ii) Prepare the suspense account. (5 marks)
- (b) Explain clearly the effect of correcting the above errors.
  - (i) On the Net profit shown in the draft income statements. (4 marks)
  - (ii) On any of the items in the draft statement of financial position. (3 marks)

**[Total: 20 Marks]**

**QUESTION SIX**

Windmill Plc is a manufacturing company located in one of the Copperbelt towns. The Accounts Assistant has given you the following list of balances for preparation of the manufacturing account and the statement of profit or loss:

	<b>1 October 2021</b>	<b>30 September 2022</b>
	<b>K 000</b>	<b>K 000</b>
Work-in-Progress	10,400	12,800
Raw Materials	17,280	18,500
Finished Goods	49,450	43,700
Sales of finished goods		320,000
Office Light and Heat		7,938
Rent and Rates		14,000
Insurance		6,200
Power		10,680
Selling and Distribution costs		15,920
Factory wages		90,490
Factory indirect expenses		26,590
Materials purchased		78,000
Office and general expenses		18,910
Administrative salaries		12,640

**Additional information:**

1. The company adds a mark-up of 15% on cost before transferring goods to the finished good warehouse.

2. Included in Administrative salaries is K 4,000 that was paid to the Production Manager.
3. Adjustments should be made to the following expenses:

	<i>Power</i>	<i>Rent &amp; Rates</i>	<i>Insurance</i>
Accruals	K 1,320	K 1,500	-
Prepayments	-	K 3,300	K 1,200

4. Rent and Rates is shared between the factory and administration building in the ratio of 6:4. Insurance of plant is 80% and 20% for office equipment and delivery vans.
5. Depreciation of non-current assets was calculated, and the total is K 24,560. This is shared equally between factory plant and office.
6. The unrealized profit account had the following balance:
  - On 1 October 2021 K6,450.
  - On 30 September 2022 K5,700.

**Required:**

- (a) Prepare a Manufacturing account for the year ended 30 September 2022. (10 marks)
- (b) Prepare the Statement of profit or loss for the year ended 30 September 2022. (8 marks)
- (c) Explain why a company would charge a markup on goods manufactured when transferring them to the selling department. (2 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 1: FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 B

1.2 D

1.3 C

1.4 C

1.5 A

1.6 C

1.7 C

1.8 C

1.9 B

1.10 D

## **SOLUTION TWO**

### (a) **Copperbelt Minerals Ltd**

#### **Statement of profit or loss for the year to 31 December 2022**

	<b><u>K'000</u></b>	<b><u>K'000</u></b>
Sales revenue		48,450
Cost of sales (21,660+2,790)		<u>(24,450)</u>
Gross Profit		24,000
Less:		
Distribution costs	(3,600)	
Administration expenses [5,400-(3,840-2,835)]	(4,395)	
Mineral royalty expense	<u>(6,000)</u>	<u>(13,995)</u>
		10,005
Investment income		1,200
Finance costs (450+450)		<u>(900)</u>
Profit before tax		10,305
Income tax expense (960+2,340)		<u>(3,300)</u>
Profit for the period		7,005
Retained earnings at start		<u>25,620</u>
Retained earnings at end		<u>32,625</u>

### (b) **Copperbelt Minerals Ltd**

#### **Statement of financial position as at 31 December 2022**

<b><u>Assets:</u></b>	<b><u>K'000</u></b>	<b><u>K'000</u></b>
<b>Non-Current Assets</b>		
Property, plant and equipment	45,000	
Accumulated depreciation	<u>(21,780)</u>	23,220
<b>Current Assets</b>		
Inventory at end	14,010	
Receivables [28,350-(10%*28,350)]	25,515	
Fixed deposit account (24,000+1,200)	25,200	
Prepayments	1,110	
Cash at bank	<u>9,900</u>	<u>75,735</u>
<b>Total assets</b>		<b><u>98,955</u></b>
<b><u>Equity and Liabilities:</u></b>		
<b>Equity</b>		

Ordinary shares capital (18,000+3,600) <b>W1</b>	21,600	
Share premium (6,000-3,600) <b>W1</b>	2,400	
Retained earnings (25,620+7,005)	<u>32,625</u>	56,625
<b>Non-current Liabilities</b>		
6% Loan Note		15,000
<b>Current liabilities</b>		
Trade payables	17,280	
Accrued expenses (7,260+2,340+450) <b>W2</b>	10,050	<u>27,330</u>
		<u>98,955</u>

**Workings:**

**1. Bonus =  $1/5 * 18,000,000 = K3,600,000$**

**2. Interest accrued =  $900,000(15,000,000 * 6\%) - K450,000 = K450,000$**

### **SOLUTION THREE**

(a) **STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2023**

	<b>DEPARTMENT</b>	
	<b>FERTILIZER</b>	<b>BEER</b>
	K 000	K 000
Sales revenue	<u>1,320</u>	<u>2,883</u>
Inventory at start	330	450
Purchases	889	1,110
Cost of Sales	1,219	1,560
Closing inventory	<u>(510)</u>	<u>(150)</u>
Cost of sales	<u>709</u>	<u>1,410</u>
Gross profits	611	1,473
Less: Expenses		
Other expenses	101	241
Wages	162	252
Rent and rates $(90 - 18) \times \frac{2}{3} @ \frac{1}{3}$ and $72 (90-18) \times \frac{2}{3} @ \frac{1}{3}$	48	24
Electricity $(33 + 3) \times \frac{2}{3} @ \frac{1}{3}$ and $36 (33+3) \frac{2}{3} @ \frac{1}{3}$	24	12
Depn – Furniture $(0.20 \times 960) 192 \times \frac{4}{5} @ \frac{1}{5}$ and $192 (20\% \times 960)$	154	38
Depn – Motor vehicles $0.4 (1,200 - 360)$ and $840 (1,200 - 360) @ 4\%$	168	168
Total expenses	<u>(657)</u>	<u>(735)</u>
Net (loss)/profit	<u>(46)</u>	<u>738</u>

(b) **COMMENT**

- i. Performance in terms of gross profit shows that the Fertilizer department is worse than Beer department although they are in different industries. The reasons could be that fertilizer department spends more money purchasing ingredients for manufacturing fertilizer as this can be explained by a large proportion of cost of sales in relation to revenue.
- ii. Fertilizer department has further made a loss of K46,000 after charging business expenses even though it spent less on operating expenses than Beer department
- iii. Performance in terms of net profit shows that beer department is doing better than fertilizer department though there has been a huge reduction from the gross profit to the net profit. What could explain this reduction in net profit for beer department is that there are huge wages costs and other expenses.

- iv. The profitability of beer department generally could be attributed to is easy to sell due to high demand for the product.
- v. It is also possible that the basis for sharing common costs of rent and rates, and electricity is not correctly determined and should be investigated. Information on why fertilizer department bears over twice the overheads borne by beer department should be obtained.

In conclusion, beer department seems profitable compared to fertilizer department however, Dr pollen should critically analyse the costs for fertilizer department particularly purchases if there could be any alternative sources of raw materials. Also, there is need to investigate the basis of apportionment of the shared cost between the two departments before a final decision is made to close the fertilizer department.

(c) i. **THE OBJECTIVE OF GENERAL PURPOSE OF FINANCIAL REPORTING**

- To provide financial information about the reporting entity that is useful to existing and potential stakeholders.
  - These stakeholders include investors, lenders and other creditors who use the information in making decisions about providing resources to the entity.
- ii. Three (3) arguments in favour of application of both national and international accounting standards:
- They reduce or eliminate confusing variations in the methods used to prepare accounts
  - They provide a focal point for debate and discussions about accounting practices
  - They oblige companies to disclose the accounting policies used in the preparation of accounts
  - They are less rigid alternative to enforcing conformity by means of legislation
  - They have obliged companies to disclose more accounting information than they would otherwise have done if accounting standards were not in existence.

## **SOLUTION FOUR**

(a) R. Banda's

### **Statement of Profit or Loss account for the year ended 31 December 2022**

	K	K
Sales (w2)		204,000
Cost of sales (w1)		<u>(102,000)</u>
Gross Profit		102,000
Less: Van running expenses (1,000 + 3,560)	4,560	
Rent ( $\frac{12}{15} \times \frac{14000}{1}$ )	11,200	
Electricity (3,040 + 720)	3,760	
Depreciation on Van (w4)	4,500	
Loan interest (8% x 40,000 x $\frac{9}{12}$ )	2,400	
Postage and other Sundry expenses	1,420	
Rates	4,800	
Wages and salaries		<u>(91,440)</u>
	<u>58,800</u>	
Net Profit		<u><u>10,560</u></u>

(b) R. Banda's

### **Statement of Financial Position as at 31 December 2022.**

<b><u>NON-CURRENT ASSETS</u></b>	K	K
Motor van (30,400 – 4,500)		25,900
<b><u>CURRENT ASSETS</u></b>		
Inventory	7,600	
Trade Receivables	9,200	
Bank (271,920 – 235,120)	36,800	
Prepaid rent ( $\frac{3}{15} \times \frac{14,000}{1}$ )	<u>2,800</u>	<u>56,400</u>
		<u><u>82,300</u></u>

### **Financed by**



Capital		60,000
Net Profit	10,560	
Drawings (17,900 (w3) + 17,000)	<u>(34,900)</u>	<u>(24,340)</u>
		35,660
<b><u>NON-CURRENT LIABILITY</u></b>		
8% loan notes		40,000
<b><u>CURRENT LIABILITIES</u></b>		
Trade payables	3,520	
Loan interest owing	2,400	
Electricity	<u>720</u>	<u>6,640</u>
Total Capital and Liabilities		<u>82,300</u>

## SOLUTION FIVE

		<b>Dr K'</b>	<b>Cr K'</b>
(a) (i)	(a) Purchases account	10,000	
	Suspense account		10,000
	(b) Purchases	45,000	
	Suspense		45,000
	(c) Plant and machinery	70,000	
	Repairs		70,000
	(d) Suspense	20,000	
	Sales returns		20,000
	(e) Sales	300,000	
	Plant and machinery disposals		300,000
	(f) Accounts receivables	60,000	
	Suspense		60,000
	(g) Suspense	2,000	
	Receivables		2,000
	(i) Business rates	45,000	
	Prepayments		45,000

(ii)

**Suspense Account**

	<b>K'000</b>		<b>K'000</b>
Balance	93,000	(a) Purchase	10,000
(c) S. Kanene	20,000	(b) A. Supplier	45,000
(d) B. Luckson	<u>2,000</u>		<u>60,000</u>
	<u>115,000</u>		<u>115,000</u>

(b) (i) The following items increase the net profit:

Machinery	70,000
The following items reduce net profit	
Under cast of purchase	10,000
Omission of Business rates	<u>45,000</u>
	<u>(55,000)</u>
	<u>15,000</u>

(ii) The following items are charged in the Statement of financial position:

	<b>Dr</b>	<b>Cr</b>
	<b>K'</b>	<b>K'</b>
Suspense		93,000
(ii) Account payables	45,000	
(iii) Plant and machinery	70,000	
(iv), (vii), (vii) Accounts receivables	38,000	
(viii) Prepayment		45,000
Net profit	<u>      </u>	<u>15,000</u>
	<u>153,000</u>	<u>153,000</u>

## **SOLUTION SIX**

### (a) **Windmill**

#### **MANUFACTURING ACCOUNT FOR THE YEAR ENDED 30 SEPTEMBER 2022**

<b>Raw Materials:</b>	<b>K</b>	<b>K</b>
Opening Inventory	17 280	
Purchases	<u>78 000</u>	
Total assets		95 280
Less Closing Inventory		<u>(18 500)</u>
Cost of raw materials consumed		76 780
<b>Direct Labour:</b>		
Factory Wages		90 490
<b>Direct Expenses:</b> Power (10 680 + 1 320)		<u>12 000</u>
PRIME COST		179 270
<b>Manufacturing Overheads:</b>		
Production Manager's salary	4 000	
Factory expenses	26 590	
Rent & Rates (6/10 x [14 000 + 1 500 - 3 300])	7 320	
Insurance (80% x [6 200 - 1 200])	4 000	
Depreciation (50% x 24 560)	<u>12 280</u>	
	<u>54 190</u>	
	233 460	
Opening Work in Progress		<u>10 400</u>
		243 860
Less: Closing Work in Progress		<u>12 800</u>
		231 060
Profit Mark up 15% x 231 060		
	<u>34 659</u>	
Transfer Price of Manufacturing Goods		<u>265 719</u>

### (b) **Windmill**

#### **STATEMENT OF PROFIT OR LOSS FOR YEAR ENDED 30 SEPTEMBER 2022**

	<b>K</b>	<b>K</b>
Sales		320 000
Opening Inventory	49 450	
Purchases	265 719	
Total assets	315 169	
Less Closing Inventory	<u>(43 700)</u>	
Cost of Sales		271 469
Gross Profit		48 531
<b>ADD: INCOME</b>		

Manufacturing Realised profit (34 659 + 6 450 – 5 700)		<u>35 409</u>
	83 940	
<b>LESS: EXPENSES</b>		
Office Light & Heat	7 938	
Rent & Rates (4/10 x [14 000+1 500 -3 300])	4 880	
Insurance expense ( 20% x 5 000)	1 000	
Office general expenses	18 910	
Selling & Distribution expenses	15 920	
Administrative salaries (12 640 – 4000)	8 640	
Depreciation ( 0.5 x 24 560)	<u>12 280</u>	
Total expenses		<u>(69 568)</u>
<b>Net Profit</b>		<b><u>14 372</u></b>

- (c) To secure its own profit contribution for value addition, rather than being disadvantaged by cost inefficiencies of the selling department. This makes the selling department responsible for its own costs so as to control them and to negotiate better selling prices for the finished product.

**END OF SUGGESTED SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 2: QUANTITATIVE ANALYSIS

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WEDNESDAY 20 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A – (COMPULSORY)

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

#### **QUESTION ONE**

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

1.1 Which of the following statements is correct?

- A. Data is always qualitative.
- B. Information is not data.
- C. Data is always quantitative.
- D. Information is data that has been processed.

(2 marks)

1.2 If the coefficient of determination is 0.64, the coefficient of correlation is

- A. Must be positive.
- B. Must be negative.
- C. Could either be -0.8 or + 0.8.
- D. None of the above.

(2 marks)

1.3 The random variable  $X$  represents the number of tests that a patient entering a hospital will have along with the corresponding probabilities. Find the mean and standard deviation.

$X$	0	1	2	3	4
$P(X)$	0.18	0.29	0.35	0.12	0.06

- A. mean=1.02 ,standard deviation=3.73
- B. mean=1.64 ,standard deviation=1.02
- C. mean=3.73 ,standard deviation=1.02
- D. mean=1.59 ,standard deviation=1.09

(2 marks)

1.4 You want to buy an ordinary annuity that will pay you K5,000 a year for the next 15 years. Your expected interest rates will be 4.5% over that time period. The maximum price you would be willing to pay for the annuity is?

- A. K53,697.37
- B. K53,697.73
- C. K103,920.27
- D. K103,920'72

(2 marks)

1.5 The weight of ten girls are measured in kg and the results are listed below

49, 43, 50, 51, 41, 39, 52, 47, 40, 48.

The number of girls, whose weights are more than the mean weights is:

- A. 4
- B. 6
- C. 7
- D. 3

(2 marks)

1.6 If the correlation is 0.9, the percentage of variation in the response variable explained by the variation in the explanatory variable is;

- A. 0.90%
- B. 90%
- C. 0.81%
- D. 81%

(2 marks)

1.7 A contractor expects partial payment of funds during the course of his contract services. He sets a probability distribution for the expected payment as follows:

<b>AMOUNT</b>	K4000	K6000	K8000
<b>PROBABILITY</b>	0.3	0.6	0.1

Using the data given above, the expected monetary value (EMV) of the payments he would get is:

- A. K 3,600
- B. K18,000
- C. K 6,000
- D. K5,600

(2 marks)

1.8 You have borrowed K15,000 from your sister and promised to pay her K18,750 after 4 years with annual compounding, find the implied rate of interest for this loan.

- A. 31.2%
- B. 3.125%
- C. 5.74%
- D. 6%

(2 marks)

1.9 A number derived from population data, which describes the data in some useful way, is called?

- A. Constant.
- B. Statistic.
- C. Parameter.
- D. Critical value.

(2 marks)



1.10 The maximum value of  $Z = 5x + 6y$  subjected to constraints  $x + y \leq 4, x \geq 0, y \geq 0$  is.

- A. 24
- B. 20
- C. 0
- D. None of the above.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

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

### QUESTION TWO

An investor wants to make a decision on the following decision alternatives; Bonds, Stocks and Mutual funds. He can only choose on the above named alternatives. The economic condition or states of nature of the alternatives are classified as growing, stable and declining. The table below shows the profits that can be obtained for each decision alternative.

<b>Economic condition</b>			
<b>Alternatives</b>	<b>Growing</b>	<b>Stable</b>	<b>Declining</b>
Bonds	40	45	5
Stocks	70	30	-13
Mutual Funds	53	45	-5

#### **Required:**

Determine the optimal decision under each of the following decision criteria:

- (a) Maximax criterion. (4 marks)
- (b) Maximin criterion. (4 marks)
- (c) Minimax Regret criterion (4 marks)
- (d) Laplace Method (4 marks)
- (e) Hurwitz using coefficient of realism  $\alpha = 0.3$  (4 marks)

**[Total: 20 Marks]**

### QUESTION THREE

Mumba obtains cash from an ATM (cash machine). She suspects that the rate at which she spends cash is affected by the amount of cash she withdraws at her previous visit on an ATM. To investigate this she deliberately varies the amounts she withdraws. She records, for each visit to an ATM, the amount,  $Kx$ , withdrawn, and the number of hours,  $y$ , until her next visit to visit to an ATM.

<b>Withdrawal</b>	1	2	3	4	5	6	7	8	9	10
$x$	42	12	102	112	122	152	22	92	82	132
$y$	54	60	193	328	92	268	46	194	212	284

**Required:**

- (a) Draw the scatter plot of this data. (3 marks)
- (b) Obtain the least squares regression equation suitable for this data. (11 marks)
- (c) Interpret, in content of the given information, the gradient of the regression line. (1 mark)
- (d) Calculate the coefficient of determination and Comment on the result. (5 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

- (a) The production (in thousand Kgs) of sugar from a sugar factory in country X are given below:

<b>Year</b>	<b>Production (thousand Kgs)</b>
2002	78
2003	89
2004	95
2005	86
2006	92
2007	99
2008	91

**Required:**

- (i) Fit a straight line by the 'least squares' method and tabulate the trend values. (12 marks)
  - (ii) By eliminating the trend, what components of the series are thus left over? (1 mark)
  - (iii) What is the monthly increase in the production of sugar? (1 mark)
- (b) The Penzo family buys a family house for K650,000 with a down payment of K50,000. They take a 20 – year mortgage for K600,000 at an annual interest of 14.5%.
- (i) Find the monthly payment to amortize this loan. (4 marks)
  - (ii) Find the total amount of interest paid when the loan is amortized over twenty (20) years. (2 marks)

**[Total: 20 Marks]**

### **QUESTION FIVE**

- (a) Big Blossom was commissioned to develop an extra-large rose for the Rose Ball parade. Two (2) random samples of blossoms from hybrid A and B bushes yielded the following diameters (in cms.) for nature peak blooms.

<b>Hybrid A</b>	3	4	4	9	11	11
<b>Hybrid B</b>	6	6	6	7	8	9

**Required:**

Find the sample;

- (i) Mean and standard deviation for Hybrid A. (7 marks)
- (ii) Mean and standard deviation for Hybrid B. (7 marks)
- (b) Suppose there are 300 men of which 200 are smokers, and 200 women, of which 30 are smokers.
- (i) What is the probability that a person chosen at random is a smoker? (4 marks)
- (ii) What is the probability that a person chosen at random is a smoker given that the person is a woman? (2 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

- (a) A gas supplier maintains a team of engineers who are available to deal with leaks reported by customers. Most reported leaks can be dealt with quickly but some require a long time. The time (excluding travelling time) taken to deal with reported leaks is found to have a mean of 50 minutes and a standard deviation of 55 minutes.

Assume that the times may be modelled by a normal distribution, estimate the probability that:

- (i) It will take less than 110 minutes to deal with a reported leak. (3 marks)
- (ii) It will take more than 175 minutes to deal with a reported leak. (3 marks)
- (iii) It will take between 40 minutes and 105 minutes to deal with a reported leak. (4 marks)
- (b) At six-month interval, Mr Moono deposited K3,000 in a saving account which credit interest at 12.5% p.a. compounded semi-annually. The first deposit was made when Mr. Moono's daughter was six-months and the last deposit was made when his daughter was nine (9) years

old. The money remained in the account and was presented to the daughter on her 12 birthday.  
How much did she receive?

(10 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 2: QUANTITATIVE ANALYSIS SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 D

1.2 C

1.3 D

1.4 B

1.5 B

1.6 D

1.7 D

1.8 C

1.9 C

1.10 A

**SOLUTION TWO**

(a) **Maximax Criterion**

<b>Economic condition</b>				
<b>alternatives</b>	Growing	Stable	Declining	<b>BEST</b>
Bonds	40	45	5	45
Stocks	70	30	-13	<b>70</b>
Mutual Funds	53	45	-5	53

Overall best is **70** therefore the best decision is to invest in **Stocks**

(b) **Maximin criterion**

<b>Economic condition</b>				
<b>alternatives</b>	Growing	Stable	Declining	<b>Worst</b>
Bonds	40	45	5	<b>5</b>
Stocks	70	30	-13	-13
Mutual Funds	53	45	-5	-5

**The best of the worst is 5** therefore the best decision is to invest in **Bonds**

(c) **Minimax Regret approach**

**Regret= Bests payoff – Payoff received**

**Regret table is**

<b>Economic condition</b>					
<b>alternatives</b>	Growing	Stable	Declining	<b>Maximum Regret</b>	<b>Minimum of max regret</b>
Bonds	30	0	0	30	
Stocks	0	15	18	18	
Mutual Funds	17	0	10	17	<b>17</b>

**The minimum of the maximum regret is 17** therefore the best decision is to invest in **Mutual Funds**

(d) **The Laplace Approach**

$$\text{average payoff} = \frac{\text{payoff1} + \text{payoff2} + \text{payoff3}}{3}$$

Economic condition				
alternatives	Growing	Stable	Declining	Average
Bonds	40	45	5	$(40+45+5)/3$ <b>=30</b>
Stocks	70	30	-13	$(70+30+-13)/3$ <b>=29</b>
Mutual Funds	53	45	-5	$(53+45+-5)/3$ <b>=31</b>

Best of the average is 31 hence equally likely decision is to invest in **Mutual Funds**

(e) **The Hurwiz Approach**

$$\alpha(\text{best payoff}) + (1 - \alpha)(\text{worst payoff})$$

$$\alpha = 0.3, \quad 1 - \alpha = 0.7$$

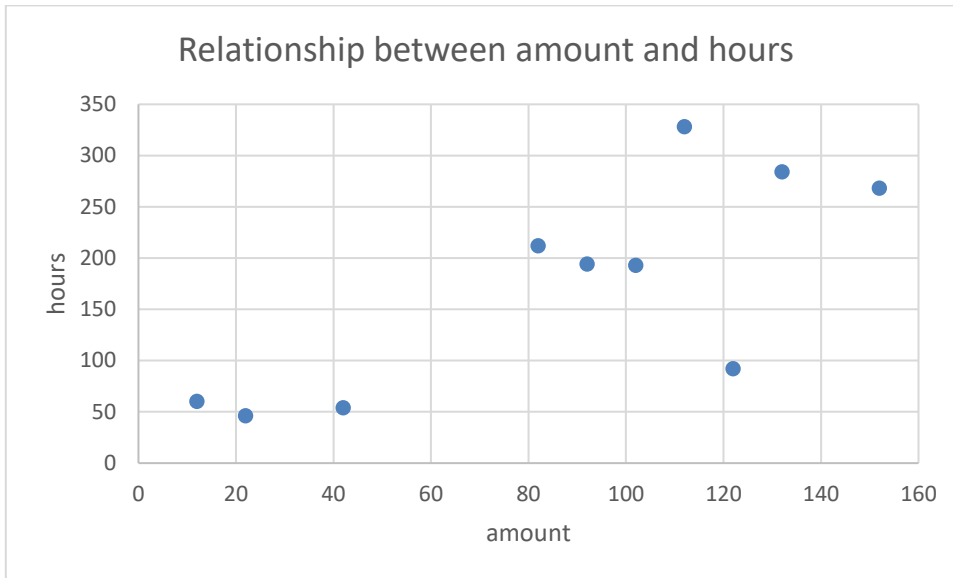
Economic condition				
alternatives	Growing	Stable	Declining	Weighted Average
Bonds	40	45	5	$0.3 \times 45 + 0.7 \times 5 = 17$
Stocks	70	30	-13	$0.3 \times 70 + 0.7 \times -13$ $= 11.9$
Mutual Funds	53	45	-5	$0.3 \times 53 + 0.7 \times -5 = 0.4$

Best weighted average is 17 hence decision is to invest in **Bonds**



**SOLUTION THREE**

(a)



(b) We construct the following table

Withdrawal	$x$	$y$	$xy$	$x^2$	$y^2$
1	42	54	2 268	1 764	2 916
2	12	60	720	144	3 600
3	102	193	19 686	10 404	37 349
4	112	328	36 736	12 544	107 584
5	122	92	11 224	14 884	8 464
6	152	268	40 736	23 104	71 824
7	22	46	1 012	484	2 116
8	92	194	17 848	8 464	37 636
9	82	212	17 384	6 724	44 944
10	132	284	37 488	17 424	80 656
	$\sum x$ = 870	$\sum y$ = 1 731	$\sum xy$ = 185 102	$\sum x^2$ = 95 940	$\sum y^2$ = 396 989

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}} = \frac{185\,102 - \frac{(870)(1731)}{10}}{95\,940 - \frac{(748)^2}{10}} \approx 1.7$$

$$a = \bar{y} - b\bar{x} = \frac{1731}{10} - (1.7)\left(\frac{870}{10}\right) = 24.9$$

$$\hat{y} = 24.89 + 1.7x$$

- (c) For every one kwacha (K1) withdrawn the number of hours until her next visit to an ATM is 1.7 hours.

$$(d) \quad r = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sqrt{\left[\sum x^2 - \frac{(\sum x)^2}{n}\right] \left[\sum y^2 - \frac{(\sum y)^2}{n}\right]}} = \frac{185102 - \frac{870 \times 1731}{10}}{\sqrt{\left[95940 - \frac{(870)^2}{10}\right] \left[396989 - \frac{1731^2}{10}\right]}} \approx 0.78$$

Therefore  $r^2 = 0.60 = 60\%$

Therefore 60% of changes in the response variable  $y$  is explained by changes in variable  $x$

## **SOLUTION FOUR**

(a) (i) We code the years as in the table

Year	Code ( $x$ )	Production (thousand Kgs) ( $y$ )	$x^2$	$y^2$	$xy$
2002	1	78	1	6 084	78
2003	2	89	4	7 921	178
2004	3	95	9	9025	285
2005	4	86	16	7396	344
2006	5	92	25	8464	460
2007	6	99	36	9 801	594
2008	7	91	49	8 281	637
	$\sum x = 28$	$\sum y = 630$	$\sum x^2 = 140$	$\sum y^2 = 56 972$	$\sum xy = 2 576$

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}} = \frac{2 576 - \frac{(28)(630)}{7}}{140 - \frac{(28)^2}{7}} = \frac{56}{28} = 2$$

$$a = \bar{y} - b\bar{x} = \frac{630}{7} - 2\left(\frac{28}{7}\right) = 90 - 8 = 82$$

$$\hat{y} = 82 + 2x$$

The trend value  $\hat{y}$  is obtained as follows for 2002  $x = 1, \hat{y} = 82 + 2(1) = 84$ , for 2003  $x = 2, \hat{y} = 82 + 2(2) = 86$ , this continues as shown in the table below:

Year	Code	Production ( $y$ )	Trend( $\hat{y}$ )
2002	1	78	84
2003	2	89	86
2004	3	95	88
2005	4	86	90
2006	5	92	92
2007	6	99	94
2008	7	91	96

(ii) After eliminating the trend, we are left with cyclical and irregular variation

(iii) The monthly increase in the production of sugar is

$$\frac{b}{12} = \frac{2}{12} = \frac{1}{6} \approx 0.167Kgs$$

(b) (i) The periodic payment is given by  $R = \frac{Ai}{1 - (1+i)^{-n}}$  where

$$A = 600\,000, n = 20(12) = 240, i = \frac{.145}{12} = 0.012083333$$

$$R = \frac{600\,000 \left( \frac{.145}{12} \right)}{1 - \left( 1 + \frac{.145}{12} \right)^{-240}} = \frac{7\,250}{0.944012064} \approx K7\,679.99$$

(ii) The Penzo family makes 240 payments of K7 679.99 each, for a total of K1 843 197.60. since the amount of the loan was K600 000, the total interest paid is  $K1\,843\,197.60 - K600\,000 = K1\,243\,197.60$

## **SOLUTION FIVE**

(a) For Hybrid A

$$(i) \bar{x} = \frac{\sum x}{n} = \frac{42}{6} = 7$$

$$S^2 = \frac{\sum x^2 - \frac{(\sum x)^2}{n}}{-n - 1} = \frac{364 - \frac{(42)^2}{6}}{5} = \frac{70}{5} = 14$$

$$S = \sqrt{14} \approx 3.74$$

For Hybrid B

$$(ii) \bar{x} = \frac{\sum x}{n} = \frac{42}{6} = 7$$

$$S^2 = \frac{\sum x^2 - \frac{(\sum x)^2}{n}}{-n - 1} = \frac{302 - \frac{(42)^2}{6}}{5} = \frac{8}{5} = 1.6$$

$$S = \sqrt{1.6} \approx 1.26$$

$$S = \sqrt{14} \approx 3.74$$

(b) (i) Let  $M$  be the event one is a man,  $W$  a woman and  $S$  one smokes.

We construct the following table based on the given information

	Men	Women	Total
Smoker	200	30	230
Non - smoker	100	170	270
Total	300	200	500

We are required to find the probability that a chosen person at random will be a smoker. That is

$$P(S) = P(S \cap M) + P(S \cap W) = \frac{200}{500} + \frac{30}{500} = \frac{230}{500} = \frac{23}{50} = 0.46$$

(ii) We are required to find the probability of a person who is a smoker given that the person is a woman.

$$P(S|W) = \frac{P(S \cap W)}{P(W)}, \text{ from the table } P(S \cap W) = 30, P(W) = 200$$

$$\text{Therefore, } P(S|W) = \frac{30}{200} = \frac{3}{20} = 0.15$$

## **SOLUTION SIX**

- (a) The normal distribution, has the mean and standard deviation as  $\mu = 50$   $\sigma = 55$  respectively.
- (i) The probability that it will take less than 110 minutes to deal with a reported leak is equal to  $P(X < 110) = P(Z < \frac{110-50}{55}) = P(Z < 1.09) = 0.5 + 0.3621 = 0.8621$
- (ii) The probability that it will take more than 175 minutes to deal with a reported leak is equal to  $P(X > 175) = P(Z < \frac{175-50}{55}) = P(Z < 2.27) = 0.5 - 0.4884 = 0.0116$
- (iii) The probability that it will take between 40 minutes and 105 minutes to deal with a reported leak is equal to  $P(40 < X < 105) = P(\frac{40-50}{55}Z < \frac{105-50}{55}) = P(-0.18 < Z < 1.0) = 0.0714 + 0.3413 = 0.4127$
- (b) The money accumulated in 9 years compounded semi – annually at 12.5% p.a. is the amount of an ordinary annuity and is given by the formula

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

Where  $R = 3\,000$ ,  $i = \frac{.125}{2} = 0.0625$ ,  $n = (2)(9) = 18$ , substituting in the formula, we get

$$S = 3\,000 \left[ \frac{(1.0625)^{18} - 1}{.0625} \right] = 3000(31.64758348) \approx K94\,942.75$$

Since this amount remained in the account at 12.5% per annum compounded semi – annually, the amount after 3 years will be

$$94\,942.75 \left( 1 + \frac{.125}{2} \right)^6 = 94\,942.75(1.438711226) \approx K136\,595.20$$

**END OF SUGGESTED SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 3: BUSINESS ECONOMICS

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TUESDAY 19 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

1. You have fifteen (15) minutes reading time. Use it to carefully study the examination paper so that you understand what to do in each question.
2. This paper is divided into TWO (2) sections:  
Section A: Ten (10) compulsory multiple choice questions.  
Section B: Any two (2) of three (3) optional questions on Microeconomics.  
Any two (2) of three (3) optional questions on Macroeconomics.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
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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**

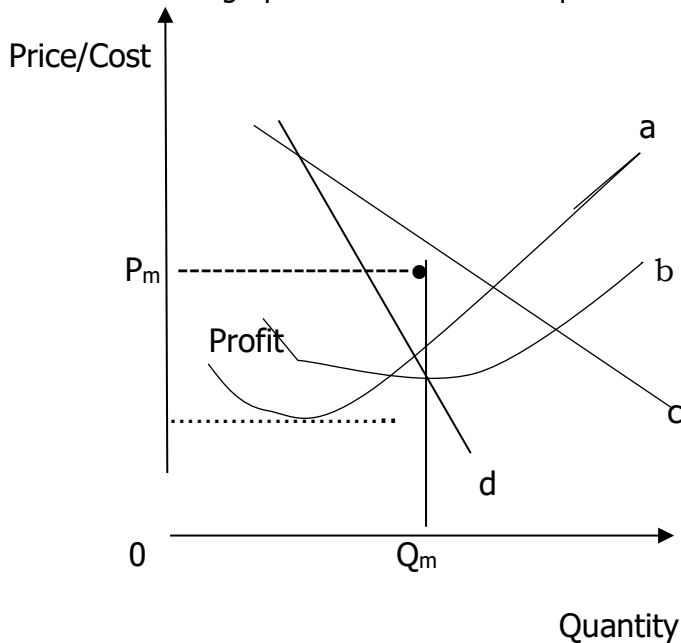
Each of the following questions has only one (1) correct answer. Write the letter of the correct answer you have chosen in your answer booklet. Marks allocated are indicated against each question.

1.1 .....is the sector of the economy which consists of mining and quarrying.

- A. Primary.
- B. Secondary.
- C. Tertiary.
- D. Service.

(2 marks)

1.2 Consider the graph below and answer question 1.2.



What is the correct name for the curve labelled b?

- A. Marginal cost.
- B. Average total cost.
- C. Average variable cost.
- D. Average fixed cost.

(2 marks)

1.3 What happens when the demand curve shifts to the left and the supply curve stays constant?

- A. Prices rise and quantity falls.
- B. Prices fall and quantity rises.
- C. Both price and quantity rise.
- D. Both price and quantity fall.

(2 marks)



- 1.4 According to the traditional theory of the firm, the equilibrium position for all firms will be where.....
- A. Costs are minimized.
  - B. Revenue is maximized.
  - C. Output is maximized.
  - D. Profit is maximized.
- (2 marks)
- 1.5 Under perfect competition, the demand curve facing an individual firm is a horizontal straight-line because, it is.....
- A. Perfectly inelastic.
  - B. Perfectly elastic.
  - C. Unitary elasticity.
  - D. Homogenous
- (2 marks)
- 1.6 If the nominal interest rate is 9% per annum and the expected rate of inflation is 6% per annum, the real interest rate is approximately.....
- A. 3%
  - B. 14%
  - C. 6%
  - D. 9%
- (2 marks)
- 1.7 Which one of the following best describes the function of the central bank?
- (i) Issuing notes and coins.
  - (ii) Supervising the banking system.
  - (iii) Conduction fiscal policy on behalf of the government.
  - (iv) Conducting monetary policy on behalf of the government.
- A. (i),(ii) and (iii) only
  - B. (i), (ii) and (iv) only
  - C. (i), (iii) and (iv) only
  - D. (ii), (iii) and (iv) only
- (2 marks)
- 1.8 If the government wishes to increase aggregate supply to achieve full employment in Zambia, which one of the following would be the most likely to achieve this?
- A. Increase taxation.
  - B. Reduce taxation.
  - C. Reduce expenditure.
  - D. Reduce exchange rate.
- (2 marks)

1.9 When the Zambian government uses taxation and spending actions to stimulate the economy, it is conducting.....

- A. Fiscal policy.
- B. Incomes policy.
- C. Monetary policy.
- D. Employment policy .

(2 marks)

1.10 If the exchange rate for Zambian kwacha against the US dollar has moved from K16.45 to K17.05, then the kwacha has.....

- A. Depreciated and US customers will find Zambian goods more expensive
- B. Depreciated and US customers will find Zambian goods cheaper
- C. Appreciated and US customers will find Zambian goods more expensive
- D. Appreciated and US customers will find Zambian good cheaper

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### 1. Microeconomics

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

#### QUESTION TWO

- (a) The price theory is very important in understanding the behaviour of buyers and sellers in the market. Explain the following statements using demand and supply diagrams:
- (i) When there is an outbreak of army worms, the price of mealie meal rises in supermarkets. (5 marks)
  - (ii) When there is load shedding, the price of rechargeable lamps increases. (5 marks)
- (b) Suppose market research has revealed that demand for and supply of chocolate bars are represented by the following equations:
- Demand Function:  $Q = 1600 - 300P$
- Supply Function:  $Q = 1,400 + 700P$
- (i) Calculate the equilibrium price and quantity in the market for chocolate bars. (4 marks)
  - (ii) Explain why the demand function has a negative slope. (2 marks)
- (c) One of the most important features of incorporated businesses is that they enjoy limited liability. Explain the meaning and importance of limited liability. (4 marks)

**[Total: 20 Marks]**

#### QUESTION THREE

- (a) The Production Possibilities Curve (PPC) is a geometrical representation of production possibilities within an economy given a fixed quantity of available resources and constant technological conditions.
- (i) Explain why the production possibilities curve is concave to the origin. (2 marks)
  - (ii) State any three (3) basic economic concepts illustrated by the production possibilities curve. (6 marks)
  - (iii) Explain any three (3) factors that may shift the production possibilities curve outwards. (6 marks)

(b) Outline any three (3) benefits of economic liberalization.

(6 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

(a) Define the term 'price discrimination' as applied to monopoly.

(3 marks)

(b) Outline any two (2) conditions that must be present for price discrimination to work well.

(4 marks)

(c) Discuss any three (3) major barriers to entry for monopoly as a market structure.

(9 marks)

(d) Giving a reason for your answer, which barriers do you feel, if any, give rise to monopoly that is socially feasible?

(4 marks)

**[Total: 20 Marks]**

## **2. Macroeconomics**

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

#### **QUESTION FIVE**

(a) The Government has several functions within the national economy, and so plays several different roles in the circular flow of income.

(i) Define the term 'Circular Flow of Income' using an appropriate diagram.

(4 marks)

(ii) Explain the role of the government as a producer, purchaser, investor and transfer payer in the circular flow of income.

(8 marks)

(b) Money is the lifeblood of any business. Many firms require external financing for their operations. Outline any four (4) sources of short term funds for a firm.

(8 marks)

**[Total: 20 Marks]**

## **QUESTION SIX**

(a) Suppose the economy's consumption function is specified by the equation.

$$C = 50 + 0.80Y_d.$$

- (i) Find consumption when disposable income ( $Y_d$ ) is K400. (2 marks)
- (ii) Find the Marginal Propensity to consume. (2 marks)
- (iii) Find the Average Propensity to Consume when  $Y_d$  is K600. (2 marks)

(b) Explain what is meant by expansionary fiscal policy and monetary policy. (4 marks)

(c) Explain the following Macroeconomic issues and why they are of importance to businesses.

- (i) An increase in government spending. (5 marks)
- (ii) A rise in the rate of inflation. (5 marks)

**[Total: 20 Marks]**

## **QUESTION SEVEN**

(a) Explain any four (4) reasons countries may engage in international trade. (8 marks)

(b) Explain the basis of trade according to the following;

- (i) Adam Smith. (3 marks)
- (ii) A rise in the rate of inflation. (3 marks)

(c) In which of the balance of payment sub-accounts (debit/credit side) will the following transactions be recorded on the Zambian balance of payments? Explain?

- (i) A Zambian resident buys chocolate from South Africa. (2 marks)
- (ii) A US automobile manufacturer buys a factory in Zambia that produces tires. (2 marks)

(d) Distinguish between nominal and real exchange rates (2 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 D

1.5 B

1.6 A

1.7 B

1.8 B

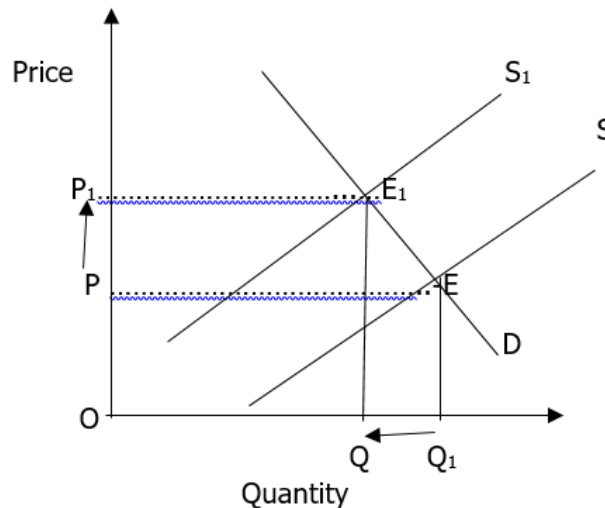
1.9 A

1.10 B

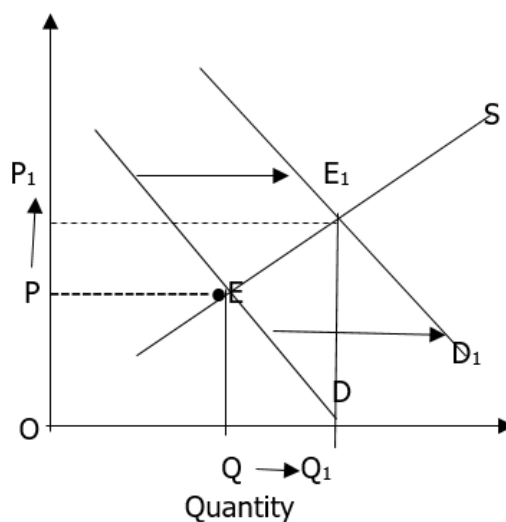
## SOLUTION TWO

(a) Effects:

- (i) An outbreak of fall armyworms affects the supply of maize which in turn affects the supply of mealie meal in supermarkets. This shifts the supply curve for mealie meal leftwards from  $S$  to  $S_1$ . Market equilibrium occurs at the point where the market demands curve intersects the market supply curve at point  $E(Q,P)$ . The new equilibrium is  $E_1(Q_1,P_e)$ . At this point the equilibrium price has increased from  $P$  to  $P_1$  while the equilibrium quantity has decreased from  $Q$  to  $Q_1$  as shown below:



- (ii) The statement, relates to more rechargeable lamps being demanded when there is load shedding. The rechargeable lamps are a substitute to electricity. This increased demand pushes the price of lamps upwards. Market equilibrium occurs at the point where the market demands curve intersects the market supply curve at point  $E(Q,P)$ . This shifts the demand curve for rechargeable lamps rightwards from  $D$  to  $D_1$ . The new equilibrium is  $E_1(Q_1,P_e)$ . At this point the equilibrium price has increased from  $P$  to  $P_1$  while the equilibrium quantity has increased from  $Q$  to  $Q_1$  as shown below:



(b) (i) At equilibrium  $Q_d = Q_s$

$$1,600 - 300P = 1,400 + 700P$$

$$200 = 1000P$$

$P = K0.20$  as the equilibrium price

Substituting  $P$  in the first equation;  $Q = 1,600 - 300(0.20)$  gives 1,540 units as the equilibrium quantity.

(ii) The slope of the demand curve is negative because of the inverse relationship between the price and the quantity demanded. Generally, the higher the price, the lower the quantity demanded and vice versa. All things being equal.

(c) The concept of limited liability means that the liability of the shareholders to third parties is limited to the amount of money they have invested in the corporation by buying shares. This is important to separate the firm from the shareholders. Further, it allows the continuity of the firm even after the demise of the founders.



### **SOLUTION THREE**

(a) Production possibilities curve:

(i) The Production possibilities curve is concave to the origin because of increasing opportunity cost.

(ii) The basic economic concepts illustrated by the production possibilities curve are:

- Scarcity: limited resources. Combinations lying outside the PPC are unattainable
- Choice: Reflected in the need for society to select among the various attainable combinations of goods lying on the curve
- Opportunity cost: Shown by the downward slope of the curve
- Technological efficiency and resource allocation
- Unemployment: Lack of jobs

(iii) The factors that may shift the production possibilities curve outwards are:

- Technology: Improvement in technology shifts the PPC rightwards
- Increase in capital stock
- Increase in the productivity of labour through training and education
- Increase in the number of workers.

(b) Benefits claimed for economic liberalisation:

- Enables a country's industries to gain access to global markets for their products and so increase home employment and incomes
- Forces home firms to become more efficient and to compete with overseas producers in home and foreign markets
- Encourages inward investment from foreign investors to revitalise home industries
- Improves choice and quality to home consumers

## **SOLUTION FOUR**

- (a) Price discrimination is the act of selling of a product or service to different buyers at different prices when the price differences are not justified by differences in production costs.

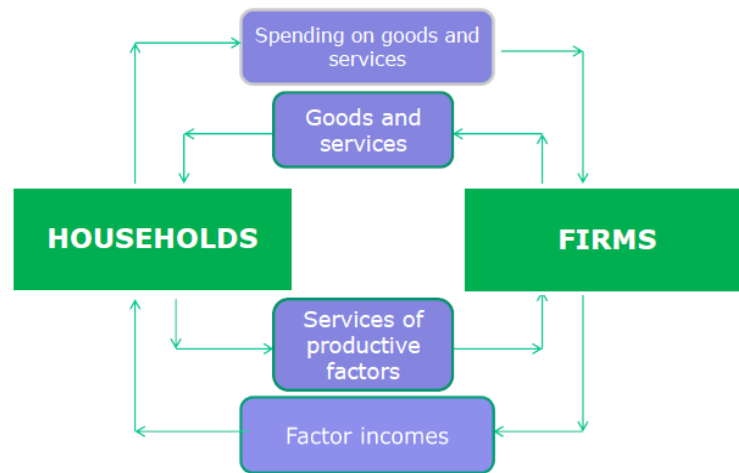
Monopolists charges different prices to different categories of buyers depending on the category's price elasticity of demand.

The monopolist practices first, second and third degree price discrimination.

- (b) The conditions necessary for price discrimination to be effective are:
- The production of a good is undertaken by a monopolist
  - Consumers are members of separate markets so that the good cannot be transferred from one market to another
  - Elasticity of demand for the good is not the same in each market
  - The cost of keeping the market separate is not too high.
- (c) The major barriers to entry in monopoly are:
- Exclusive rights are legally granted property rights to produce or distribute a good or service.
  - Complete control over an essential raw material such as coal or oil to produce gasoline prevents other firms from producing the same product.
  - Large economies of scale lead to "natural monopolies" because the largest producer can charge a lower price, driving competition from the market
- (d) The barrier that is socially feasible or beneficial to society is economies of scale. This is because economies of scale lead to lower production costs in the long run, which allows firms to sell their goods at lower prices but still make profits.

## SOLUTION FIVE

- (a) (i) Circular flow of income is defined as a diagram that show the flow of funds (payments) as well as productive resources from one economic agent to another



- (ii) The government roles in the circular flow of income:

- It acts as the producer of certain goods and services instead of privately-owned firms, and the production of public administration services, education and health services, the police force, armed forces, fire services and public transport are all aspects of output. The government in this respect acts, like firms, as a producer, and must also pay wages to its employees.
- It acts as the purchaser of final goods and services and adds to total consumption expenditure. National and local government obtain funds from the firms or households of the economy in the form of taxation and then use these funds to buy goods and services from other firms.
- It invests by purchasing capital goods, for example building roads, schools and hospitals.
- It makes transfer payments from one section of economy to another, for example by taxing working households and paying pensions, and by paying unemployment benefits and social security benefits.

- (b) Principal sources of short-term capital:

- **Credit agreements** allow businesses to borrow money for the immediate purchase of goods or services and to pay for them over an extended period of time. These agreements take a variety of forms including bank loans, overdraft facilities, credit card, trade credit, hire purchase and lease finance.
- **Bank overdrafts** are a short-term facility which allow businesses to borrow money up to an agreed limit. The bank will charge interest on the amount overdrawn, but the overdraft can be a valuable means of overcoming a short-term cash flow problem or working capital shortage
- **Bills of exchange** are a means of one business providing credit to another business for a short period, usually for 3 months. The lender makes up the bill for a specified sum payable at a future date and the borrower accepts the bill by

signing it. Once the loan has been made there may be secondary trading in the bill, that is, the loan will be sold on to a third party. The bill will be bought from the drawer at a discount from the face value of the loan, this discount representing an interest charge on the amount owed.

- **Commercial Paper** Banks and companies with good credit ratings raise funds by issuing unsecured promissory bearer notes that can be interest-bearing or discounted. These notes usually have short lives of up to 270 days.
- **Retained cash.** A business can also solve the short term mismatch of payments and receipts (the cash flow problem) by retaining a reserve of cash in its bank accounts to use in periods where expenditure exceeds income.

## **SOLUTION SIX**

(a) Consumption for each level of disposable income is found by substituting the specified disposable income level equation. Thus:

(i) for  $Y_d = K400$ ,  $C = 50 + 0.80(K400) = K50 + K320 = K370$ .

(ii)  $MPC = \frac{dC}{dY_d} = 0.8$

(iii)  $APC = \frac{C}{Y_d} = \frac{50+0.8(600)}{600} = 0.8333$

(b) Expansionary macroeconomic policies are designed to increase the level and rate of growth of national income. Expansionary fiscal policy operates via taxes and government expenditure and would include a reduction in taxes and an increase in government spending. Expansionary monetary policy operates through the money supply and credits creation process and would include open market operations and reduction in the resources that commercial banks need to hold with the central bank.

(c) (i) An increase in government spending may have a number of direct effects on business not all of which are positive, for example: - sales might increase; prices of final products (and inputs) might rise; there may be upward pressure on interest rates (crowding-out).

Indirect effects might include inflationary pressure – leading to taking export and if the increase in spending is debt financed, there may be concerns about future increases in taxes and their negative effects on sales growth and profitability.

(ii) Irrespective of its causes, a rise in the rate of inflation can impose a number of harmful effects on business, although the precise extent to which these are realised will be affected by the degree of unemployment in an economy. The key effects are likely to include the following: declining export competitiveness and less real purchasing power in the economy. If the rise in the rate of inflation accelerates, it will increase macroeconomic uncertainty which will undermine business investment and wage-price spirals may also ensure.

## **SOLUTION SEVEN**

### **(a) Reasons for international trade**

- Products that are not produced in a certain country are available in other countries, thanks to international trade. For instance, computers are not produced in Zambia, but are produced in the United States.
- Unequal distribution of skills and technology. In addition, some countries have a good reputation in the production of some commodities than other countries. An example is a country like Japan which is more skilled in the production of goods like cars.
- Excess demand for locally produced goods may force countries to import to offset the shortage.
- Unequal distribution of resources. For example, oil is found in Angola but not in Zambia, the climate in South Africa is suitable for growing apples, but not the Zambian climate, etc

- (b) (i) Absolute advantage means that a country is more efficient in the production of both goods under consideration than the other country being considered. A country's absolute advantage is measured in relation to other nations. If two countries are producing the same product, the country that produces the product cheaply has an absolute advantage over the other.
- (ii) Comparative advantage is a country's ability to produce a product at a lower opportunity cost in terms of another country. The principle of comparative advantage states that countries will benefit by concentrating on the production of those goods in which they have a relative advantage. The law of comparative advantage, therefore, states that a country should concentrate on producing those goods in which it has the greatest relative cost advantage and imports from other countries those goods in which it has the greatest relative cost disadvantage.
- (c) (i) Current Account because chocolates are a trade good. Debit side to Zambia's BOP because payment is made outside Zambia to South Africa.
- (ii) Capital Account because a factory is a financial asset. Credit side to Zambia's BOP because payment is made to Zambia by the US.
- (d) The nominal exchange rate is expressed in units of one currency per unit of the other. A real exchange rate adjusts this for changes in price levels in both currencies.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

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WEDNESDAY 20 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A – (COMPULSORY)

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

#### QUESTION ONE

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

- 1.1 The following are menu tabs in MS Word except ...  
A. Page layout.  
B. Review.  
C. References.  
D. Page setup.  
(2 marks)
- 1.2 Which one below is an example of operational level support system?  
A. Input device inform of a bar code reader captures product details from bar codes on a product in a warehouse floor.  
B. Captured sales data in a spreadsheet 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 What do the terms Megahertz (MHz), Gigahertz (GHz), refer to when deciding a computer for purchase?  
A. Main Memory capacity.  
B. Processor speed.  
C. External Storage Capacity.  
D. Hard Drive Capacity.  
(2 marks)
- 1.4 Office Automation Systems are found at the ... level  
A. Management.  
B. Operational.  
C. Knowledge.  
D. Strategic.  
(2 marks)
- 1.5 Identify from the statements below the correct one which explains the differences between data and information.  
A. Data are processed facts and figures whilst information is raw facts and figures which necessary don't give meaning to the user.  
B. Data is unprocessed facts and figures which do not make sense to the recipient whilst information is processed facts and makes sense to the user.  
C. Data gives knowledge whist information gives unprocessed wisdom.  
D. Information is everywhere in unprocessed form whilst data is difficult to capture.  
(2 marks)



- 1.6 Which of the following is an open question?
- A. Why did you apply for this job?
  - B. What time do you report for work?
  - C. How does the new Student Affairs Officer relate with the students?
  - D. Do you enjoy attending workshops?
- (2 marks)
- 1.7 A document containing a column on the right side of the paper indicating critical items that serves as a reminder during a meeting is known as a \_\_\_\_\_.
- A. Secretary's agenda.
  - B. Ordinary.
  - C. Standard agenda.
  - D. Chairperson's agenda.
- (2 marks)
- 1.8 What is the main purpose of a closing paragraph in a business document?
- A. It offers a brief explanation on the reason for writing.
  - B. It gives detailed information of the document.
  - C. It summaries the whole document.
  - D. It provides clear desired action.
- (2 marks)
- 1.9 Which of the following would **NOT** be used for internal communication?
- A. Newsletter.
  - B. Brochure.
  - C. Memos.
  - D. Conference calls.
- (2 marks)
- 1.10 Which of the following displays information that is contained on the title page of a report?
- A. What the report is attempting to cover.
  - B. A condensed version of a report.
  - C. Who wrote the report, for whom it has been compiled and date of publication.
  - D. Names of people who helped produce the report.
- (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) Network topology is the arrangement of clients/ nodes of a communication network. It can be used to define or describe the arrangement of various types of telecommunication, including commands and control radio network and computer networks.

State any five (5) advantages of using a Ring Topology when implementing a network.

(10 marks)

- (b) 'Big Data' is a term commonly associated with data warehousing and data mining.

Outline the '3Vs' characteristics of big data.

(6 marks)

- (c) Nkhoto Hotel has recently implemented an enterprise resource planning software (ERP) called Shaba. Shaba supports various Nkhoto business processes and has resulted into management effectiveness and operational efficiency. As a Chief Accountant, you had been a member of the implementation team throughout its development process.

Name four (4) Nkhoto business operations which are likely to be integrated into an ERP system.

(4 marks)

**[Total: 20 Marks]**

#### QUESTION THREE

- (a) You are employed in a private audit firm as an internal auditor. Management has formed an intranet design team and you are of the team.

(i) Define the term intranet to management.

(2 marks)

(ii) Outline three (3) ways an organisation can keep outsiders from accessing the intranet.

(6 marks)

- (b) List four (4) Selecting and Pointing input devices used with the computer.

(4 marks)

- (c) Explain four (4) ways in which you can protect data in a Spreadsheet.

(8 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

Computer networks can be structured in various ways. Two common structures are the topology and star topology.

- (a) Explain four (4) advantages of star networks over the Ring networks. (8 marks)
- (b) Outline the process of inserting a chart in MS Word. (6 marks)
- (c) Explain how Information System resources can be protected using:
  - (i) File Encryption. (3 marks)
  - (ii) Restricted physical access. (3 marks)

**[Total: 20 Marks]**

## **2. COMMUNICATION**

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

#### **QUESTION FIVE**

MR. Bwalya, one of the accounts staff is preparing an Annual Financial Report for your organisation. However, he does not seem to know which diagrams (graphs and charts) to use in his presentation.

#### **Required:**

- (a) Mention the type of graph or chart that would be appropriate for the following:
  - (i) To show trends over time. (2 marks)
  - (ii) To compare data among different categories. (2 marks)
  - (iii) To show percentage or proportional data. (2 marks)
- (b) State any four (4) reasons it would be important to use graphs and charts in the presentation. (8 marks)
- (c) Outline any three (3) challenges that may come as a result of using graphic communication. (6 marks)

**[Total: 20 Marks]**

## **QUESTION SIX**

Oral communication involves speaking and listening and is usually the most effective form of communication. However, people experience barriers to effective communication.

- (a) Outline any four (4) benefits of using oral communication at places of work. (4 marks)
- (b) Distinguish between;
- (i) Speaking and talking. (4 marks)
- (ii) Listening and hearing. (4 marks)
- (c) Explain any four (4) barriers of communication that are associated with oral communication. (8 marks)

**[Total: 20 Marks]**

## **QUESTION SEVEN**

As Manager of your organization, you have realized that some of your staff always become emotionally charged whenever their requests are not granted. This has affected production as some become uncooperative and generally apprehensive towards work.

### **Required:**

- (a) State any four (4) situation in which a Junior Officer may seek permission. (4 marks)
- (b) Explain any four (4) types of questions that managers should consider when granting permission (8 marks)
- (c) Outline any four (4) features of a message that managers should apply when refusing to grant permission to a junior staff. (8 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 D

1.2 A

1.3 B

1.4 C

1.5 B

1.6 A

1.7 D

1.8 D

1.9 B

1.10 C

## **SOLUTION TWO**

(a) **advantages of using a Ring Topology**

- A network server is not needed to control network connectivity
- Devices/nodes can be added to the network without impacting network performance
- Easy to identify and isolate single points of failure
- Better suited for high traffic environments than other topologies
- It doesn't need a central hub in order to function

(b) 'Big Data' is a term commonly associated with data warehousing and data mining. Outline the '3Vs' characteristics of big data.

The 3Vs of big data are:

- Volume as big data deals with vast quantities of data
- Velocity as the data changes very rapidly with continuous, real-time updates
- Variety as data comes from various sources

- (c)
- i. Finance
  - ii. Human Resources
  - iii. Asset
  - iv. Procurement
  - v. Manufacturing
  - vi. Sales
  - vii. inventory

### **SOLUTION THREE**

- (a) (i) Intranet is an internal organizational network based on internet protocols  
(ii) Protecting the intranet from outsider.
- (b) **Selecting and pointing device used with the computer:**
- Mouse
  - Trackballs
  - Joysticks
  - Light pen
  - Wii Remote
  - Finger
- (c) **ways in which you can protect data in a spreadsheet**
- File encryption - you specify a password and lock the excel file
  - Setting a password – to open or modify a file
  - Mark as final – to prevent any further changes by other users
  - Restrict Access – by using information rights management (IRM)
  - Digital signature – by adding it to the excel file

## **SOLUTION FOUR**

### **(a) advantages of using a Star Topology**

- The switch provides a central connection and therefore less cable is used than ring topology
- Any failure of one computer connected does not affect others
- A network server provides central administration
- Devices/nodes can be added to the network without impacting network performance
- Easy to make and control
- Better suited for high traffic environments than other topologies

### **(b) how to insert a chart in MS Word**

- Insert menu
- Illustration group
- Chart and select the type of chart
- Edit the excel sheet that pops up to reflect your information

### **(c) Briefly discuss how data and information are protected using**

#### **(i) File Encryption**

Data and information formats are scrambled before transmission and therefore hackers find it difficult to read the data

#### **(ii) Restricted physical access**

Restricted entry ensure that passwords are unreachable and physical copying of files eliminated or reduced



## **SOLUTION FIVE**

### **(a) Graphs and Charts**

- i. Line graph
- ii. Bar chart
- iii. Pie chart

### **(b) Importance of Graphs**

- They provide information in less space than the equivalent verbal message would require
- They relieve the monotony of solid texts as verbal messages may be monotonous
- They help the reader to identify relationships between variables quicker than verbal messages
- They help the reader to pick out specific figures quicker than verbal messages
- points

### **(c) Challenges of Graphic communication**

- It is expensive
- It requires skills to create
- It can only accommodate limited information
- It may be deceiving

## **SOLUTION SIX**

### **(a) Advantages of Oral communication**

- Immediate feedback
- It is not expensive
- Easier to get clarification
- It is interactive
- It is flexible

### **(b) Brief Notes**

- (i) - Speaking is planned while talking is not
- Speaking requires uttering or saying something/anything, while talking is to interact/ converse/ discuss some specified issues with a specified audience.
- (ii) - Listening is intentional while hearing is unintentional
- Listening is voluntary while hearing is involuntary.
- Listening involves one to be attentive so that one can grasp the message while hearing does not require attentiveness.

### **(c) Barriers associated with oral communication**

- It cannot be used by people with hearing impairments
- It does not show records
- It is usually informal
- It does not give enough time to send or receive the message
- It can be easily be affected by external circumstances such as background noise

## **SOLUTION SEVEN**

### **(a) When to seek permission**

- Compassionate leave
- Giving discount to customers
- Small amount of expenditure
- When bereaved
- When someone is unwell
- Need to act on some situations that need serious attention.

### **(b) Questions**

- Have standard procedures been followed?
- Has a good case been made?
- Will giving permission affect the budget?
- Are there alternatives?
- What will be effect of giving permission?
- Close questions
- Open questions
- Funnelling questions
- Leading questions.

### **(c) Refusal message should be:**

- Polite
- Unambiguous
- Firm
- Justified and explained.
- It should be brief and direct to the point.

**END OF SOLUTION**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA: 5 COST ACCOUNTING

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TUESDAY 19 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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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 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 What is an equivalent unit?

- A. A unit of output which is identical to all others manufactured in the same process.
- B. Notional whole units used to represent uncompleted work.
- C. A unit of product in relation to which costs are ascertained.
- D. The amount of work achievable, at standard efficiency levels, in an hour.

(2 marks)

1.2 Which one of these is a fixed cost?

- A. Raw materials.
- B. Telephone expense.
- C. Rent.
- D. Electricity.

(2 marks)

1.3 The following information is available about a product a company sells:

Direct material (per unit)	K12
Direct labour (per unit)	K23
Variable overheads (total)	K30,000
Fixed overheads (total)	K50,000
Production (units)	K10,000

What is the prime cost per unit?

- A. K15
- B. K38
- C. K43
- D. K35

(2 marks)

1.4 Which one of the following group of workers would be classified as indirect labour?

- (i) Machinists in a company manufacturing clothes.
- (ii) Plasterers in a building company.
- (iii) Maintenance workers in a hat factory.

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

(2 marks)

1.5 An activity for which separate measurement of cost is undertaken is:

- A. A cost centre.
- B. A cost object.
- C. A cost unit.
- D. A revenue centre.

(2 marks)

1.6 A company has recorded the following results:

<b>Month</b>	<b>January</b>	<b>February</b>	<b>March</b>
Units	5,600	6,000	5,400
Production costs	K58,400	K60,000	K57,600

In April, the budgeted output is 3,250 units. The budgeted production costs should be:

- A. K37,000
- B. K32,500
- C. K49,000
- D. K34,667

(2 marks)

1.7 Which of the following defines batch costing?

- A. A costing method used where each cost unit is separately identifiable, where production may not take place for inventory.
- B. A costing method used where there are separately identifiable processes, where production may take place for continuous jobs.
- C. A costing method used where each cost unit is separately identifiable, where production may take place for inventory.
- D. A costing method used where there are continuous processes.

(2 marks)

1.8 A product requires 3 kilos of raw material per unit. The standard cost of each kilo is K2. During the last period, 5,000 units were produced, 16,000 kilos were purchased and used costing a total of K30,400.

The materials price and usage variances were:

<b>Price</b>	<b>Usage</b>
A. K1,600 (F)	K2,000 (A)
B. K1,600 (A)	K2,000 (F)
C. K65,600 (F)	K84,000 (A)
D. K65,500 (A)	K84,000 (F)

(2 marks)

1.9 If inventory fall in a period by 1,000 units and the absorption rate is K71 per unit which of the following statements is true?

- A. Absorption costing profit will be K19,000 lower than marginal costing profit.
- B. Absorption costing profit will be K71,000 lower than marginal costing profit.
- C. Absorption costing profit will be K19,000 higher than marginal costing profit.
- D. Absorption costing profit will be K71,000 higher than marginal costing profit.

(2 marks)

1.10 What is an interlocking bookkeeping system?

- A. A single, combined system containing both cost accounting and financial accounting records.
- B. A system combining cost accounting and management accounting.
- C. A system supported by prime entry records.
- D. A system where separate accounts are kept for cost accounting and financial accounting.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

There are **FIVE (5)** questions in this Section.

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

### QUESTION TWO

Viva Meridian Bank (VMB) has three revenue earning departments: Personal Banking, Corporate Banking, and Mortgages and Loans. The business operates a system of departmental accounting and the following is budget information for quarter 2:

<b>Overheads</b>	<b>K</b>
Wages	500,000
Rent	20,000
Utilities	35,600
Stationery	24,000
General manager's salary	100,000
Depreciation	64,500

Other relevant information is provided as follows:

	<b>Personal Banking</b>	<b>Corporate Banking</b>	<b>Mortgages and Loans</b>
Floor area (m <sup>2</sup> )	1,200	1,500	1,300
Number of staff	25	15	10
Number of customers	25,000	15,000	10,000
Non-current assets at cost(K)	50,000	65,000	100,000

#### **Required:**

- (a) Prepare an overhead cost analysis, clearly showing the basis of apportionment. (9 marks)
- (b) Calculate the departmental overhead absorption rate on the basis of the number of customers. (3 marks)
- (c) Define the following terms in accounting for overheads:
- (i) Overheads.
  - (ii) Cost allocation.
  - (iii) Cost apportionment.
  - (iv) Cost absorption. (8 marks)

**[Total: 20 Marks]**

### QUESTION THREE

- (a) State five (5) reasons why workers may leave an organization. (5 marks)
- (b) A company manufactures a product from a raw material, which is purchased at K54 per kg. The company incurs a handling cost of K350 plus freight of K400 per order. The incremental



carrying cost of inventory of raw material is K0.50 per kg per month. In addition, the cost of working capital finance on the investment in inventory of raw material is K8 per kg per annum. The annual production of the product is 94,500 units and 2 units are obtained from one kg of raw material.

**Required:**

- (i) Calculate the economic order quantity of raw materials. (6 marks)
- (ii) Calculate the frequency of placing orders for procurement. (2 marks)

(c) Fortune chemicals Limited has three outlets located in Kamwala, Matero and Chainda. The company makes 'parts' for spray equipment and chemicals used in pest control. Details of the labour payment methods at their base in Kamwala as well as two employees at their outlets are as follows:

- (i) Direct labour force is paid on a time rate basis, but a bonus is paid if work can be completed faster than the time allowed.
- (ii) The bonus is for the savings achieved to be shared equally between employer and employee.
- (iii) Wages are paid as (time rate + 50% of (time saved x time rate)).
- (iv) If no bonus is due, then the time rate applies.
- (v) Magwaya Kalopa worked for 38-hours last week; his time rate is K10 per hour. He is allowed a time of 30 minutes to carry out his work on each unit of production; last week he completed 71 units.
- (vi) Biden Simushi has a time rate of K11 per hour; last week she worked 40 hours. She is allowed a time of 15 minutes to carry out her work on each unit of production; last week she completed 184 units.

**Required:**

Determine the gross earnings of each employee.

(7 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

Mulobezi Bus Company (MBC) operates four coaches, each with a capacity for 25 passengers. MBC operates on two routes with two coaches on each route. Each coach on East route completes 12 journeys per day and on North route 10 journeys per day. The coaches operate for six days per week and for 52 weeks per year.

The company is analyzing performance on each route and has gathered the following route data for the last 52 weeks:

	<b>East route</b>	<b>North route</b>
Average number of passengers per journey	13	11
Average fare paid per passenger, per journey	K226	K280
Route length per journey (kilometres)	14	19

Operating cost data for the last 52 week period is as follows:

Drivers' wages: K110 per coach per working day

Fuel and maintenance: K0.8932 per kilometre

Vehicle tax and insurance: K7,740 per coach for the period

Apportioned fixed costs: K43,520 per route for the period

#### **Required:**

- (a) State four (4) characteristics of service industry. (4 marks)
- (b) Calculate, for the 52-week period:
  - (i) The total cost per coach on each route; (10 marks)
  - (ii) The cost per kilometre on each route (to four decimal places of K). (6 marks)

**[Total: 20 Marks]**

#### **QUESTION FIVE**

Gift, a grade twelve pupil at David Kaunda Technical school has produced a single washing soap and the product is called SOOM. The standard cost for SOOM and actual costs is as follows:

<b>Description</b>	<b>Standard</b>	<b>Actual Results</b>	<b>K</b>
Production units	2 000	1,800	

Direct material. 400kg at K12 per Kg	K4,800	750,000 Kgs for	8,250,000
Direct labour 500 hours at K7 per hour	K3,500	840,000 hours for	6,720,000
Fixed production overheads 300 hours at K10 per hour	K3,000	Fixed production overheads	6,200,000

**Required:**

- (a) Prepare a standard cost card for actual SOOM production. (3 marks)
- (b) Calculate the following variances:
- (i) Material price and material usage variances. (4 marks)
- (ii) Labour rate and labour efficiency variances. (4 marks)
- (iii) Fixed overhead expenditure and fixed overhead volume variances. (4 marks)
- (c) List five (5) differences between Management Accounts and Financial Accounts. (5 marks)

**[Total: 20 Marks]**

**QUESTION SIX**

The details of the unit cost of products X, Y, and Z have been provided below:

<b>Products</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Demand (units)	1,200	2,800	3,000
	<b>K</b>	<b>K</b>	<b>K</b>
Direct Material	70	55	40
Direct Labour	65	60	38
Variable Overheads	11	8	7
Fixed Overheads	32	24	20

**Additional information:**

The fixed overheads were absorbed at the rate of K8 per machine hour.

The budgeted fixed overheads of K165,600 can be analyzed into the following cost pools with their respective percentages agreed for apportionment:

**Cost Pool** **Percentages (%)**

Batch	20%
Machinery	45%
Customer service	25%
Deliveries	10%

	<b>X</b>	<b>Y</b>	<b>Z</b>
Units in a batch	120	140	200
Quantities per delivery	100	280	250
Number of customers	50	180	220

**Required:**

- (a) Calculate the activity rates per batch, machine hour, customer service and deliveries. (11 marks)
- (b) Calculate the total cost of a unit of product X (5 marks)
- (c) Explain the difference between Cost Centre and Revenue Centre. (4 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA: 5 COST ACCOUNTING SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 B

1.2 C

1.3 D

1.4 D

1.5 B

1.6 C

1.7 C

1.8 A

1.9 B

1.10 D

## SOLUTION TWO

### (a) Overhead analysis sheet

Overhead	Basis of apportionment	Total cost	Personal Banking	Corporate Banking	Mortgages & Loans
		(K)	(K)	(K)	(K)
Wages	Number of staff	500,000	250,000	150,000	100,000
Rent	Floor area (m <sup>2</sup> )	20,000	6,000	7,500	6,500
Utilities	Floor area (m <sup>2</sup> )	35,600	10,680	13,350	11,570
Stationery	Number of customers	24,000	12,000	7,200	4,800
General manager's salary	Number of staff	100,000	50,000	30,000	20,000
Depreciation	Non-current assets cost(K)	64,500	15,000	19,500	30,000
Total		744,100	343,680	227,950	172,870

### Workings

1. Wages

$$\text{Personal Banking} = 25/50 \times \text{K}500,000 = \text{K}250,000$$

2. Rent

$$\text{Personal banking} = 1,200/4,000 \times \text{K}20,000 = \text{K}6,000$$

3. Utilities

$$\text{Personal banking} = 1,200/4,000 \times \text{K}35,600 = \text{K}10,680$$

4. Stationery

$$\text{Personal banking} = 25,000/50,000 \times \text{K}24,000 = \text{K}12,000$$

5. General manager's salary

$$\text{Personal banking} = 25/50 \times \text{K}100,000 = \text{K}50,000$$

6. Depreciation

$$\text{Personal banking} = 50,000/\text{K}215,000 \times \text{K}64,500 = \text{K}15,000$$

### (b) Departmental overhead rates

(i) Personal Banking =  $\text{K}343,680/25,000 = \text{K}13.75$  per customer

(ii) Corporate Banking =  $\text{K}227,558/15,000 = \text{K}15.17$  per customer

(iii) Mortgages & loans =  $\text{K}172,870/10,000 = \text{K}17.287$  per customer

### (c) Definition of terms

- (i) Overheads are indirect costs that cannot be identified specifically and exclusively with a given cost object. They consist of indirect labour, indirect materials and indirect expenses.

- (ii) Cost allocation is the process of assigning costs directly to the departments/cost centres.
- (iii) Cost apportionment is the sharing of common costs among the departments/cost centres.
- (iv) Cost absorption is attributing the overheads accumulated by a cost centre to the cost units passing through it.

### SOLUTION THREE

(a) Reasons why workers may leave an organization:

- Poor pay. According to the Pew Research Center data, the top reason employees left their job was because of poor pay. ...
- Lack of career advancement opportunities. ...
- Feeling disrespected at work. ...
- Childcare issues. ...
- Not enough flexibility. ...
- Poor work-life balance. ...
- Burnout. ...
- A bad manager.

(b) Calculation of Economic Order Quantity & Frequency of Ordering.

(i) Economic Order Quantity

$$EOQ = \sqrt{2CD/H}$$

Where C is the Cost of placing an order

D is the annual demand

H is the annual holding costs.

$$\text{Thus } C = \text{Handling Cost} + \text{Freight} = K350 + K400 = \underline{\underline{K750}}$$

$$D = (\text{Annual Production/Daily Usage}) \times 1 \text{ Kg}$$

$$= (94,500 \text{ units}/2 \text{ units})$$

$$= 47,250 \times 1 \text{ kg}$$

$$= \underline{\underline{47,250 \text{ kgs}}}$$

$$H = \text{Carrying Cost} + \text{Finance charge on investment in inventory}$$

$$= (12 \text{ months} \times K0.50) + K8$$

$$= \underline{\underline{K14}}$$

$$\therefore EOQ = \sqrt{2CD/H}$$

$$= \sqrt{2 \times K750 \times 47,250 \text{ kgs} / K14}$$

$$= \underline{\underline{2,250 \text{ kgs}}}$$



(ii) Frequency of ordering = Annual Demand/EOQ

= 47,250 kgs/2,250 kgs

= **21 times**

(c) Fortune Chemicals Limited

Determination of gross wages for each employee

Magwaya Kalopa

	K
Basic Pay (38 hours x K10 per hour)	380
Bonus:-	
Time allowed (71 units x 30/60 hrs)	35.5 hrs
Actual Time	38 hrs
Time Saved	—
No Bonus paid since no time is saved	<u>0</u>
Gross Earnings	<b><u>380</u></b>

Biden Simushi

		K
Basic pay (40hrs x K11)		440
Bonus:-		
Time Allowed (184 units x 15/60 hrs)	46 hrs	
Actual Time saved	40 hrs	
Time saved 6 hrs Bonus @ 50%	3 hrs	
Bonus payment	x K11	<u>33</u>
<b>Gross Earnings</b>		<b><u>473</u></b>

## SOLUTION FOUR

(a) Characteristics of service industry

- (i) Intangibility
- (ii) Simultaneity
- (iii) Heterogeneity
- (iv) Perishability

(b) Total cost per coach on each route

	East route	North route
	K	K
Drivers' wages (w1)	34,320	34,320
Fuel and maintenance (w2)	46,818	52,949
Fixed costs:		
Vehicle tax & insurance	7,740	7,740
Apportioned costs (w3)	21,760	21,760
<b>Total cost</b>	<b>110,638</b>	<b>116,769</b>

(c) Cost per kilometre on each route

	East route	North route
Total cost	110,638	116,769
÷ total kilometres (w4)	52,416	59,280
<b>Cost per kilometre</b>	<b>K2.1108</b>	<b>K1.9698</b>

Workings:

1. Wages

$$K110/\text{coach} \times 6 \text{ days/week} \times 52 \text{ weeks/year} = K34,320$$

2. Fuel and maintenance

$$K0.8932/\text{km} \times 12 \text{ journeys/day} \times 14 \text{ km/journey} \times 6 \text{ days/week} \times 52 \text{ weeks/year} = K46,818$$

$$K0.8932/\text{km} \times 10 \text{ journeys/day} \times 19 \text{ km/journey} \times 6 \text{ days/week} \times 52 \text{ weeks/year} = K52,949$$

3. Apportioned costs

$$K43,520/\text{route} \div 2 \text{ coaches/route} = K21,760$$

4. Total kilometres

$$\text{EAST: } 12 \text{ journeys/day} \times 14 \text{ km/journey} \times 6 \text{ days/week} \times 52 \text{ weeks/year} = 52,416\text{kms}$$

$$\text{NORTH: } 10 \text{ journeys/day} \times 19 \text{ km/journey} \times 6 \text{ days/week} \times 52 \text{ weeks/year} = 59,280\text{kms}$$

**Note:** As operators work a 6 days per week and there are 52 weeks in a year, they basically work for 312 days in a year. East route makes 12 journeys and there are 14 kilometres per journey hence the computation in working 4.

## SOLUTION FIVE

	<b>Per Unit Cost (K)</b>	<b>Units</b>	<b>TOTAL (K)</b>	
(a)				
Direct material	4800	1,800	8,640,000	
Direct labour	3500	1,800	6,300,000	
Fixed production overheads	3000	1,800	5,400,000	
<b>Standard Cost</b>			<b>20,340,000</b>	
(b)				
Variances				
<b>Direct material variances</b>				
<b>Price</b>				
Standard should Be	750,000	12	9,000,000	
But did cost			8,250,000	
			<b>K 750,000</b>	<b>Favourable</b>
<b>Usage</b>				
Standard should be	400	1,800	720,000 Kg	
But it was			750,000 Kg	
			30,000 Kg	
			<b>K12</b>	
			<b>K 360,000</b>	<b>Adverse</b>
<b>Labour Rate Variance</b>				
Standard should be	840000	7	5,880,000	

But Did Cost			6,720,000	
			<u><b>K 840,000</b></u>	<b>Adverse</b>

**Labour Efficiency Variance**

Standard Should Be	500	1,800	900,000	
But It Was			<u>840,000</u>	
			<u>60,000</u>	HOURS
			<u>7</u>	
			<u><b>K</b></u>	
			<u><b>420,000</b></u>	<b>Favourable</b>

**Fixed Overhead Expenditure**

Standard should be	3000	2,000	6,000,000	
But did cost			<u>6,200,000</u>	
			<u><b>200,000</b></u>	<b>Adverse</b>

**Fixed Overhead -Volume Variance**

Standard should be			2,000	
But it was			<u>1,800</u>	
			<u>200</u>	
			<u>3000</u>	
			<u><b>K600,000</b></u>	<b>Adverse</b>

(c)

<b>MANAGEMENT ACCOUNTS</b>	<b>FINANCIAL ACCOUNTS</b>
Have no defined periods for reporting performance	Have defined periods for reporting performance
Not required by Law	Required by Law
No format prescribed for reporting	Have prescribed formats for reporting
Reporting is on specific areas as required by management	They report performance of an organisation as a whole
Both historical and future	Historical in nature
Both Non-monetary and monetary	Mostly is in monetary form

## SOLUTION SIX

### (a) Workings

Apportionment of overheads		K165,600
Machine related	45% x K165,600	= K74,520
Batch related	20% x K165,600	= K33,120
Delivery related	10% x K165,600	= K16,560
Customer services	25% x K165,600	= K41,400

Total Machine hrs:	X 1,200 X4	= 4,800
	Y 2,800 X 3	= 8,400
	Z 3,000 X 2.5	= <u>7,500</u>

Total hours **20,700**

Number of batches	X 1,200/120	= 10
	Y 2,800/140	= 20
	Z 3,000/200	= <u>15</u>

Total **45**

Number of deliveries		
	X 1,200 /100	= 12
	Y 2,800/280	= 10
	Z 3,000/250	= <u>12</u>

Total **34**

Number of customers = 450

Statement showing calculation of activity rates:

Activity base	Overheads	No of activities	Rates
	K		K
Machine related	74,520	20,700	3.6 per machine hour
Batch related	33,120	45	736 per batch
Delivery related	16,560	34	487 per delivery
Customer service	41,400	450	92 per customer

(b) <u>Cost per unit of X (1,200 units)</u>		K
Prime cost	K146 x 1,200	175,200
Overheads:		
Machine related	(4,800 x 3.6)	17,280
Batch	(10 x 736)	7,360
Delivery	(12 x 487)	5,844
Customer	(50 x 92)	<u>4,600</u>
Total		<b><u>210,284</u></b>
Cost per unit	K210,284/ 1200 =	<b><u>K175.24</u></b>

- (c) Cost Centre is a department or function responsible for costs only while Revenue Centre is a department or function responsible for revenue only.

### **END OF SUGGESTED SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 6: BUSINESS LAW

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FRIDAY 22 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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



## **SECTION A – (COMPULSORY)**

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

#### **QUESTION ONE**

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

1.1. What is the statute of limitations for a breach of contract?

- A. 5 years.
- B. 2 years.
- C. 10 years.
- D. The statute of limitations varies by state.

(2 marks)

1.2. What type of liability arises when a person makes a false statement that causes harm to another person's reputation?

- A. Defamation.
- B. Negligence.
- C. Fraud.
- D. Strict liability.

(2 marks)

1.3. What is the term used to describe a legal agreement between two or more parties that creates obligations that are enforceable by law?

- A. Contract
- B. Agreement
- C. Covenant
- D. Promise

(2 marks)

1.4. Which of the following is not a right of an agent

- A. Right to remuneration.
- B. Right to indemnity.
- C. Right to exercise.
- D. Right to make a profit.

(2 marks)

1.5. What is the maximum number of partners in a partnership?

- A. 10
- B. 100
- C. 20
- D. 50

(2 marks)

1.6. People no matter the grouping, need some kind of control and guidance. Society's ethical and moral guidance is an example of .....

- A. Law and Rules.
- B. Formal control mechanisms.
- C. Informal control mechanisms.
- D. Social Order.

(2 marks)

1.7. In a voidable contract, property transferred before avoidance is usually ..... from a third party.

- A. Recoverable.
- B. Irrecoverable.
- C. Voidable.
- D. None of the above.

(2 marks)

1.8. In ..... ownership is transferred immediately.

- A. A contractual agreement.
- B. An agreement to sale.
- C. A contract of sale.
- D. A conditional sale.

(2 marks)

1.9. Agency is a relationship that subsists between the principal and the agent. Where the agent and the principal agree that their relationship should come to an end. Such termination is by .....

- A. End of time period.
- B. Unilateral withdraw of consent.
- C. Mutual consent.
- D. Operation of Law.

(2 marks)

1.10. Munga, Matilda and Nchimunya are in a partnership business where Nchimunya is classified as a 'dormant partner'. This means that, a dormant partner .....

- A. Does not take part in a profit sharing of the business.
- B. Does not take part in the management of the business.
- C. Does not contribute any capital into the business.
- D. Is also known as a nominal partner.

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

**There are five (5) questions in this section.**

**Attempt any four (4) questions**

### **QUESTION TWO**

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

**[Total: 20 Marks]**

### **QUESTION THREE**

Write short notes on the following:

- A. Redundancy. (5 marks)
- B. Termination of contract of employment by frustration. (5 marks)
- C. Divisions of the High Court for Zambia. (5 marks)
- D. Persuasive precedents. (5 marks)

**[Total: 20 Marks]**

### **QUESTION FOUR**

Alice and Bob enter into a contract for the sale of Perishable goods. The contract specifies that Bob was to deliver the goods within 30 days of the date of the contract. Alice receives the goods 40 days after the date of the contract. The goods had perished by the time they were delivered to her.

**Required:**

- (a) Who is responsible for the perished goods? (5 marks)
- (b) What is the difference between a condition and a warranty in a sale of goods contract? (5 marks)
- (c) Identify any four (4) ways a contract can be terminated. (10 marks)

**[Total: 20 Marks]**

### **QUESTION FIVE**

Haafwa Farms is in the business of selling breeding bulls. They entered into an agreement with Gwama Farms for the sale of a bull at a cost K20,000. Gwama Farms said they did not have money at that time, but signed an agreement with the seller in consideration of a K10 giving them an option to buy the bull within one year. In the 7 month, a new buyer, Charles Mutale Cattle Breeders offered to buy the bull at K 45,000 and Haafwa Farms sold it to them at that price.

#### **Required:**

- (a) Explain the validity or non - validity of the contract between Haafwa Farms and Gwama Farms. (10 marks)
- (b) Explain the implication of the contract between Haafwa Farms and Charles Mutale Cattle Breeders. (10 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

Zambezi River Fish Hunters is a partnership business which started four years ago and has been doing fine. At their last meeting, one of the partners suggested that they turn their business into a Public Limited Company. Her partners want to know the differences between a partnership and a public limited company, and have come to you to explain the differences between the two types of businesses in relation to:

- (a) (i) Bankruptcy. (2 marks)
- (ii) Liability in respect to business debt. (2 marks)
- (iii) Property. (2 marks)
- (iv) Agency. (2 marks)
- (v) Formation. (2 marks)
- (vi) Transfers of shares. (2 marks)
- (b) With the aid of case law, explain four (4) ways by which IYC Cosmetics partnership may be dissolved by the court of law. (8 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 6: BUSINESS LAW SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 D

1.2 A

1.3 A

1.4 D

1.5 C

1.6 A

1.7 B

1.8 C

1.9 C

1.10 B

## SOLUTION TWO

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

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

- (b) (i) The list of *Five defences in Tort* would include: Consent; Contributory negligence; Statutory or common law justification; Necessity and Illegality.
- (ii) *Consent (volenti non fit injuria)* – This is a defence in tort where the injured consents to the taking of the risk e.g. in football, undertaking a surgery, etc. The consent must be voluntary and freely undertaken, for it to be a good defence by the wrong doer.

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

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

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

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

### **SOLUTION THREE**

- (a) *Redundancy*:- This is a method by which an employee loses his employment when an employer intends to stop carrying on his business, or is reducing employee numbers because of poor business or to save on costs so the business remains viable. The employee is entitled to redundancy payment based on how long he has worked among other factors.
- (b) *Termination of Contract of Employment by Frustration*:- Frustration of a contract occurs when, without the fault of either part, it becomes incapable of being performed. Thus a contract of employment becomes frustrated when the employee is incapable of performing the contract e.g. when he is sick, dies, imprisoned etc and cannot carry on the work.
- (c) *Divisions of the High Court*:- The High Court for Zambia is established pursuant to Article 133 of the Constitution and is the third highest court in Zambia after the Court of Appeal, and the Supreme Court/Constitutional Court (the two are at par).

It has four (4) divisions:

Industrial Relations Court – For labour and industrial disputes

Commercial Court – Commercial/business related matters

Family Court – For Family matters like divorce.

Children's Court – For matters relating to custody of children, adoption, etc.

- (d) *Persuasive Precedent*:- A *precedent* is a previous court decision which another court is bound to follow by deciding a subsequent case in the same way. *Persuasive precedents* may be followed, but need not be followed in a later case. This occurs where a decision is made by the court of the same status e.g. Livingstone High Court and Kitwe High Court; when a decision is made by a court of a different country; or the court hearing the matter is higher than the one that made the decision, e.g. the Supreme Court is higher than the High Court, so it is not bound by the High Court decisions, they can just be persuasive to it.

## **SOLUTION FOUR**

- (a) Bob, as the seller, could be responsible for any delay in delivery because under the law of contract, he has a duty to deliver the goods within the time specified in the contract. If Bob fails to deliver the goods within the specified time, Alice, as the buyer, may have the right to terminate the contract and seek a remedy for breach of contract.
  
- (b) A condition is a term of the contract that is considered essential and must be fulfilled for the contract to be valid. A breach of a condition gives the buyer the right to terminate the contract and seek damages. A warranty, on the other hand, is a promise by the seller regarding the quality or condition of the goods. A breach of a warranty gives the buyer the right to seek a remedy, such as a repair or replacement of the goods, but not the right to terminate the contract.
  
- (c) By breach
  - By frustration
  - By agreement
  - By death



## SOLUTION FIVE

- (a) **Consideration** is some right, interest, profit or benefit accruing to one party, or some forbearance, detriment, loss or responsibility given, suffered or undertaken by the other.

One of the rules of consideration is that it **must not be adequate** (i.e. does not need to be equal in value to the consideration received in return) and that it **must be sufficient** (that is it must be capable in law of being regarded as consideration by the courts). These rules entail that parties are free to contract as they please and the duty of the court is to enforce what the parties have agreed and not repair a bad bargain.

In the case at hand, the contract between Haafwa Farms and Gwama Farms had a consideration of K10 offering the buyer to buy the bull within one year. That was enough consideration, as consideration does not need to be adequate, it only needs to be sufficient. The case of **Mountford v Scott (1974)**, where £1 was enough consideration for a purchase of a house within six months at £10, 000. Further, **Thomas v Thomas (1842)** where an annual rent of £1 was sufficient consideration. In **Chappel and Co. Ltd v Nestle Co. Ltd (1960)**, chocolate wrappers were enough consideration.

In view of the above, there was enough consideration by the paying of K10 for a bull worth K20, 000.

- (b) Based on the above rules of consideration explained in (a) above, Haafwa Farms is bound by the initial agreement, even if the amount was very small. Thus the implication of the new contract of selling the bull at K45, 000 to Charles Mutale Cattle Breeders is in total breach of the agreement with Gwama Farms. Gwama Farms can sue for breach of contract **Mountford v Scott (1974)**, it does not matter how high the new amount being offered by the new customer is, the seller is already bound by the K10 they received.

## SOLUTION SIX

- (a) (i) *Bankruptcy* – Bankruptcy of a partner dissolves the partnership, but the bankruptcy of a shareholder in a PLC company does not dissolve it.
- (ii) *Liability in respect of business debts* – In a partnership, partners are liable for the business debts jointly (all together) and severally (each one of them individually), whilst in a PLC company, shareholders are not personally liable for the debts of the company.
- (iii) *Property* – In a partnership, property belongs to the partners who own it in form, whilst in a PLC company, it belongs to the company and not shareholders as it has separate legal identity from the owners.
- (iv) *Agency* – In a partnership, partners are agents of a partnership and can make contracts on behalf of the partnership, whilst in PLC company, shareholders are not agents of the company.
- (v) *Formation* – Partnership is easier to form and cheaper to maintain, whilst a PLC company will be expensive to form, more documents and required, annual returns have to be filed every year, making it expensive to maintain.
- (vi) *Transfer of Shares* – In a partnership, shares can only be transferred with the consent of other partners, whilst in a PLC company, shares are freely transferrable, no need to seek consent from other shareholders.
- (b) A partnership, i.e. Zambezi River Fish Hunters, may be **dissolved by the court of law** through:
- (i) *Mental incapacity of one of the partners*. The other partners can petition the court for dissolution of the partnership, and if satisfied, the court will grant the petition. Section 35 (a) of the Partnership Act 1890
- (ii) *Physical Incapacity*. Section 35(b) of the Act. This would happen where a partner becomes permanently incapacitated to take part in the business in any anyway. In ***Whitewell v Arthur (1865)*** the court refused to grant the petition for dissolution because the partner had recovered from the paralysis for which the petition was done, at the time it was being heard by the court. Further, it must be the other partners petitioning not the incapacitated partner ***Peyton v Mindham (1971)***
- (iii) *Conduct prejudicial to the business*. Section 35(c) of the Act. Partners may petition for dissolution if any of them does something which injures the business, e.g. misappropriation of partnership money (***Essell v Hayward (1860)***), criminal conviction, etc. Conduct that does not affect the business will not be accepted as a ground for dissolution (***Snow v Milford (1868)***).
- (iv) *Willful or persistent breach of the agreement*. This would be a ground where the partner willfully causes serious breach of the agreement causing damage to the firm, the other partners may petition the court for dissolution. Section 35(d) of the Partnership Act 1890.
- (v) *If the business makes losses*. Any of the partners can petition the court for dissolution. This can happen if there is no chance of reviving the business back to profit (***Handyside v Campbell 1901***), Section 35(e) of the Partnership Act 1890.

(vi) *When it is just and equitable to do so.* Section 35 (c) of the Partnership Act 1890. This is where the court deems it fit to dissolve the partnership for justice or fairness' sake, i.e. that is the most reasonable or just thing to do. This can happen in many ways such as evading lawful obligations like tax, partnership used for fraud (Baring v Dix (1786), where one partner is not co-operating with others (**Harrison v Tennant 1856**), where a partnership is in actuality a company (**Re Yenidje Tobacco Co Ltd (1916)**), etc.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 7: PRINCIPLES OF MANAGEMENT

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MONDAY 18 MARCH 2024

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

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**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 The ..... of an organization is concern with the overall purpose and scope of the organization and how the value will be added to business units.
- A. Business Strategy
  - B. Corporate Strategy
  - C. Operational strategy
  - D. All of the above.
- (2 marks)
- 1.2 Which of the following can be referred to as a corporate appraisal model:
- A. PESTEL Model.
  - B. Job evaluation Model.
  - C. SWOT model.
  - D. Vrooms Expectancy Theory Model.
- (2 marks)
- 1.3 The chairperson of the Board of Directors and CEO should be leaders with:
- A. Vision and problem solving skills.
  - B. The ability to motivate.
  - C. Business acumen.
  - D. All of the above.
- (2 marks)
- 1.4 An example(s) of internal change forces is (are):
- A. Inadequate communication.
  - B. Problems in morals.
  - C. Market competitors.
  - D. a. & b.
- (2 marks)
- 1.5 Which of the following is not a way of overcoming resistance to change?
- A. Involving those who resist in the change process.
  - B. Bullying and harassing people into towing the line.
  - C. Communication and discussion.
  - D. Incentives.
- (2 marks)
- 1.6 Which of the following is NOT one of Drucker's seven tasks for managers?
- A. Manage by objectives.
  - B. Take strategic decisions.

- C. Take operational decisions.
- D. a. & b.

(2 marks)

1.7 Theory X assumes which of the following?

- A. People seek out responsibility.
- B. People achieve little satisfaction from work.
- C. People are committed to organizational activities.
- D. People regard work as normal activity.

(2 marks)

1.8 Which of the following is expert power?

- A. Leader can reward staff who complies with instructions.
- B. Leader can punish staff who does not comply with instructions.
- C. Leader has power because subordinates trust him/her.
- D. Leader has power because of their expert knowledge.

(2 marks)

1.9 Aldefer and McClelland are two (2) examples of \_\_\_\_\_ theories of motivation.

- A. Content.
- B. Process.
- C. Equity.
- D. Expectancy.

(2 marks)

1.10 According to Herzberg, which of the following may be regarded as hygiene /maintenance actors?

- A. Working conditions.
- B. Salary.
- C. Company policy.
- D. All of the above.

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

**There are five (5) questions in this section.**

**Attempt any four (4) questions.**

### **QUESTION TWO**

- (a) Distinguish between Job enrichment and Job enlargement. (2 marks)
- (b) Describe three (3) ways in which Managers enrich jobs in organizations. (6 marks)
- (c) Explain five (5) main factors to take into account in order to achieve job enrichment. (10 marks)
- (d) State two (2) key dimensions which contributes to job satisfaction. (2 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

- (a) Explain six (6) areas argued by Johnson and Whittington that make a strategic plan different from other types of plans. (12 marks)
- (b) Define the term Stakeholder and explain the importance of stakeholder expectations. Give examples where applicable. (8 marks)

**[Total: 20 Marks]**

### **QUESTION FOUR**

Recruitment is a systematic process of identifying, defining skills needed and attracting suitable candidates

#### **Required:**

- (a) Discuss four (4) advantages and four (4) disadvantages of Internal recruitment. (16 marks)
- (b) Outline four (4) reasons for poor selection of candidates in an organization. (4 marks)

**[Total: 20 Marks]**

### **QUESTION FIVE**

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

**Required:**

- (a) From your understanding of this courses write down the meaning of Delegation. (1 mark)
  
- (b) Devise the three (3) elements of Delegation. (3 marks)
  
- (c) State and evaluate the benefits of delegation in an organization. (16 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

Business organizations must have a Mission statement which must be supported by a wide ranging goals that may correspond to overall functional activities

**Required:**

Explain the following:

- (i) SMART (10 marks)
  
- (ii) PRIME (10 marks)

**[Total: 20 Marks]**

**END OF PAPER**



## **DA 7: PRINCIPLES OF MANAGEMENT SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 B

1.2 C

1.3 D

1.4 D

1.5 B

1.6 C

1.7 B

1.8 D

1.9 A

1.10 D

## **SOLUTION TWO**

- (a) Job enrichment is planned, deliberate action to build greater responsibility, breadth and challenge of work into a job while job enlargement is the attempt to widen jobs by increasing task variety and reducing task repetition.
- (b) Ways to enrich jobs:
  - Staff should have greater freedom to decide how the job should be done
  - Feedback must be given to employees all the time.
  - Giving the job holder to make critical decisions.
- (c) Main factors to take into account in order to achieve job enrichment. -  
Providing workers with tasks that challenge their abilities
  - Giving workers greater responsibilities and freedom to work in self-managing teams, monitoring their own progress and a minimum supervision
  - Employees to have a greater opportunity to have great direct contacts with customers
  - Avoiding excessive work divisions, so that workers are able to understand the full tasks to be achieved
  - Providing workers freedom and control over scheduling and pacing of their work as opposed to machine pacing.
- (d) Key dimensions which contributes to job satisfaction
  - -Task variety
  - -Task Identity
  - -Autonomy of the job
  - Regular feedback to staff
  - Task significant

### **SOLUTION THREE**

- (a) Explain six (6) areas argued by Johnson and Whittington that make a strategic plan different from other types of plans

The following are the differences of strategic plans and other types of plans as argued by Johnson and Whittington.

- i. they are long term direction that the business should take may be 3years or 5years
  - ii. They are decisions about the scope of an organizations' activities, the overall role and purpose of the organization and also the activities it should undertake to achieve this purpose. It covers the entire organization.
  - iii. For commercial business organizations .Strategy should be about gaining some kind of advantage in competition.
  - iv. Strategic management in some organization takes the form of adapting the activities of the business to fit the environment in which it operates. For example to change the products and service that the business produces or provides, to meet the changing requirements of the customers.
  - v. They require to exploit unique resources and the special competencies of its employees they are affected by the values and expectations of all the organizations stakeholders and must consider the expectations of the major stakeholders.
- (b) Define the term Stakeholder and explain the importance of stakeholder expectations. Give examples where applicable

The following are the importance of the stakeholder to the organization:

Stakeholders are individual or groups who have interest in and influence on the affair of the organization.

The organization cannot operate in isolation since it depends on other organizations or individuals for its survival. For example the company will get inputs from suppliers, and will interact with other companies for its growth and will need to observe certain regulation in order to run its affairs, the banks and other funding agencies.

## **SOLUTION FOUR**

(a) Advantages of Internal recruitment.

- The employee has opportunities for career development.
- The employer is preview to the employee's competencies than an external applicant.
- Internal applicants understand the organization and its culture
- It is much cheaper to advertise jobs internally than eternally.
- Internal promotion may improve the morale and motivation of the workforce.

Disadvantages of external recruitment

- The organization may not have staff with the required skills
- Staff may not be open to new ideas that can develop the organization
- In case of expansion, the organization may not have enough staff to fill up new positions
- The positions available may be for low level jobs in the organization that existing staff do not want to apply for.
- They may not be a person inside the organization who is suitable for the job.

(b) Reasons for poor selection of candidates in an organization

- The job vacancies are advertised in unsuitable way. The vacancy may not come to the attention of people who might apply if they knew it
- The job itself may not be attractive due to low pay as a result it may not attract right people.
- The job requirements may not be properly considered before the job is advertised so that the job is advertised

## SOLUTION FIVE

- (a) From your understanding of this courses write down the meaning of Delegation
- **Delegation** means division of authority and powers downwards to the subordinate.
  - **Delegation** is sub-allocation of powers to the subordinates in order to achieve efficiency in getting results.
  - **Delegation** is a process in which the authority and powers are divided and shared amongst the subordinates
- (b) Devise the THREE elements of Delegation (3 marks)
1. Authority
  2. Responsibility
  3. Accountability
- (c) State and evaluate the benefits of delegation in an organization. (16 marks)
- **Build trust within the organization**  
Delegation encourages you to learn how to trust your subordinates and to not always be in control. Once subordinates successfully complete a task, you will have more trust in the future in their capabilities.
  - **Improved time management**  
Delegation enables you to focus on more important tasks or tasks for which you are better suited. The increase in time reduces pressure and stress
  - **Specialization**  
Authorities and responsibilities are delegated as per the skills, abilities, knowledge and experience of subordinates. Thus, delegation of authority promotes specialization and division of work in the organization.
  - **Reduce Pressure and Workload**  
It reduces the pressure, stress and workload of top-level manager. Manager get enough time to conduct other important creative and productive activities.
  - **Quick Decisions**  
Lower-level managers get the authority to make decisions which helps to improve their decision-making power. They do not need to consult top managers to take decision which ensures prompt decisions at the workplace.
  - **Employee Development**  
Delegation of authority helps to develop skills and capabilities of subordinates. It helps them to perform challenging jobs which helps to develop managerial qualities.
  - **On-the-job Training**

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

- **Better Understanding**  
It helps to build trust and better understanding between managers and subordinates in the organization. It promotes effective communication and sense of team spirit while performing the job.
- **Expansion And Diversification**  
Delegation creates well-trained, dedicated and competent team of subordinates. So, it is helpful for expansion, growth and diversification of organization.
- **Suitability**  
Delegation of authority is suitable for large organizations with different departments, branches and units with various organizational activities.

## **SOLUTION SIX**

(a) **SMART** objective means that

- They must be specific
- Measurable
- Achievable
- Realistic
- Time related

(b) **PRIME** Means that objectives must consider the following:

- Planning- objectives must define what the plan is about and what it is trying to achieve.
- Responsibility – objectives must define the responsibilities of managers and departments
- Integration – objectives must support one another and be consistent with each other.so that the activities and efforts of different departments are properly integrated.
- Motivation – objectives must be known by managers before they are motivated to achieve them. Objectives must be created for all areas of performance.
- Evaluation – Performance is assessed by comparing actual results with objectives(targets)and where appropriate measures can be taken.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 8: FINANCIAL REPORTING

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MONDAY 18 MARCH 2024

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

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**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.
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8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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



## SECTION A

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

### **QUESTION ONE**

On 1 April 2020, Mtondo Plc acquired 80% of the equity shares in Kachele Plc for cash consideration of K144,000 and through share exchange of 1 share for every 2 shares held in Kachele, when the retained earnings of Kachele stood at K110,000. The market price of each of Mtondo Plc's shares at the date of acquisition was K2.

The following draft statements of financial position relate to Mtondo Plc, and Kachele Plc as at 31 March 2023.

	Mtondo Plc K'000	Kachele Plc K'000
<b>Non – current assets:</b>		
Property, plant and equipment	910	730
Investments in:		
Kachele Plc	144	
Financial assets- equity instruments	45	65
Investment property	<u>51</u>	<u>-----</u>
	<u>1,150</u>	<u>795</u>
<b>Current assets:</b>		
Inventories	45	60
Trade receivables	218	203
Cash and cash equivalent	<u>157</u>	<u>142</u>
	<u>420</u>	<u>405</u>
Total assets	<u>1,570</u>	<u>1,200</u>
<b>Equity and liabilities:</b>		
<b>Equity</b>		
Equity shares of K1.00 each	300	270
Retained earnings	<u>600</u>	<u>330</u>
Total equity	<u>900</u>	<u>600</u>
<b>Liabilities</b>		
Non – current liabilities	278	180
<b>Current liabilities:</b>		
Trade payables	120	115
Other payables	150	170
Taxation payable	<u>122</u>	<u>135</u>
Total current liabilities	<u>392</u>	<u>420</u>
Total liabilities	<u>660</u>	<u>600</u>
Total equity and liabilities	<u>1,570</u>	<u>1,200</u>

**The following information is relevant in the preparation of group accounts.**

1. At the date of acquisition, the fair values of Kachele Plc's assets were equal to their carrying amounts with an exception of:

- A non-depreciable piece of land with a carrying amount of K250,000 that had a fair value of K260,000.
- Plant and machinery with a carrying amount of K150,000 and a Fair value of K155,000. The estimated future economic life of plant and machinery at 1 April 2020 was four years (straight line depreciation).
- At the date of acquisition, Kachele Plc. had an internally generated Brand name. The directors of Mtondo Plc estimate the Fair Value of this Brand name to be K20,000 with a useful life of 4 years.

The non-controlling interest at 1 April 2020 was K108,000.

2. Only the cash consideration had been recorded by Mtondo Plc.
3. Kachele Plc has not issued any additional shares since being acquired by Mtondo Plc. Further, fair value adjustments referred to in (1) above have not been incorporated in the above statements of financial position.
4. The financial asset equity instruments in Mtondo and Kachele Plc are classified as financial assets through profit or loss in accordance with IFRS 9 'Financial Instruments'. The values in the above financial statements are fair values since their purchase during the current accounting period. The fair values of financial asset equity instruments in Mtondo and Kachele Plc at the reporting date of 31 March 2023 are K30,000 and K70,000 respectively.
5. Mtondo Plc has a policy of carrying its investment property at its fair value. Its fair value at 31 March 2023 was K55,500.
6. In the post-acquisition period in which Mtondo Plc obtained control of Kachele Plc, Mtondo Plc sold goods to Kachele Plc for K35,000 at 25% margin. 15% worth of the goods were in inventory of Kachele Plc at 31 March 2023 and current account balances from these intra group sales at 31 March 2023 are K7,000 in Mtondo and K3,500 in Kachele. The difference in current account balances is due to cash in transit from Kachele Plc despatched on 26 March 2023 but only received on 8 April 2023 by Mtondo Plc.
7. At 31 March 2023, goodwill in Kachele Plc had been impaired by K15,000.

**Required:**

Prepare a consolidated statement of financial position of Mtondo Plc group as at 31 March 2023 in accordance with applicable International Financial Reporting Standards.

**[Total: 25 Marks]**

**QUESTION TWO**

Chimtengo Ltd. operates in a pulp and paper industry as a stationery supplier to most learning institutions in Zambia. You are the senior accountant at Chimtengo Ltd. and your Chief Executive Officer (CEO) has requested you to prepare financial statements for the year ended 31 March 2023. The following trial balance relates to Chimtengo Ltd:

	<b>K'000</b>	<b>K'000</b>
Equity shares of K0.50 each		40,000
Retained earnings at 1 April 2022		44,100

Current tax	700	
Deferred tax		8,400
Interim equity dividends paid	8,000	
Administrative expenses	27,500	
Distribution costs	19,500	
Cost of sales	234,500	
Inventory at 31 March 2023 (note ii)	28,200	
Revenue		310,000
Trade payables		39,100
Investment property (note iii)	15,000	
Bank	5,500	
Trade receivables	38,100	
Lease liability at 1 April 2022 (note i)		15,600
Lease rental paid on 31 March 2023 (note i)	6,000	
Leasehold property at valuation 31 March 2022 (note i)	25,200	
Plant and equipment at cost	46,800	
Right Of Use Asset at cost	20,000	
Accumulated depreciation at 31 March 2022:		
Owned plant		12,800
ROU plant		5,000
	<u>475,000</u>	<u>475,000</u>

**The following additional information is relevant:**

- (i) On 1 April, 2021, Chimtengo Ltd acquired the 15 year leasehold property at a cost of K30 million. The accounting policy is to revalue the property at fair value at each year end. The valuation in the trial balance of K25.2 million as at 31 March 2022 led to an impairment loss of K2.8 million which was reported in the statement of profit or loss and other comprehensive income in the year ended 31 March 2022. As at 31 March 2023, the property was revalued at K24.9 million.
- Owned plant is depreciated at 25% per annum using the reducing balance method.
- The ROU plant was acquired on 1 April 2021. The rentals are K6 million per annum for four years payable in arrears on 31 March each year. The interest rate implicit in the lease is 8% per annum.
- No depreciation has yet been charged on any non current assets for the year ended 31 March 2023. All depreciation is charged to cost of sales.
- (ii) Inventory value was derived from an inventory count that took place on 3 April 2023 due to operational challenges. This was after Chimtengo Ltd. received more inventory costing K3.4 million and sold inventory for K6.4 million. Chimtengo Ltd. uses a margin of 20% on all sales. Sales and purchases figures do not however include these after date sales and purchases.
- (iii) Investment property in the trial balance is recorded at its fair value on 1 April 2022. The fair value of the investment property at 31 March 2023 was K13.5 million. Chimtengo Ltd uses fair value model of IAS 40 to account for investment property.

- (iv) On 31 January, 2023, Chimtengo Ltd made a bonus issue of 3 shares for every 2 shares held utilizing the retained earnings for this purpose. Just after 31 March 2023, Directors of Chimtengo Ltd approved dividends of K2 per share for all shares in issue at 31 March 2023.
- (v) The Directors of Chimtengo Ltd have estimated the provision for income tax for the year ended 31 March 2023 at K4.5 million. The required deferred tax provision at 31 March 2023 is K15.6 million. All adjustments to deferred tax should be taken to the statement of profit or loss. The balance of current tax in the trial balance represents underprovision of income tax liability for the year ended 31 March 2022.

**Required:**

- (a) A statement of profit or loss and other comprehensive income for Chimtengo Ltd. for the year ended 31 March 2023. (12 marks)
- (b) A statement of changes in equity for Chimtengo Ltd. as at 31 March 2023. (4 marks)
- (c) A statement of financial position for Chimtengo Ltd as at 31 March 2023. (9 marks)

**[Total: 25 Marks]**

## SECTION B

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

Answer any **TWO (2)** questions.

### QUESTION THREE

Mukwa Plc manufactures musical equipment. During the past few years Mukwa's performance has been criticized by investors and analysts as a number of key ratios have been below those of equivalent industry averages. Below are the summarised financial statements of Mukwa Plc for the years to 31 March 2023 and 2022.

#### **Statement of profit or loss for Mukwa Plc for the year ended 31 March:**

	<b>2023</b>	<b>2022</b>
Revenue	5,492	5,608
Cost of sales	<u>(3,384)</u>	<u>(3,148)</u>
Gross profit	2,108	2,460
Operating expenses	<u>(864)</u>	<u>(1,432)</u>
Profit from operations	1,244	1,028
Finance costs	<u>(196)</u>	<u>(408)</u>
Profit before tax	1,048	620
Income tax	<u>(308)</u>	<u>(232)</u>
Profit for the year	<u>740</u>	<u>388</u>

#### **Statement of financial position for Mukwa Plc as at 31 March:**

<b>Non-current assets</b>	<b>2023</b>	<b>2022</b>
Property, plant and equipment	4,200	5,040
Intangibles	<u>112</u>	<u>128</u>
Total non-current assets	<u>4,312</u>	<u>5,168</u>
<b>Current assets</b>		
inventories	688	492
Trade and other receivables	664	568
bank	<u>84</u>	<u>20</u>
Total current assets	<u>1,436</u>	<u>1,080</u>
Total assets	<u>5,748</u>	<u>6,248</u>

**Equity**

Equity share capital of K1 each	1,600	800
Share premium	1,096	464
Retained earnings	<u>1,036</u>	<u>696</u>
Total shareholders funds	<u>3,732</u>	<u>1,960</u>

**Non-current liabilities**

10% loan note	800	3,200
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**Current liabilities**

Trade payables	844	580
Taxation payable	<u>372</u>	<u>508</u>
Total current liabilities	<u>1,216</u>	<u>1,088</u>
Total equity and liabilities	<u>5,748</u>	<u>6,248</u>

The following ratios have been calculated for Mukwa Plc for the year ended 31 March 2022:

<b>DESCRIPTION</b>	<b>RATIO</b>
Return on capital employed	19.9%
Gross profit margin	43.9 %
Operating profit margin	18.3 %
Current ratio	0.99 : 1
Quick ratio	0.54 : 1
Inventory days	57 days
Receivables days	37 days
Payables days	67 days
Gearing (debt over debt plus equity)	62 %
Interest cover	2.5 times

**Further information:**

1. At the end of 2022, in an attempt to improve performance and produce better results, the Directors of Mukwa Plc entered into a phase of restructuring. The restructuring programme has involved disposing of surplus assets, reducing employee numbers, outsourcing product construction and streamlining the products offered. The Directors of Mukwa Plc believe that the restructuring programme has been successful at addressing the previous criticism and as a result performance has improved.

2. Mukwa Plc disposed of its surplus assets during the year ended 31 March 2023 for K750,000. The carrying value of these assets on the date of disposal was K438,000. The resulting gain was recorded within operating expenses.
3. The Directors were pleased with the performance of Mukwa Plc during the year to 31 March 2023 and on 20 April 2023, a final dividend of K840,000 was declared.

**Required:**

- (a) Calculate ratios for the year ended 31 March 2023 equivalent to those provided above for 2022. (10 marks)
- (b) Analyse the financial performance and position of Mukwa Plc for the two (2) years ended 31 March 2023. (Note: Your answer should refer to the effects of the restructuring). (15 marks)

**[Total: 25 Marks]**

**QUESTION FOUR**

You are a trainee accountant at Fimbo Co. and 4 clients of your firm are seeking your guidance on accounting treatment of issues that have arisen at their company.

**Client 1**

This client operates in the financial markets industry. The year end for the client is 31 March. On 1 April 2022, the client issued a K20 million 4% convertible loan note, which is repayable on 31 March 2026. Similar loan notes without conversion option have a market rate of 8%. The present value of K1 payable at the end of each year, based on discount rates of 4% and 8% are:

	4%	8%
End of year: 1	0.96	0.93
2	0.92	0.86
3	0.89	0.79
4	0.85	0.74

(8 marks)

**Client 2**

This client recorded revenue amounting to K800 million for the year ended 31 March 2023. The revenue includes an amount for goods sold for K12 million to a customer on a sale or return. The sale was at a margin of 20%. The date set for the customer (dealer) to return the goods is 15 April 2023. It is uncertain that the dealer will sell the goods before 31 March 2023. The client however recognized a sale and derecognized inventory from its accounting records on 31 March 2023.

(6 marks)

### Client 3

This client is a private limited company operating in the hardware supply business. At the start of the current accounting period, on 1 April 2022, the client owed the Zambia Revenue Authority (ZRA) K8,000 in unpaid current taxes for the period to 31 March 2022 and had a deferred tax liability of K25,300 at 1 April 2022.

For the year ended 31 March 2023, Directors of the company made a provision for current tax on the current year profits to be K68,250. The required deferred tax provision at 31 March 2023 is K29,460.

(5 marks)

### Client 4

This client recently set up as a business entity in the Hotels and Lodges industry. The client commenced construction of a five (5) star hotel on 1 February 2022. Construction is scheduled to take 24 months to complete. To finance this construction, the client planned to use its pool of funds from existing general borrowings which are as follows:

	'K'million
9% loan repayable in 2024	8
11% loan repayable in 2026	10
10% loan repayable in 2027	12

The client withdrew funds from the pool of loans on 1 June 2022 amounting to K5 million to fund the construction. On 1 September 2022, an additional K2 million was withdrawn for the same purpose.

### Required:

Evaluate and explain the accounting treatment of each client's situation above and show effects of the transactions on client financial statements for the year ended 31 March 2023. (6 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

- (a) IAS 41 *Agriculture* applies the requirements of IFRS to the accounting treatment of Agricultural activities.
- (i) Distinguish between consumable and bearer biological assets, giving one example of each. (5 marks)
- (ii) Explain the IAS 41 *Agriculture* guidance on measurement of biological assets. (3 marks)
- (b) The objective of IAS 8 Accounting policies, changes in accounting estimates and errors, 'is to prescribe the criteria for selecting and charging accounting policies together with the accounting treatment and disclosure of changes in accounting estimates and errors.



**Required:**

- (i) Distinguish between accounting treatment of 'a change in accounting policy' and that of 'a change in accounting estimate' giving an example of a change in accounting policy and a change in accounting estimate. (3 marks)
  
- (ii) Under what two (2) circumstances is there going to be justification for changing an accounting policy? (2 marks)
  
- (c) Briefly explain the main responsibilities of the following bodies involved in the standard setting processes:
  - (i) International Financial Reporting Standards Foundation (IFRSF). (3 marks)
  
  - (ii) International Accounting Standards Board (IASB). (3 marks)
  
  - (iii) International Financial Reporting Interpretations Committee (IFRIC). (3 marks)
  
  - (iv) International Financial Reporting Advisory Council (IFRSAC). (3 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 8: FINANCIAL REPORTING SUGGESTED SOLUTION

### SOLUTION ONE

Mtondo Group

Consolidated statement of financial position as at 31 March 2023

**K'000**

#### **ASSETS**

##### **Non-current assets**

Property, Plant and Equipment (910,000+730,000+11,250 W3)	1,651,250
Investment Property (W5)	55,500
Financial assets (30,000+70,000) (W11)	100,000
Goodwill (W2)	38,000
Intangible asset – brand name (W3)	5,000
Total Non-current asset	<u>1,849,750</u>

##### **Current assets**

Inventory (45,000+60,000-1,313 W4)	103,687
Trade receivables (218,000-3,500 +203,000-3,500 W6)	414,000
Cash and cash equivalents (157,000 +142,000+3500 W6)	302,500
Total current assets	<u>820,187</u>
Total assets	<u>2,669,937</u>

#### **EQUITY AND LIABILITIES**

##### **Equity**

Equity shares of K1 each (300,000+108,000 W8)	408,000
Share premium (W8)	108,000
Retained earnings (W7)	741,187
Non controlling interest (W9)	146,250
Total shareholders' funds	<u>1,403,437</u>

Non-current liabilities (278,000+180,000)	458,000
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##### **Current liabilities**

Trade payables (120,000+115,000-3,500)	231,500
Other payables (150,000 + 170,000)	320,000
Taxation payable (122,000 + 135,000)	257,000
Total current liabilities	<u>808,500</u>
Total equity and liabilities	<u>2,669,937</u>

## WORKINGS

- Group structure  
 Mtondo into Kachele .....80%  
 NCI .....20%  
 Acquisition date .....1 April 2020

<b>2. Goodwill on acquisition of Kachele</b>		<b>'K'</b>	<b>'K'</b>
Purchase consideration:			
Cash			144,000
Share exchange (80% x 270,000/2 x 1 x K2)			216,000
Non controlling interest @ acquisition			<u>108,000</u>
			468,000
Less net assets of Kachele at acquisition:			
Share capital	270,000		
Pre-acquisition retained earnings	110,000		
Fair value adjustments:			
Land	10,000		
Plant and machinery	5,000		
Brand name	20,000		<u>(415,000)</u>
Gross Goodwill			53,000
Less impairment loss			<u>(15,000)</u>
Net goodwill			<u>38,000</u>

### 3. Fair value adjustments:

	At acquisition	movement	At reporting
	'K'	'K'	'K'
Land	10,000	-	10,000
Plant and machinery	5,000	(3,750)*	1,250
Brand name	20,000	(15,000)**	5,000

\*Plant and machinery depreciation =  $K5,000/4 \text{ years} = 1,250 \text{ p/a} \times 3 \text{ years} = 3,750$

\*\*Brand name amortization =  $20,000/4 \text{ years} = 5,000 \text{ p/a}$

### 4. Provision for unrealized profit:

Sales $K35,000 \times 15\% \times 25/100 = 1,313$	
Dr group retained earnings	1,313
Cr group inventory	1,313

<b>5. Investment property:</b>	<b>'K'</b>
Fair value at start of period	51,000
Fair value gain	<u>4,500</u>
Fair value at end of the year	<u>55,500</u>

## 6. Intragroup cancellations

	Mtondo	Kachele
Receivables	7,000	
Payables		3,500

Kachele's payables are lower due to cash it disbursed to Mtondo to the value of K3,500 which was still in transit at reporting date. For consolidation purposes, this in transit cash should be assumed to have been received and so the following double entry will be required:

Dr cash (Mtondo)	3,500	
Cr receivables (Mtondo)		3,500

After above double entry, receivables of Mtondo and payables of Kachele will now be at par at K3,500 requiring cancellation involving following double entry:

Dr group payables	3,500	
Cr group receivables		3,500

<b>7. Group retained earnings</b>	<b>'K'</b>
Mtondo	600,000
Mtondo's share of Kachele (80% * 201.25(w10))	161,000
Fair value gain of investment property (W5)	4,500
Provision for unrealized profits (W4)	(1,313)
Fair value gain/(loss) of financial asset – equity (W11):	
Mtondo (30-45)	(15,000)
Kachele (80% * [70-65])	4,000
Share of impairment loss of Goodwill (80% * 15)	<u>(12,000)</u>
	<u>741,187</u>

## 8. Share exchange values

$80\% * 270,000 \text{ shares} / 2 \text{ shares} * 1 \text{ share} = 108,000 \text{ shares}$

To equity capital =  $108,000 \text{ shares} * K1 = K108,000$

To share premium =  $108,000 \text{ shares} * K1 = K108,000$

<b>9. Non controlling interest at reporting date:</b>	<b>'K'</b>
NCI at acquisition	108,000
NCI share of Kachele post acquisition R.E(20%*201,250)	40,250
NCI share of fair value gain of Kachel's E.I. (20%*5,000,W11)	1,000
NCI share of impairment loss (20% * 15,000)	<u>(3,000)</u>
NCI at reporting	<u>146,250</u>

**10. Net assets of Kachele Plc at acquisition and at reporting**

	At acquisition	At reporting	Movement
Share capital	270,000	270,000	0
Retained earnings	110,000	330,000	220,000
Fair value adjustments:			
Land	10,000	10,000	0
Plant	5,000	1,250	(3,750)
Brand name	<u>20,000</u>	<u>5,000</u>	<u>(15,000)</u>
	<u>415,000</u>	<u>616,250</u>	<u>201,250</u>

**11. Financial asset –equity instrument**

	Mtondo	Kachele
Fair values b/f	45,000	65,000
Fair value gain /(loss)	<u>(15,000)</u>	<u>5,000</u>
Fair value c/f	<u>30,000</u>	<u>70,000</u>

## SOLUTION TWO

(a) **Chimtengo Ltd.'s statement of profit or loss and other comprehensive income for the year ended 31 March 2023.**

	K'000
Revenue	310,000
Cost of sales (W3)	<u>(246,580)</u>
Gross profit	63,420
Administrative expenses (W3)	(27,500)
Distribution costs (W3)	(19,500)
Fair value loss of investment property (W4)	<u>(1,500)</u>
Operating profit	14,920
Finance cost (W7)	<u>(1,248)</u>
Profit before tax	13,672
Income tax (W5)	<u>(12,400)</u>
Profit for the year	1,272
Other comprehensive income:	
Revaluation surplus (1,500-1500 reversal)	<u>0</u>
Total comprehensive income	<u>1,272</u>

(b) **Chimtengo Ltd.'s statement of profit or loss and other comprehensive income for the year ended 31 March 2023.**

	Share capital	Retained earnings	Total
	K'000	K'000	K'000
Balance b/f	40,000	44,100	84,100
Profit for the year		1,272	1,272
Bonus issue of shares (W6)	60,000	(60,000)	0
Dividends paid	<u>          </u>	<u>(8,000)</u>	<u>(8,000)</u>
	<u>100,000</u>	<u>(22,628)</u>	<u>77,372</u>

(c) **Chimtengo Ltd.'s statement of financial position as at 31 March 2023**

Non-current assets:	K'000
Property, Plant and Equipment (W2)	50,400
Right Of Use Asset (ROUA) (W2)	10,000
Investment property (W4)	<u>13,500</u>
Total Non-current assets	<u>73,900</u>

Current assets:

Inventory (W1)	29,920
Trade receivables	38,100
Bank	<u>5,500</u>
Total current assets	<u>73,520</u>
Total assets	<u>147,420</u>
Equity and liabilities:	
Equity shares of K0.50 each	100,000
Retained earnings	22,628
Revaluation surplus	<u>0</u>
Total equity	<u>77,372</u>
Non-current liabilities	
Lease obligation (W7)	5,716
Deferred tax	<u>15,600</u>
Total Non-current liabilities	<u>21,316</u>
Current liabilities	
Trade payables	39,100
Lease obligation (W7)	5,132
Current tax payable (W5)	<u>4,500</u>
Total current liabilities	<u>48,732</u>
Total equity and liabilities	<u>147,420</u>

### SOLUTION THREE

(a) Ratios for Mukwa Plc for the year ended 31 March 2023

	2022	Comparatives for 2022
Return on capital employed	27.4% $(1,244 / (800 + 3,732)) \times 100$	19.9%
Gross profit margin	38.4% $(2,108 / 5,492) \times 100$	43.9%
Operating profit margin	22.7% $(1,244 / 5,492) \times 100$	18.3%
Current ratio	1.18: 1 $(1,436 / 1,216)$	0.99: 1
Quick ratio	0.62: 1 $(1,436 - 688 / 1,216)$	0.54: 1
Inventory days	74 days $(688 / 3,384) \times 365$	57 days
Receivables days	44 days $(664 / 5,492) \times 365$	37 days
Payables days	91 days $(844 / 3,384) \times 365$	67 days
Gearing (debt over debt + equity)	17.7 % $(800 / (800 + 3,732))$	62%
Interest cover	6.3 times $(1,244 / 196)$	2.5 times

(b) Profitability

Revenue has fallen during 2023 by 2.1% which is probably due to the decision to Restructure and improve the products offered. It may be that Mukwa Plc is no longer offering non-core products.

The primary profitability ratio is the return on capital employed (ROCE). ROCE has improved during the year from 19.9% to 27.4% indicating that the decision taken to restructure the business has been successful.

Despite the increase in ROCE, the gross profit margin has fallen to 38.4% indicating that Mukwa Plc are no longer as efficient at generating profits at the direct trading level. The streamlining of products offered may have resulted in the elimination of some product lines which actually had higher margins than the remaining products.

This change in mix may explain the lower gross profit margin. In addition to this, we have been told that Mukwa Plc has outsourced product construction. The cost of this is likely to be greater than the equivalent internal construction costs, resulting in smaller margins. The disruption from the restructuring may also have led to decreased efficiency resulting in a reduction in gross profit margin.

The operating profit margin has improved from 18.3% to 22.7% in 2023. This is not in line with the gross profit margin which had actually deteriorated. This improvement therefore indicates that Mukwa Plc has managed to effectively control its operating expenses. The reduction in the number of employees will have helped improve the operating profit margin.

Overall profitability has improved during the year as shown by the financial statements and the ratios calculated in part (a). However, the gain on disposal recorded in 2023 of K312,000 is a one-off, exceptional item and as such its inclusion in the results



distorts the view of the user. By removing this one-off item, a fairer analysis of the past performance and an attempt at predicting future performance can be achieved.

Adjusted ratios:

		2023	2022
ROCE	1,244-312/4,532	20.6%	24.7%
Operating profit margin	1,244-312/5,492	17%	22.8%
Interest cover	1,244-312/196	4.8 times	3.1 times

When the effects from the disposal of Non-current asset due to restructuring are removed, it can be seen that the underlying performance of Mukwa Plc has in actual fact deteriorated. The results in 2023 were greatly enhanced by the gain on the disposal of surplus assets. It is assumed that such gains will not be achieved in the future. Interest cover still remains more favourable during the year which is due to the significant reduction in finance costs following the repayment of the loan note.

### **Liquidity and working capital**

The bank balance has improved during the year and from the current and quick ratios that have been calculated, it can be said that liquidity improved in 2023. Both the current and quick ratios are however below expected 'norms'. It would be useful to know what the average liquidity ratios are expected to be for this type of industry. A cash flow statement would provide a far better analysis of the liquidity of Mukwa Plc.

It is worth noting that a major cash injection was received during the year for the disposal of surplus assets (K750,000). This cash has enabled Mukwa Plc to continue to have a positive bank balance. The value of the injection is unlikely to be received again in the future and is another one-off item to take into consideration. Without the disposal, it is likely that Mukwa Plc will have potentially been in a negative cash position, incurring expensive overdraft charges. In addition if the dividend that has been declared is taken into consideration, K840,000 would be payable in April 2023, yet at the year end the cash at bank only amounted to 10% of this value.

Payables days have increased substantially from 67 days in 2022 to 91 days in 2023. This period of 'free' credit is being taken to cushion the impact of the rise in both inventory and receivables days. Mukwa Plc must ensure that it is adhering to credit terms agreed to avoid damaging its reputation and relationship with suppliers.

### **Financial position**

Mukwa Plc has dramatically reduced its gearing levels during 2023 and with it, the financial risk associated with debt finance. It is likely that Mukwa Plc used the finance raised on the share issue to pay off the loan along with the cash from the disposal of

surplus assets. The reduction in borrowing has resulted in a significant reduction in finance costs. This will alleviate future pressures on cash outflows. It may be that Mukwa Plc will require further debt finance in the future.

### **Conclusion**

Whilst we do not know the industry average for comparisons of Mukwa Plc's 2023 key ratios, the result of the restructuring has no doubt improved the performance and position during 2023. However, when the one-off item is removed and the underlying performance is analysed, a deteriorating position had been revealed. It is potentially worrying that Mukwa Plc may face cash flow difficulties in the future without the disposal proceeds and share issue and it could be that further debt finance may be required.

## **SOLUTION FOUR**

### **CLIENT 1**

This is a convertible loan note is initially measured at fair value and will be split into debt and equity as the instrument has debt and equity components. Split accounting to be applied in which initial liability is calculated as the sum of discounted proceed of the loan note and discounted coupon payable on the loan until redemption or conversion. The difference between initial liability and total proceeds is the equity component at fair value.

In subsequent years, the liability component is measured at amortized cost whereas the equity instrument is not subject to remeasurement. At 31 March 2023, the liability is recognized at K17.94 million (W2) and equity at K2.648 million (W1) in the statement of financial position while a finance cost of K1.388 million (W2).will be shown in profit or loss

### **Profit and loss extract**

Finance cost	1,388
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### **Statement of financial position extract**

Equity and liabilities:

Equity option	2,648
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Non-current liabilities

4% loan note	17,940
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### **WORKINGS**

1. Split accounting for convertible loan note: K'000

Present value of proceed (K20,000 x 0.735)	14,700
Present value of interest (4% x K20,000 x 3.315)	<u>2,652</u>
Liability component @1 April 2021	17,352
Equity component at 1 April 2021	<u>2,648</u>
Proceeds (bal. figure)	<u>20,000</u>

2. Subsequent measurement of liability: K'000

	Bal b/f	finance cost (8%)	interest paid	bal c/f
	K'000	K'000	K'000	K'000
Y/E 31/3/22 (w1)	17,352	1,388	(800)	17,940

### **CLIENT 2**

The goods sold do not constitute a sale at reporting date and the client need not recognize a sale. This is because the return date is after the reporting period and it is uncertain that the dealer will buy the goods before the due date.

The transaction needs to be reversed by the following entries:

Dr sales	12,000	
Cr receivables		12,000

Additionally, the client to reverse inclusion of such sales from cost of sales and bring back the inventory that was excluded when a sale was assumed by the following entries:

Dr Inventory

Cr cost of sales with the cost of the goods assumed to have been sold.

### **CLIENT 3**

Client has an overprovision of tax for the previous year ending 31 March 2022 which has the effect of reducing the current tax charge to the profit and loss by the same amount as follows:

Current tax charge:	K'000
Provision for the year ending 31 March 2023	68,250
Less overprovision of tax for year ending 31/3/ 2022	<u>8,000</u>
Charge for the year	<u>60,250</u>

For deferred tax liability, the movement from opening balance to closing balance will be charged to profit and loss while the deferred tax liability at the year-end will be recognized as a Non-current liability as follows:

Deferred tax liability b/f	25,300
Increase	<u>4,160</u>
Deferred tax liability c/f	<u>29,460</u>

The total taxation charge to profit and loss will be K64,410 (60,250 +4,160)

<b>Profit and loss extract</b>	K'000
Income tax expense	64,410

### **Statement of financial position extract**

#### **Non-current liability**

Deferred tax	29,460
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#### **Current liability**

Current tax payable	68,250
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### **CLIENT 4**

As client was to construct a five star hotel using existing general borrowing, a weighted average capitalization rate has to be used to ascertain the average rate to apply on the actual amounts drawn. This works out to be 10.07% [9(8/30) + 11 (10/30) + 10 (12/30)]. As funds of K5 million were drawn at 1 June, these were used for 10 months upto 31 March

2023 and so interest will be prorated for 10 months as follows:  $K419,583(10.07\% \times K5 \text{ million} \times 10/12)$  on initial amount will be capitalized and the final draw of K2 million was 7 months before the reporting date and interest of  $K117,483 (10.07\% \times K2 \text{ million} \times 7/12)$  will be capitalized. The total cost accumulated from the borrowing that would be capitalized is  $K537,066 (K419,583 + K117,483)$ .

## **SOLUTION FIVE**

- (a) (i) Consumable biological assets are a living plant or animal that are to be harvested as agricultural produce or sold as biological assets.

Examples:

- livestock intended for the production of meat or held for sale other than for reproduction.
- Fish held for sale
- Maize held for consumption or sale.
- Sugar cane held for consumption or sale.

Bearer biological assets are a living plant or animal held for bearing other plant or animals or produce that could then be harvested.

Examples:

- Trees from which fruits are harvested
- Trees from which firewood is harvested
- Maize seed from harvested maize
- Vegetables held for seed harvest
- Live stock held for milk production.

- (ii) IAS 41 Agriculture requires that all biological assets are measured, at the end of each year, at fair value less estimated point-of-sale costs.

Alternatively, if a fair value cannot be determined because market determined prices or values are not available, they could be measured at cost less accumulated depreciation and impairment loss. This alternative is only applicable on initial recognition.

For all subsequent years, biological assets should be measured at fair value less point of sale costs. This is so because fair value, other than historical cost, has greater relevance, reliability, comparability and understandability as a measure of future economic benefits.

- (b) IAS 8

- (i) Accounting policies are specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting statements. IAS 8 accounting policies, changes in accounting estimates and errors requires that a change in accounting policy be applied retrospectively, that is, applying a new policy as though it had always been applied.

Examples of change in accounting policy include:

- An expense that used to be classified as cost of sales is now classified as administrative expense.

- Inventory that used to be valued using FIFO method is now valued using weighted average method.

Estimates are a result of new information that will lead to changes in business activities.

IAS 8 requires that a change in accounting estimate be applied prospectively, that is, applying a new estimate either to current period only (e.g. irrecoverable debts) or to both current and future periods (e.g. useful life or residual value of Non-current assets)

No change is applied to previous periods.

Examples of change of accounting estimates include:

- Change of depreciation percentage
- Change of useful life
- Change of residual value
- Change in the provision for inventory obsolescence or irrecoverable debts.

(ii) IAS 8 requires that once developed, accounting policies are to be applied in a consistent manner. It goes on to stating that a change would be allowed only if:

- Required by another IFRS (new or revised)
- It provides more relevant and reliable information

(c) (i) **Responsibilities of IFRSF**

- Appoint members of IASB, IFRS advisory council and IFRS Interpretations Committee.
- Review annually the strategy of the IASB and its effectiveness.
- Approve annually the budget of the IASB.
- Source funding for IASB
- Promote the work of IASB
- Establish operating procedure for IASB, IFRS AC and IFRS IC.

(ii) **Responsibilities of IASB**

- Develop International Accounting Standards
- Approve interpretations made by IFRS Interpretations Committee.
- Manage all IFRS technical matters including issue of exposure drafts, withdrawal of IFRS, appointment of Committee to be in touch with IFRS advisory council.

(iii) **Responsibilities of Advisory Council**

- Provide forum for individuals and organizations to participate in the standard setting process.
- Give advice to IASB on technical issues arising from the grassroots.
- Inform the board of the views of organizations and individuals on the council on major standard setting projects.

**END OF SUGGESTED SOLUTIONS**





DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 9: MANAGEMENT ACCOUNTING

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TUESDAY 19 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A – TWO (2) COMPULSORY QUESTIONS

Attempt Both questions in this section.

### QUESTION ONE

- (a) A company uses batch production method to produce a single product by combining two (2) materials YEN and ZEN. The company has budgeted for a material mix ratio of 60:40 for YEN and ZEN, respectively. The following information relates to each batch:

Direct material input	240 kg		
Material YEN standard price	K2 per kg		
Material ZEN standard price	K3 per kg		
Standard yield	200 kg of product		
Actual results for Month 11 were as follows:			
Output	18,000 kg		
Material YEN	14,020 kg	costing	K 26,638
Material ZEN	8,980 kg	costing	K 28,736

#### **Required:**

Calculate the following variances:

- (i) Material price variance for each material and in total. (3 marks)
- (ii) Material mix variance for each material and in total. (3 marks)
- (iii) Material yield variance in total. (4 marks)
- (b) Explain two (2) possible causes of the following variances:
- (i) Material total cost variances. (2 marks)
- (ii) Labour total cost variance. (2 marks)
- (iii) Sales variances. (2 marks)
- (iv) Fixed overhead total variances. (2 marks)
- (c) PBM Ltd has budgeted to produce and sell 15 million units of its products. The standard cost per unit is as follows:

Direct materials	K200
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Direct labour	K150
Variable overhead	K120
Fixed production overhead	K10

During the period the following variances occurred:

Fixed overhead expenditure variance	K6 million (Adverse)
Fixed overhead volume variance	K18 million (Favourable)

**Required:**

Calculate the following:

- (i) Actual fixed overhead in the period. (2 marks)
- (ii) Actual production volume in the period. (2 marks)

(d) **Required:**

State three (3) advantages and three (3) disadvantages of Zero Based Budgeting (ZBB). (3 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Fruit Limited (F Ltd) produces a range of fruit drinks for the beverage market in Zambia. The company is currently preparing its budget for the next three months, July to September, based on a number of assumptions and using a range of information. The following information is relevant:

- (i) Lemonade is manufactured in a simple production process from a blend of lemon juice and mineral water and sold in 500ml bottles.

Projected sales for the four months are shown below:

	<b>July</b>	<b>August</b>	<b>September</b>	<b>October</b>
Sales units (500ml bottles)	47,000	49,000	52,500	53,000
Sales value (@ K14 per bottle)	K658,000	K686,000	K735,000	K742,000

- (ii) Assume that at 1 July the company will not have any bottles of Lemonade in inventory. However, the Sales Manager requires that at the end of each of the next six (6) months there will be 5,600 bottles in the warehouse to satisfy any unexpected demand.
- (iii) The company uses marginal (variable) costing to value production. To produce one 500ml bottle of Lemonade, the following costs are incurred:

**K/bottle**

Materials:

- Lemon juice (50ml @ K8 per litre)	0.4
- Mineral Water (450 ml @ K2 per litre)	0.9
- 500ml plastic bottle	0.6

Labour (0.05 hours @ K80 per hour) 4.0

Variable production overhead 1.1

7.0

- (iv) Assume that at 1 July the company will have 2,200 litres of mineral water, 600 litres of lemon juice and 5,600 plastic bottles in inventory. To reduce the risk of disruption to manufacturing, F Ltd has a policy of maintaining the same opening and closing monthly inventory of product materials and plastic bottles.
- (v) The recommended selling price for a 500ml bottle of Lemonade is K14.
- (vi) The cost of material purchases has not changed in the past two years and is not expected to change for the next year.

***Please note that there are 1,000 millilitres in one litre.***

**Required:**

- (a) For the first three (3) months of next year you are asked to prepare a:
- (i) Production Budget in units, i.e. in litres. (4 marks)
  - (ii) Materials Purchase Budget (in units and K) for lemon juice, mineral water and plastic bottles. (8 marks)
  - (iii) Labour Cost Budget (in hours and K). (3 marks)
  - (iv) Variable Production Overhead Cost Budget. (3 marks)
- (b) Budgeted Income Statement based on the results you have obtained in (i) to (iv) above. (5 marks)
- (c) Explain the term 'flexible budget'. (2 marks)

**[Total: 25 Marks]**

## SECTION B

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

Attempt any **TWO (2)** questions.

### **QUESTION THREE**

Euphemia Food Processing Ltd (EFP) sells different flavoured roasted groundnuts. The product is packed in 8cm x 12cm zip plastics. The company is now considering the introduction of the cinnamon flavour in 8cm x 10cm zip plastics.

Currently weekly production, unit costs and selling prices, are as follows:

Flavour	Units (of Output (packs))	Variable costs (K)	Fixed cost (K)	Selling price (K)
Garlic	200,000	0.90	0.30	1.50
Tomato	48,000	1.55	0.50	2.10
Ginger	140,000	2.30	0.40	2.60

The sales volume is equal to production volume. A forty- eight week trading year is assumed. The overheads absorption rate is on the basis of production volumes. In order to produce cinnamon flavour in 8cm x 10cm packs, the packaging machine would require modification at a cost of K200,000 which is to be recovered through sales within one year. Additional annual fixed costs of K250,000 would be incurred in manufacturing the new product. The variable cost of production would be K1 per pack. Initial research has estimated demand as follows:

Price per pack (K)	Maximum weekly demand (packs)
K3.00	30,000
K2.80	40,000
K2.30	50,000

EFP's policy is that the new product must be capable of generating sufficient profit to cover costs, including estimated initial marketing and advertising expenditure of K500,000.

There is adequate capacity on the packaging machine, but the company is operating near capacity in other areas. The new product would have to be produced by reducing production elsewhere and two alternatives have been identified:

- (a) Reduce production of garlic flavoured groundnuts by 20% per annum; or
- (b) Reduce production of ginger flavoured groundnuts by 25% per annum.

The CEO of EFP Ltd, Ms Euphemia Zulu, believes that the new product must cover any loss caused by this reduction in volume. She is also aware that market research has shown growing customer dissatisfaction because of wastage of garlic powder. She has suggested that the company adopts throughput accounting.

**Required:**

- (a) Compute the profit of the alternative courses of action open to EFP Ltd. (17 marks)
- (b) Recommend the most profitable alternative. (3 marks)
- (c) Explain the concept of throughput accounting. (5 marks)

**[Total: 25 Marks]**

**QUESTION FOUR**

- (a) Samfya Shoe Limited (SS Ltd) has developed a new range of high quality affordable shoes for beach soccer. The shoes are based on an innovative design. The company has already received some sales orders for the shoes and production is due to commence next month. The Management Accountant has prepared the following projections for next year:

	<b>K</b>	<b>K</b>
<b>(Production and sales of 100,000 pairs of shoes)</b>		
Sales		5,500,000
Cost of sales:		
Direct materials	1,238,000	
Direct labour (Note 1)	822,000	
Production overhead (Note 2)	<u>472,000</u>	<u>(2,532,000)</u>
Gross profit		2,968,000
Administration expenses (Note 2)	673,000	
Selling and distribution expenses (Note 2)	<u>290,000</u>	<u>963,000</u>
Profit		<u>2,005,000</u>

**Notes:**

- 1) It is assumed that the company will pay workers based on a fixed time basis i.e. hours worked regardless of output achieved.
- 2) The production, administration, and selling and distribution costs have been analyzed and the cost behaviour is shown below:

	<b>Fixed element</b>	<b>Variable element</b>
Production overhead	20%	80%
Administration expenses	100%	-
Selling and distribution expenses	75%	25%

**Required:**

- (i) Calculate the break-even point in units (pairs of shoes) and revenue. (6 marks)

- (ii) Calculate the margin of safety in units (pairs of shoes) and revenue. (4 marks)
- (iii) Calculate the number of pairs of shoes to be sold to make a profit of K2,000,000. (3 marks)
- (iv) Outline two (2) assumptions of the break-even (cost-volume-profit) analysis. (2 marks)
- (b) You are a trainee Assistant Accountant working for a medium sized firm and you have been asked by your manager to prepare a briefing note to explain the difference between Management Accounting and Financial Accounting, and the benefits that a good management accounting information system may bring to a business.
- (i) Outline five (5) differences between Management Accounting and Financial Accounting. (5 marks)
- (ii) Explain the role of the Management Accountant in terms of the type of information that he/she may provide to a business. (5 marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

- (a) CB Ltd (CB Ltd) buys raw materials from suppliers. The supplier allows CB Ltd 1.5 months' credit. Raw materials remain in inventory for two months, and it takes two (2) months to produce goods. The goods are sold within a couple of days of production being completed and customers take on average 1.5 months to pay.

**Required:**

Calculate the cash operating cycle for CB Ltd. (5 marks)

- (b) When a company needs to improve its cash flow, it can engage in an arrangement known as factoring.

**Required:**

(i) Explain four (4) benefits of factoring. (4 marks)

(ii) Explain the operations of two (2) types of factoring namely, factoring without recourse and factoring with recourse. (4 marks)

- (c) The Management Accountant wishes to change CB Ltd's current pricing strategy and prefers invoice discounting to factoring with recourse.

**Required:**

(i) Explain four (4) pricing strategies that could be used. (8 marks)

(ii) Explain the advantages of invoice discounting over factoring with recourse.

(4 marks)

**[Total: 25 Marks]**

**END OF PAPER**



## DA 9: MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) (i) Material price variance

(Actual usage x standard price) – Actual cost

YEN (14,020 x K2) – K26,638 = K1, 402 F

ZEN (8,980 x K3) – K28,736 = K 1,796 A

K394 A

(ii) Material mix variance

(Actual usage in standard proportions – Actual usage) x Standard price.

YEN [{60% of (14,020 + 8,980)} – 14,020] x K 2 = K 440 A

ZEN [{40% of (14,020 + 8,980)} – 8,980] x K 3 = K 660 F

K220 F

(iii) Material yield variance in total

(Actual output – budgeted output for the actual material input) x (Standard weighted average cost per unit of output)

[14,020 + 8,980) x 200/240) – 18,000] x K2.88(W.1) = K3,361 A

#### Workings: W.1

Standard weighted average cost per unit standard cost of mix

YEN 240 x 60% x K2 per kg = K 288

ZEN 240 x 40% x K3 per kg = K 288

K 576

Standard weighted average cost (material output)

K576/200 = K 2.88 per kg.

(b) Two possible causes of variances:

(i) Materials total cost variance.

- A difference in purchase price between budgeted purchased price and actual purchased price
- A difference in quantity used. The difference between budgeted quantity and actual quantity used

(ii) Labour total cost variances

- A difference in rate paid i.e the difference between the budgeted labour rate and the actual labour rate paid
- A difference in hours worked, that is the difference between the budgeted hours and actual hours spent by labour.

(iii) Sales price variances

- A difference in selling price, that is the difference between the budgeted selling price and the actual selling price.

(iv) Sales volume variance

- A difference in sales volume, that is the difference between budgeted sales volume and actual sales volume.

(v) Fixed overhead total variances

- The difference between actual cost incurred and the amount absorbed by the use of the absorption rate based on the budgeted cost and activity
- The fixed overhead total variance is equivalent to the under or over absorption of overhead in a period.

(c) (i) The actual fixed overhead is calculated as follows:

- Budgeted fixed overhead (K10 x 15 million units) = K150 million
  - Fixed overhead expenditure + K6 million (A)
- K156 MILLION**

(ii) The actual production in the period is calculated as follows:

- Fixed overhead volume variance in units = fixed overhead volume variance in kwacha (Favourable) ÷ standard fixed overhead rate per unit
- = K18 million  
K10  
= 1.8 million units (F)

Because the variance is favourable, this means that 1.8 million more units were produced than budgeted, i.e. 15 million units + 1.8 million units = **16.8 million units**

(d) **Advantages of ZBB**

- Removes inefficient and obsolete activities
- Forces workers to avoid wasteful expenditure
- Increases motivation
- Leads to more efficient allocation of scarce resources

**Disadvantages of ZBB**

- Creates extra paper work
- Requires a lot of management time
- Emphasises short term benefits at the expense of long- term ones.
- Managers need to be trained in ZBB techniques.
- The ranking process may be difficult

## SOLUTION TWO

### (a) (i) Production Budget in units (500ml bottles)

	July	August	September
Sales	47,000	49,000	52,500
Closing inventory	<u>5,600</u>	<u>5,600</u>	<u>5,600</u>
	52,600	54,600	58,100
Less: opening inventory	(0)	(5,600)	(5,600)
Production required in 500ml bottles	<b><u>52,600</u></b>	<b><u>49,000</u></b>	<b><u>52,500</u></b>
Production required in litres	<b><u>26,300</u></b>	<b><u>24,500</u></b>	<b><u>26,250</u></b>

### (ii) Material Purchases Budget

Each 500ml bottle contains 50ml or 10% lemon juice and 450ml or 90% mineral water

<b>Lemon Juice</b>	July	August	September
Production in litres	26,300	24,500	26,250
Lemon juice per 500ml bottle, i.e. 10%	2,630	2,450	2,625
Closing inventory	600	600	600
	<u>3,230</u>	<u>3,050</u>	<u>3,225</u>
Less opening inventory	(600)	(600)	(600)
Purchases required	<u>2,630</u>	<u>2,450</u>	<u>2,625</u>
Cost @ K8 per litre	K8	K8	K8
Total cost	<b><u>21,040</u></b>	<b><u>19,600</u></b>	<b><u>21,000</u></b>

Total lemon juice purchases **K61,640**

<b>Mineral water</b>	July	August	September
Production in litres	<u>26,300</u>	<u>24,500</u>	<u>26,250</u>
Mineral water per 500ml bottle, i.e. 90%	23,670	22,050	23,625
Closing inventory	2,200	2,200	2,200
	<u>25,870</u>	<u>24,250</u>	<u>25,825</u>
Less opening inventory	(2,200)	(2,200)	(2,200)
Purchases required	<u>23,670</u>	<u>22,050</u>	<u>23,625</u>
Cost @ K2 per litre	K2	K2	K2
Total cost	<b><u>47,340</u></b>	<b><u>44,100</u></b>	<b><u>47,250</u></b>

Total mineral water purchases **K138,690**

<b>Plastic bottles</b>	July	August	September
Production in 500ml bottles	52,600	49,000	52,500
Closing inventory	5,600	5,600	5,600
	<u>58,200</u>	<u>54,600</u>	<u>58,100</u>
Less opening inventory	(5,600)	(5,600)	(5,600)
Purchases required	<u>52,600</u>	<u>49,000</u>	<u>52,500</u>

Cost @ K0.6 per bottle	K0.6	K0.6	K0.6
Total cost	<u>31,560</u>	<u>29,400</u>	<u>31,500</u>
Total mineral water purchases	<u><b>K92,460</b></u>		

**Note:** For each of the ingredients the opening inventories and closing inventories are the same, hence, the above calculations may be computed by excluding these and just using production quantities.

(iii) **Labour cost budget**

	July	August	September
Production in 500ml bottles	52,600	49,000	52,500
Cost to produce each bottle	K4	K4	K4
Production labour cost	<u>210,400</u>	<u>196,000</u>	<u>210,000</u>
Total production labour cost	<u><b>K616,400</b></u>		

(iv) **Variable overhead budget**

	July	August	September
Production in 500ml bottles	52,600	49,000	52,500
Cost to produce each bottle	K1.1	K1.1	K1.1
Variable overhead cost(K)	<u>57,860</u>	<u>53,900</u>	<u>57,750</u>
Total production labour cost	<u><b>K169,510</b></u>		

(b) **Budgeted income statement**

		<b>K</b>
Sales(47+49+52.5) x K14		2,079,000
Cost of sales		
Opening inventory	Note 1	12,560
+ Production costs	Note 2	<u>1,078,700</u>
		1,091,260
- Closing inventory	Note 3	<u>(51,760)</u>
Cost of sales		<u>(1,039,500)</u>
<b>Gross profit</b>		<u><b>1,039,500</b></u>

**Note 1**

<b>Opening inventory</b>	<b>Quantity</b>	<b>Cost</b>	<b>Value</b>
Lemon juice	600	K8	K4,800
Mineral water	2,200	K2	K4,400
Plastic bottles	5,600	K0.6	<u>K3,360</u>
			<u>K12,560</u>

**Note 2**

<b>Production Cost (from(a) (i) to (iv))</b>	<b>K</b>
Lemon juice	61,640
Mineral water	138,690
Plastic bottles	92,460
Labour	616,400
Variable overheads	169,510
	<u>1,078,700</u>

**Note 3**

<b>Closing inventory</b>	<b>Quantity</b>	<b>Cost</b>	<b>Value</b>
Lemonade	5,600	7	39,200
Lemon juice	600	8	4,800
Mineral water	2,200	2	4,400
Plastic bottles	5,600	0.6	3,360
			<u>51,760</u>

**(c) Explanation of 'flexible budget'**

A flexible budget is a budget which, by recognizing the difference in behaviour between variable and fixed overheads in relation to changes in volume, turnover or other variable factors, is designed to change in accordance with such fluctuations.

### SOLUTION THREE

(a) Computation of the alternative courses of action.

	Garlic	Tomato	Ginger	Total
Units	200,000	48,000	140,000	
	K	K	K	K
Selling price	1.50	2.10	2.60	
Variable costs	(0.90)	(1.55)	(2.30)	
Contribution per unit	0.60	0.55	0.30	
Total contribution	120,000	26,400	42,000	188,400
Fixed costs	(60,000)	(24,000)	(56,000)	(140,000)
Net profit/(loss) per week	<u>60,000</u>	<u>2,400</u>	<u>(14,000)</u>	<u>48,400</u>
Annual profit				<b><u>2,323,200</u></b>

Range of demand for Cinnamon

Units	30,000	40,000	50,000
	K	K	K
Selling price	3.00	2.80	2.30
Variable cost	(1.00)	(1.00)	(1.00)
Contribution per unit	2.00	1.80	1.30
Total contribution per week	<u>60,000</u>	<u>72,000</u>	<u>65,000</u>
Number of weeks		48	
Total contribution		3,456,000	
Less:			
Additional advertising		(500,000)	
Modification cost		(200,000)	
Additional fixed cost		(250,000)	
Net benefit		<b><u>2,506,000</u></b>	

(b) **Recommendation**

Reducing production of garlic flavoured groundnuts by 25% per annum will result into loss of  $K120,000 \times 48 \times 20\% = \mathbf{K1,152,000}$  contribution.

Reducing production of ginger flavoured groundnuts by 25% per annum will result into loss of  $K42,000 \times 48 \times 25\% = \mathbf{K504,000}$  contribution.

The net benefit of the new product is therefore greater than the loss on either of the options withdrawn.

EFP Ltd should reduce the Garlic and replace it with Cinnamon. The only possible warning here is that there is only K648,000 between withdrawing Garlic and ginger. If the growing customer dissatisfaction with Garlic is serious, the longer-term view might prevail over the short-term recommendation.

(c) **Throughput accounting**

Throughput accounting aims to make the best use of a scarce resource (bottleneck) in a JIT environment.

Throughput is a measure of profitability and is defined by the following equation:  
Sales – material cost

The aim of throughput accounting is to maximise this measure of profitability whilst simultaneously reducing operating expenses and inventory (money is tied up in inventory).

The goal is achieved by determining what factors prevent the throughput from being higher. This constraint is called a bottleneck, for example there may be a limited number of machine hours or labour hours.

In the short term the best use should be made of this bottleneck. This may result in some idle time in non-bottleneck resources and may result in a small amount of inventory being held so as not to delay production through the bottleneck.

In the long term the bottleneck should be eliminated, for example a new, more efficient machine may be purchased. However, this will generally result in another bottleneck which must then be addressed.



## SOLUTION FOUR

### (a) (i) Break Even Point in Sales Units (pairs of shoes) and Revenue

#### Workings:

Sales in units (pairs of shoes) 100,000

	<b>Per unit (K)</b>	<b>Total (K)</b>
Sales	55	5,500,000

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#### Variable costs

Direct materials	12.38	1,238,000
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Variable production overheads (80%)	3.776	377,600
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Variable selling and distribution expenses (25%)	0.725	72,500
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	16.881	1,688,100
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Contribution	38.12	3,811,900
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#### Fixed costs

Direct labour		822,000
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Fixed production overhead (20%)		94,400
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Administration expenses		673,000
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Fixed selling and distribution expenses (75%)		217,000
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Total fixed costs		<b>1,806,400</b>
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Profit		<u>2,005,500</u>
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Break-even point in units (pair of shoes)

$$\begin{aligned} \text{Formula} &= \text{Total fixed} \\ \text{costs/contribution per unit} &= \text{K1,806,400/38.12} \\ &= \underline{\underline{47,387}} \end{aligned}$$

Break-even point in revenue (K)

$$\begin{aligned} \text{Formula} &= \text{Break-even point in units} \\ &\times \text{selling price} \\ &= 47,387 \times \text{K55} = \\ &\underline{\underline{\text{K2,606,2986}}} \end{aligned}$$

(ii) **Margin of safety (MOS) in units (pairs of shoes) and revenue (K)**

MOS in units (pair of shoes)

$$\begin{aligned} \text{Formula} &= \text{Budgeted sales units} - \text{BEP sales units} \\ &= 100,000 - 47,387 = \underline{\underline{52,613}} \end{aligned}$$

MOS in revenue (K)

$$\begin{aligned} \text{Formula} &= \text{Budgeted sales revenue} - \text{BEP sales} \quad \underline{\underline{\text{K2,893,704}}} \\ \text{revenue} & \\ &= \text{K5,500,000} - \text{K2,606,296} \end{aligned}$$

(iii) **Pairs of shoes SS Ltd should sell to make a profit of K2, 000,000**

Target profit in units (pair of shoes)

$$\begin{aligned} \text{Formula} &= \frac{\text{Total Fixed Cost} + \text{Target profit}}{\text{Contribution per unit}} \\ &= \\ &= \frac{1,806,400 + 2,000,000}{38.12} = \underline{\underline{99,853}} \end{aligned}$$

(iv) **Assumptions of the break-even (cost-volume-profit) analysis**

- Costs are either fixed or variable.
- The variable cost per unit is the same at all levels of activity (output and sales).
- Fixed costs are normally assumed to remain unchanged at all levels of output.
- The contribution per unit is constant for each unit sold (of the same product).
- The sales price per unit is constant for every unit of product sold; therefore, the contribution to sales ratio is also a constant value at all levels of sales.
- If sales price per unit, variable cost per unit and fixed costs are not affected by volume of activity sales and profits are maximised by maximising total contribution.

(b) (i) **Differences between management accounting and financial accounting**

<b>Management Accounting</b>	<b>Financial Accounting</b>
There is no legal requirement to prepare management accounts.	There is a legal requirement for companies to prepare financial statements.
Management accounting has an internal focus. It is designed to assist company managers in planning, controlling and decision-making activities.	Financial accounting has an external focus. It is designed to provide information to users who are external to an organisation.
Management accounting information may focus on many areas as required by the company.	Financial accounting focuses on the organization as a whole.
The layout and substance of management accounting information is decided by company management.	Financial accounting information is presented in a format prescribed by law and by accounting standards.
Management accounting information may include both monetary and non-monetary information.	Most financial accounting information is expressed in monetary terms.
Management accounting may be used for planning purposes and also for presenting information on past activities.	Financial accounting information provides information on what has happened in the past.
Management accounting information may be prepared daily, monthly, weekly etc. as required.	A detailed set of financial statements for a business is produced annually and in some cases less detailed financial information may be produced semi-annually.
Management accounts are not usually audited	Financial accounts/statements are usually audited

(ii) **Role of management accounting**

As part of his/her role the management accountant provides information to facilitate a range of activities including:

- **Allocation of costs between cost of goods sold and inventories**  
It is important to allocate costs to products as accurately as possible in order to establish the profitability of the business. The management accountant ensures that cost information is collected and correctly allocated to cost of sales or inventories as appropriate. The management accountant may use techniques such as activity based costing to allocate overheads to products or the first in first out (FIFO) method to value inventory.
- **Planning**  
Planning involves translating goals and objectives into the specific activities and resources that are required to achieve the goals and objectives. The management accountant is involved in the preparation of both long term and short term plans. Budgets are short-term plans that are prepared in more detail than longer term plans.

- **Controlling**  
Control involves the process of ensuring that actual outcomes conform to planned or expected outcomes. Budgets may be used to support the controlling of activities by providing a measure against which actual performance may be compared.
- **Performance measurement**  
The management accountant generates periodic reports, which compare actual performance to plan, and provides these to managers enabling them to determine if operations are proceeding as expected and to identify where corrective action may be required. These periodic reports also allow managerial performance to be evaluated and provide incentives for managers to try to achieve favourable results.
- **Decision making**  
Managers also require information to assist them with routine and non-routine decision making. Routine decisions relate to issues such as assessing the profitability of different segments of an organisation such as products, services and customers. Non-routine decisions are made infrequently and may relate to strategic issues such as the introduction of new products or services. The information provided by the management accountant to support these decisions may be financial or non-financial in nature, depending on what best meets the needs of management. In many instances cost information accumulated by the management accountant is relied upon to inform decisions, and therefore it is critical that such information is of a high quality.

## **SOLUTION FIVE**

(a) Average time that raw materials remain in inventory	2 months
Less the time taken to pay suppliers	(1.5 months)
Time taken to produce goods	2 months
Time taken by customers to pay for goods	<u>1.5 months</u>
<b>Cash cycle</b>	<b><u>4 months</u></b>

### (b) (i) **Benefit of factoring**

1. A business receives early payments for most of its receivables in the form of finance from the factor.
2. Optimum inventory levels can be maintained because a business will have enough cash to pay for the inventories it needs.
3. Growth can be financed through sales rather than by injecting fresh external capital.
4. Business gets finance linked to its volume of sales.
5. Managers of businesses do not have to spend their time on the problems of slow payer's accounts receivables.
6. The business does not incur the costs of running its own sales ledger department.

(ii) There are two types of factoring i.e factoring with recourse and factoring without recourse.

- Under factoring with recourse arrangement, when the accounts receivable fails to pay, such a customer is referred back to the company that the customer owes.
- Under factoring without recourse the factor does take full responsible for all accounts receivables without referring the irrecoverable debts to the company.

### (c) (i) **Pricing Strategies**

#### 1. **Market penetration pricing.**

It is a policy of low prices when the product is first launched in order to obtain sufficient penetration into the market. Penetration prices are prices that aim to secure a substantial share in a substantial total market.

#### 2. **Market skimming pricing.**

It involves charging high prices when a product is first launched and spending heavily on advertising and sales promotion to obtain sales. As the product moves into the later stage of its life cycle, progressively lower prices will be charged and so the profitable 'cream' is skimmed off in stages until sales can only be sustained at lower prices.

3. **Premium pricing.**

This involves making a product appear different through product differentiation so as to justify a premium price. Heavy advertising can establish brand loyalty which can help to sustain a premium.

4. **Product bundling.**

It is a variation on price discrimination which involves selling a number of products or services as a package at a price lower than the aggregate of their individual prices.

5. **Loss leader pricing.**

A loss leader pricing is when a company sets a very low price for one product intending to make customers buy other products in the range which carries higher profit margins.

6. **Price discrimination.**

It is the practice of charging different prices for the same product to different groups of buyers when these prices are not reflective of cost difference.

(ii) Advantages of invoice discounting over factoring with recourse are as follows:

- Selected invoices are bought at a discount by the provider of the discounting service, without the invoice discounter taking over the administration of the client's sales ledger. This activity maintains the confidentiality of the customer.
- There is no recourse to the original owner of invoices in the event that the debt becomes irrecoverable.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 10: TAXATION

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THURSDAY 21 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## DA10 TAXATION TABLE

### Income Tax

#### Standard personal income tax rates

Income band	Taxable amount	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 individuals

K0.01 to K57,600	first K57,600	0%
Over K57,600		10%

#### Company income tax rates

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

### Capital Allowances

#### Implements, plant and machinery and commercial vehicles:

Wear and Tear Allowance – Standard wear and tear allowance	25%
Used in manufacturing and leasing	50%
Used in farming and agro-processing	100%
Used in mining operations	20%

#### Non- commercial vehicles

Wear and Tear Allowance	20%
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#### Industrial Buildings:

Wear and Tear Allowance	5%
Initial Allowance	10%
Investment Allowance	10%

#### Low Cost Housing (Cost up to K100,000)

Wear and Tear Allowance	10%
Initial Allowance	10%

#### Commercial Buildings

Wear and Tear Allowance	2%
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#### Farming Allowances

Development Allowance	10%
Farm Works Allowance	100%



Farm Improvement Allowance	100%
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### 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
	K	K
Less than 12 passengers and taxis	1,080	270
From 12 to 17 passengers	2,160	540
From 18 to 21 passengers	4,320	1,080
From 22 to 35 passengers	6,480	1,620
From 36 to 49 passengers	8,640	2,160
From 50 to 63 passengers	10,800	2,700
From 64 passengers and over	12,960	3,240

#### Property transfer tax

Rate of tax on realised value of land, buildings and shares	5%
Rate on realised value of intellectual property	5%
Rate on realised value of mining right for an exploration licence	5%
Rate of tax on realised value of a mining right for a mining licence	10%
Rate of tax on realised value on a mineral processing licence	10%

#### Value Added Tax

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

#### Customs and Excise duties on used motor vehicles

Motor vehicles for the transport of ten or more persons, including the driver	Aged 2 to 5 years		Aged 5 years and over	
	Customs duty	Excise duty	Customs duty	Excise duty

	K	K	K	K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0

	Aged 2 to 5 years		Aged 5 years and over	
<b>Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars</b>	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	K	K	K	K
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687
Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
<b>Hatchbacks</b>				
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
<b>Station wagons</b>				
cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463
<b>SUVs</b>				
Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463
	<b>Aged 2 to 5 years</b>		<b>Aged 5 years and over</b>	
<b>Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-diesel):</b>	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>
<b>Single cab</b>				
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
<b>Double cabs</b>				
GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,697	13,302	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	33,766	14,632	26,531	11,497

### Panel Vans

GVW not exceeding 1.0 tonne	13,353	5,786	7,630	3,061
GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

### Trucks

GVW up to 2 tonnes	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	51,898	0	19,462	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

### Surtax

On all motor vehicles aged more than five (5) years from year of manufacture K2,000

### Customs and Excise on New Motor vehicles

#### Duty rates on:

**1. Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:**

**Customs Duty:**

Percentage of Value for Duty Purposes	30%
Minimum Specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Cylinder capacity of 1500 cc and less	20%
Cylinder Capacity of more than 1500 cc	30%

<b>2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:</b>	
<b>Customs Duty</b>	
Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000
<b>Excise Duty:</b>	
Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
<b>3. Buses/coaches for the transport of more than ten persons</b>	
<b>Customs Duty:</b>	
Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000
<b>Excise Duty:</b>	
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%
<b>4. Trucks/lorries with gross weight exceeding 20 tonnes</b>	
<b>Customs Duty:</b>	
Percentage of Value for Duty Purposes	15%
<b>Excise Duty:</b>	
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**

Kalumbila plc is a company engaged in manufacturing and is registered for Value Added Tax (VAT). In March 2023, the company listed its shares on the Lusaka Securities Exchange and offered 30% of the ordinary shares to indigenous Zambians.

For the year ended 31 December 2023, the company made a profit before taxation as per accounts of K12,433,820. This profit figure was arrived at after taking into account the following:

- (1) Investment income comprising debenture interest of K187,000 (net), and dividends from a private Ltd company of K45,000(gross).
- (2) Gifts and donations which included donations to political parties of K86,000, entertainment expenses for suppliers of K16,000, Christmas gift packs to customers costing (K60 per customer) totaling K180,000, expenditure on accommodation and meals for employees whilst on business trips of K161,200 and a donation of K140,000 to an approved public benefit organization.
- (3) Staff costs which included the annual taxable emoluments for the Managing Director of K840,000, employee training costs of K177,000, employee relocation costs of K635,000, loans to employees written off amounting to K68,000 and employee's salaries of K18,600,000. The Managing Director is accommodated in a company owned house (with a market value of K1,400,000) for which he does not pay rent.
- (4) Bad debt expenses, which comprised trade debts written off amounting to K108,000, loans to customers written off amounting to K38,000, a loan to a major customer previously written off subsequently recovered of K35,000, increase in specific provision for bad debts of K26,000 and decrease in general provision for trade debts of K19,000.
- (5) General operating expenses comprising depreciation of K850,000, costs incurred in issuing ordinary shares to indigenous Zambian of K250,000, audit fees of K450,000 and miscellaneous allowable expenses of K1,697,800.

#### **Additional information**

The following additional information is available:

- (i) The company paid provisional income tax amounting to K2,100,000 for the year ended 31 December 2023.
- (ii) In the year ended 31 December 2023, the company acquired a Toyota Camry car with a cylinder capacity of 1,700cc, at a cost of K240,000 (VAT exclusive) and a Ford Ranger Double Cab Van with a cylinder capacity of 2200cc at a cost of K650,000 (VAT exclusive). Both of these cars are used on a personal to holder basis by the directors. The private use of each vehicle by each director is 30%.
- (iii) In the charge year 2023, the company also acquired manufacturing equipment at a cost of K185,600 (VAT inclusive).

(iv) In September 2023, the company sold a pool car (with a cylinder capacity of 1500cc), for K122,000 (VAT exclusive). The pool car was purchased at a cost of K130,000 (VAT exclusive) in the year 2020.

In March 2023, Kalumbila plc purchased a second-hand building at a total cost of K9,450,000 (VAT exclusive). This comprised land with a value of K1,800,000, a factory building with a value of K6,150,000 and a warehouse for storing finished goods with a value of K1,500,000.

**Required:**

- (a) Calculate the total capital allowances claimable in the charge year 2023, on buildings, implements, plant and machinery. (12 marks)
- (b) Calculate the tax adjusted business profits for the tax year 2023. (10 marks)
- (c) Calculate the company income tax payable by Kalumbila Plc for the tax year 2023. (3 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Ken, Tom and Jerry are in a partnership trading in computers and computer accessories. The partners had agreed to share the profit and losses in the ratio of 3:2:1, for Ken, Tom and Jerry respectively. Their annual salaries are K126,000 for Ken, K132,000 for Tom and K144,000 for Jerry. On 1 September 2023, Jerry had to separate from the partnership to pursue his personal interest. The partnership sharing ratio was changed to 2:1 and annual salaries adjusted to K96,000 and K102,000 for Ken and Tom respectively.

The net profit as per accounts for the partnership for the year ended 31 December 2023, was K1,833,000. This net profit figure was arrived at after accounting for advertising expenses of K16,000, depreciation of K10,200, partner's speeding fines of K5,300, employee's salaries of K280,000 and motor vehicle running expenses of K18,000. It has been agreed with the Commissioner General that only 35% of the motor vehicle running expenses relate to the business and the remaining balance relates to the partner's private motoring.

Ken and Tom use their own personal private motor vehicles partly for business purposes. The vehicles include motor van for Ken and a Toyota corolla car for Tom which were acquired a year ago at a cost of K140,000 and K95,000 respectively. The business use of each of these vehicles by each individual has been agreed with the Commissioner General to be 35%.

The business assets owned by the partnership qualifying for capital allowances included a desk top computer and a delivery van which were acquired last year at a cost K45,000 and K250,000 respectively.

**Required:**

- (a) Calculate the Partnership's final adjusted taxable business profits for the tax year 2023. (5 marks)
- (b) Calculate the allocation of taxable profits to each partner and the amount of profits on which each partner will be assessed for the tax year 2023. (12½ marks)
- (c) Calculate each partner's income tax payable for the tax year 2023. (7½ marks)

**[Total: 25 Marks]**



## SECTION B

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

### QUESTION THREE

- (a) Explain how the ethical principles of integrity and confidentiality apply in the provision of taxation services. (4 marks)
- (b) Mwanza is a sole trader running a farming business and a retail trade. Her annual turnover has always exceeded K800,000. The following information has been extracted from her financial statements for the year ended 31 December 2023:

#### **Income from farming**

The profit from farming amounted to K1,130,000 for the year ended 31 December 2023. This profit figure is before capital allowances but after all other tax adjustments.

During the year ended 31 December 2023, she incurred the following capital expenditure relating to the farming business:

	Cost (K)
Purchase of Light Truck	170,000
Purchase of Irrigation Equipment	250,000
Purchase of Nissan Tiida Car	90,000
Purchase of Tractor	240,000
Construction of Cow Shed	100,000
Drilling boreholes	60,000
Development of a citrus fruits plantation	500,000

#### **Income from retail trade**

During the year ended 31 December 2023, she made a net profit as per accounts from retailing amounting to K605,000. This profit figure was arrived at after deducting the following:

- (1) Salaries & wages amounting to K400,000. This figure includes Mwanza's salary of K66,000. The balance relates to salaries paid to employees.
- (2) Other operating expenses amounting to K780,000. Included in this figure is depreciation of K42,600, expenditure on entertaining customers of K28,400, labour day awards for employees of K32,600, donation to approved public benefit organisations of K15,700, a donation to political a party of K10,000, fines for breach of labour laws of K17,300 and other allowable revenue expenses of K633,400.

#### **Other information relating to the retail trade**

Capital allowances on assets used in the retail trade have been agreed to be K120,500.

#### **Investment income**

She received royalties amounting to K94,350 (net) during the year ended 31 December 2023. Withholding tax had been deducted at source.

**Provisional income tax**

Provisional income tax paid for the year ended 31 December 2023 amounted to K182,405.

**Required:**

- (i) Calculate the taxable profit, after capital allowances, from farming for the year ended 31 December 2023. (8 marks)
- (ii) Calculate the taxable profit, after capital allowances, from the retail trade for the year ended 31 December 2023. (5 marks)
- (iii) Calculate the amount of income tax payable for the tax year 2023. (8 marks)

**[Total: 25 Marks]**

**QUESTION FOUR**

- (a) In January 2023, Willy Lungu imported a second-hand Toyota Axio car (1,700cc) at a cost of US\$3,200 free on board and incurred freight charges and insurance costs amounting to US\$1,300 and US\$1,600 respectively up to the point of entry into Zambia. Other incidental expenses incurred to transport the vehicle up to the point of entry into Zambia amounted to US\$800. Costs incurred in registering the motor vehicle in Zambia amounted to K5,700. The motor vehicle was manufactured in 2016 and it is classified as a sedan for the purposes of import taxes.

The exchange rate quoted by the Bank of Zambia and approved by the Commissioner General at the date of importation was K17.20 per US\$1. Mr Lungu paid for the vehicle at an exchange rate of K17.40 per US\$1 which he had agreed with the bank in a forward contract.

**Required:**

- (i) Explain the procedure to be followed in order to clear the imported motor vehicle by the ZRA Customs Officers. (4 marks)
  - (ii) Calculate the amount of import tax paid on the importation of the Toyota Axio motor car. (6 marks)
- (b) Kajirijiri Ltd is a VAT registered business dealing with both taxable and exempt
- The following transactions took place during the month of December 2023:

(1) Sales revenue was as follows:

	K
Standard-rated sales	900,000
Zero-rated sales	450,000
Exempt sales	<u>150,000</u>
	<u>1,500,000</u>

(2) Purchases comprised of the following:

	K
Standard-rated purchases	318,000
Zero-rated purchases	102,000
Exempt purchases	<u>60,000</u>
	<u>480,000</u>

(3) During the month, the company bought a delivery van at a cost of K153,000 (VAT inclusive) a Toyota Prado car at a cost of K210,000 (VAT inclusive) and equipment at a cost of K79,340 (VAT inclusive). All non-current assets are used 60% in making taxable supplies and 40% in making exempt supplies.

(4) Standard rated operating expenses for the month totaled K696,060 (VAT inclusive) included the following items:

	K
Entertaining customers	44,544
Entertaining employees	5,658
Entertaining suppliers	97,002
Expenses on domestic accommodation of directors	10,500
Advertising expenses	41,760
General overheads	<u>496,596</u>
	<u>696,060</u>

All operating expenses were incurred in making both taxable and exempt supplies in the proportional of sales.

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

**Required:**

Calculate the Value Added Tax payable by the company for the month of December 2023. You should clearly indicate using a zero (0) each item on which input VAT is not chargeable or is irrecoverable.

(15 marks)

**[Total: 25 Marks]**

## **QUESTION FIVE**

- (a) The Zambia Revenue Authority (ZRA) was established on 1 April 1994 under the Zambia Revenue Authority Act of 1993. ZRA is charged with the responsibility of assessing and collecting tax revenue on behalf of the Government. The ZRA is headed by the Commissioner General who reports to the Governing Board.

**Required:**

- (i) Describe the composition of the ZRA Governing Board. (3 marks)
- (ii) State any six (6) powers of the Commissioner General. (6 marks)
- (b) Felicia Mulubwa is a Zambian resident individual who is employed by MTP Plc as a Business Development Manager. Her annual basic salary had been K264,000 until 31 May 2023 when she was given a salary increment of 15% of her current basic salary. She is entitled to an annual transport allowance of 12% of her annual basic salary and annual medical allowance of 5% of her annual basic salary.

She is provided with free residential accommodation in a company owned house. If the house was let out, the company could have charged monthly rentals of K16,000. The company maintains the house and during the year ended 31 December 2023, the company paid maintenance expenses amounting to K3,700 per month in connection with the house.

The company paid education fees amounting to K28,000 for her children's education during the year ended 31 December 2023. She was also paid K11,000 to buy work uniforms.

On 1 May 2023, she received a labour day award consisting of cash amounting to K11,000 and an iPad valued at K9,000.

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

	K
Professional subscription	7,100
Donation to approved public benefit organisation	8,300
Donation to political party	5,000
Purchase of work uniforms	6,800
Employees NAPSA contributions	14,662
Tax deducted under Pay As You Earn	121,300
Medical expenses	12,900

During the year ended 31 December 2023 she also received the following investment income:

	K
Dividends from DFS Plc, a LuSE listed company	9,500
Bank deposit interest	10,000
Royalties	39,100
Interest on Government bonds	15,300

The above amounts of investment income represent the actual amounts received.

**Required:**

(i) Calculate the total amount of withholding tax paid on the investment income for the tax year 2023. (3 marks)

(ii) Calculate the amount of income tax payable by Felicia for the tax year 2023. (13 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 10: TAXATION SUGGESTED SOLUTIONS

### SOLUTION ONE

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

	K
Total cost	9,450,000
Less cost of land	<u>(1,800,000)</u>
	<u>7,650,000</u>
10% test (10% x K7,560,000)	765,000

The warehouse has a cost of K1,500,000 and hence have failed the test and will be classified as commercial buildings.

<u>Factory</u>	K
Wear & tear allowance (K6,150,000 x 5%)	307,500
<u>Administration offices</u>	
Wear & tear allowance (K1,500,000 x 2%)	<u>30,000</u>
	<u>337,500</u>

COMPUTATION OF CAPITAL ALLOWANCES ON IMPLEMENTS PLANT & MACHINERY

	K	K
<u>Toyota Camry</u>		
Wear & tear allowance Cost (K240,000 x 116%) x 20%		55,680
<u>Ford Ranger</u>		
Wear & tear allowance (K650,000 x 116%) x 20%		150,800
<u>Manufacturing equipment</u>		
Wear & tear allowance (K185,600 x 25/29 x 50%)		80,000
<u>Pool car</u>		
Original Cost (K130,000 x 116%)	150,800	
Less total allowances (K150,800 x 20% x 3yrs)	<u>(90,480)</u>	
ITV at 1 January 2023	60,320	
Proceeds	<u>(122,000)</u>	
Balancing charge	<u>(61,680)</u>	<u>(61,680)</u>
		<u>224,800s</u>

(b) COMPUTATION OF TAXABLE BUSINESS PROFIT

	K	K
Net profit as per accounts		12,433,820

Add		
Political party donations	86,000	
Gifts of dairies to suppliers	16,000	
Gifts to customers	180,000	
Accommodation benefit (K840,000 x 37.5%)	315,000	
Employee loans written off	68,000	
Customer loans written off	38,000	
Depreciation	850,000	
Share issue costs	250,000	
Personal to holder motor car benefit on		
- Ford Ranger	36,000	
- Toyota Camry	21,600	
		1,860,600
		14,294,420
Less		
Debenture interest	187,000	
Dividends	45,000	
Customer loan recovered	35,000	
Increase in general provision of bad debts	19,000	
Capital allowances on buildings	337,500	
Capital allowances on implements	<u>224,800</u>	
		<u>848,300</u>
Taxable profit		<u><u>13,446,120</u></u>

(c) KALUMBILA PLC

COMPANY INCOME TAX COMPUTATION FOR THE TAX YAER 2023

	K
Business Profit	13,446,120
Debenture interest (K187,000 x 100/85)	220,000
Final taxable income	13,666,120
Company income Tax (30%-2= 28% x K13,666,120)	3,826,514
Less Tax already paid	
Provisional income tax paid	-2,100,000
WHT on debenture interest (K220,000 x 15%)	<u>-33,000</u>
Company income Tax payable	<u><u>1,693,514</u></u>

## SOLUTION TWO

### (a) PARTNERSHIP'S COMPUTATION OF ADJUSTED TAXABLE BUSINESS PROFITS

	K	K
Business profits		1,833,000
Add:		
Depreciation	10,200	
Fines	5,300	
Motoring expenses (K18,000 x 65%)	<u>11,700</u>	
		<u>27,200</u>
		1,860,200
Less Capital Allowances:		
Desk computer (K45,000x 25%)	(11,250)	
Delivery van (K250,000 x 25%)	<u>(62,500)</u>	<u>(73,750)</u>
Final Adjustable taxable profit		<u>1,786,450</u>

### (b) ALLOCATION OF TAXABLE PROFITS

	K	K	K	K
	Total	Ken	Tom	Jerry
First 8 Months	K	K	K	K
Salaries (K402,000x 8/12)	268,000	84,000	88,000	96,000
Residual (3:2:1)	922,967	461,483	307,656	153,828
	1,190,967	545,483	395,656	249,828
Last 4 month				
Salaries (K198,000 x 4/12)	66,000	32,000	34,000	-
Residual (2:1)	529,483	352,989	176,494	-
	595,483	384,989	210,494	
Total Allocations	1,786,450	930,472	606,150	249,828
Less Capital allowances		(12,250)	(6,650)	
		918,222	599,500	249,828

Allocation of profits for the tax 2023

First 8 months  $8/12 \times K1,786,450 = K1,190,967$

Last 4 months  $4/12 \times K1,786,450 = K595,483$

### (c) COMPUTATION OF INCOME TX PAYABLE BY EACH PARTNER

	Ken	Tom	Jerry
	K	K	K
Income Tax			
K57,600 x 0%	0	0	0
K24,000 x 20%	4,800	4,800	4,800
K25,200 x 30%	7,560	7,560	7,560
K811,422 x 37.5%	304,283		
K492,700 x 37.5%		184,763	
K143,028 x 37.5%			53,636
Total income tax payable	316,643	197,123	65,996



### SOLUTION THREE

(a) Integrity

This principle imposes an obligation on the member providing tax services to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.

This means that a member providing taxation services must not willingly be associated with reports, returns, communications or other information where the member believes the information:

- (i) Contains a materially false or misleading statements or calculations
- (ii) Contains statements or information furnished recklessly

Confidentiality

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

This means that members should not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for personal advantage of the member.

(b) (i) Taxable farming profit for the year ended 31 December 2023

	K	K
Profit from farming		1,130,000
Less capital allowances:		
Light Truck (K170,000 x 25%)	42,500	
Irrigation Equipment (K250,000 x 100%)	250,000	
Nissan Tiida (K90,000 x 20%)	18,000	
Tractor (K240,000 x 100%)	240,000	
Cow Shed (K100,000 x 100%)	100,000	
Boreholes (K60,000 x 100%)	60,000	
Developing a plantation (K500,000 x 10%)	<u>50,000</u>	
		<u>(760,500)</u>
Taxable farming profit		<u>369,500</u>

(ii) Taxable profit from retail trade for year ended 31 December 2023

	K	K
Net profit		605,000
Add:		
Mwanza's salary	66,000	
Depreciation	42,600	
Entertaining customers	28,400	
Donation to political party	10,000	
Fines for breach of labour laws	<u>17,300</u>	
		<u>164,300</u>
		769,300
Less:		
Capital allowances		<u>(120,500)</u>
Taxable profit from retail trade		<u>648,800</u>

(iii) MWANZA  
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2023

	K	K
Non-farming income		
Profit from retail trade	648,800	
Royalties (K94,350 x 100/85)	<u>111,000</u>	
		759,800
Profit from farming		<u>369,500</u>
Total taxable income		<u>1,129,300</u>
<u>Income Tax</u>		
Non-farming income		
First K57,600 @0%		0
Next K24,000 @25%		4,800

Next K25,200 @30%	7,560
Excess (K759,800 – K106,800) @37.5%	<u>244,875</u>
	257,235
Tax on farming income (K369,500 x 10%)	<u>36,950</u>
Income tax liability	294,185
Less:	
Provisional income tax paid	(182,405)
WHT- Royalties (K111,000 x 15%)	<u>(16,650)</u>
Income tax payable	<u>95,130</u>

## SOLUTION FOUR

### (a) Customs and excise duties

(i) The following is the procedure for clearing a motor vehicle:

- (1) Presentation of genuine import documents, such as invoice or letter of sale, road/rail consignment notes, freight statements etc.
- (2) Valuation (VDP) of the motor vehicle by the customs officers and revaluation if necessary.
- (3) Payment of customs duty, excise duty, import VAT and processing fees.
- (4) Processing of the declaration in form CE 20 by customs.

(ii) Import taxes

	\$
Cost	3,200
Freight charges	1,300
Insurance	1,600
Incidental costs	<u>800</u>
VDP in US\$	6,900
Exchange rate	<u>x K17.20</u>
VDP ZMW	<u>118,680</u>

Import taxes	Value of the Vehicle	Import taxes
	K	K
Value for duty purposes	118,680	
Customs duty	8,423	8,423
Excise duty	<u>10,950</u>	10,950
	138,053	
Import VAT @16%	<u>22,088</u>	22,088
	160,141	
Surtax	<u>2,000</u>	<u>2,000</u>
Total value of the vehicle	<u>162,141</u>	

Total import taxes

43,461

(b) **KAJIRIJIRI LTD**

**VAT PAYABLE FOR THE MONTH OF DECEMBER 2023**

Output VAT	K	K
Standard-rated sales: K900,000 x 16%		144,000
Exempt sales		0
Zero-rated sales: K450,000 x 0%		0
Total output VAT		144,000
Input VAT		
Standard-rated purchases: K318,000 x 16%	50,880	
Exempt	0	
Zero-rated purchases: K102,000 x 0%	0	
Entertaining customers	0	
Entertaining suppliers	0	
Entertaining employees	0	
Expenses on domestic accommodation of directors	0	
Advertising expenses:		
(K41,760 x 4/29 x 90%)	5,184	
General overheads: K496,596 x 4/29 x 90%	61,646	
Delivery van: K153,000 x 4/29 x 60%	12,662	
Toyota Prado	0	
Equipment: K79,340 x 4/29 x 60%	<u>6,566</u>	
		<u>136,938</u>
VAT refundable		<u>7,062</u>

The non-attributable recoverable input VAT on the overheads is computed using the following ratio:

$\frac{\text{Taxable supplies}}{\text{Total supplies}} \times 100$

$\frac{1,350,000}{1,500,000} \times 100$   
=90%

## SOLUTION FIVE

- (a) (i) The ZRA Governing Board is composed of:
- Secretary to the Treasury,
  - Ministry of Justice Permanent Secretary,
  - Governor of the Bank of Zambia,
  - Representatives from the Law Association of Zambia (LAZ), the Zambia Association of Chamber of Commerce and Industry(ZACCI),Zambia Institute of Chartered Accountants (ZICA) and The Bankers Association of Zambia
  - Two persons nominated by the Minister of Finance and National Planning.
- (ii) Powers of the commissioner General of ZRA:
- (1) Power to request for a tax return to be submitted any time.
  - (2) Power to request and examine financial statements of the tax payer in order to obtain information.
  - (3) Power to enter and search tax payer's premises, for money and documents.
  - (4) Power to seize property, and any documents of the taxpayer.
  - (5) Power to charge penalties and interest on overdue tax payments.
  - (6) Power to request for tax information.

- (b) (i) Withholding tax paid for the tax year 2023

	K
Bank deposit interest	0
Dividends	0
Royalties (K39,100 x 15/85)	6,900
Interest on Government bonds (K15,300 x 15/85)	<u>2,700</u>
Total withholding tax	<u>9,600</u>

- (ii) FELICIA'S PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2023

	K
Basic salary	
(K264,000 x 5/12) + (K264,000 x 115% x 7/12)	287,100
Transport allowance: K287,100 x 12%	34,452
Medical allowance: K287,100 x 5%	14,355
House maintenance expenses: K3,700 x 12	44,400

Education fees	28,000
Uniform allowance (K11,000 – K6,800)	<u>4,200</u>
	412,507
Investment income	
Royalties (K39,100 x 100/85)	<u>46,000</u>
	458,507
Less:	
Professional subscription	(7,100)
Donation to approved public benefit organization	<u>(8,300)</u>
Taxable income	<u>443,107</u>

#### Income Tax

First K57,600 @0%	0
Next K24,000 @20%	4,800
Next K25,200 @30%	7,560
Excess (K443,107 – K106,800) @37.5%	<u>126,115</u>
Income tax liability	138,475
Less:	
WHT- Royalties (K46,000 x 15%)	(6,900)
PAYE	<u>(121,300)</u>
Income tax payable	<u>10,275</u>

**END OF SUGGESTED SOLUTIONS**



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 11: PRINCIPLES OF AUDITING

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THURSDAY 21 MARCH 2024

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

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### **INSTRUCTIONS TO CANDIDATES**

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

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



## **SECTION A – TWO (2) COMPULSORY QUESTIONS**

**Attempt Both questions in this section.**

### **QUESTION ONE**

High-End Fashion Shop Ltd (HEFS Ltd) is a modern retail shop that stocks latest designer clothing and other jewelry targeting higher income earners with most of its shops located in shopping malls. Usually a large quantity of designers stocks of various goods is ordered in order to fulfill customer orders and reduce stock outs. In order to keep up with competition, HEFS Ltd spent a large amount of money on refurbishing all its stores. The costs of refurbishing were recorded in the books of accounts by an Administration Officer with no prior accounting knowledge in terms of classification of costs. This was due to the fact that the Accountant was on study leave. Further, in the absence of the Accountant, the Administrative Manager was made custodian of large amounts of cash at the office which was kept for over a week before depositing it into the bank.

In order to secure their high end customers who normally pay on time, large number of expensive stock is paid for in advance by customers and the money is receipted together with cash sales and deposited into the same business bank account. Most of these secured stocks are imported on credit from the Far East. The company has not paid its suppliers for the last five (5) months.

During the year, HEFS Ltd received an order to supply different fashion wear on credit to guests at a dinner gala. The gala was attended by celebrities who are esteemed customers of HEFS Ltd. This was unusual as it was done and arranged by only senior management who exercised their own judgment without normal approval process from the sales department. In order to increase its market share, HEFS Ltd delivered some of the goods to Greta Ltd, a company in which HEFS Ltd acquired 30% shares. The transaction was to a related party and management only provided this information when pressed by external auditors during the year.

Owing to load shedding of electricity, the accounting department of HEFS Ltd, recommended that all tellers at the points of sale use manual systems when recording transactions until power is restored. It usually, takes twelve (12) hours for power to be restored and the situation is expected to go on for the next three (3) months.

A lot of shops that are into fashion industry have entered the jewelry market which further reduced sales of HEFS Ltd, forcing the company to start offering credit sales of 60 days. Since the company has a Credit Controller, receivables amounts have increased and the receivables age analysis has not been updated.

In order to run an effective salaries and wages system, the following controls are in place:

1. Those responsible for data in-put are different from those processing the payroll.
2. Authorisation is obtained before any employees are hired except in special cases.
3. All employees are required to clock in using a biometric system that is placed at the entrance to the shop.
4. All preparations and payments of cheques relating to payroll are authorised.

Despite the internal controls in the salaries and wages system being in place, there were cases where certain urgently needed staff was replaced without prior approval and formalities. This was allegedly done by the Human Resources Manager and Payroll Accountant who connived by delaying

to update employee details after a worker resigned. Further, due to these frequent changes in personnel, a lot of errors were discovered during the audit.

**Required:**

- (a) Explain five (5) areas where professional judgment will be required during the audit of HEFS Ltd. (5 marks)
- (b) (i) Identify and explain five (5) audit risks in HEFS Ltd. (5 marks)  
(ii) Suggest five (5) responses for the identified risks in ((b) (i) above. (4 marks)
- (c) (i) Identify and explain four (4) factors that indicate significant risks in the scenario above. (4 marks)  
(ii) Describe three (3) tests of controls that should be performed in relation to the wages and salaries system of HEFS Ltd. (3 marks)
- (d) Explain four (4) limitations of accounting and internal control systems. (4 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

You are the Audit Senior in Brian & Co. and your team has just completed the interim audit of Chongo Industries Co, whose year-end is 31 December 2022. You are in the process of reviewing the payroll system cycle, as well as preparing the audit programmes for the final audit.

Chongo Industries Co. manufactures lights and the process is predominantly automated. There is a workforce of 35 employees, who monitor the machines, as well as approximately 20 employees who work in sales and administration. The company operates 24 hours a day seven (7) days a week.

Below is a description of the payroll system in Chongo Industries Co:

**Factory workforce**

The company operates three (3) shifts daily with employees working eight (8) hours per shift. They are required to clock in and out using employee swipe cards, which identify the employee number and links into the hours worked report produced by the computerised payroll system.

Employees are paid on an hourly basis. There is no monitoring/supervision of the clocking in/out process and an employee was witnessed clocking for several employees using their employee swipe cards.

The payroll system calculates on a weekly basis the cash wages to be paid to the workforce, based on the hours worked report multiplied by the hourly wage rate, with appropriate tax deductions.

These calculations are not checked by anyone as they are generated by the payroll system. During the year, the hourly wage rate was increased by the Human Resources (HR) department and this was notified to the payroll department on a piece of paper.

Each Friday, the payroll department prepares the pay packets and physically hands these out to the employees, upon production of identification. However, for the night shift workers, the pay packets are given to the Factory Supervisor to distribute. If any night shift employees are absent on pay day, the Factory Supervisor keeps these wages pay packets and returns them to the payroll department the following Monday.

### **Sales and administration staff**

The sales and administration staff are paid monthly by bank transfer. The number of employees fluctuates and during July two (2) administration staff joined; however, due to staff holidays in the HR department, they delayed informing the payroll department, resulting in incorrect salaries being paid out.

The Board of Directors, in its last meeting, questioned the legal compliance levels for Chongo Industries Co. since it is involved in manufacturing. The company is required to comply with regulations of the Zambia Environmental Management Authority (ZEMA) and the Lusaka City Council. The Board wanted to know what Management was doing to ensure that it complied to avoid payment of penalties and save the reputation of Chongo Industries Co.

Brian and Co. are planning the audit for Chongo Industries Co. and during the preparation of the audit strategy the Audit Manager mentioned to the Audit Senior that they should consider using the internal audit reports as part of their work. Mwaka an Audit Junior is not sure of how to go about using work done by the internal auditors and would like to know what should be considered before placing reliance on the work done by Internal Audit.

### **Required:**

- (a) (i) Identify six (6) internal control deficiencies and explain the possible implications of these in the payroll system of Chongo Industries Co. (6 marks)
- (ii) Suggest a recommendation to address each deficiency. (6 marks)
- (b) Describe six (6) substantive procedures that should be performed to confirm the accuracy and completeness of Chongo Industries' payroll cost. (6 marks)
- (c) Explain the responsibilities of management and auditors of Chongo Industries Co. in relation to compliance with laws and regulations. (4 marks)
- (d) Explain three (3) factors that should be considered by an external auditor before reliance can be placed on the work performed by a company's internal audit department. (3 marks)

**[Total: 25 Marks]**

## **SECTION B**

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

**Attempt any TWO (2) questions.**

### **QUESTION THREE**

You are a Manager in the audit firm of Alice & Co; and this is your first time to audit one (1) of the firm's clients, Sakala Co. The main activity of Sakala Co. is providing investment advice to individuals regarding saving for retirement, purchase of shares and securities and investing in tax efficient savings schemes. Sakala is regulated by the relevant financial services regulating authority. The Board of Directors of Sakala Co. comprises an equal number of Executive and Non-Executive board members.

You have been asked to start the audit planning for Sakala Co. by Mr Sichinga who has been the Engagement Partner for Sakala Co. for the previous nine (9) years and has excellent knowledge of the client.

Mr Sichinga informed you that he would like his daughter, Kabu to be part of the audit team this year; Kabu is currently studying for her first set of application papers for her CA qualification. Mr Sichinga also informed you that Mr Bwalya, the Audit Senior, received investment advice from Sakala Co. during the year and intends to do the same next year.

In an initial meeting with the Finance Director of Sakala Co, you learn that the audit team will not be entertained on Sakala Co.'s yachts this year as this could appear to be an attempt to influence the opinion of the audit. Instead, he has arranged a balloon flight costing less than one-tenth of the expense of using the yacht and hopes this will be acceptable. The Finance Director also stated that the fee for taxation services this year should be based on a percentage of tax saved and trusts that your firm will accept a fixed fee for representing Sakala Co in a dispute regarding the amount of sales tax payable to the tax authorities.

Kabu needs help in understanding what corporate governance is and also why the audit team needs to plan the audit before they can commence the audit. As the Audit Manager on the team it is your responsibility to ensure that all the Audit Trainees have the relevant skills to carry out the assigned tasks of the audit. She was also wondering why companies engage Internal Auditors and also bring in external auditors to audit at the end of the year. In her view, Kabu thinks that this is a duplication of work and rather companies should just engage external auditors.

#### **Required:**

- (a) Explain three (3) benefits of having Non-Executive Board members on the Board of Sakala Co. (3 marks)
- (b) (i) Explain six (6) ethical threats which may affect the auditor of Sakala Co. (6 marks)  
(ii) For each ethical threat in (i) above, suggest a suitable safeguard. (6 marks)
- (c) Discuss four (4) benefits to Sakala Co. for establishing an Internal Audit department. (6 marks)

(d) Explain four (4) benefits of audit planning.

(4 marks)

**[Total: 25 Marks]**

#### **QUESTION FOUR**

You are the audit supervisor in charge of the audit of your client, Pungwa Co (Pungwa) and you are provided with the information below.

The Audit Manager has sent you the information regarding the responsibilities of auditors and management regarding "going concern". You have been requested to meet the other audit team members and explain these responsibilities to them.

At the beginning of the year, Pungwa Co. reviewed its Property, Plant and Equipment valuations and as a result decided to revalue the carrying values of property based on the values in the external expert valuation report.

You had a meeting with your Audit Manager, where he emphasized that it is very important for you to communicate with those charged with governance throughout the audit of Pungwa Co.

He also told you that Pungwa Co.'s payables balance includes suppliers owed different balances from small balances of about K20,000 up to K1,000, 000, all with many different due dates for payments. For the first time at this client, your firm decided to use audit software to assist with the audit of the payables balance.

The Audit Manager requested you to use audit sampling and obtain reliable audit evidence during the audit.

#### **Required:**

- (a) (i) Explain two (2) responsibilities of management and three (3) responsibilities of auditors regarding "Going Concern". (5 marks)
- (ii) Explain five (5) substantive procedures that should be performed in relation to the revaluation of property. (5 marks)
- (iii) Explain three (3) reasons auditors use audit sampling to obtain audit evidence. (3 marks)
- (iv) State four (4) factors that influence the reliability of audit evidence. (4 marks)
- (b) (i) Explain the need of auditors to communicate with those charged with governance during the audit. (4 marks)
- (ii) Explain four (4) audit procedures that should be performed on the payables balance. (4 marks)

**[Total 25 Marks]**

## **QUESTION FIVE**

Benut (BT) Ltd is a manufacturer of agro-chemicals. The previous accountant resigned and a new accountant was employed who has no knowledge of the type of accounting software and system and the industry in which BT Ltd is operating. He previously worked for the Human Rights Commission. The following transactions have been entered in the books of accounts by the new accountant:

1. BT Ltd bought a delivery van costing K13m.
2. During the year, the company spent K25,000 on training employees in the use of new chemicals that can destroy crops. It is believed that when employees are trained in the use of a particular pesticide, they will guide farmers who come to buy agro-chemicals from BT. The related training costs have been capitalized.
3. BT Ltd spent large amounts of money in rehabilitating its factory amounting to K28.5m obtained through a loan from the Zambia Farmers Credit bank. The amount was recorded as a non-current liability in the financial statements. It is expected that the levels of production will increase and the company will be able to export agro-chemicals to the entire Southern African region.
4. BT Ltd acquired new office buildings at a cost of K70m
5. During the year, BT Ltd disposed of a piece of equipment which was found to be of no use at K30m. A deposit of K8m was received. At the end of the year, the amount of depreciation on Property, Plant and Equipment was K15m.

BT Ltd extended credit to its customers. The credit policy has been working well with few exceptions and most of the receivables are confirmed on time. This is due to the fact that the internal controls are functioning effectively and efficiently. In order to maintain updated inventory records, the company decided to use perpetual inventory count of stock taking.

Your firm, Trendy Chartered Accountants (Trendy) is auditor of BT Ltd. The audit team for BT Ltd has been assigned, among other tasks, to attend cash count and obtain bank confirmations by following the right procedures. Consequently, the Engagement Partner recommended the negative confirmation method for receivables confirmations.

During the last two (2) years, the country experienced the worst drought. This led to most farmers experiencing poor or no harvest at all. Consequently, BT Ltd lost out as most of its customers could not pay for the chemicals they bought on credit. Further, Suppliers of bulk chemicals threatened the company with legal suits.

The Board Chairman requested the Board Secretary to convene an extraordinary meeting to discuss liquidity challenges the company was facing. A meeting was subsequently convened and it resolved that the company gets three (3) different long term loans from three (3) different institutional lenders. The process of obtaining the loans was completed and K45m was given to BT Ltd repayable in ten (10) years. So far BT Ltd has made four (4) monthly installments through the bank on each loan.

**Required:**

- (a) Describe one (1) substantive audit procedure for each of the five (5) transactions initiated by the newly employed Accountant. (5 marks)
- (b) Suggest four (4) audit procedures to be performed on receivables. (4 marks)
- (c) Describe four (4) specific audit procedures to be performed on the loan (4 marks)
- (d) (i) Explain audit procedures to be performed when verifying whether inventory was valued at the lower of cost and net realizable value. (5 marks)  
(ii) Explain five (5) conditions that justify the use of the negative confirmation method. (5 marks)

**[Total: 25 marks]**

**END OF PAPER**

## DA 11: PRINCIPLES OF AUDITING SUGGESTED SOLUTIONS

### SOLUTION ONE

- (a) The following are the areas in which external auditors can use professional Judgment:
1. When computing levels of materiality at the planning stage of an audit.
  2. It will also be required to determine timing, the nature and extent of audit procedures during the audit of HFS Ltd.
  3. When auditors want to evaluate whether audit evidence obtained is sufficient and adequate.
  4. When evaluating management judgment in applying the applicable financial reporting framework.
  5. When drawing conclusions based on the audit evidence that was collected
  6. It can also necessary when assessing audit evidence from HFS Ltd in order to form an opinion.
- (b) Audit risks and responses in the audit of High End Fashion Shop:

<b>(i) Audit risks</b>	<b>(ii) Responses to audit risks</b>
1. The company deals in fashion goods which may quickly go out of fashion. The net realisable value may drop significantly for some lines of clothing. There is a risk of inventory being overstated.	1. Review the inventory count instructions and confirm they deal with identification of obsolete items. Attend inventory count to see how items that may be out of fashion are identified and check the valuation to ensure it is at the lower of cost and net realisable value.
2. Cost of refurbishment: HFS Ltd had spent huge amounts of money on refurbishments and the treatment of this cost was recorded by Administrative Officer with no proper knowledge of accounting. There is a possibility of recording this expenditure as non-current assets.	2. External auditors should obtain the breakdown of expenditure and review the accounting entries against the breakdown. This will confirm if expenditure has been classified correctly as revenue or capital expenditure.
3. Payments for goods in advance –this is an audit risk in that the amount of revenue will include this advance payment thereby overstating total revenue.	3. Inquire from management the accounting for advance payments by customers. For a sample of advance payments confirm that the money received was not credited to revenue but rather creditors.
4. Significant borrowings stressing cash flows-this is a risk in that	4. During the course of the audit, look out for any indicators of going concern problems of the



the going concern will be impacted and the business will be under pressure to make up for the high interest when they are due for payments	company. Review the loan agreements for any covenants that should be complied with and any security on the loans that may be enforced by the banks.
5. The Administrative Officer as custodians of large amounts of cash –there is a possibility that cash can be stolen as it is taking a lot of time to deposit it at the bank. There is a risk that falsification of records can be done in order to conceal money misused or stolen.	5. For samples of cash received follow through and confirm the money is deposited. Inspect copy deposit slips and relate them to receipts for money received.

- (c) (i) The following factors indicate significant risks in the business HFS Ltd:
- Risk of fraud-the administrative staff are involved in the collection of cash for the company. They are also holding on to large amounts of cash balances. This can lead to money laundering activities.
  - The business experienced unusual transactions which were sanctioned by management using their own judgment. This can result in fraudulent activities since no one can question management’s actions.
  - Third party transactions-the business relationships in which HFS Ltd owns 30% is a third party. This transaction with its related entries have not been reflected in the books of accounts. It will only be revealed when external auditors query management.
  - Complexity of the transaction-the transaction involving the sale of suits to guests at a diner gala was complex.
  - The degree of subjectivity of information contained in the financial statements is likely to be high .This is due the fact the Administrative Officer in involved in recording accounting information.

(ii) The following tests of controls should be performed

<b>Control</b>	<b>Test</b>
1. Segregation of duties	External auditors need to observe and evaluate how duties are segregated
2. Authorisation for hiring of new staff	For a sample of newly employed staff, examine the documentation and confirm that there is authorisation of hiring of staff by senior official.
3. Signing in biometrically	Obtain a sample of details for employees and compare with log in details of employees from the IT department

4. Authorisation for payment to employees	Review and test procedures authorisation of payments. Obtain a sample of payments and review to compare for correct signatures of authorisation.
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(d) The following are limitations of accounting and internal controls:

1. The cost of controls more than the benefits of setting up controls if it is not justifiable to incur costs but fraud continues.
2. There is potential of treatment of accounting transactions differently and wrongly especially when they are recorded by administrative staff with no knowledge of accounting.
3. Collusion between employees –there is a possibility of employees teaming up to defraud the company.
4. Management can overridden internal controls by sanctioning the sale of expensive clothing using their own discretion by disregarding laid down procedures.

## SOLUTION TWO

### (a) Payroll system implications and recommendations

#### (i) Deficiency

#### (ii) Recommendation

<p><b>Clocking in process:</b> as there is no supervision of the clocking in process then, as witnessed, employees can clock in multiple employees simply by using their employee swipe cards, this will be resulting a substantially increased payroll cost for chuck industries.</p>	<p>The clocking in and out procedures should be supervised by a responsible official to prevent one individual clocking in multiple employees. In addition, Chongo Industries Co could consider linking the access to the factory floor with the employee swipe card system, hence employees can only access the factory one at a time upon presentation of their employee swipe card.</p>
<p><b>Wages calculations:</b> the wages calculations are generated by the payroll system and there no checks performed. Therefore, if the system errors occur during payroll processing then this would not be identified. This could result in wages being over or under calculated leading to an additional payroll cost or loss of employee goodwill.</p>	<p>A senior member of payroll team should recalculate the gross to net pay workings for a sample of employees and compare their results to the output from the payroll system. These calculations should be signed as approved before wages payments are made.</p>
<p><b>Hourly wage increase:</b> the hourly wage has been increased by the human resource (HR) department and notified to the payroll department on a piece of paper. This form of communication can result in fraud by the people involved.</p>	<p>All communication of changes in payroll should be done formally on company headed paper and must be appropriately approved.</p>

<p><b>Wage pay-out:</b> the Factory Supervisor should not be given the pay packets of the night shift staff as this is a significant amount of cash being approximately one third of the workforce. This cash will not be in a secure location and so is open to the risk of theft.</p> <p>For employees absent on pay day, the supervisor retains the wages and only returns them on Monday, this cash is therefore not secure and susceptible to loss or theft.</p>	<p>Consideration should be given to operating a shift system for the payroll department on Fridays, this will ensure that there are sufficient payroll employees to perform the wages pay-out to the night shift employees. Therefore, the same controls applied to the morning and late afternoon shifts can be put in place for the night shift.</p> <p>Pay packets of absent employees should be safely secured in the safe overnight and then banked on Monday.</p>
<p><b>Joiners/leavers:</b> notification of joiners and leavers should be made on a timely basis to the payroll department, even if some staff are on holiday otherwise Chongo Industries Co could continue making payments to employees who have left or pay new employees late resulting in a loss of employee goodwill.</p>	<p>During periods of illness or holidays, key roles of affected employees should be reallocated to other members of the team to ensure that controls are maintained.</p> <p>Forms for new joiners should be completed when they are appointed with appropriate start dates filled in, these should then be distributed to all relevant departments. This should reduce the risk of new joiners being missed out by the payroll department.</p>

(b) **Payroll substantive procedures**

1. Agree the total wages and salaries expense per the payroll system to the detailed trial balance, investigate any differences.
2. Cast a sample of payroll records to confirm completeness and accuracy of the payroll expense.
3. For a sample of employees, recalculate the gross and net pay and agree to the payroll records to verify accuracy.
4. Re-perform calculation of statutory deductions to confirm whether correct deductions for this year have been included within the payroll expense.
5. Compare the total payroll expense to the prior year and investigate any significant differences.
6. Review monthly payroll charges, compare this to the prior year and budgets and discuss with management any significant variances.

7. Perform a proof in total of total wages and salaries, incorporating joiners and leavers and the pay increase. Compare this to the actual wages and salaries in the financial statements and investigate any significant differences.
8. Select a sample of joiners and leavers, agree their start/leaving date to supporting documentation, recalculate that their first/last pay packet was accurately calculated and recorded.

(c) **Responsibilities for laws and regulations:**

Under ISA 250 *Consideration of Laws and Regulations in an Audit of Financial Statements*, management have a responsibility to ensure that the operations of Chongo Industries Co are conducted in accordance with the provisions of laws and regulations. This includes compliance with laws and regulations that determine amounts and disclosures in financial statements, including tax liabilities and charges.

Auditors are not responsible for preventing non-compliance with laws and regulations, and cannot be expected to detect non-compliance with all laws and regulations. They have a responsibility to obtain reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error.

Auditor's responsibility differs in relation to the two different categories of laws and regulations identified below:

- Laws and regulations which have a DIRECT effect on the determination of material amounts and disclosures in financial statements. Here the auditor is responsible for obtaining sufficient appropriate audit evidence regarding compliance.
- Laws and regulations which do not have a direct effect on the determination of material amounts and disclosures in financial statements, but may impact the entity's ability to continue to trade. Here the auditor's responsibility is limited to specified audit procedures to help identify non-compliance with those laws and regulations that may have a material effect on the financial statements. This includes inquiring with management whether the entity is in compliance with such laws and regulations, and inspecting correspondence with relevant licensing or regulatory authorities.

Auditors also have a responsibility to remain alert, by maintaining professional scepticism, to the possibility that other audit procedures may bring instances of identified or suspected non-compliance with laws and regulations.

(d) **Reliance on internal audit**

ISA 610 *Using the Work of Internal Auditors* details the factors the external auditors should consider in order to place reliance on the work of the internal audit (IA) department as follows:

**Objectivity**

They should consider the status of IA within the company and if they are independent of other departments, in particular the finance department. In addition, consideration should be given as to who IA reports to, whether this is directly to those charged with governance or to a finance director.

**Technical competence**

The technical competence of IA staff should be considered. Consideration should be given to whether they are members of a professional body and have relevant qualifications and experience.

**Due professional care**

The external auditors should consider if the IA department have exercised due professional care, the work would need to have been properly planned including detailed work programmes, supervised, documented and reviewed.

**Communication**

In order to place reliance there needs to be effective communication between the internal auditors and the external auditor.

This is most likely to occur when the IA department is free to communicate openly and regular meetings are held throughout the year.

### SOLUTION THREE

(a) Benefits of Non-Executive Board Members:

- They bringing to the company specialist skills that they poses for the benefit of Sakala Co.
- Because they do not participate in the running of the company, they are objective being independent of the company.
- They are necessary members of committees such as the audit and remuneration committees which should comprise independent board members to be effective.

(b) **Ethical threats and their mitigation**

<b>(i) Ethical threat</b>	<b>(ii) Safeguard</b>
Mr Sichinga, the Engagement Partner has been involved with the client for the last nine years. This means he may be too familiar with the client to be able to make objective decisions due to this long association.	Mr Sichinga should be rotated from being Engagement Partner. The audit work should be subject to an independent review by someone who has not been involved with the audit.
<p>There is no ethical rule which stops Mr Sichinga recommending Kabu for the audit, or letting Kabu take part in the audit.</p> <p>However, there may be the impression of lack of independence as Kabu is related to the Engagement Partner.</p> <p>Kabu could be tempted not to identify errors in case this prejudiced her father's relationship with the client.</p>	To show complete independence, Kabu should not be part of the audit team. However, if Mr Sichinga is no longer the Engagement Partner then this removes the ethical threat and Kabu could be included in the audit team.
As long as Mr Bwalya paid a full fee to Sakala co for the investment advice, then there is no ethical threat. This would be a normal commercial transaction and Mr Bwalya would not gain any benefit.	To show independence from the client, Mr Bwalya could be asked not to use the services of Sakala co again unless this is first agreed with the Engagement Partner.

<p>However, continued use of client services could imply a lack of independence especially if Mr Bwalya is not paying a full fee and therefore receiving a benefit from the client.</p>	
<p>The audit team have been offered a balloon flight at the end of the audit.</p> <p>Acceptance of gifts from a client, unless of an insignificant amount, is not allowed. The fact that the flight costs less than the yacht expense is irrelevant, independence could still be impaired.</p>	<p>The balloon flight should not be accepted.</p>
<p>Agreeing to accept taxation work on the percentage of the tax saved is essentially accepting a contingent fee.</p> <p>There will be pressure to gain the highest tax refund for the client and this could tempt the audit firm to suggest illegal tax avoidance schemes.</p>	<p>The audit firm must confirm that assistance with taxation work is acceptable, although the fee must be based on time and experience for the job, not contingent fee</p>
<p>Representing Sakala co in court could be seen as an advocacy threat – that is the audit firm is promoting the position of the client.</p> <p>Objectivity could be compromised because the audit firm is seen to take the position that the client is correct, affecting judgement on the tax issue.</p>	<p>To remain independent, the audit firm should decline to represent the client in court.</p>

(c) **Benefits of having an internal audit department.**

**Liaison with external auditors**



The internal auditors can liaise with the external auditors, especially where it is possible for the external auditors to place reliance on the work of internal audit. This will decrease the time and cost of the external audit.

### **Monitor effectiveness of internal controls**

It is likely that Sakala has to maintain a strong internal control system as the company is regulated and will be handling significant amounts of client cash. Internal audit can review the effectiveness of those controls and make recommendations to management for improvement where necessary.

### **Value for Money Audits**

Internal audit can carry out value for money audits within Sakala Co. For example, a review could be undertaken on the cost effectiveness of the various control systems or whether investment advice being provided is cost-effective given the nature of products being recommended and the income/commission generated from those products.

### **Risk assessment**

Internal audit will assist the company in ensuring that the risk assessment processes are being done in an effective manner and that controls to mitigate the risks identified are put in place by management. The internal auditors will assist in risk identification.

### **Carrying out investigations:**

In the event of investigations for fraud, internal audit will carry out investigations and report to management.

## **(d) Benefits of audit planning**

Audit planning is addressed by ISA 300 *Planning an Audit of Financial Statements*. It states that adequate planning benefits the audit of financial statements in several ways:

- Helping the auditor to devote appropriate attention to important areas of the audit.
- Helping the auditor to identify and resolve potential problems on a timely basis.
- Helping the auditor to properly organise and manage the audit engagement so that it is performed in an effective and efficient manner.
- Assisting in the selection of engagement team members with appropriate levels of capabilities and competence to respond to anticipated risks and the proper assignment of work to them.
- Facilitating the direction and supervision of engagement team members and the review of their work.
- Assisting, where applicable, in coordination of work done by experts.

## **SOLUTION FOUR**

(a) (i) Going concern responsibilities

Management responsibilities

1. Management should assess the entity's ability to continue as a going concern.
2. Use the going concern basis appropriately when preparing financial statements.

Auditors' responsibilities

1. Obtain sufficient appropriate evidence on whether management used going concern basis appropriately.
2. Assess and conclude whether there is material uncertainty (any event or condition) that may cast significant doubt on the going concern ability of the organisation.
3. Determine the implication(s) on the audit opinion / auditor's report (ISA 570).

(ii) Substantive procedures performed on property revaluation:

1. Obtain a schedule of revalued P.P.E during the year and cast to confirm completeness and accuracy.
2. Agree revalued amounts to trial balance and financial statements figures.
3. Agree the revalued amounts to the valuation report provided by the valuer.
4. Agree the revalued amounts to the amounts recorded in the non-current assets register.
5. Consider the competence and capability of the valuer (enquiry his qualification, membership and experience).
6. Consider the independence of the valuer. He should be independent of management.
7. Recalculate the revaluation surplus/ (losses) and agree to amounts recorded as revaluation surplus/ (loss).
8. Recalculate the depreciation charge for the year on revalued assets to verify accuracy.
9. Review the valuation report to verify that cherry-picking was not applied -IAS 16.
10. Review disclosures relating to the revaluation to ensure they comply with IAS 16.

(iii) Reasons for using audit sampling

1. It is not possible to test all the items in the population or transactions.
2. To reduce the cost of audit and take reasonable time to perform audit.
3. Auditors give reasonable assurance and not absolute (100%) assurance.

(iv) Factors that influence reliability of audit evidence

1. Audit evidence is more reliable when it is obtained from independent sources outside the entity.
2. Audit evidence is more reliable when it is in documentary form, rather than oral representation.
3. Audit evidence provided by original documents is more reliable than photocopies.
4. Audit evidence obtained directly by the auditor is more reliable than audit evidence obtained indirectly.
5. Audit evidence generated internally is more reliable when the related controls are effective.

- (b) (i) Reasons for communicating with those charged with governance
1. It helps auditors and those charged with governance to understand audit matters.
  2. It helps them to develop a constructive working relationship while maintaining independence and objectivity.
  3. It helps auditors to obtain information relevant to the audit from those charged with governance.
  4. It helps auditors to understand the entity and its environment.
  5. It helps those charged with governance to fulfill their responsibility to oversee the financial reporting process.
- (ii) Substantive procedures performed on payables balance:
1. Cast the payables ledger and agree to the total on the payables control account.
  2. Calculate payables days to determine overdue suppliers' balances.
  3. Compare the balance on each payable account with the balance on the ageing report.
  4. Produce an aged payables analysis to determine how old the balances are.
  5. Select appropriate payables sample for testing.
  6. Review reconciliations of a sample of payable's accounts and confirm balances agree. Investigate any differences.
  7. Select a sample of payables and seek direct confirmation.

## **SOLUTION FIVE**

- (a) The following audit procedures should be performed on transactions initiated by the newly employed accountant:
1. Obtain the purchase invoice and trace them to the respective ledgers (nominal) to verify if they have been correctly recorded.
  2. Obtain a sample of transactions concerning money spent on training employees and trace them to the income statement if they have been recorded as expenses.
  3. Obtain a sample of invoices relating to cost of refurbishment and trace them to the respective non-current assets to confirm if they have been capitalized.
  4. Inspect the office buildings to confirm if it exists and examine documents of title to confirm if it belongs to the company.
  5. Agree the payment of the deposit to the sales contract entered into between BT and its customers.
  6. Inspect the non-current asset register and confirm that the equipment has been removed from the register.
- (b) **Audit procedures for receivables:**
1. Agree individual sales ledger balances to receivables aged receivables listing.
  2. Cast the receivables age analysis for arithmetic accuracy and agree total to the receivables control account.
  3. Obtain a receivable confirmation on sample of receivables at the end of the year.
  4. Review the allowances for receivables to ensure it is adequate based on the age analysis. Confirm that the allowance for receivables has been computed in line with guidance in IFRS 9.
  5. For a sample of invoices around the year end, compare the dates on the ledger and the debts on the dispatch notes if they agree to ensure that transactions have been recorded in the correct accounting period.
- (c) **Auditors should perform the following audit procedures on the loan:**
1. Obtain a schedule of loans outstanding at the end of the year and agree with the total of loans recorded in the statement of financial position.
  2. Review the bank statement to confirm if the loan has been paid.
  3. Review the loan agreements and confirm that the loan conditions have been met.
  4. Obtain and review minutes of the meeting for any outstanding balances on loans.
  5. Review the draft financial statements and confirm that the loan amounts have been correctly been classified between short and long term.
- (d) (i) **Procedure for inventory recorded at cost:**

1. Recalculate the value of inventory for mathematical accuracy and consider the reliability of the sources of information pertaining to costs.
2. Obtain price lists at the year-end for any changes to confirm if that is the price to value inventory at.
3. Obtain a sample of costs and test to confirm that gross margins do not vary too much across all items of inventory.
4. Review invoices for delivered stock and any related cost up to the current location have been accounted for.
5. For expired/obsolete inventory check the inventory valuation and confirm that it has been written down.
6. For samples of inventory sold post year, confirm the net realisable value and ensure that this inventory was correctly valued at the year end.

(ii) Conditions supporting the negative confirmation method:

1. When auditors have confirmed that the client's internal controls are strong.
2. When the exception rate has been low by receivables.
3. The risk of material misstatements is low.
4. When auditor is not aware of any reason why customers would refuse to confirm their balances.
5. The population or sampled receivables consist of large and similar balances

(e) **Audit procedures on depreciation amount of K15m:**

- (i) Obtain the rate of depreciation and apply it on the cost computers. Then compare the amount obtained with that appearing in the profit and loss account as an expense.
- (ii) Compare the depreciation rate with the policy of BT Ltd to ascertain if it consistent with it.
- (iii) Obtain minutes of board meeting to review if the rate of depreciation used was agreed upon by management.

**END OF SUGGESTED SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 12: GOVERNANCE AND CORPORATE LAW

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FRIDAY 22 MARCH 2024

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

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**INSTRUCTIONS TO CANDIDATES**

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

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

## **SECTION A - TWO (2) COMPULSORY QUESTIONS**

**Attempt both questions in this section.**

### **QUESTION ONE**

King Ltd is a property development company. Although there are five members of its Board of Directors, the actual day to day running of the business is left to one of them, Lex, who simply reports back to the board on the business he has transacted. Lex refers to himself as the Managing Director of King Limited, although he has never been officially appointed as such. Lex is assisted in the running of the business by Mary, King Ltd's secretary. Six months ago, Lex entered into a contract on King Ltd's behalf with Nat to produce plans for the re-development of a particular site that it hoped to acquire. However, King Ltd did not acquire the site and due to its current precarious financial position, the Board of Directors have refused to pay Nat, claiming that Lex did not have the necessary authority to enter into the contract with him. The board are also refusing to complete a contract with Owen for the supply of new office furniture that Mary had ordered on King Ltd's behalf. They have also learned that Mary has entered into a contract on King Ltd's behalf to have an extension built onto her own house.

In another quite unrelated situation, Jane is a minority shareholder in a private company Kells Ltd. She is concerned about the way in which the company is being run by the current Board of Directors. Her major ground for concern is the fact that all of the day-to-day business decisions are actually taken by Len, the Chairman of the Board without any reference to the other Directors. Indeed the other three Directors appear to take very little part in the running of the business and tend not to attend board meetings. Jane also suspects that Len has been taking bribes from other companies in order to get Kells Ltd to enter into particular contracts. As a result, Jane would like to have Len removed from the Board of Directors.

#### **Required:**

- (e) With the aid of common law and statutory authorities, explain on the legality or non-legality of the actions by Lex and Mary. (10 marks)
- (f) Explain as to whether or not Jane's desire to have Len removed from the board of Directors is tenable. (10 marks)
- (g) What are the promoter's duties and how are they enforceable? (5 marks)

**[Total: 25 Marks]**

## **QUESTION TWO**

Daka decides to open up a business. He approaches you for help.

### **Required:**

- (a) Write a position paper to Daka explaining the pros and cons of setting up the new business as a company or a sole trader. Conclude your paper by advising which option would best suit Daka's requirements. (10 marks)
- (b) Distinguish companies limited by Guarantee from companies limited by shares. (10 marks)
- (c) Explain at least two (2) elements of good corporate Governance. (5 marks)

**[Total: 25 Marks]**



## **SECTION B**

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

**Attempt TWO (2) questions.**

### **QUESTION THREE**

The focus of a public company is to raise capital from the public and ensure that the capital is not diluted. Explain how the company achieves its objectives in this light when dealing with:

- (a) Reduction of capital. (7 marks)
- (b) Purchase of its own shares. (8 marks)
- (c) Discuss the advantages of preference shares over ordinary shares. (10 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

Corporate Governance can be defined in many different ways. However, one of the key definitions is that 'it is the system or way by which organisations are directed and controlled'.

- (a) Distinguish the following principles of good Corporate Governance:
  - (i) Integrity and accountability. (4 marks)
  - (ii) Fairness and responsibility. (4 marks)
- (b) 'Directors are agents of the company and not individual shareholders'. Discuss the correctness or incorrectness of the above statement. (6 marks)
- (c) One way a company may be dissolved is by striking it off the register by the Registrar of Companies. Explain two (2) procedures for dissolution by striking off the register. (11 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

You have been invited for an interview for the position of Chief Executive Officer of *Mubempe Logistics Limited*, which was previously headed by a foreign Executive who was forced to resign for failure to perform and deliver to both the Board of Directors, and most importantly to the shareholders of the company.

One of your starting tasks will be to clean up the "mess" that was left behind by the foreign national, by ensuring that all of the Company's fixed and floating charges are discharged within the course of the present financial year.

Explain the four (4) roles you have to play as a new Chief Executive Officer of a company. (16 marks)

Discuss the difference between a fixed charge and a floating charge to the shareholder of the company. (9 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 12: GOVERNANCE AND CORPORATE LAW SUGGESTED SOLUTIONS

### SOLUTION ONE

- (a) The main issue is the liability of a director in relation to a company. Directors are agents of the company and their actions bind the company. They must work within the scope of their power and in good faith.

In the case at hand, the company is bound. The legal position is fortified by the case of *Turquand (1856) 6 E. & B. 327* (or "internal management" rule) states that a person dealing with a company is entitled to assume, in the absence of facts putting him on inquiry, that there has been due compliance with all matters of internal management and procedure required by the corporate constitution.

- (b) Jane's request is tenable in that the shareholders have power to remove 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. This statutory procedure provides a mechanism for shareholders to hold directors accountable and ensure that the affairs of the company are being conducted in a fair and transparent manner. If a director is also a shareholder in the company, there is a potential conflict of interest which could lead to unfair prejudice against other shareholders. Consequently, it is important to carefully consider whether such an arrangement is in the best interests of the company and all its stakeholders before proceeding.

Some common reasons for director removal include:

- Frequently missed board meetings or committee meetings.
- Causing problems with the CEO or other executive officers by micromanaging or otherwise.
- Disclosing confidential or sensitive information about the corporation to unauthorized persons.
- Becoming involved with a competitor of the corporation.
- Using the corporation for his or her own personal gain.
- Violating the policies of the corporation by serving on another corporation's board of directors.
- Taking part in illegal activities regarding the corporation's securities.
- Violating the corporation's code of ethics or any other written agreements the business has among the directors.
- Creating an unhealthy or dysfunctional boardroom through inappropriate behavior or disrespecting the other members of the corporation.

Basically, the removal of a director should only be done when absolutely necessary. However, the reasons for doing so are up to the corporation's other directors and shareholders. If a director has failed his or her fiduciary duty in some way, then he or she should be removed from the board.

- (c) A promoter is neither an agent nor a trustee of the company. He acts in a fiduciary position towards the company. He takes steps for the formation of the company and incurs the preliminary expenses for the Incorporation of the company like Registration expenses, stamp duty payment, professional fees.

**Further a promoter has the following duties;**

1. To disclose the secret profit: The promoter should not make any secret profit.
2. To disclose all the material facts.
3. The promoter must make good to the company that he has obtained as a trustee.
4. Duty to disclose private arrangements

## SOLUTION TWO

### (a) **Advantages of a ltd company she wants to set up**

- Limited liability
- Low set up costs
- Tax efficiency
- Easily Transfer the Business to someone else
- Better reputation
- Your business name is protected.
- You can set up a dormant company
- Access to more financial opportunities

### **Disadvantages of sole trader**

- You have unlimited liability for debts as there's no legal distinction between private and business assets
- Your capacity to raise capital is limited
- All the responsibility for making day-to-day business decisions is yours
- Retaining high-calibre employees can be difficult.

The best option for Daka is a limited company.

- (b) A company limited by guarantee is a company without shareholders or shares. Typically used by non-profits and charities, this type of company is controlled by guarantors (members), who guarantee a nominal sum of money to the company in the event of its becoming insolvent or winding up.

### **WHEREAS COMPANIES LIMITED BY SHARES;**

A private company limited by shares is **a type of company that offers limited liability to its shareholders but places certain restrictions on its ownership such as not selling shares to the public over a stock exchange market.**

Companies Form 3 must be typewritten and signed by Directors and shareholders.

- (c) Elements of good corporate governance.

- Participatory
- Consensus oriented
- Accountability
- Transparency
- Responsiveness
- Effectiveness and Efficiency

## **SOLUTION THREE**

### (a) Reduction of capital

Any reduction in capital is a threat to creditors who view it as a guarantee fund, and reduction in capital must therefore be lawful. While members are entitled to a dividend, it is not paid out of capital but distributable profits. If a company does not make profit in a year, it means that shareholders may not get a dividend. A company cannot return capital to its members until a company is liquidated and there is surplus capital left after paying creditors and employees of the liquidated company. The law therefore, while it does not prohibit, restricts the reduction of capital and makes it difficult for this goal to be achieved. A company may reduce its capital by a special resolution (2/3 majority) if authorized by the articles of Association, but this decision must be confirmed by the Courts after consulting creditors.

### (b) Purchase of its own shares

A company is not allowed to purchase its own shares except as provided for by law. For instance, redeemable shares that a company may buy back must be authorized by the articles, and:

- Such shares must be fully paid for at redemption
- Such shares are redeemed or paid for out of distributable profits
- Any premium on redeemable shares must be paid out of profits of the company or from the share premium account.
- When a company has bought its shares, it must cancel them and compensate for loss of capital by issuing or transfer profits from the capital redemption reserve.

### (c) Ordinary shares are ordinary in nature and holders do not have special rights or restrictions. Holders of ordinary shares may enjoy the following rights; voting rights at company meetings, rights to a dividend when declared and rights to surplus assets on winding up.

On the other hand, preferential shares by nature are preferential in terms of issuance of dividends that is, holders of these shares get preference when dividends are declared. The dividends are fixed in terms of percentage per share. Preferential shareholders get their dividends cumulatively meaning they can always have dividends paid to them in the next financial year where the dividends could not have been paid in one financial year. Unlike ordinary shareholders, preferential shareholders have restrictions on their power to vote at meetings.

## SOLUTION FOUR

- (a) The distinction is:
- (i) Integrity means straightforward dealing and completeness. It means being honest, of high moral character and standing on one's principles no matter the pressure to do otherwise. Whilst Accountability means being answerable for the consequences of one's actions. For example the Directors/Management of the company will be accountable to shareholders and other stakeholders.
  - (ii) Fairness means being balanced by taking into account everyone who has a legitimate interest in the company, and respecting their rights and views, eg the board must take into account the interests of all stakeholders. Whilst Responsibility means the board/management must accept the credit or blame for governance decisions. They must act responsively to, and with responsibility towards all stakeholders of the company.
- (b) The Directors are agents of the company (all shareholders) and not individual shareholders. This is so because there is a separation between the company and its owners, making directors answerable to the company and not individual shareholders. Thus the owners (company as a whole) are the principal whilst the Directors are the agents employed to carry out instructions of the company. Therefore, to this extent, the above statement is correct.
- (c) The two procedures for dissolution of a company by striking off:
- Option 1:** The registrar of Companies, if he has any reasonable grounds to believe that the company is not carrying on business or is not in operation or is not complying with the law (e.g. members below two, not preparing annual reports, etc.) will send a post requesting confirmation. If no response, he will give notice in the government gazette requesting the company to prove that it is in operation within three from the date of notice or else, it will be dissolved.
- Option 2:** Alternatively, a company may, by ordinary resolution, request the Registrar to strike it off the register upon lodging the Registrar a copy of the resolution, summary accounts, and a statutory declaration showing that it has no debts outstanding/unpaid. The Registrar will publish that notice in the gazette and the company will be dissolved after three months from the day of the notice.
- (d) Insider trading is the use of inside information (i.e. specific information that has not yet been made public, and if made public would have a significant effect on the shares/stock as it is price sensitive information) by the directors to take advantage and buy or sell shares of the company the market. This is prohibited of directors.

The implications of insider trading on the directors would be being liable to the company and must pay back any secret profit to the company, can be fired, or criminally liable/prosecuted as this undermines the integrity of the capital market.

## SOLUTION FIVE

(a) Every company once incorporated, fully set up and in motion must have a Chief Executive Officer. The latter acts as the senior executive in charge of the management team and is answerable to the Board its performance. In the execution of his/her duties, the Chief Executive Officer will undertake numerous roles such as re listed below:

1. Risk Management

The Chief Executive Officer of a company is in charge of the internal controls of the company and must manage the risk profile of the company to ensure that all risks are in line with the Board's position on risk exposure.

2. Board Committees

The Chief Executive Officer of a company is responsible for making recommendations to be discussed by the Board Committees on matters such as: the remuneration policy of the company, executive remuneration and the terms of employment.

3. Investment and Financing

The Chief Executive Officer is responsible for identifying new initiatives and examining major investments, capital expenditure etc.

4. Business Strategy and Management

It is the duty of the Chief Executive Officer to ensure that the Organisation achieves its objectives by taking a lead in developing objectives and strategy, whilst having regard to the organisation's stakeholders.

(b) To begin with a charge over a company asset can properly be defined as; that which gives a particular creditor a prior claim over all other creditors for the payment of their monies out of the charged assets of the company. Charges over the assets of a company come in two forms, a fixed charge and a floating charge.

1. Floating Charge

A floating charge has been defined in the celebrated case of **Re: Yorkshire Woolcombers Association Limited 1903** as being:

'A charge on a class of assets of a company, present and future, which class is, in the ordinary course of the company's business, charging from time to time. Until the holders enforce the charge, the company may carry on business and deal with the assets charged'.

Suffice to note that a floating charge is not restrictive in nature as it hovers over both present and future assets of the company and does not attach to any one particular asset of the company, until such a time that it shall have crystallized.



## 2. Fixed Charge

A fixed charge, unlike a floating charge attaches to a particular asset of a company and give the holder the right of enforcement against an identified asset of the company. This kind of a charge attaches as soon as it is created.

This kind of a charge is best suited for assets that can properly be described as long-term assets that a company is likely to hold, e.g. real property. A mortgage is an example of a fixed charge.

Should the company for any reason decide to dispose of an asset the subject of a fixed charge, the company will have to pay off the debt out of the proceeds of the sale or hand over the asset.

In conclusion, it is clear that a fixed charge differs from a floating charge in the sense that the former attaches to a particular asset of the company, whereas the latter hovers over the assets of the company, until such a time that shall have crystalized and attached to a particular asset.

**END OF SUGGESTED SOLUTIONS**