



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 1: FINANCIAL ACCOUNTING

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MONDAY 12 SEPTEMBER 2022

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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.

#### QUESTION ONE

1.1 Which of the following is a non-profit making entity?

- A. Sole trader
- B. Partnership
- C. Corporate entity
- D. Cricket club

(2 marks)

1.2 The "accounting equation" can be rewritten as:

- A. Assets less Liabilities less Capital at start of the accounting period plus drawings equals Profit.
- B. Capital at the start of the accounting period plus Profit less drawings less Liabilities equals Assets.
- C. Assets plus Profit less drawings less Liabilities equals capital at the end of the accounting period.
- D. Assets less Liabilities less drawings equals capital at the start of the accounting period plus profit.

(2 marks)

1.3 The correct entries needed to record the return of office equipment that had been bought on credit from D Ltd, other payables and not yet paid for, are:

#### **Debit**

- A. Office Equipment
- B. D Ltd, other Payables
- C. Sales Returns
- D. Office Equipment

#### **Credit**

- Purchases Returns
- Office Equipment
- Office Equipment
- D Ltd, other Payables

(2 marks)

1.4 A credit balance of K850 on R. Phiri's account in the books of H. Banda, a Sole trader means that:

- A. R. Phiri has paid H. Banda K850
- B. H. Banda owes R. Phiri K850
- C. R. Phiri owes H. Banda K850
- D. H. Banda has paid R. Phiri K850

(2 marks)

1.5 The capital of a Sole trader at the end of the reporting period is K26,000. The owner has withdrawn K6,000 during the year and reported a net profit of K10,000. What was the capital at the start of the reporting period?

- A. K32,000
- B. K30,000
- C. K22,000
- D. K42,000

(2 marks)

1.6 The most appropriate definition of depreciation is:

- A. A means of allocating the cost of an asset over a number of accounting periods.
- B. A means of estimating the fair value of the asset.
- C. A means of determining the decrease in fair value of an asset over time.
- D. A means of setting funds aside for the replacement of the asset.

(2 marks)

1.7 Property, Plant and Equipment Account in Daka's ledger had a total carrying amount of K67,460 at the start of an accounting period. An item of equipment which cost K15,000 was sold for K4,000, making a loss on disposal of K1,250. No entries have been made in the ledger account for this disposal. What will be the balance on the account when the disposal has been recorded?

- A. K52,460
- B. K42,710
- C. K62,210
- D. K57,710

(2 marks)

1.8 Your firm's cash book at 30 December 2021 shows a balance at the bank of K2,490. Comparison with the bank statement at the same date reveals the following differences:

	K
- Unpresented cheques	840
- Bank charges not in cash book	50
- Receipts not yet credited by the bank	470
- Dishonoured cheque previously received in the cash book	140

The correct bank balance at 31 December 2021 is:

- A. K2,300
- B. K2,440
- C. K2,120
- D. K1,830

(2 marks)

1.9 Rent paid on 1 October 2020 for the year to 30 September 2021 was K12,000 and rent paid on 1 October 2021 for the year to 30 September 2022 was K16,000. Rent payable, as shown in the statement of Profit or Loss for the year ended 31 December 2021, would be:

- A. K15,000
- B. K16,000
- C. K12,000
- D. K13,000

(2 marks)

1.10 The profit before tax for C Ltd was K104,358. What was the cash generated from operations if:

- The depreciation expense for the year was K9,000
- A non-current asset was sold at a profit of K1,800
- An increase of trade receivables of K10,362, and
- An increase of trade payables of K12,961

- A. K117,757
- B. K114,157
- C. K134,881
- D. K88,235

(2 marks)

**[Total 20 Marks]**

**SECTION B**

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

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

**QUESTION TWO**

- (a) The Bank columns of your cash book for the month of June 2020 together with a bank statement are shown below.

<u>CASH BOOK (bank column only)</u>							
DATE	DETAILS	K	DATE	DETAILS	CHEQUE NUMBER	K	
June 1	Balance	b/f	9 600	June 4	Wages	35	3 600
June 22	A Banda		5 000	June 5	F Lungu	36	1 200
June 22	C Chanda		2 720	June 11	G. Mwanza	37	2 200
June 22	E Mambwe		4 160	June 11	J Lona	38	4 880
June 26	F Daka		1 700	June 23	K. Phiri	39	8 020
			<u>23 180</u>	June 30	Balance	c/f	-
							<u>23 180</u>

Bank Statement for June 2020

DATE	DETAILS	Dr K	Cr K	Balance K
June 1	Balance			12 000
June 3	Cheque number 34	2 400		9 600
June 8	Cheque number 35	3 600		6 000
June 16	Cheque number 38	4 880		1 120
June 17	Cheque number 36	1 200		80
June 23	Sundries		11 880	11 800
June 26	D Manda – credit transfer		1 300	13 100
June 27	Standing order – Insurance	520		12 580
June 28	Bank charges	360		12 220

**Required:**

- (i) Make the necessary entries in the cash book to update the cash book. (4 marks)
- (ii) Reconcile your Revised cash book balance with the balance shown in the bank statement. (4 marks)

(b) On 1 January 2021, the Handball Club had the following Assets:

<b>Details</b>	<b>K</b>
Cash at Bank	4 000
Snack Bar inventory	16 000
Club house buildings at cost	250 000

During the year to 31 December 2021, the club received and paid the following amounts:

<b>RECEIPTS</b>	<b>K</b>	<b>PAYMENTS</b>	<b>K</b>
Subscriptions	77,600	Rent and Rates	30,000
Snack Bar income	120,000	Extension to club house	160,000
Visitors' fees	13,000	Snack bar purchases	75,000
Loan from Bank	110,000	Secretarial expenses	4,800
Competition fees	16,400	Interest on loan	5,200
		Snack bar expenses	12,000
		Games equipment	40,000

**Additional Information:**

- 1) The Snack bar inventory on 31 December 2021 was K18,000.
- 2) The depreciation should be provided as follows:
  - Games equipment at 20% on cost
  - Club house buildings at 2% on cost
- 3) Subscription paid in advance on 31 December 2021 is K7,600.

**Required:**

- (i) Prepare the Income and Expenditure Account for the year ended 31 December 2021. (8 marks)
  - (ii) Prepare the statement of Financial Position as at December 2021. (4 marks)
- [Total: 20 Marks]**

**QUESTION THREE**

The Chief Financial Officer of Hanashe Company did not present the statement of cash flows at the recent Board meeting which was recently convened. This made the Chairperson of the board to postpone the meeting. He stated that the statement of cash flow was an important part of the financial statements which needed to be presented with other financial statements for management to make proper decisions. The Chairperson tasked the Chief

Financial Officer to prepare the statement of cash flow for presentation in the next board meeting.

Below are the financial statements of Hanashe Co.

**Hanashe Co.**

**Statement of profit or loss for the year ended 31<sup>st</sup> March 2020**

	K'000
Revenue	650
Cost of sales	<u>(185)</u>
Gross profit	465
Profit on disposal of equipment	<u>10</u>
Total income	475
Administration expenses	(50)
Distribution costs	<u>(60)</u>
Profit before interest and tax	365
Interest received	8
Interest paid	<u>(35)</u>
Profit before tax	338
Income tax	<u>(80)</u>
Profit for the year	<u>258</u>

**Hanashe's Co.**

**Statement of financial position as at 31 March 2020**

	2020		2019	
	K'000	K'000	K'000	K'000
<b>Non-current asset</b>				
Property, plant and equipment				
Cost	2,700		2,500	
Depreciation	<u>400</u>		<u>360</u>	
		2,300		2,140
<b>Current assets</b>				
Inventory	20		270	
Receivables	300	250		
Short-term investments	-		60	
Cash in hand	<u>40</u>		<u>25</u>	
		<u>360</u>		<u>605</u>
Total Assets		<u>2,660</u>		<u>2,745</u>
<b>Equity and Liabilities</b>				
Share capital	1,300		1,200	
Share premium	200		180	
Revaluation reserve	100		60	
Retained earnings	<u>300</u>		<u>162</u>	
		1,900		1,602
<b>Non-current liabilities</b>				
Loan		300		800
<b>Current liabilities</b>				
Payables	140		163	

Bank overdraft	200	100	
Income tax	<u>120</u>	<u>80</u>	
		<u>460</u>	<u>343</u>
Total equity and liabilities		<u>2,660</u>	<u>2,745</u>

**Further information is given below**

1. During the year to 31 March 2020, the shareholders of Hanashe Company were paid a dividend of K120, 000 by the company.
2. Depreciation for the year ended 31 March 2020 was K70,000
3. 100,000 ordinary shares of K1 per share were issued during the period at a premium of 20 ngwee per share.
4. New equipment with the latest technology worth K220,000 was purchased during the year in order to enhance the quality of the products. At the same time, the old equipment which was in a bad shape was sold. The profit on sale of this equipment was included in the statement of profit or loss.

**Required:**

Prepare Hanashe Company's statement of cash flows for the year ended 31 March 2020 according to IAS 7 using indirect method. (20 marks)

**QUESTION FOUR**

The following trial balance was extracted from the books of the Tilitonse Social Club at the close of business on 31 May, 2021.

	<b>K</b>	<b>K</b>
Bar stocks 1 June, 2020	3, 200	
Bar purchases and sales	14, 750	23, 800
Salary of secretary	3, 500	
Wages of staff	10, 950	
Rates and Insurance	2, 900	
Accumulated fund: 1 June, 2020		28, 400
Club premises	26, 000	
Club furniture and fixtures	4, 300	
Postages and telephone	1, 150	
Cash at bank	2,100	
Cash at hand	150	
Subscriptions received		18, 850
Sundry expenses	1, 350	
Lighting and heating	2, 250	
Income from social events		<u>1, 550</u>
	<u>72, 600</u>	<u>72, 600</u>



**Additional information:**

1. Bar stocks at 31 May, 2021 was K4,050.
2. At 31 May, 2021 subscriptions in arrears amounted to K100. No subscription had been paid in advance.
3. Provide for depreciation of furniture and fixtures of K300.
4. One third of lighting and heating and one third of wages are to be debited to the Bar Trading Account.

**Required:**

- (a) (i) Prepare the Bar Trading Account. (6 marks)
- (ii) Prepare the Income and Expenditure Account. (5 marks)
- (iii) Prepare the Statement of Financial Position. (4 marks)
- (b) What is the importance of segregation of duties in a public sector organisation? (5 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

A company depreciates its Plant at 20% per annum, straight-line method, for each month of ownership.

2019 Bought Plant costing K10,000 on 1 January  
Bought Plant costing K4,000 on 1 October.

2020 Bought Plant costing K15,000 on 1 July.

2021 Bought Plant costing K5,000 on 1 January  
30 September, sold Plant which cost K10,000 on 1 January 2019 for K5,000.

**Required:**

From the above details, draw up Ledger Accounts for each of the years ended 31 December 2019, 2020 and 2021.

- (a) Plant at cost account. (5 marks)
- (b) Allowance for Depreciation account. (13 marks)
- (c) Plant Disposal Account (2 marks)

**[Total: 20 Marks]**

## **QUESTION SIX**

- (a) A Trial Balance extracted on 31 December 2021 for ACM Ltd failed to balance. The following errors were identified.
- (i) Advertising Expenses of K500 had been charged to purchases.
  - (ii) Plant costing K18,000 was purchased during the year by cheque. The correct entry was made to the bank account, but no other entries were made.
  - (iii) Depreciation for the year ended 31 December 2021 needs to be provided on the new plant at 20% using the straight line method. A full year's depreciation is charged in the year of purchase.
  - (iv) Accrued office expenses of K2,600 were debited to the office expenses account twice. No other entries were made.
  - (v) The figure for closing Inventory needs to be adjusted. You have the following information:
    - Value of closing Inventory at cost from the computerized stock system was K41,600
    - Included in this figure are damaged items that cost K2,750 but will be sold for K1,000.

### **Required:**

- (1) Make Journal entries to correct the above errors. (7 marks)
  - (2) Draw up a suspense Account to establish the initial difference in books figure. (3 marks)
- (b) A Sinda trader is registered for VAT. The applicable VAT rate is 16%. The Gross amounts for sales and purchases for the year ended 31 December 2021 are as follows.

- Credit sales	K82,360
- Cash sales	K271,440
- Credit Purchases	K186,760

### **Required:**

To open Extract of the following Ledger account showing clearly the workings.

- (i) Sales Account (4 marks)
- (ii) Purchases Account (2 marks)
- (iii) VAT Control Account (4 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## DA1 FINANCIAL ACCOUNTING SUGGESTED SOLUTIONS

### SOLUTION ONE

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

**SOLUTION TWO**

(a) (i) Revised Cash Book

Balance	b/f	3 280	S/order	520
D Manda - Director		1 300	Bank charges	360
		<u>4 580</u>	Adjusted balance	<u>3 700</u>
				<u>4 580</u>

(ii) Bank Reconciliation Statement

	<b>K</b>	<b>K</b>
Adjusted Cash book balance		3 700
Add Unpresented cheques:- G Mwanza	2 200	
K Phiri	8 020	
		<u>10 220</u>
		13 920
Less outstanding lodgement		<u>(1 700)</u>
Balance as per Bank statement		<u>12 220</u>

(b) (i) Handball Club's  
Income and Expenditure Account for the year ended 31 December 2021

	<b>K</b>	<b>K</b>
<u>Income</u>		
Bar income (wk1)	35 000	
Subscriptions (wk2)	70 000	
Visitors fees	13 000	
Competition fees	<u>16 400</u>	134 400
<u>Expenditure</u>		
Depreciation (wk2)	16 200	
Rent and Rates	30 000	
Secretarial expenses	4 800	
Interest on loan	<u>5 200</u>	<u>(56 200)</u>
Excess of Income over Expenditure		<u>78 200</u>

(ii) Handball Club's

Statement of Financial Position as at 31 December 2021

	K	K
<u>Non-Current Assets</u>		
Club house Buildings (250,000+160, 000 – 8 200)	401 800	
Games equipment (40 000 – 8 000)	32 000	433 800
<u>Current Assets</u>		
Bar Inventory	18 000	
Bank (w)	14 000	<u>32 000</u>
		<u>465 800</u>
<u>Represented By:</u>		
Accumulated Fund at 1 <sup>st</sup> January (wk4)	270 000	
Excess of income over Expenditure	<u>78 200</u>	348 200
<u>Non-Current Liability</u>		
Bank loan		110 000
<u>Current Liability</u>		
Subscription in advance		<u>7 600</u>
		<u>465 800</u>

Part 'b' Workings

1 Bar Income

Bar Trading Account

	K	K
Sales		120 000
Opening Inventory	16 000	
Purchase	<u>75 000</u>	
	91 000	
Less closing inventory	<u>(18 000)</u>	<u>(73 000)</u>
Gross profit		47 000
Less expenses		<u>(12 000)</u>
Net income		35 000

2 Depreciation Expense

Games equipment 20% x 40 000	= 8 000
Club house Buildings (250 000 + 160 000) x 2%	= <u>8 200</u>
	= <u>16 200</u>

3 Subscriptions 77 600 – 7 600 = 70 000

Accumulated fund at 1<sup>st</sup> January 2021 (4 000 + 16 000 + 250 000) = 270 000

### **SOLUTION THREE**

#### **Hanashe Company's Statement of Cash Flow for the year ended 31 March 2020**

	K'000	K'000
<b>Cash flow from operating activities</b>		
Profit before tax	338	
Adjustments:		
Depreciation	70	
Profit on disposal of equipment	(10)	
Interest expense (35 – 8)	27	
Decrease in inventories (270 – 20)	250	
Increase in receivables (300 – 250)	(50)	
Decrease in payables (163 – 140)	<u>(23)</u>	
Cash generated from operations	602	
Interest received	8	
Interest paid	(35)	
Dividends paid	(120)	
Income tax (80 + 80 – 120)	<u>(40)</u>	
Net cash flow from operating activities		415
<b>Cash flow from investing activities</b>		
Payment for purchase of equipment	(220)	
Receipt on sale of equipment (w 1)	<u>40</u>	
Net cash flow from investing activities		(180)
<b>Cash flow from financing activities</b>		
Issue of share capital (1,300 + 200 – 1,200 + 180)	120	
Loans repaid (800 – 300)	<u>(500)</u>	
Net cash flow from financing activities		(380)
Increase in cash and cash equivalents		(145)
Cash and cash equivalents at 1/4/2019 (w 2)		<u>(15)</u>
Cash and cash equivalents at 31/3/2020 (w 2)		<b><u>(160)</u></b>

## Workings to the Statement of cash flow

### 1. Proceeds on sale of equipment

	K'000	
Cost of equipment disposed (see work i)		60
Accumulated depreciation on equipment (see work ii)		<u>(30)</u>
Carrying amount on disposal		30
Profit on sale of equipment		<u>10</u>
Proceeds on disposal of equipment		<b><u>40</u></b>

#### i. Equipment Cost a/c

		K'000			K'000
1.4.2019 balance	b/d	2,500	Disposals(balancing figure)		60
Revaluation (100 – 60)		40	31.3.2020 balance	c/d	2,700
Purchases		220			
		<u>2,760</u>			<u>2,760</u>

#### ii. Accumulated depreciation on Equipment a/c

		K'000			K'000
Disposal(balancing figure)		30	1.4.2019 balance	b/d	360
31.4.2020 balance	c/d	400	31.3.2020 SPL for the year		70
		<u>430</u>			<u>430</u>

### 2. Cash and cash equivalents at start and end

	Change 2020 K'000	2019 K'000	in a year K'000
Cash in hand	40	25	(15)
Short-term investments	-	60	(60)
Bank overdraft	<u>(200)</u>	<u>(100)</u>	<u>(100)</u>
	<b><u>(160)</u></b>	<b><u>(15)</u></b>	<b><u>(145)</u></b>

## **SOLUTION FOUR**

(a) (i) Tilitonse Bar Trading Account for the year ended 31 My 2021

	<b>K</b>	<b>K</b>
Sales		23 800
Cost of sales		
Opening inventory	3 200	
Purchases	<u>14 750</u>	
	17 950	
Less: closing inventory	<u>(4 050)</u>	
		<u>13 900</u>
		<u>9 900</u>
Wages (1/3)	3 650	
Light and Heat (1/3)	<u>750</u>	
		<u>(4 400)</u>
		<u>5 500</u>

(ii) Tilitonse Income and Expenditure Account for the year ended 31 May 2021

	<b>K</b>	<b>K</b>
<b>Incomes:</b>		
Subscriptions (18,850 + 100 subs in arrears)		18 950
Income from socials		1 550
Profit and Bar		<u>5 500</u>
		26 000
<b>Expenses:</b>		
Secretary's salary	3 500	
Staff wages (2/3)	7 300	
Rates and Insurance	2 900	
Post and Telephone	1 150	
Sundry expenses	1 350	
Light and Heat (2/3)	1 500	
Depreciation of furniture	<u>300</u>	
		<u>(18 000)</u>
Surplus		<u>8 000</u>

(iii) Tilitonse Statement of financial position

	<b>K</b>	<b>K</b>
<b>Non-Current Assets:</b>		
Premises		26 000
Furniture and fittings(4300-300)		<u>4 000</u>
		30 000
<b>Current Assets:</b>		
Bar stocks	4 050	
Subscriptions due	100	
Bank	2 100	
cash	<u>150</u>	
		<u>6 400</u>
		<u>36 400</u>



Accumulated funds	28 400
Surplus	<u>8 000</u>
	<u>36 400</u>

- (b) Segregation of duties is put in place to have effective internal controls. It helps to prevent errors or fraud by ensuring that no single individual has control over all or stages of a transaction.

In order to achieve segregation of duties, the following categories of tasks should not be performed by the same person:

- Authorisation
- Custody of assets
- Record keeping
- Reconciliation

It might not be possible to achieve segregation of duties in all public sector institutions, but there should always be a higher level of control over high risk assets, such as Cash and inventories.

In such organisations management must take a more active role in checking the work of others. The knowledge that work will be checked by others can in itself be a deterrent to misappropriation.

**SOLUTION FIVE**

5. a. **Plant Account at Cost**

2019						
Jan 1	Bank		10,000	Dec	Balance	14,000
Oct 1	Bank			31	c/d	<u>          </u>
			<u>4,000</u>			
2020						<u>14,000</u>
Jan 1	Balance	b/f	<u>14,000</u>			
July 1	Bank			Dec	Balance	29,000
			14,000	31	c/d	<u>          </u>
2021						
Jan 1	Balance	b/f	<u>15,000</u>			<u>29,000</u>
	Bank		<u>29,000</u>	Sept	Disposal	10,000
	Balance	b/f	29,000	30	Balance	
			<u>5,000</u>	Dec	c/d	<u>24,000</u>
			<u>34,000</u>	31		<u>34,000</u>
			24,000			

b.

**Accumulated Depreciation on Plant**

2019 Dec 31	Balance	c/d	<u>2,200</u>	2019 Dec 31	Profit or Loss (w1)	<u>2,200</u>
2020 Dec 31	Balance	c/d	6,500	2020 Jan 1	Balance	2,200
2021 Sept 30	Disposal Balance		<u>6,500</u>	2020 Dec 31	b/f Profit or Loss (w2)	<u>4,300</u>
2021 Dec 31	Balance	b/f	5,500	2021 Jan 1	Balance	<u>6,500</u>
2021 Jan 1			<u>7,300</u>	2021 Dec 31	b/f Profit or Loss (w3)	<u>6,300</u>
			<u>12,800</u>	2022 Jan 1	Balance	<u>12,800</u>
					b/f	7,300

c.

**Plant Disposal Account**

2021 Sept	Plant	10,000	2021 Sept	Accumulated	5,500
	Profit on sale	<u>500</u>		Depn	
		<u>10,500</u>		Bank	<u>5,000</u>
					<u>10,500</u>

**Working 1**

				K
2019	January 1	20% x K10,000	=	2,000
	October 1	20% x K4,000 x $\frac{3}{12}$	=	<u>200</u>
				<u>2,200</u>

**Working 2**

				K
2020	January 1	20% x K10,000	=	2,000
	October 1	20% x K4,000	=	800
	July 1	20% x K15,000 x $\frac{6}{12}$	=	<u>1,500</u>
				<u>4,300</u>

**Working 3**

				K
2021	January 1	20% x K10,000 x $\frac{9}{12}$	=	1,500
	October 1	20% x K4,000	=	800
	July 1	20% x K15,000	=	3,000
	January 1	20% x K5,000	=	<u>1,000</u>
				<u>6,300</u>

**SOLUTION SIX**

6. a.(1)

**Journal Entries**

		K	K
(i)	Advertising Expenses	500	
	Purchases		500
(ii)	Plant	18,000	
	Suspense		18,000
(iii)	Depreciation Expenses (Profit or Loss)	3,600	
	Allowance for Depreciation		3,600
(iv)	Suspense (2,600 x 2)	5,200	
	Accruals Expenses		2,600
	Office Expenses		2,600
(v)	Inventory Loss Expense (2,750 – 1,000)	1,750	
	Closing Inventory (41,600 – 39,850)		1,750

(2)

**Suspense Account**

	K		K
Difference in book (Bal. fig)	12,800	Plant	18,000
Office Expenses	5,200		
	18,000		18,000

b.(i)

**Sales Account (Extract)**

	K		K
		Trade Receivables (w1)	71,000
		Cash (w1)	234,000

(ii)

**Purchases Account (Extract)**

	K		K
Trade Payables (w1)	161,000		

(iii)

**VAT Control Account (Extract)**

	K		K
Input (w1)	25,760	Output (11,360+37,440) (w1)	48,800

**Workings 1**

<b>DETAILS</b>	<b>GROSS</b>	<b>VAT</b>	<b>NET</b>
Credit sales	82,360	$\frac{4}{29} \times \frac{82,360}{1} = 11,360$	71,000 $(\frac{25}{29} \times \frac{82,360}{1})$
Cash sales	271,440	$\frac{4}{29} \times \frac{271,440}{1} = 37,440$	234,000 $(\frac{25}{29} \times \frac{271,440}{1})$
Credit Purchases	186,760	$\frac{4}{29} \times \frac{186,760}{1} = 25,760$	161,000 $(\frac{25}{29} \times \frac{186,760}{1})$

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

LEVEL ONE

DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 14 SEPTEMBER 2022

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

**INSTRUCTIONS TO CANDIDATES**

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

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

**INVIGILATOR.**  
**SECTION A – (Compulsory)**

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

**QUESTION ONE**

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

1.1 A set of numerical data that is summarized in grouped data can be displayed into a diagram in which bar of groups are attached. The diagram is called;

- A. Histogram.
- B. commulative frequency curve
- C. Bar chart.
- D. stem and leaf plot.

(2 marks)

1.2 Mulonda borrowed some money from his friend at 6% simple interest per annum. He returned his friend K15,600. How long did it take Mulonda to return money he borrowed, if he borrowed K120,000?

- A. 8 years
- B. 3.5 years
- C. 2.5 years
- D. 5 years

(2 marks)

1.3 The mean of the distribution is 60 and the mode is 24. What is the median?

- A. 51
- B. 45
- C. 50
- D. 48

(2 marks)



1.4 The probability distribution of sales is given in the table below:

<b>SALES</b>	K50	K60	K70
<b>PROBABILITY</b>	0.3	-	0.5

The expected monetary value (EMV) of the sales is:

- A. K43.
- B. K45.
- C. K63.
- D. K53.

(2 marks)

1.5 The following measures are dependent on the exact value of every measurement except?

- A. Range
- B. Variance
- C. Standard deviation
- D. Mean deviation

(2 marks)

1.6 The probabilities of two (2) independent events X and Y are 0.4 and 0.6 respectively. Find the conditional probability  $P(X \cap Y)$

- A. 0.24
- B. 0.6
- C. 1.00
- D. 0.4

(2 marks)

1.7 Determine the annual percentage rate of interest of a deposit account that has a nominal rate of 10% compounded monthly.

- A. 9.32%
- B. 8.96%
- C. 10.42%
- D. 10.87%

(2 marks)

- 1.8 At what rate of interest per annum will a sum of K55,000 amount to K60,000 in two(2) years compounded annually.
- A. 5.5%
  - B. 4.45%
  - C. 4.54%
  - D. 6%

(2 marks)

- 1.9 The payoff table of three (3) types of fruits Mango, Banana and Guava is given in the table below:

<b>FRUIT</b>			
<b>YEAR</b>	<b>MANGO</b>	<b>BANANA</b>	<b>GUAVA</b>
1	50	70	80
2	90	60	100
3	70	85	95

The fruit determined by Maximini process is:

- A. Guava.
  - B. Mango.
  - C. Banana.
  - D. Orange.
- 1.10 Find the compound interest on K35,000 for three (3) years at 12% per annum compounded semi – annually.
- A. K14,172.48
  - B. K14,172.84
  - C. K14,172.48
  - D. K14,648.17

(2marks)

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

- (a) If K15,000 is needed to meet a term note due in 15 years, what amount will need to be deposited each year at 8 percent compound interest to reach the goal?  
(5 marks)
- (b) The lengths of 32 fish caught in a competition were measured correct to the nearest mm.

<b>Length</b>	20 – 22	23 – 25	26 – 28	29 – 31	32 – 34
<b>Frequency</b>	4	7	13	10	3

#### **Required:**

Find:

- (i) The mean length (3 marks)
- (ii) The standard deviation (5 marks)
- (iii) The quartile deviation (5 marks)
- (iv) Modal value (2 marks)

**[Total 20 Marks]**

### QUESTION THREE

- (a) A regular customer at a small clothes shop observes that the number of customers,  $X$ , in the shop when she enters has the following probability distribution:

<b>X</b>	0	2	5	6
<b>P(X)</b>	0.11	0.35	0.46	0.08

#### **Required:**

Determine:

- (i)  $E(X)$  (2 marks)
- (ii)  $E(8X^2 - 2)$  (3 marks)
- (iii)  $E(Y)$ , where  $Y = 3 + 6X$  (2 marks)

- (iv)  $7E(4X + 3)$  (2 marks)
- (v)  $Var(3X - 5)$  (3 marks)
- (vi)  $Var(Y)$  where  $Y = 5 + 2X$  (3 marks)

- (b) If you deposit a K100 with a bank at an annual interest rate of 4%, with interest reinvested, how much will you get back at the end of five (5) years? (5 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

- (a) The beef meat sales per quarter in 2016 and 2017 are shown in the table below:

YEAR	QUARTER(K000)			
	1	2	3	4
2016	10	8	7	9
2017	9	10	6	7

**Required:**

Calculate four (4) quarter moving average trend values. (10marks)

- (b) The probability distribution of plant height is given in the table below:

<b>HEIGHT(cm)</b>	10	15	20
<b>PROBABILITY</b>	0.4	0.5	0.1

**Required:**

Calculate:

- (i) Expected value. (2marks)
- (ii) Standard deviation. (3marks)

(c) The payoff table of three (3) decisions A, B and C with states of nature, S1, S2 and S3 are given as follows:

<b>DECISIONS</b>	<b>A</b>	<b>B</b>	<b>C</b>
<b>STATES OF NATURE</b>			
S1	80	90	70
S2	100	50	60
S3	75	85	80

**Required:**

Determine Maximax decision.

(5marks)

**[Total:20 Marks]**

### **QUESTION FIVE**

(a) Ngenda Manufacturing Co. must decide whether or not to expand its product line by manufacturing and marketing a new product, backyard storage sheds. The following payoff table is given:

	<b>Favorable market</b>	<b>Unfavorable market</b>
<b>Large plant</b>	100000	-150000
<b>Small Plant</b>	50000	-10000
<b>No Plant</b>	0	0

What should we do using:

- (i) Maximax criterion (2 marks)
- (ii) Maximin criterion (2 marks)
- (iii) Minimax Regret criterion (3 marks)
- (iv) Laplace (2 marks)
- (v) Hurwicz using  $\alpha = 0.2$  (2 marks)

- (b) A random sample of eight (8) drivers insured with a company having similar auto insurance policies was selected. The following table lists their driving experiences (in years) and monthly auto insurance premiums.

<b>Driving Experience(years)</b>	<b>Monthly Auto Insurance premium(in thousands of kwacha)</b>
6	1.28
3	1.94
13	1
10	1.42
16	.88
7	1.12
26	.84
17	1.2

- (i) Does the insurance premium depend on the driving experience or does the driving experience depend on the insurance premium? (1 mark)
- (ii) Do you expect a positive or a negative relationship between these two (2) variables? (1 mark)
- (iii) Find the least square regression line by choosing appropriate dependent and independent variables based on your answer in part (i) (5 marks)
- (iv) Interpret the meaning of the values the intercept ( $a$ ) and the slope ( $b$ ) of the least square regression line found in part (iii). (2 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

- (a) An academic officer wanted to show the institution procurement head of department how the department budget for stationary was spent. The total budget was K500 as shown in the table below:

<b>Category</b>	<b>Kwacha (K)</b>
Stationery	60
Black & white printing	50
Black & white photocopying	180

Colour printing	45
Colour photocopying	25
Laminating	110
Binding	30

**Required:**

Construct:

- (i) A bar chart (3 marks)  
(ii) A pie chart (5 marks)

(b) Using the figures given below calculate:

25	15	26
58	50	17
51	60	70
43	53	64
36	45	55

- (i) The arithmetic mean (3 marks)  
(ii) The standard deviation (4 marks)  
(iii) The median (2 marks)  
(iv) Coefficient of variation (3 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## DA 2 QUANTITATIVE ANALYSIS SUGGESTED SOLUTIONS

### SOLUTION ONE

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



## SOLUTION TWO

- (a) This is a Sinking fund problem where amount  $S = 50\,000$ , time  $n = 15$  and interest rate per annum is  $i = 0.08$ , we solve for periodic deposits  $R$

$$50\,000 = R \left[ \frac{(1.08)^{15} - 1}{0.08} \right]$$

$$R = \frac{0.08(50\,000)}{(1.08)^{15} - 1} = K\,1\,841.48$$

- (b) We use the table below

Length	Frequency ( $f$ )	Class midpoint ( $x$ )	$xf$	$x^2f$	$F$
20 – 22	4	21	84	1 764	4
23 – 25	7	24	168	4 032	11
26 – 28	13	27	351	9 477	24
29 – 31	10	30	300	9 000	34
32 – 34	3	33	99	3 267	37
	$\sum f = 37$		$\sum xf = 1\,002$	$\sum x^2f = 27\,540$	

(i)  $\bar{x} = \frac{1002}{37} = 27.08$

(ii)  $S^2 = \frac{27\,540 - \frac{(1002)^2}{37}}{36} = \frac{404.7567568}{36} = 11.24$

(iii)  $Q_1 = 22.5 + \frac{(9.25-4)}{7} = 24.75$   
 $Q_3 = 28.5 + \frac{(27.75 - 24)}{10} (3) = 29.625$   
 Therefore,  $QD = \frac{1}{2}(29.625 - 24.75) = 2.4375$

(iv)  $\text{Mode} = 25.5 + \frac{(13-7)}{2(13)-7-10} (3) = 27.5$

### **SOLUTION THREE**

**(a)(i)**

$$E(X) = \sum X \cdot P(X = x) = (0 \times 0.11) + (2 \times 0.35) + (5 \times 0.46) + (6 \times 0.08) = 3.48$$

$$E(X^2) = \sum X^2 \cdot P(X = x) = ((0)^2 \times 0.11) + ((2)^2 \times 0.35) + (5^2 \times 0.46) + (6^2 \times 0.08) \\ = 15.78$$

Therefore,  $V(X) = E(X^2) - [E(X)]^2 = 15.78 - 3.48^2 = 3.67$  .

(ii)  $E(8X^2 - 2) = 8E(X^2) - 2 = 8(15.78) - 2 = 124.24$

(iii)  $E(Y)$ , where  $Y = 3 + 6X$

$$E(Y) = E(3 + 6X) = 3 + 6 \times E(X) = 3 + 6 \times 3.48 = 23.88$$

(iv)  $7E(4X + 3) = 7[4E(X) + 3] = 7[4 \times 3.48 + 3] = 118.44$

(v)  $Var(3X - 5) = 3^2 \cdot V(X) - V(5) = 9 \times 3.67 - 0 = 33.03$

(vi)  $Var(Y)$  where  $Y = 5 + 2X$

$$V(Y) = V(5 + 2X) = V(5) + 2^2 \cdot V(X) = 4 \times 3.67 = 14.68$$

**(b)**

We use the compound growth formula  $y = a(1 + r)^x$  with  $a = 100$ ,  $r = 0.04$ , and  $x = 5$ , giving

$$y = 100(1 + 0.04)^5 = 100(1.04)^5 = 100(1.2167) \\ = K121.67$$

**SOLUTION FOUR**

(a)	YR	Q	SALES	MAT	MA	CA(T)
8.625	2016	1	10			
		2	8			
		3	7	34	8.5	8.375
		4	9	33	8.25	8.5
	2017	1	9	35	8.75	
		2	10	34	8.5	8.25
		3	6	32	8	
		4	7			

(b) (i)  $E(X) = 10(0.4) + 15(0.5) + 20(0.1) = 4 + 7.5 + 2 = 13.5 \text{ cm}$

(ii)  $\sigma = \sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 p(x_i)}$   
 $= (10 - 13.5)^2(0.4) + (15 - 13.5)^2(0.5) + (20 - 13.5)^2(0.1)$   
 $= (-3.5)^2(0.4) + (1.5)^2(0.5) + (6.5)^2(0.1)$   
 $= 12.25(0.4) + 2.25(0.5) + 42.25(0.1)$   
 $= 4.9 + 1.125 + 4.225 = 10.25$

(c)

			DECISION		
A	B	C			
	MAX		100	90	80
	MAXI		100		
	Maximax decision is A				

## **SOLUTION FIVE**

a) i.) **maximax criterion**

	<b>Favorable market</b>	<b>Unfavorable market</b>	<b>Max</b>	<b>Max</b>
<b>Large plant</b>	100000	-150000	100000	<b>100000</b>
<b>Small Plant</b>	50000	-10000	50000	
<b>No Plant</b>	0	0	0	

Choose large Plant

ii.) **maximin criterion**

	<b>Favorable market</b>	<b>Unfavorable market</b>	<b>Min</b>	<b>Max</b>
<b>Large plant</b>	100000	-150000	-150000	
<b>Small Plant</b>	50000	-10000	-10000	
<b>No Plant</b>	0	0	0	<b>0</b>

Choose No plant

iii.) **minimax Regret criterion**

	<b>Favorable market</b>	<b>Unfavorable market</b>	<b>max</b>	<b>Min</b>
<b>Large plant</b>	$100000-100000=0$	$0-(-150000)=150000$	150000	
<b>Small Plant</b>	$100000-50000=50000$	$0-(-10000)=10000$	50000	
<b>No Plant</b>	$100000-0=100000$	$0-0=0$	100000	<b>0</b>

Choose Smaller plant

iv.) Laplace

$$\text{Laplace (large plant)} \frac{100000+(-150000)}{2} = \frac{-50000}{2} = -25000$$

$$\text{Laplace (Small Plant)} \frac{50000+(-10000)}{2} = 20000$$

$$\text{Laplace (No plant)} \frac{0+0}{2} = 0$$

**Highest is 20000**

**Choose to invest in Small Plant**

**v.) Hurwicz**

$\alpha$  is the level of optimism

Large plant:  $100000(0.2) + (-150000)(0.8) = -100000$

Small Plant:  $50000(0.2) + (-10000)(0.8) = 2000$

No Plant:  $0(0.2) - 0(0.8) = 0$

**Highest is 2000**

**Choose to invest in small plant**

**(b)**

- (i) Based on theory and intuition, we expect the insurance premium to depend on driving experience. As a result, the insurance premium is a dependent variable while the driving experience is an independent variable in regression model
- (ii) When you are new driver, you are considered as a high risk by the insurance companies and he or she has to pay a higher premium for auto insurance. The premium insurance is supposed to decrease with an increase in the years of driving experience. Hence we expect a negative relationship between the two variables. That is the population correlation ( $\rho$ ) and the coefficient of regression the slope ( $B_0$ ) are both expected to be negative.
- (iii)

$x$	$y$	$xy$	$x^2$	$y^2$
6	1.28	7.68	36	1.6394
3	1.94	5.82	9	3.7639
13	1.00	13.00	169	1.000
10	1.42	14.20	100	2.0169
16	0.88	14.08	256	0.7744
7	1.12	7.84	49	1.2544
26	0.84	21.84	676	0.7056
17	1.20	20.40	289	1.4400
$\sum x = 98$	$\sum y = 9.68$	$\sum xy = 104.86$	$\sum x^2 = 1584$	$\sum y^2 = 12.5928$

$$b = \frac{n \sum xy - \sum x \sum y}{n \sum x^2 - [\sum x]^2} = \frac{8(104.86) - (98)(9.68)}{(8)(1584) - (98)^2} = \frac{-13.72}{383.5} = -0.036$$

$$a = \bar{y} - b\bar{x} = \frac{9.68}{8} - (-1.035775749) \frac{98}{8}$$

$$a = 1.648$$

The required least square line is  $y = 1.648 - 0.03x$

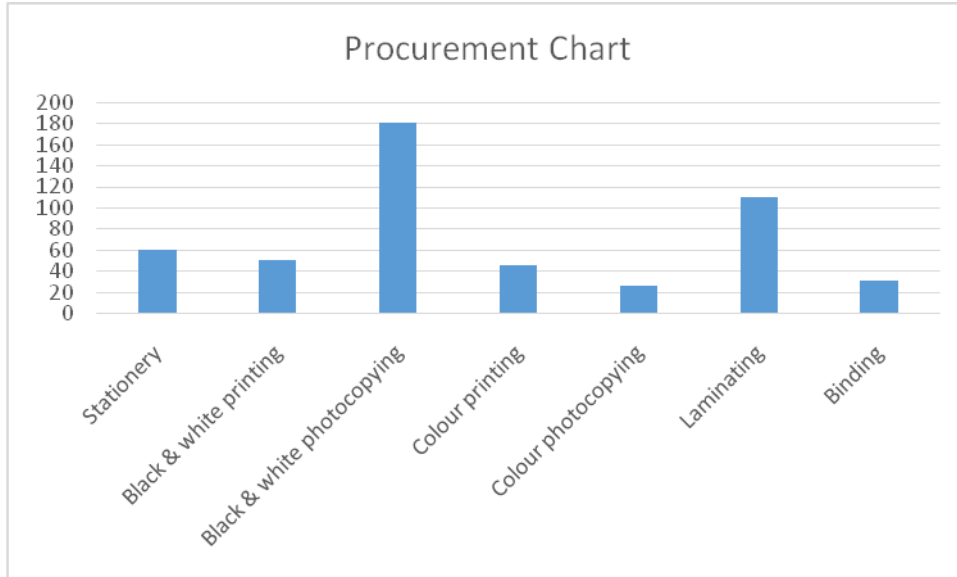
(iv). The value of  $a = 1.648$  gives the value of  $y$  for  $x = 0$ . It gives the monthly auto insurance premium for a driver with no driving experience. ( however, the data contains information of drivers with experience from 3 or more so this is not important.

The value  $b = -0.036$  gives the change in  $y$  due to one unit change in  $x$ . Thus it indicates that on average, for every extra year of driving experience, the monthly auto insurance premium decreases by K36. (Note that when  $b$  is negative  $y$  decreases as  $x$  increases.

**SOLUTION SIX**

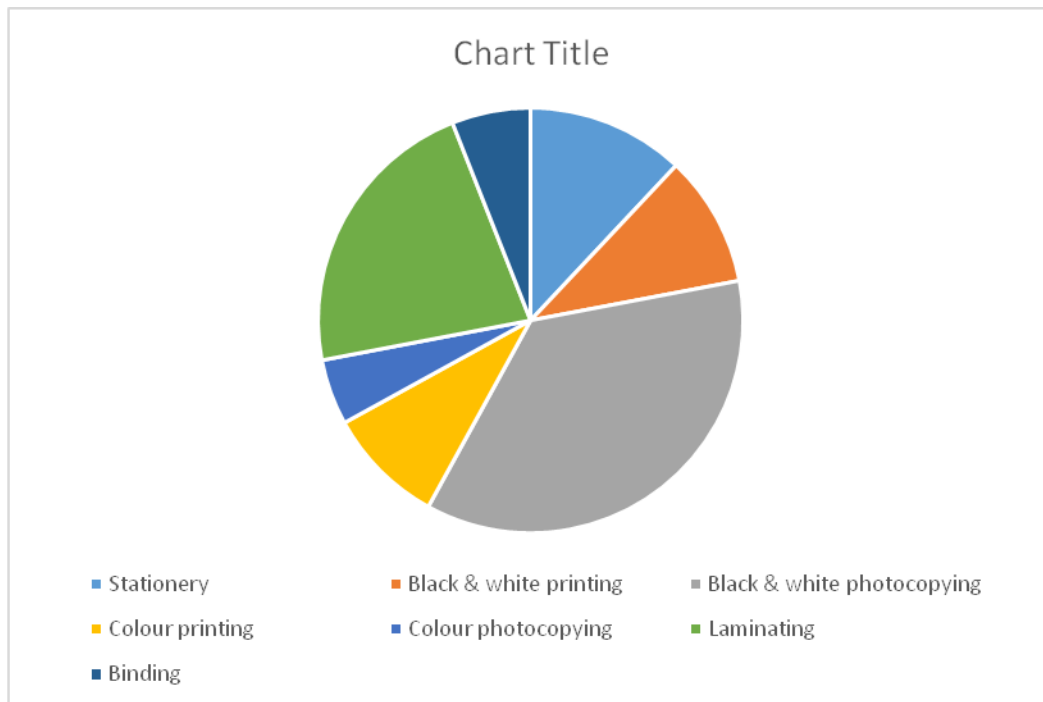
a)

(i)



(ii) pie chart

Category	Kwacha (K)	degrees
Stationery	60	$60/500 \times 360 = 43.2$
Black & white printing	50	$50/500 \times 360 = 36$
Black & white photocopying	180	$180/500 \times 360 = 129.6$
Colour printing	45	32.4
Colour photocopying	25	18
Laminating	110	79.2
Binding	30	21.6



b) calculations are as follows

i. the mean =  $\frac{1}{n} \sum x = \frac{1}{15} (25 + 15 + 28 + \dots)$   
 $= \frac{1}{15} (668) = 44.53$

ii. standard deviation

$$\sum x = 25 + 15 + 28 + \dots = 668$$

$$\sum x^2 = 25^2 + 15^2 + 28^2 + \dots = 33880$$

$$S^2 = \frac{\sum x^2 - \frac{(\sum x)^2}{f}}{f - 1} = \frac{33880 - \frac{(668)^2}{15}}{15 - 1}$$

$$= \frac{33880 - 29748.26}{14}$$

$$= \frac{4131.74}{14} = 295.12$$

$$S = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{f}}{f - 1}} = \sqrt{295.12} = 17.17$$



(iii) To find the median, arrange the data in increasing order.

15, 17, 25, 26, 36, 43, 45, 50, 51, 53, 55, 58, 60, 64, 70

Median is the 8<sup>th</sup> observation=50

(iv)  $CV = \frac{S}{\mu} = \frac{17.17}{44.53} = 0.366$

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

---

DA 3: BUSINESS ECONOMICS

---

TUESDAY 13 SEPTEMBER 2022

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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.  
Section B: Any two (2) of three (3) optional questions on Microeconomics.  
Any two (2) of three (3) optional questions on Macroeconomics.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
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7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

**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 According to Keynes, which of the following would increase aggregate demand...

- A. An increase in investment
- B. An increase in tax rate
- C. A decrease in government expenditure
- D. A decrease in government loans

(2 marks)

1.2 Which of the following will always rise when a manufacturing company increases its output?

- (i) Fixed costs
- (ii) Marginal costs
- (iii) Average variable costs
- (iv) Total cost

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

(2 marks)

1.3 What happens when the supply curve shifts to the right and the demand 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 Which of the following is a leakage in the Circular Flow of income?
- A. Consumption
  - B. Investment
  - C. Exports
  - D. Imports
- (2 marks)
- 1.5 What function is money serving when you sign a six (6) months contract to undertake a project?
- A. A unit of account
  - B. A store of value
  - C. A means for deferred payments
  - D. A medium of exchange
- (2 marks)
- 1.6 A tax that is structured so that people with higher incomes pay a larger percentage of their income for the tax than do people with smaller incomes is called a(an)...
- A. Income tax
  - B. Regressive tax
  - C. Property tax
  - D. Progressive tax
- (2 marks)
- 1.7 Which one of the following best describes cost-push inflation?
- A. Inflation caused by increases in the costs of production
  - B. Inflation caused by too much money chasing too few goods
  - C. Inflation caused in decrease in the costs of production
  - D. Inflation caused by imported goods
- (2 marks)
- 1.8 An exchange rate system where the local currency is determined by the market forces of demand and supply is called a.....
- A. Managed float regime
  - B. Fixed regime
  - C. Freely floating regime
  - D. Dirty float
- (2 marks)

1.9 The difference between total revenues and total costs (including both implicit and explicit costs) is called.....

- A. Accounting profit
- B. Opportunity cost
- C. Opportunity profit
- D. Economic profit

(2 marks)

1.10 When income and consumption have a positive relationship, the good is.....

- A. Inferior
- B. Normal
- C. Substitute
- D. Complementary

(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 the three (3) questions(from 2-4)

### QUESTION TWO

The following information was obtained from a production unit of a farm.

Number of bags (output)	Price K	Total Cost K
0	250	200
1	250	220
2	250	260
3	250	330
4	250	580
5	250	870
6	250	1250
7	250	1400

- (a) Compute for each output Fixed cost (FC), Marginal cost (MC), Total revenue (TR), Marginal revenue (MR) and Profit/loss (show your answer in a tabular format) (17 marks)
- (b) State the market structure in which the firm is operating from? (1 mark)
- (c) How many units should the firm produce in order to maximize profit and what is the maximizing achievable profit? (2 marks)

**[Total: 20 Marks]**

### QUESTION THREE

- (a) Outline any four (4) characteristic of monopolistic competition (4 marks)
- (b) With the aid of a diagram, explain the output and pricing positions of a firm operating under monopolistic competition in the:
- (i) Short-run (5 marks)
- (ii) Long-run (5 marks)
- (c) Explain the following types of decisions which are made by firms irrespective of the market under which they operate:
- (i) Shutdown rule (3 marks)
- (ii) Profit maximisation rule (3 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

- (a) With the use of graphs, show what happens to the equilibrium price and quantity traded for chocolate if;
- (i) The price of cocoa falls (5 marks)
  - (ii) Consumers become more health conscious and consume less calories. (5 marks)
- (b) You estimate the demand for chocolate to be  $Q = 30 - P$ . Suppose the supply of chocolate is given by  $Q = 2P$ .
- (i) What is the equilibrium price and quantity of chocolate? (2 marks)
  - (ii) Suppose a per-unit sales tax of K3 per chocolate is levied. Estimate the new equilibrium price and quantity. (2 marks)
- (c) Outline any three (3) factors that may influence the price elasticity of demand for chocolate. (6 marks)

**[Total: 20 Marks]**

#### **2. MACROECONOMICS: Attempt any two (2) questions out of the three (3) questions(from 5-7)**

#### **QUESTION FIVE**

- (a) Explain any three (3) reasons why countries measure national income (6 marks)
- (b) What is 'double counting' as applied to national income accounting and how it can be avoided (4 marks)
- (c) Distinguish between demand pull and cost push inflation. (4 marks)
- (d) Outline any three(3) economic objectives that a country like Zambia may pursue. (6 marks)

**[Total 20 Marks]**

#### **QUESTION SIX**

- (a) Outline any four (4) functions of commercial banks (8 marks)
- (b) What is meant by Cash reserve ratio? How does it increase the money supply in the economy? (4 marks)
- (c) Explain any two (2) limitations banks may face in credit creation (4 marks)
- (d) Distinguish between the money market and the capital market (4 marks)

**[Total: 20 Marks]**

### **QUESTION SEVEN**

(a) The following data is given in international trade.

	lorries	Wheat(tons)
Country X	60	300
Country Y	30	180

It is clear that country X has an absolute advantage in the production of both goods lorries and wheat. Even if country X has an absolute advantage in the production of both goods, trade is still possible on the basis of comparative advantage.

**Required:**

- (i) Calculate the opportunity costs in each country for each good (4 marks)
  - (ii) Determine the comparative advantage for each country (2 marks)
- (b) Compare the two (2) forms of trade agreements: common market and economic union. (4 marks)
- (c) As an advisor to the minister of finance, how would you use any two (2) fiscal policy instruments and any two (2) monetary policy instruments to create jobs in a country like Zambia? (8 marks)
- (d) Compare the two (2) forms of taxation: regressive and progressive tax? (2 marks)

**[Total: 20 Marks]**

**END OF PAPER**



## **DA 3 BUSINESS ECONOMICS: SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

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

## **SOLUTION TWO**

1	2	3	4	5	6	7	8
Q(units) output	Price K	TC K	<b>FC K</b>	<b>MC K</b>	<b>TR K</b>	<b>MR K</b>	<b>Profit/loss K</b>
0	250	200	<b>200</b>	-	<b>0</b>	-	<b>(250)</b>
1	250	220	<b>200</b>	<b>20</b>	<b>250</b>	<b>250</b>	<b>30</b>
2	250	260	<b>200</b>	<b>40</b>	<b>500</b>	<b>250</b>	<b>240</b>
3	250	330	<b>200</b>	<b>70</b>	<b>750</b>	<b>250</b>	<b>420</b>
4	250	580	<b>200</b>	<b>250</b>	<b>1000</b>	<b>250</b>	<b>420</b>
5	250	870	<b>200</b>	<b>290</b>	<b>1250</b>	<b>250</b>	<b>380</b>
6	250	1250	<b>200</b>	<b>380</b>	<b>1500</b>	<b>250</b>	<b>250</b>
7	250	1400	<b>200</b>	<b>150</b>	<b>1750</b>	<b>250</b>	<b>350</b>

- a) See table above.
- b) Perfect competition  $AR=MC=MR=P=K250$  and the demand curve is horizontal.
- c) maximum profit =K420  $Q=4$  and  $MR=MC=250$  maximum achievable profit is K420

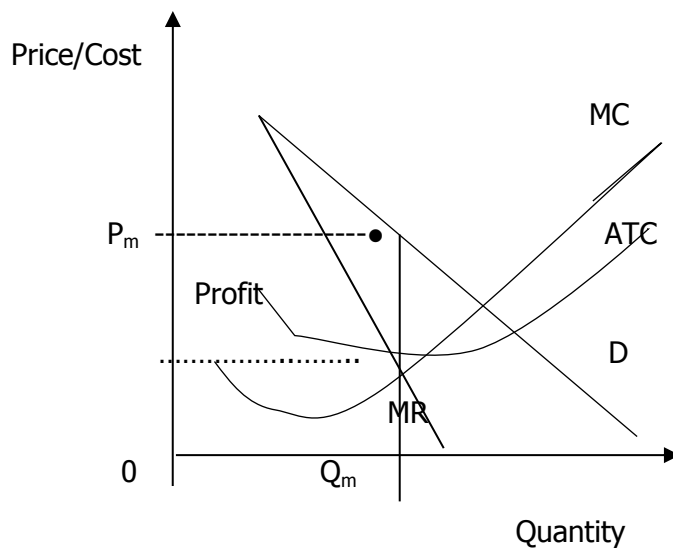
### **SOLUTION THREE**

a) Characteristics of a monopolistic industry:

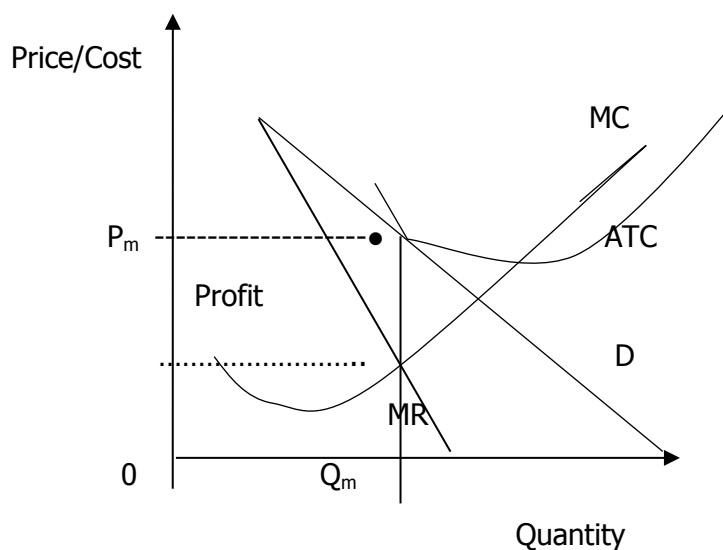
- There are a large number of firms in the industry
- There are no barriers to entry
- Each firm produces a distinctive, differentiated product
- Each firm faces a downward sloping demand curve for its particular good

b) Monopolistic in equilibrium:

- i) Given that monopolistic competitor's demand curve is down-sloping its marginal revenue (MR) is downward sloping. The monopolistic competitor maximises profit at the point where marginal revenue is equal to marginal cost, which results in a (price, output) combination ( $P_m$ ,  $Q_m$ ) as illustrated in the diagram below.



- ii) Given the monopolistic competitor's demand curve is down-sloping its marginal revenue (MR) is downward sloping. The monopolist maximises profit at the point where marginal revenue is equal to marginal cost, which results in a (price, output) combination ( $P_m$ ,  $Q_m$ ) as illustrated in the diagram below.



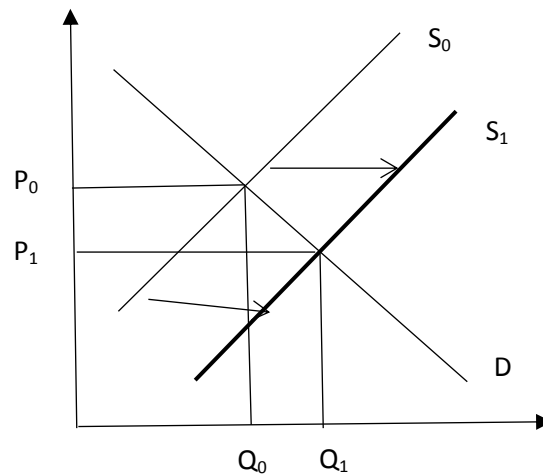
c) Decision rules:

- i) Shutdown rule is a rule that states that a firm should only produce if total revenue is equal to or greater than total variable cost. It can also be stated in terms of unit costs. A firm should only produce if average revenue is equal to or greater than average variable cost
- ii) Profit maximising rule states that firms should produce that quantity of the good such that profits are maximised or losses minimised. Profit maximisation can be explained in terms of total revenue (TR) and total cost (TC) or in terms of marginal revenue (MR) and marginal cost (MC). Profit is maximised where  $MR = MC$

**SOLUTION FOUR**

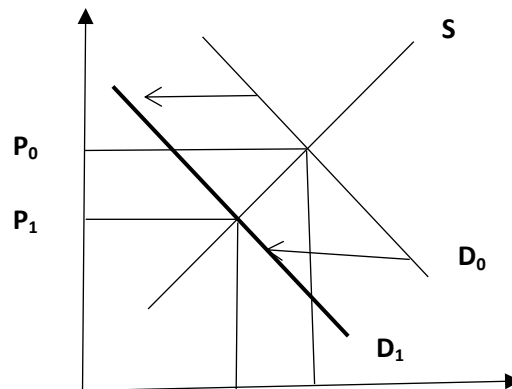
**a) Effects on price and quantity traded for chocolate**

i)



Cocoa is the main ingredient in the production of chocolate, if the price of cocoa falls, it makes it cheaper to produce chocolate. This leads to an increase in the quantity supplied of chocolate, reflected by a shift of the supply curve to the right, and a new equilibrium point at a lower price and higher quantity as shown above.

ii)



When consumers become more health conscious, they will decide to buy less chocolate. This will lead to a reduction in demand for chocolate. This reduction in demand will shift the demand curve to the left, leading to a lower equilibrium point at a lower price and lower quantity as shown above.

b)

i) Equilibrium is determined where Demand = Supply

$$30 - P = 2P$$

$$30 = 3P$$

$$\mathbf{P = 10, Q = 20}$$

ii)  $Q_s = 2(P-t)$   
 $Q_s = 2(p - 3)$   
 $= 2p - 6$   
 $2P - 6 = 30 - P$   
 $2P + P = 30 + 6$   
 $3P = 36$   
 **$P = 12, Q = 18$**

**c) Determinants of Elasticity**

- **Availability of substitutes:** Substitutes have a very big impact on elasticity, if there are close substitutes available, then an increase in the price of a good, will enable consumers to react, and demand will be elastic. However, the demand for a unique product is likely to have an inelastic demand.
- **Income:** This is when a commodity constitutes a small proportion of an individual's income, a cheap product such as a razor blade, a rubber and pencil or a box of matches, items costing K100 or so would still be affordable even if there is a 100% percent increase in price. In contrast, the demand for luxurious expensive products is likely to be elastic. A 10% increase in the price of a product costing K2 million would make consumers responsive to changes in demand.
- **Necessities:** The demand for commodities such as mealie meal, salt, sugar, milk etc is likely to be stable and inelastic.
- **Additive or habit forming products:** Consumers who are addicted to products such as beer, cigarettes, drugs etc feel that they cannot function properly without them. To them, the products are 'necessities', and therefore their demand is stable and inelastic.
- **Time period:** It takes time to adapt to changes in price. Consumers are likely to cling to a certain lifestyle until reality sets in and they are forced to adjust their spending habits. As such demand is more likely to be elastic in the long run rather than in the short run.

## **SOLUTION FIVE**

- a) The following are the reasons why countries measure national income:
- To assess the state of the economy as a basis for economic planning
  - Monitor the impact of government economic policies
  - Make national comparisons
  - Establish the standard of living in a country.
- b) Double counting is the counting of a given item more than once when measuring national income. It can be avoided by using the following methods:
- Counting only final goods
  - Using the value added method
- c) Demand pull inflation is a rise in general price level resulting from an excess total spending(demand) while cost push inflation is a general rise in the general price level resulting from an increase in the cost of production
- d) Economic objectives:
- To achieve full employment
  - To achieve economic growth
  - To achieve stability in average price level
  - To achieve Balance of payments equilibrium
  - To achieve equality in income distribution

## **SOLUTION SIX**

### **a) Functions of Commercial Banks**

- Banks provide a payment mechanism and a place to store surplus money; they also provide means of obtaining and selling foreign exchange.
- Commercial banks advise and assist companies in the issue of shares, and give investment unit trust advice and business.
- They also engage in financial leasing, debt factoring or collection management, including executorships (trustee) services.
- Banks finance import and export operations and investments.
- The most profitable business of commercial banks is lending money in the form of overdrafts, discounting bills of exchange and loan facilities. This particular function is always expanding because banks create credit, create deposit and therefore create money.

### **b) Cash Reserve Ratio**

- Cash reserve ratio is the ratio of bank deposits that commercial banks must keep as reserves with the Central Bank.
- When CRR falls, commercial banks keep lower reserves with the Central Bank. This releases funds that were earlier held with the Central Bank for commercial banks to lend. As lending increases, the money creation in the economy expands and money supply in the economy increases.

### **c) Limitation to Credit Creation**

- A Bank's Ability To Lend depends on its ability to acquire deposits, this may sometimes be limited by the lack of public confidence in the banking sector, and their inability to make abnormal demands for cash.
- Lack of collateral security may also hinder the process of lending and borrowing.
- The government, through the central bank, may decide to restrict lending and borrowing, in order to control the money supply in the economy.
- There is an inverse relationship between the cash reserve ratio and the money that is 'created' by banks. In developing countries, the cash ratios are relatively high, this means less Economic activity
- If the loans are spent on imported goods, then the foreign banking system benefits instead of domestic banks.

### **d) Money markets ad Capital markets**

**Money markets** deal with short-term finance i.e. lending and borrowing for less than one year. Active participants in the market are commercial banks, the central bank, big organization and brokers. Financial instruments traded are:

- Certificate of deposits
- Commercial paper,
- I Owe You ( I O U )

**Capital Markets:** This market is divided into primary market for the new issue of shares, and the secondary market, which deals with reselling of existing securities. Instruments traded on the capital market are equity shares, mortgages, corporate and government bonds etc



## **SOLUTION SEVEN**

(a) The table below gives data of international trade

Table (i) Absolute Advantage

	Lorries	Wheat
Country X	60	300
Country Y	30	180

Table (ii) opportunity cost of producing Lorries

	Lorries	wheat
Country X	1	5
Country Y	1	6

Table (iii) opportunity cost of producing wheat

	Lorries	wheat
Country X	0.2	1
Country Y	0.17	1

- Table(i) shows that country X has an absolute advantage, because it produces more of both goods
- Table (ii) shows that country X has a comparative advantage in the production of Lorries because the opportunity cost for country X in producing one lorry is lower (5) than the opportunity cost for country Y in producing Lorries (6)
- Table (iii) shows that country Y has a lower opportunity cost  $0.17=1/6$  than country X in the production of wheat whose opportunity cost is  $0.2=1/5$ . Therefore country Y has a comparative advantage in the production of wheat

As long as we have this situation of one country having a comparative advantage in the production of one good and the other a lower opportunity cost in the production of the other, trade is possible.

(b) The two forms of trade agreements:

- Common markets: in this agreement we have preferential trade agreement, free trade area and customs union, there is also free movement of labor and capital
- Economic union: in this agreement we have all the characteristics of common market and additionally we have common currency

(c) Creation of jobs

### **Fiscal policy instruments:**

- Reduce corporate tax so that companies can have enough resources to increase production and employ more workers.
- Increase government spending especially grants to companies so that they can increase production thereby employing more workers.

## **Monetary policy**

- Reduce interest rates: companies can borrow more to increase production thereby employing more workers
- Increase money supply : more money in circulation implies that people will have enough money to buy more and companies will produce more and they will employ more workers

### (d) Comparing the two forms of taxation

- Regressive tax: this tax takes a higher proportion of a poor person's salary than of a rich person's. It means the price for a good being the same from a poor persons and a rich person
- Progressive tax: this tax takes a higher proportion of income in tax as income rises.

**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 14 SEPTEMBER 2022

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

1.1 Which of the following is **NOT** a storage device?

- A. Tape cartridge
- B. Optical disk
- C. Smart card
- D. Memory stick

(2 marks)

1.2 There are several techniques that could be used to search for content on the internet in most search engines. Which of the following will tell a search engine that the phrase 'ZICA ZAMBIA' must be present in all pages found in a search?

- A. +ZICA+ZAMBIA
- B. -ZICA-ZAMBIA
- C. "ZICA ZAMBIA"
- D. -ZICA+ZAMBIA

(2 marks)

1.3 Which of the following error messages will appear when the cells referenced in a formula in a spreadsheet no longer exist?

- A. #####
- B. #DIV/0!
- C. #REF!
- D. #NUM!

(2 marks)

1.4 Different types of information systems are used in an organization. Which of the following is an example of operations support system?

- A. Knowledge work systems
- B. Decision support systems
- C. Executive Information systems
- D. Management Information systems

(2 marks)

- 1.5 A major component of an Accounting Information system is a database, which is a storage structure of data. Which of the following is the correct language used to access data and information in a database?
- A. Simple query language
  - B. Structured query language
  - C. Simple querying language
  - D. Structured querying language
- (2 marks)
- 1.6 Which of the following patterns provides faster communication?
- A The circle and the chain
  - B The circle and the wheel
  - C The wheel and the network
  - D The network and the Y pattern
- (2 marks)
- 1.7 State the correct salutation and complementary close that Mr Phiri can use when addressing a recipient whom he does not know.
- A. Dear customer \_\_\_\_\_ yours faithfully
  - B. Dear sir \_\_\_\_\_ Yours faithfully.
  - C. Dear sir \_\_\_\_\_ Best Regards
  - D. Dear Recipient \_\_\_\_\_ Yours sincerely
- (2 marks)
- 1.8 What are verbatim minutes?
- A. Minutes that do not describe the debate of a meeting, but state the decision reached upon during the meeting.
  - B. Minutes that describe word for word at a meeting.
  - C. Minutes that only state the decision agreed upon during the meeting
  - D. Minutes that describes the debate of a meeting.
- (2 marks)
- 1.9 What is the meaning of 6x6 rule when using PowerPoint in an oral presentation?
- A. Not writing the whole sentences
  - B. Not using more than 6 lines per slide
  - C. Not using more than six words per line
  - D. Not using more than 6 lines per slide and not more than 6 words per line
- (2 marks)

1.10 What type of question starts by asking a general question and then goes to ask a specific point?

- A. Open question
- B. Closed question
- C. Leading question
- D. Funneling question

(2 marks)

**[Total: 20 Marks]**

## SECTION B

This section has two parts:

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

### **QUESTION TWO**

- (a) Most information system security issues are centered on the CIA triage. Explain what each of the above letters in the acronym is concerned with. (6 marks)
- (b) As an Accountant who is up to date with technological trends. Explain to your supervisor any three (3) benefits of cloud storage. (6 marks)
- (c) If security controls are not in place or they are configured improperly, the process of establishing the interconnection could expose the IT systems to access by authorized personnel.

#### **Required:**

Write short notes on the following security controls

- (i) Logical Access Controls (4 marks)
- (ii) Physical and Environmental Security (4 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

- (a) Microsoft Windows is the most common operating system available. It has evolved through a number of versions.

Outline the following features of Windows operating system.

- (i) Taskbar (2 marks)
  - (ii) Recycle bin (2 marks)
  - (iii) Multitasking (2 marks)
  - (iv) Web integration (2 marks)
  - (v) Multimedia (2 marks)
- (b) State five (5) advantages of client/server computing? (10 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

- (a) Before accounting systems became automated, manual bookkeeping was being practiced, which wasn't just cumbersome task but also prone to inaccuracies and time consuming.

Computerized accounting has managed to take extra load off of entrepreneurs and accountants, making accounting simple and reliable.

- (b) Identify and explain the use of the five (5) main types of accounting systems. (10 marks)
- (c) The internet technology has changed a lot of things including how businesses are conducted.  
Explain any two (2) ways the internet may be used to enhance the delivery of your services. (4 marks)
- (d) Outline three (3) advantages of using a spreadsheet as an Accountant. (6 marks)

**[Total: 20 Marks]**



## 2 COMMUNICATIONS

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

### QUESTION FIVE

Curriculum vitae are a common feature in modern application letters. You have just completed your Diploma in Accountancy which you were pursuing while you were working as a part time sales person at Mongu Zambeef depot. At home you used to help you uncle to balance his business sales records against his orders for his shop called Kulika Feela Enterprise. Now you see the following advert from a renowned organisation in a newspaper.

MOMBOCIMA STORES AND HARDWARE LMT

POSITION TO BE FILLED URGENTLY – ACCOUNTS ASSISTANT

QUALIFICATIONS

Zica Diploma or equivalent

Grade 12 certificate with traceable school history

EXPERIENCE

Traceable record of accounting for at least two years

Zambian citizens with green national registration cards and can meet the above requirements can submit detailed curriculum vitae to:

The Human Resource Manager

Mombocima Stores and Hardware

P O BOX 910167

MONGU

### **Required:**

Write detailed curriculum vitae for the job advertised above.

(20 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

The following information shows sales figures obtained from four (4) products sold by company X over a period of 4 years.

<b>Type of product</b>	<b>2018</b>	<b>2019</b>	<b>2021</b>	<b>2022</b>
<b>Kapenta</b>	13,000	12000	5000	2075
<b>Beans</b>	10,000	15,000	10,000	50,000
<b>Rice</b>	8,000	30,000	45,000	10,000
<b>Cassava</b>	12,000	20000	10,000	700

#### **Required:**

- (a) Draw a multiple bar chart using the above information. (6 marks)
- (b) Interpret the information presented in (a). (4 marks)
- (c) Explain three (3) other types of charts or graphs that can be used to present large amounts of statistical data other than a multiple bar chart. (6 marks)
- (d) State four(4) advantages of using visual Communication. (4 marks)

**[Total: 20 Marks]**

### **QUESTION SEVEN**

Your department in the organization that you work for has been given access to new computer application packages which will be used to manage the debt collection activities. The software package has some benefits that everyone will enjoy in the department, but some of the staff are not aware of them.

#### **Required:**

- (a) Write a memorandum to your staff informing them about the new software package and its benefits. (14 marks)
- (b) State six (6) purposes of a memo in an organization. (6 marks)

**[Total: 20 Marks]**

**END OF PAPER**

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

### **SOLUTION ONE**

1.1 C

1.2 C

1.3 C

1.4 A

1.5 B

1.6 C

1.7 B

1.8 B

1.9 D

1.10 D

## **SECTION B**

### **SOLUTION TWO**

#### **a) CIA triage:**

**Confidentiality:** - information should not be accessed by unauthorised people

**Integrity:** - data should be trustworthy

**Availability:** - Data should be available when needed

#### **b) Benefits of cloud storage: -**

- Files are accessible from anywhere over the internet
- Convenient sharing of files
- Disaster recovery as files are stored off site
- Cost efficient as organisations do not own the storage devices

#### **c) i) Logical Access Controls:**

Logical Access Controls are mechanisms used to designate users who have access to system resources and the types of transactions and functions they are permitted to perform. It allows the user to type the user name and password to gain access to the system.

Use Access Control Lists (ACL) and access rules to specify the access privileges of authorized personnel, including the level of access and the types of transactions and functions that are permitted (e.g., read, write, execute, delete, create, and search). Hardware and software often are configured with ACLs, or the ACLs may be administered offline and then distributed to routers and other devices. Configure access rules to grant appropriate access privileges to authorized personnel, based on their roles or job functions. Ensure only system administrators have access to the controls.

#### **ii) Physical and Environmental Security:**

Physical security addresses the physical protection of computer hardware and software. Place hardware and software supporting the interconnection, including interconnection points, in a secure location that is protected from unauthorized access, interference, or damage. Ensure that environmental controls are in place to protect against hazards such as fire, water, and excessive heat and humidity. In addition, place computer workstations in secure areas to protect them from damage, loss, theft, or unauthorized physical access. Consider using access badges, cipher locks, or biometric devices to control access to secure areas. Also, consider using biometric devices to prevent unauthorized use of workstations.

## **SOLUTION THREE**

### **a) Features of MS Windows operating system**

- i) Taskbar is usually found at the bottom of the screen and shows applications that are currently open. It contains the start button and applications can be pinned there for quick launching
- ii) Recycle bin is folder that keeps deleted files
- iii) Multi-tasking a feature that allows more than one application to be active at the same time.
- iv) Web integration is a feature designed to enhance internet access and use of internet facilities and technologies and integrate with the user's system.
- v) Multimedia this feature allows the computer to process different types of data (video, audio, text etc)

### **b) Advantages of client/server computing**

**i) Shared programs and data** – Program and data files held on a file server can be shared by all the PCs in the network. With the stand alone computer, each computer has its own data files and there is unnecessary duplication of data. A system where everyone uses the same data will help to improve data processing, communication and decision making

**ii) Shared work-loads** – each PC in a network can do the same work. With stand-alone PCs, A does job 1, B does job 2, C does job 3 and so on. In a network, any PC (A,B or C) could do any job (1,2 or 3). This means that in a peak period for job 1, say, two or more people can share the work without having to leave their own desk

**iii) Scalability** – A client-server system is highly scalable, when you need more computers, you simply add more clients or another server

**iv) Shared equipment** – e.g. five computers might share a single printer, whereas with stand-alone computers, each computer would have to be given its own separate printer, or else not have access to one at all.

**v) Communication and time management** – LAN can be linked up to the office communication network, thus adding to the processing capabilities in an office. Electronic mail can be used to send messages, memos and letters from computer to computer.

## **SOLUTION FOUR**

### **a) Main types of accounting systems**

- i. **Financial accounting**
  - Standard accounting used to provide information about an organization's performance.
- ii. **Payroll accounting**
  - Is subject to complicated rules and regulations concerning who an employee is, how long they can work for, minimum wages etc.
- iii. **Tax accounting**
  - Has an objective to ensure that the organization is paying what is due or what it owes to the government in the form of taxes.
- iv. **Cost accounting**
  - Includes product costing and activity based costing, focuses on activities involved in production, the service process, the departmental units within an organization and other resources.
- v. **Managerial accounting**
  - For the internal use of management of the business, specifically for planning, monitoring and decision making.
  -

### **b) Ways the internet may be used to enhance the delivery of your services**

- Online payments
- 24/7 service which can be accessed anytime
- Easy communication
- E-Commerce

### **c) Advantages of spreadsheet software**

- Organises data
- Calculations are faster
- It is used to manipulate and analyse data

## **SOLUTION FIVE**

**Write detailed curriculum vitae for the job advertised above**

**Basic Curriculum vitae must have:**

### **PERSONAL PARTICULARS**

**Name**

**Year of birth**

**Nationality**

**Gender/ sex**

**Phone number**

**etc**

### **EDUCATIONAL BACKGROUND AND TRAINING**

<b>SCHOOL</b>	<b>YEAR</b>	<b>QUALIFICATION</b>
Primary Secondary junior Secondary senior tertiary		

### **WORK EXPERIENCE**

<b>ORGANISATION</b>	<b>YEAR</b>	<b>POSITION HELD</b>
<b>Mongu Zambeef Depot Kulika Feela Enterprise</b>		<b>Part-time sales person Sales records organizer</b>

### **HOBBIES**

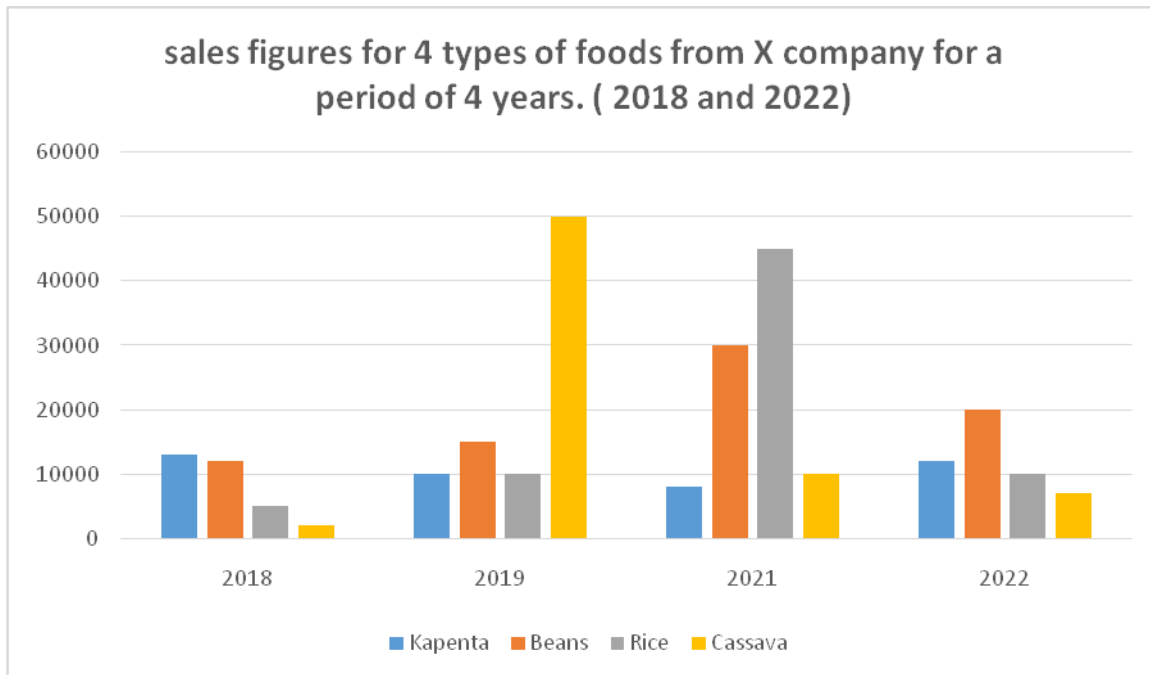
**any**

### **REFEREES**

**At least three referees with positions and contacts stated**

## **SOLUTION SIX**

(a)



(b) Apart from Kapenta, there were less sales in 2018 compared to 2019 and 2021 from all the 4 foods that the company sold. The highest sales were in cassava in the year 2019, followed by rice in 2021 and then Beans in 2022. However, cassava was the least sold in 2022 followed by Rice in the same year. (Students were awarded marks for any other correct interpretations)

(c) some other types of charts are:

- Pie charts – useful for showing the relative size of component elements of a total Value or amount
- Bar charts are useful for showing or comparing magnitude or sizes of items
- Gantt charts useful for comparing the actual work against the planned activity
- Simple line graph - is used to show a relationship between two variables  
depict two or more variables that change over the same period of time.

(d) The advantages of visual communication are:

- Can have a great impact than a series of figures
- Can easily draw attention to changes and trends
- It is more memorable, it is easier to remember pictures than words or figures
- One can readily demonstrate something
- In some cases it cuts across language barrier.



## **SOLUTION SEVEN**

### **TULITONSE GENERAL DEALERS**

#### **MEMORANDUM**

To: All staff

From: The supervisor- Accounts section

Date : ( Any date during examination time)

#### **Subject: Benefits of a new software package**

This memo serves to inform you that management has authorized access to the new Computer application package which will be used to manage debt collection challenges currently facing the organization.

Some of the benefits of such an application package are:

- It stores large amounts of data relevant to the database management system
- It provides a user friendly interface
- Assists with the billing system and sends invoices to customers
- It transforms data into information that is useful for decision making

You are all encouraged to familiarize yourself with this application package. For this reason, some IT specialists will always be on standby to assist you with any challenges that you might face when using the system.

Take this as an official notification. Your cooperation in this matter will be appreciated

Sender's signature

Mr. J. Kapotwe.

- (a) The specific purpose of a memo are:
- To give instructions to staff
  - To remind them about a meeting
  - To warn staff about wrong work practices
  - To notify staff about a meeting
  - To announce any new changes in the organization
  - To encourage employees as they work in teams or participate in work activities.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

---

DA 5: COST ACCOUNTING

---

TUESDAY 13 SEPTEMBER 2022

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A - MULTIPLE CHOICE

Attempt all ten (10) multiple choice questions in this section.

### QUESTION ONE

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

- 1.1 A manufacturing company uses 25,000 components at an even rate during a year. Each order placed with the supplier of the components is for 2,000 components, which is the economic order quantity. The company holds a buffer inventory of 500 components. The annual cost of holding one component in inventory is K2.

What is the total annual cost of holding inventory of the component?

- A. K2,000
- B. K2,500
- C. K3,000
- D. K4,000

(2 marks)

- 1.2 Which of the following is a characteristic of an investment centre?

- A. Managers have control over marketing.
- B. Management have a sales team.
- C. Management have a sales team and are given a credit control function.
- D. Managers can purchase capital assets.

(2 marks)

- 1.3 Cost centres are:

- A. Units of product or service for which costs are ascertained.
- B. Amounts of expenditure attributable to various activities.
- C. Functions or locations for which costs are ascertained and related to cost units for control purposes.
- D. A section of an organization for which budgets are prepared and control exercised.

(2 marks)

- 1.4 John Kazumba is a worker in a roofing manufacturing plant of Marcopolo Roofing Sheets Ltd. Details of his gross pay for the week are as follows:

	K
Basic pay for normal hours worked: 38 hours @K10 per hour	380
Overtime: 8 hours at time-and –a half	120
Group bonus payment	<u>24</u>
Gross pay	<u>524</u>

Although John was paid for normal hours in full, he had been idle for 10 hours during the week because of lack of iron sheet materials.

What is the indirect labour costs in his gross pay of K524?

- A. K140
- B. K144
- C. K164
- D. K220

(2 marks)

- 1.5 The following data relate to one year in department A.

Budgeted machine hours	25,000
Actual machine hours	21,875
Budgeted overheads	K350,000
Actual overheads	K350,000

Based on the data above, what is the machine hour absorption rate as conventionally calculated?

- A. K12
- B. K14
- C. K16
- D. K18

(2 marks)

- 1.6 Golden Star Ltd budgets to make 70,000 units of its product each month. Budgeted fixed costs are K175,000 per month. The company uses an absorption costing system.

During September 2021, sales were 69,000 units at K5 each. Production of 72,000 units cost K270,000, and the closing inventory was valued at K11,250. There was no opening inventory at the beginning of September.

If marginal costing had been used instead of absorption costing, the profit that Golden Star would have made in September, 2021 is:

- A. K78,750
- B. K83,250
- C. K86,250
- D. K93,750

(2 marks)

- 1.7 Mutinta Ltd operates a process costing system. The following details are available for process 2. Materials input at the beginning of the process are 12,000kg and cost K18,000.

Labour and overhead added are K28,000.

10,000kg were completed and transferred to the finished goods account. The remaining units were 60% complete with regard to labour and overheads. There were no losses in the period.

What is the value of closing WIP in the process account?

- A. K4,800
- B. K6,000
- C. K7,667
- D. K8,000

(2 marks)

- 1.8 Leoice Plc makes a single product, product X, for which the standard production overhead cost is 4 hours per unit at K6 per hour = K24 per unit. The standard overhead cost is based on a budgeted absorption rate per direct labour hour. All production overheads are fixed costs.

Data for the year's operations are as follows:

- Actual production of product X 4,500 units
- Actual production overhead expenditure K126,000
- Budgeted production of product X 4,800 units
- Direct labour hours worked 18,800 hours

What was the production overhead expenditure variance for the year?

- A. K7,200 adverse
- B. K10,800 adverse
- C. K18,000 adverse
- D. K10,800 favourable

(2 marks)

1.9 Which of the following would not be used to estimate standard direct material prices?

- A. The availability of bulk purchase discounts
- B. Purchase contracts already agreed.
- C. Performance standards in operation
- D. The forecast movement of prices in the market

(2 marks)

1.10 Sindolo Ltd uses the FIFO method of process costing. At the end of a four week period, the following information was available for process P.

Opening WIP 2,000 units (60% complete) costing K3,000 to date  
Closing WIP 1,500 units (40% complete)  
Transfer to the next process 7,000 units

How many units were started and completed during the period?

- A. 5,500 units
- B. 7,000 units
- C. 8,400 units
- D. 9,000 units

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

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

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

### **QUESTION TWO**

Abigail Limited manufactures cylinders. The following standard costs apply for the production of 100 cylinders:

<b>Materials</b>	500kg @ K0.8 per kg	= K400
<b>Labour</b>	20hrs @ K1.5 per hour	= 30
<b>Fixed overheads</b>	20hrs @ K1.0 per hour	= 20

The monthly production sales budget is 10,000 cylinders.

For the month of November 2021 the following production and sales information is available:

Cylinders Produced and sold		10,600 cylinders
Material purchased and used	53,200kg costing	K42,500
Labour	2,040hours costing	K3,100
Fixed overheads		K2,200

#### **Required:**

(a) Calculate the following variances:

- (i) Material price and usage
- (ii) Labour rate and efficiency
- (iii) Fixed overhead expenditure, capacity and efficiency

(14 marks)

(b) Prepare an operating statement for November 2021 which reconciles the budgeted cost and the actual cost. (6 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

Muleli Plc manufactures and sells product Y at the selling price of K12. Each product Y has the following unit costs.

	K
Direct material	2
Direct Labour	1
Variable production overhead	2
Fixed production overhead	<u>3</u>
	<b><u>8</u></b>

Administration costs are incurred at the rate of K20,000 per annum.

The company achieved the following production and sales of product Y:

<b>Years :</b>	<b>1</b>	<b>2</b>
Production	100,000	110,000
Sales	90,000	110,000

#### **The following information is also relevant:**

- (1) The overhead costs of K2 and K3 per unit have been calculated on the basis of a budgeted production volume of 90,000 unit.
- (2) There was no inflation.
- (3) There was no opening inventory in year 1.

#### **Required:**

(a) Prepare an operating statement for each year using:

- (i) Marginal costing ( 6 marks)
- (ii) Absorption costing ( 6 marks)

(b) Explain why the profit figures reported under the two (2) techniques disagree.

(4 marks)



(c) Reconcile the profits calculated in part (a).

(4 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

A chemical compound is made by raw material being processed through two (2) processes. The output of Process A is passed to Process B where further material is added to the mix. The details of the process costs for the financial period number 10 were as shown below:

**Process A**

Direct material	2,000 kilograms at K5,000 per kg
Direct labour	K7,200,000
Process plant time	140 hours at K60,000 per hour

**Process B**

Direct material	1,400 kilograms at K12,000 per kg
Direct labour	K4,200,000
Process plant time	80 hours at K72,500 per hour

The departmental overhead for Period 10 was K6,840,000 and is absorbed into the costs of each process on direct labour cost.

	<b><i>Process A</i></b>	<b><i>Process B</i></b>
Expected output was	80% of input	90% of input
Actual output was	1,400 kgs	2,620kgs

Assume no finished inventory at the beginning of the period and no work- in-progress at either the beginning or the end of the period.

Normal loss is contaminated material which is sold as scrap for K500 per kg from Process A and K1,825 per kg from Process B, for both of which immediate payment is received.

**Required:**

Prepare the following accounts for Period 10, for:

- |                        |           |
|------------------------|-----------|
| (a) Process A          | (5 marks) |
| (b) Process B          | (6 marks) |
| (c) Normal Loss        | (4 marks) |
| (d) Abnormal loss/gain | (4 marks) |
| (e) Finished goods     | (1 mark)  |

**[Total: 20 Marks]**

**QUESTION FIVE**

Milimo Contractors Ltd has a contract for an office and leisure complex. Work is part complete at the year-end on 30 June 2021. The following information is available:

	<b>K'000</b>
Contract price	2, 500
Direct materials issued	680
Direct materials returned to suppliers	30
Direct material transferred to other contracts	30
Direct materials on site at 30 June, 2021	40
Direct wages paid	440
Direct wages accrued	20
Direct expenses paid	50
Direct expenses accrued	10
Value of work certified to date	1, 500
Received from contracts	1, 200
Plant installed on site, at cost	200
Plant valuation 30 June, 2021	150
Estimated cost to completion	700

**Required:**

- |  |            |
|--|------------|
| (a) Calculate the attributable profit for the year to 30 June 2021.      | (10 marks) |
| (b) Calculate the contract work in progress on 30 June 2021.             | (2 marks)  |
| (c) Prepare the contract account and contractee (client ledger) account. | (8 marks)  |

**[Total: 20 Marks]**

## **QUESTION SIX**

You are the cost accountant of an industrial concern and have been given the following budgeted information regarding the four cost centres within your organization:

	<b>Depart 1</b>	<b>Depart 2</b>	<b>Maintenance</b>	<b>Canteen</b>	<b>Total</b>
	K'000	K'000	K'000	K'000	K'000
Indirect labour	60,000	70,000	25,000	15,000	170,000
Consumables	12,000	16,000	3,000	10,000	41,000
Heating and lighting					12,000
Rent and rates					18,000
Depreciation					30,000
Supervision					24,000
Power					<u>20,000</u>
					<b><u>315,000</u></b>

**You are also given the following information:**

	<b>Depart 1</b>	<b>Depart 2</b>	<b>Maintenance</b>	<b>Canteen</b>	<b>Total</b>
Floor space in Square metres	10,000	12,000	5,000	3,000	30, 00
Book value of Machinery in K' 000	150,000	120,000	20,000	10,000	300,000
Number of employees	40	30	10	-	80
Kilowatt hours	4,500	4,000	1,000	500	10,000

You are also told that:

- (i) the canteen staff are outside contractors.
- (ii) departments 1 and 2 are production cost centres and the maintenance department and canteen are service cost centres.
- (iii) the maintenance department provides 4,000 service hours to Departments 1 and 3,000 service hours to Department 2.
- (iv) department 1 is machine intensive and Department 2 is labour intensive.
- (v) 6,320 machine hours and 7,850 labour hours are budgeted for Departments 1 and 2, respectively, for 2021.

**Required:**

- (a) Prepare an overhead cost statement showing the allocation and apportionment of overhead to the four (4) cost centres for 2022, clearly showing the basis of apportionment. (16 marks)
- (b) Calculate the overhead absorption rates for department 1 on the basis of the machine hours and Department 2 on the basis of labour hours. (2 marks)
- (c) On the basis that for 2021 actual overheads for Department 1 turned out to be K155,000,000 and machine hours worked amounted to 6,000 whilst actual overheads for department 2 turned out to be K156,000,000 and labour hours worked were 7,900, calculate the under or over recovery of overheads for each department. (2 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 5 COST ACCOUNTING DA5SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

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

**SOLUTION TWO**

a) i) **Material Price Variance**

53, 200kg	should have cost x K0.8/kg	K
But did cost		42,560
		<u>42,500</u>
		<u>60(F)</u>

**Material Usage Variance**

10,600	units should have used x $\frac{500}{100}$	53, 000kg
But did use		53, 200kg
		200kg A)
		x K0.8
		= <u>K 160</u>
		<u>(A)</u>

ii) **Labour Rate Variance**

1, 040 hours	should have cost x K1.5 per hr	=	K	3,060
But did cost				<u>3, 100</u>
				<u>40(A)</u>

**Labour Efficiency Variance**

10,600 units	should have taken x $\frac{20hrs}{100}$	2,120 hrs
But did take		<u>2,040 hrs</u>
		<u>80hrs (F)</u>
		<u>xK1.5</u>
		<u>K120 (F)</u>

iii) **Fixed OH Expenditure Variance**

10, 000 units	should have cost x $\frac{20}{100}$	K	2,000
But did cost			<u>2,200</u>
			<u>200(A)</u>

**Fixed OH Efficiency Variance**

<u>80 hrs (F) x K1.00</u>	<u>K80 (F)</u>
---------------------------	----------------

**Fixed OH Capacity Variance**

10,00units should have taken x $\frac{20\text{hrs}}{100}$	2, 000hrs
But did take	<u>2,040hrs</u>
	<u>40hrs (F)</u>
	<b><u>xK1</u></b>
	<b><u>K40(F)</u></b>

(b) **Operating Statement for November, 2021**

	K	K	K
Budget cost (450/100 x 10,600 units)			47,700
<b><u>Variances:</u></b>	FAV	ADV	
Material Price	60	-	
Material Usage	-	160	
Labour Rate	-	40	
Labour Efficiency	120	-	
Fixed OH Exp	-	200	
Fixed OH Capacity	80	-	
Fixed OH Efficiency	<u>40</u>	-	
	<u>300</u>	<u>400</u>	<u>100(A)</u>
Actual Cost			<b><u>47,800</u></b>

Budget cost (450/100 x 10,600 units)			47,700
<b><u>Variances:</u></b>	(F)	(A)	
Material Price	60	–	
Material Usage	–	160	
Labour Rate	–	40	
Labour Efficiency	120	–	
Fixed OH Exp	–	200	
Fixed OH Capacity	80	–	
Fixed OH Efficiency	<u>40</u>	=	
	<u>300</u>	<u>400</u>	= <u>100 (A)</u>
Actual Cost			<b><u>47,800</u></b>



### **SOLUTION THREE**

a) i) **Operating statement under Marginal Costing.**

	Year 1	Year 1	Year2	Year2
	K'000	K'000	K'000	K'000
Sales		1,080		1,320
Opening Inventory	-		50	
<u>Add: production cost</u>	<u>500</u>		<u>550</u>	
	500		600	
Less: Closing Inventory	<u>(50)</u>		<u>(50)</u>	
Variable cost of sales		<u>(450)</u>		<u>(550)</u>
Total Contribution		630		770
Less: Fixed costs				
■ Production overhead	270			
■ Administration overhead	<u>20</u>	<u>290</u>		<u>290</u>
<b>Net Profit</b>		<b><u>340</u></b>		<b><u>480</u></b>

ii) **Operating statement under Absorption Costing.**

	Year 1	Year 1	Year2	Year2
	K'000	K'000	K'000	K'000
Sales		1,080		1,320
Opening Inventory	-		80	
<u>Add: production cost</u>	<u>800</u>		<u>880</u>	
	800		960	
Less: Closing Inventory	<u>(80)</u>		<u>(80)</u>	
Variable cost of sales		<u>(720)</u>		<u>(880)</u>
Gross Profit		360		440
Over / (under) Absorption		30		60
Less: Administration overhead		<u>(20)</u>		<u>(20)</u>
<b>Net Profit</b>		<b><u>370</u></b>		<b><u>480</u></b>

b) The difference in profit arises because of the difference in the amount of fixed overhead included in inventory under the absorption costing system. When the opening and closing inventory includes the same amount of fixed overheads (i.e, here when the volume of opening and closing inventory is the same, in year 2) profit is the same under both techniques. Where volume of inventory has gone up (year 1) and the amount of fixed overhead in inventory has increased then profit is higher under absorption costing and vice versa.

c) **Reconciliation statement.**

	<b><u>Year 1</u></b>	<b><u>Year 2</u></b>
	<b><u>K'000</u></b>	<b><u>K'000</u></b>
Profit as per marginal costing	340	480
Difference in inventory x fixed cost(10, 000 x K3 per unit)	<b><u>30</u></b>	<b><u>0</u></b>
Profit as per absorption costing	<b><u>370</u></b>	<b><u>480</u></b>

**Workings**

**Over/ under Absorption of overheads**

	<b><u>Year 1</u></b>		<b><u>Year 2</u></b>
	<b><u>K `000</u></b>		<b><u>K `000</u></b>
Actual fixed overhead(90 x K3)	270	(90 x K 3)	270
Fixed Absorbed (100 x K3)	<u>300</u>	(110 x 3)	<u>330</u>
Over	<b><u>30</u></b>	Over	<b><u>60</u></b>

## SOLUTION FOUR

### (a) Process A

$$\text{Cost/kg} = \frac{\text{Total costs} - \text{scrap value of normal loss}}{\text{Expected output}}$$

		<u>K'000</u>
Direct material	(2, 000kg @ K5,000/kg)	10,000
Direct Labour		7, 200
Process plant time	(140hrs @ K60, 000/hr)	8, 400
Departmental overhead	(60% x K7.2m) (W1)	<u>4, 320</u>
		29, 920
Scrap value of normal loss	(20% x 2, 000kg x K500/kg)	<u>200</u>
	Total costs	<b><u>29,720</u></b>

$$\text{Cost/kg} = \frac{\text{K}29,720,000}{2,000\text{kg} \times 80\%} = \textbf{K18, 575/kg}$$

### Process A Account

	<b>Kg</b>	<b>K'000</b>		<b>Kg</b>	<b>K'000</b>
Direct material	2, 000	10, 000	Normal loss	400	200
Direct Labour		7,200	Process B	1, 400	26, 005
Process Plant Hire		8, 400			
Depart overhead		<u>4, 320</u>	Abnormal loss	<u>200</u>	<u>3,715</u>
	<b><u>2,000</u></b>	<b><u>29,920</u></b>		<b><u>2,000</u></b>	<b><u>29,920</u></b>

### (b) Process B

		<u>K'000</u>
Transfer from Process A		26, 005
Direct material	(1, 400kg @ K12,000/kg)	16, 800
Direct Labour		4, 200
Process plant time	(80hrs @ K72, 500/hr)	5, 800
Departmental overhead	(60% x K4.2)	<u>2, 520</u>
		55,325
Scrap value of normal loss	(2, 800kg x 10% x K1,825)	<u>(511)</u>
	Total costs	<b><u>54,814</u></b>

$$\text{Cost/kg} = \frac{\text{K}54,814,000}{2,800\text{kg} \times 90\%} = \underline{\underline{\text{K}21, 751.587}}$$

(i) Process B Account

	<b>Kg</b>	<b>K'000</b>		<b>Kg</b>	<b>K'000</b>
Process A	1,400	26,005			
Direct material	1,400	16,800	Normal loss	280	511
Direct Labour		4,200			
Process Plant Hire		5,800			
Depart overhead		2, 520			
Abnormal Gain	100	<u>2,175</u>	Finished goods	<u>2,620</u>	<u>56,989</u>
	<b><u>2,900</u></b>	<b><u>57,500</u></b>		<b><u>2,900</u></b>	<b><u>57,500</u></b>

(c)

**Normal Loss Account**

	<b>Kg</b>	<b>K'000</b>		<b>Kg</b>	<b>K'000</b>
Process A	400	200	Scrap A/c	680	711
Process B	280	511			
	<b><u>680</u></b>	<b><u>711</u></b>		<b><u>680</u></b>	<b><u>711</u></b>

(d)

**Abnormal Loss/Gain Account**

	<b>Kg</b>	<b>K'000</b>		<b>Kg</b>	<b>K'000</b>
Process A	200	3,715.00	Scrap A/c	200	100.00
			Process B	100	2,175.00
Scrap A/c	<u>100</u>	<u>182.50</u>	Profit/Loss a/c		1,622.50
	<b><u>300</u></b>	<b><u>3,897.50</u></b>		<b><u>300</u></b>	<b><u>3,897.50</u></b>

(e) **Finished Goods Account**

	<b>Kg</b>	<b>K'000</b>		<b>Kg</b>	<b>K'000</b>
Process B	<u>2,620</u>	<u>56,989</u>	Cost of sales a/c	<u>2,620</u>	<u>56,989</u>

**WORKINGS**

(W1) Departmental overhead absorption rate

$$= \frac{\text{K}6,840,000}{\text{K}7.2\text{m} + \text{K}4.2\text{m}} = \underline{\underline{\mathbf{60\% \text{ of direct labour cost.}}}}$$

**SOLUTION FIVE**

(a) Costs incurred to date

	K'000	K'000
<b>Materials issued</b>		680
Less: Returns	30	
Less: Transfers	30	
Less: Materials on site on 30 <sup>th</sup> June	<u>40</u>	
		(100)
		580
Wages – paid and accrued		460
Direct expenses – paid and accrued		60
Plant depreciation K (200,000 – 150,000)		<u>50</u>
Contract costs incurred to date		<b><u>1, 150</u></b>
 <b>Contract costs to completion</b>		
• Incurred (above)		1, 150
• Estimated further costs		<u>700</u>
Total estimated contract costs		<b><u>1, 850</u></b>
 <b>Estimated Contract profit</b>		
• Fixed contract price		2, 500
• Total estimated costs		(1, 850)
<b>Estimated profit</b>		<b><u><u>650</u></u></b>

Profit taken in year to 30 June 2021	=	$\frac{\text{Work certified}}{\text{Contract price}}$	x	contract profit	=	$\left(\frac{1,500}{2,500} \times 650\right)$
						<b><u>K390,000</u></b>

### (b) Work in Progress

	K'000	K'000
Contract costs to 30 June 2021		1, 150
<b>Add:</b> Profit taken		<u>390</u>
		<b>1,540</b>
<b>Less:</b> Progress payments		
• Received	1, 200	
• Receivable	<u>300</u>	
		<u>1,500</u>
Value of work in progress at 30 June 2021		<b><u>40</u></b>

### (c) (i) Contract Account

	K'000		K'000
Material costs	680	Material returns	30
Wages- cash	440	Material transfer	30
Wages- accrued	20	Client account (work certified)	1,500
Direct expenses- cash	50	Plant c/d	150
Direct expenses- cash	10	Materials c/d	40
Plant	200	Work in progress	40
Profit and loss account	<u>390</u>		
	<b><u>1,790</u></b>		<b><u>1,790</u></b>

### (c) (ii) Contractee(Client Ledger) Account

	K'000		K'000
Contract account (work certified)	1,500	Cash received (progress payment)	1,200
		Balance c/d	<u>300</u>
	<b><u>1,500</u></b>		<b><u>1,500</u></b>
Balance b/d	<b>300</b>		

## **SOLUTION SIX**

### **(a) Overhead Analysis Sheet for 2021**

<b><u>Overhead cost</u></b>	<b><u>Basis of Apportionment</u></b>	<b>Dept 1</b>	<b>Dept 2</b>	<b>Mtce</b>	<b>Canteen</b>
		<b>K'000</b>	<b>K'000</b>	<b>K'000</b>	<b>K'000</b>
Indirect labour	per question	60,000	70,000	25,000	15,000
Consumables	per question	12,000	16,000	3,000	10,000
Heating and lighting	floor space	4,000	4,800	2,000	1,200
Rent and rates	floor space	6,000	7,200	3,000	1,800
Depreciation	Book value of machinery	15,000	12,000	2,000	1,000
Supervision	no. of employees	12,000	9,000	3,000	
Power	kilowatt hours	9,000	8,000	2,000	1,000
Canteen	no. of employees	15,000	11,250	3,750	(30,000)
Maintenance	service hours	25,000	18,750	(43,750)	
	<b><u>Budgeted Overhead</u></b>	<b>158,000</b>	<b>157,000</b>		

### **(b) Calculation of overhead absorption rates(K'000)**

<u>Budgeted overhead</u>	Dept 1 <u>K158,000</u>	Dept 2 <u>K157,000</u>
<u>Budgeted hours</u>	<u>6,320</u>	<u>7,850</u>
	= <b><u>K25,000/Mach hour</u></b>	= <b><u>K20,000per Labour hour</u></b>

### **(c) Under or Over absorption**

	<b>Dept 1</b>	<b>Dept 2</b>
	<b>K'000</b>	<b>K'000</b>
Amount incurred	155,000	156,000
Absorbed overhead(6,000 hrs x K25,000/7,900 x K20,000)	<u>150,000</u>	<u>158,000</u>
<b>Under / (over) recovery</b>	<b><u>5,000</u></b>	<b><u>(2,000)</u></b>

**END OF SOLUTIONS**





DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 6: BUSINESS LAW

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FRIDAY 16 SEPTEMBER 2022

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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 Which of the following is **not** a source of law in Zambia?
- A. Government circulars
  - B. Delegated legislation
  - C. Case law
  - D. Customs
- (2 marks)
- 1.2 What principle of law did the case of *Christine Mulundika and 7 others v the Attorney General* establish?
- A. The constitution is subject to other laws
  - B. All laws in the country are the same
  - C. Laws made by parliament are more superior to all other laws
  - D. None of the above
- (2 marks)
- 1.3 Which one of the following properly compares criminal and civil law?
- A. There is no difference between the two
  - B. Liability for both is determined by the penal code
  - C. One attracts punishment and the other compensation
  - D. All the above
- (2 marks)
- 1.4 Which is not correct about law of contract and law of torts?
- A. They are both concerned with compensation for damage
  - B. They are both meant to punish people for acting wrongly
  - C. They are both branches of civil law
  - D. One concerns preexisting agreements and the other does not
- (2 marks)
- 1.5 Which one correctly represents the principle of damages in contract
- A. It is meant to enrich the aggrieved party
  - B. Aggrieved party is taken where performance of contract would have been
  - C. It takes aggrieved party to their original position before breach

- D. It prevents damage from happening (2 marks)
- 1.6 What constitutes damage under negligence in the law of Torts?
- A. Injury or loss
  - B. Proximate Cause
  - C. Damages
  - D. Compensation
- (2 marks)
- 1.7 What amounts to wrongful dismissal?
- A. Termination of an employee's contract as a result of gross misconduct without notice.
  - B. Termination of an employee's contract based on lack of financial capacity to pay.
  - C. Termination of an employee's contract without following proper procedure.
  - D. Termination of an employee's contract based on race, and political affiliation.
- (2 marks)
- 1.8 Which of the following is **not** a product of the interaction of equity and common law?
- A. New rights
  - B. Better procedure
  - C. Better remedies
  - D. Rules
- (2 marks)
- 1.9 A contract between a minor and an adult is..?
- A. Void
  - B. Voidable
  - C. Illegal
  - D. Unenforceable
- (2 marks)
- 1.10 In instance where a contract has been performed partially, the innocent party can claim under..?
- A. Quantum meruit
  - B. Damages
  - C. Specific performance
  - D. Restitution

(2 marks)

**[Total 20 Marks]**

## **SECTION B**

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

### **QUESTION TWO**

Write brief notes on each of the following:

- (a) Negligent misrepresentation (5 marks)
- (b) Supervening illegality in contract Law (5 marks)
- (c) Redundancy (5 marks)
- (e) The employer's duty to pay remuneration to employees (5 marks)

**[Total 20 Marks]**

### **QUESTION THREE**

May, a 14 years old girl got 6 points in her grade 12 exams. Proud of his daughter's achievement, Mr Banda wants to take her to a prestigious University. May is so excited and so she is preparing herself for University life. She bought three six metres chitenge materials which she took to Robert a 26 years old tailor to make 10 fancy dresses for her. May also went to Book world and ordered stationery worth K10,000.00 for which she did not pay. Robert made the fancy dresses as instructed and charged Mary K20,000 for all the 10 dresses however, May has refused to pay saying that she is no longer interested in the dresses because her father just brought her 20 fancy dresses and shoes from UK. Robert is thinking of taking legal action against May. He has come to you to seek legal advice before he proceeds with his suit.

#### **Required:**

- (a) By citing examples, explain to Robert the consequences of entering into a contract with a minor. (10 marks)
- (b) Between the agreement May has with Book World and the one she has with Robert, which one will be considered valid and why? (10 marks)

**[Total 20 Marks]**

### **QUESTION FOUR**

The subject matter in the contract of sale of goods are goods, and in absence of goods, the Sale of Goods Act, 1893 does not apply.

- (a) What are goods as defined by section 62 of the Sale of Goods Act, 1893? (5 marks)
- (b) Identify and distinguish between two (2) contracts referred to in the sale of goods. (5 marks)

- (c) Under section 12 of the Sale of Goods Act ,1893, there is an implied condition that at the time of passing title to the buyer, the seller must have a right to sell the goods, or else the buyer will not acquire valid title. However, there are exceptions to this rule. Discuss any two (2) exceptions to this rule. (10 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

- (a) Citing relevant authorities, distinguish agency by holding out from agency by consent. (8 marks)
- (b) Explain the following defences at law;  
(i) Volenti non fit injurio (2 marks)  
(ii) Contributory negligence (2 marks)
- (c) Write brief notes on the following;  
(i) Implied Authority in agency law. (2 marks)  
(ii) Partner by holding out. (2 marks)
- (d) With the aid of decided cases, distinguish Executed consideration from Executory consideration. (4 marks)

**[Total 20 Marks]**

**QUESTION SIX**

- (a) Identify and explain the three (3) main ingredients requisite for formation of a contract. (6 marks)
- (b) Identify and discuss the three (3) types of consideration in a contract. (8 marks)
- (c) Discuss the contentions in *Carlill v Carbolic Smoke ball Co* (1893) 1 QB 256 with regard to offer and the court's finding and principle behind the finding. (6 marks)

**[Total 20 Marks]**

**END OF PAPER**

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

### **SOLUTION ONE**

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

## **SOLUTION TWO**

(a) *Negligent Misrepresentation*:- This is a form of misrepresentation where the person making the false statement has no reasonable grounds for believing the statement he has made to be true. Negligent misrepresentation is only actionable (one can only successfully sue) where there is a pre-existing contractual relationship between the parties [as held in the case of *Esso Petroleum Co. Ltd v Mardon (1976)*] or where the parties were in a 'fiduciary relationship'. The basic remedy in this case are damages [as in *Hedley Byrne & Co. Ltd v Mardon (1976)*], if the injured party has suffered a loss. Other remedies may include rescission of contract, restitution to pre-contract condition, etc

(b) *Supervening Illegality*:- This is a method of discharge of a contract where the law or circumstances make the performance of the contract illegal. This may occur where there is a change in the law as seen in *Denny, Mott & Dickson Ltd v James B Fraser & Co Ltd (1944)* where the court refused to enforce a contract as subsequent government regulations had made performance of the contract illegal.

(c) *Causation in Tort Law*: - Causation is the connection between the defendant's wrongful conduct and the damage suffered by the plaintiff. In Tort, for there to be liability on the defendant, he must have caused the wrongful act, there must have been a connection between the wrongful acts and the injury. When this connection or chain of causation is broken or too remote (*Cob v Great Western Railway (1894)*), the defendant will not be held liable. It is also known as the 'but for' – i.e. would the damage have occurred 'but for' (had it not been for) the defendant's actions (*Overseas Tankship (UK) Ltd v Morts Cock and Engineering Co. Ltd (Wagon Mound) 1961*), and the case of (*Barnett v Chelsea and Kensington Hospital Management Committee (1969)*).

(d) *The Employer's Duty to Pay Remuneration*:- This one of the employer's duties at common law. An employer is expected through the Minimum Wages and Conditions of Employment Orders of 2011 (now incorporated in the Employment Code Act No.3 of 2019) to pay at least the prescribed minimum wages applicable for the different classes of employees such as cleaners, domestic workers, etc. If there is no rate fixed by parties, the employer has a duty to pay a reasonable wage. The duty is suspended where there is act which is beyond the employer's control, making the performance of the contract impossible (frustration of the contract), the employer would be exempted from paying remuneration to part-time and piece workers as held in *Re Crumlin Valley Collieries, 1916*. In that case, the flooding of the mine was a good reason not to pay part-time and piece workers as there was no work to do during the period.

### **SOLUTION THREE**

- a) When someone chooses to enter into a contract with a minor or an infant, they are doing so at their own risk. Contract laws provide minors the option to exit a contract as they desire, which is called "voiding a contract." These exist to protect minors from entering into contracts with responsibilities and obligations that they may not understand. For instance, in the case of **Nash v Inman (1908)** the claimant supplied clothing to the defendant minor, a Cambridge undergraduate. The clothing included 11 fancy waistcoats. It was held that, 'as the defendant was already amply supplied with clothing appropriate to his station in life the clothing purchased could not amount to necessaries and the action must fail'.

The rule that allows minors to void contracts can lead to severe consequences, so the laws do have some basic exceptions. One exception allows a minor to either [void](#) or accept the contract within a reasonable amount of time upon reaching the age of majority. Henceforth, a contract with a minor is voidable at the choice of a minor.

However, there are certain contracts which a minor cannot avoid as follows;

- Military contracts
- Taxes
- Necessities
- Penalties
- Bank regulations

- b) The contract May has with Book world is a valid contract. This is because it is a contract relating to necessities. Many enforceable contracts among minors relate to necessities. If a minor chooses to enter into a contract for something concerning education, comfort, or health, it cannot be voided based on the capacity rule. When voiding a contract, a minor must follow certain rules of the law.

The first rule is returning any items that have been granted under the contract terms. If the minor has any of the items received, they must be returned before the contract can be voided. Failure to return the property limits the ability to void a contract. In general, a contract with an infant or minor can be voided. This rule protects younger people who don't necessarily understand the responsibilities or consequences of entering into contracts. Minors don't have the capacity to enter into contracts.

Statutes and court rulings offer the option to exit contracts to minors, at their own discretion. The other party entering into a contract with a minor does not have the right to void a contract. Only the minor has the discretion to void a contract on this basis. Although the contract is valid, the minor can exit if they wish to do so. Since this rule can lead to severe consequences or be abused, several exceptions exist to the general void ability rule for contracts with minors.

The first rule concerns contracts relating to entertainment or sports. If a minor enters into an entertainment or sports contract, this would not be voidable at will. Any contracts for



necessities, such as services and goods that are necessary to the safety and health of minors, can't be voided at will. Examples of necessities include shelter or lodging, clothing, and food. In some cases, a motorcycle or automobile could be classified as a necessity. For instance in the case of ***Roberts V. Gray* ([1913] 1 K. B. 520)**. It was held, that a contract for the education of an infant so that he may able to earn his living (e.g., as a professional billiard player) is a contract for necessities. It is worth noting that the onus lies on the adult to prove that the contract is a contract for necessities.

## **SOLUTION FOUR**

- (a) Goods are defined under S.62 to include chattels, emblements, industrial growing crops and things attached or forming part of the land which are agreed to be severed before sale or under the contract of sale.
- (b) Firstly, a contract of sale where there is immediate transfer of title or property in the goods to the buyer, and secondly, an agreement to sale, in which the seller promises to transfer property in the goods to the buyer later. This distinction is important for two reasons: firstly, once property moves to the buyer, the seller can sue for the price. Secondly, if property moves to the buyer, the buyer has a legal right to sell the goods to a third party, but the seller does not unless he obtains consent of the buyer.
- (c) Exceptions to the right of sale:
- i. Sale by estoppel**  
Where the owner of the goods by his own conduct misleads the buyer to believe that the person selling the goods has his blessings, he will be prevented in fairness from denying that he did not authorize the sell, and title will pass to the buyer.
  - ii. Sale by an agent**  
If a principal appoints an agent to sell his or her goods to a third party, then any sale by the agent, in accordance with the instructions given, will pass on a good title to the third party. If, however, the agent has exceeded the instructions in some way, then no title will pass to the third party unless the agent had apparent authority
  - iii. Sale by a mercantile agent**  
A third party has a stronger claim to the title of the goods where the agent is a mercantile agent. A mercantile agent is one 'having in the customary course of business as such agent, authority either to sell goods or to consign goods for the purposes of sale or to buy goods, or to raise money on the security of goods' (s. 1 (1) of the Factors Act 1889).
  - iv. Sale by a court order**  
The court may order sale of perishable goods under the Supreme Court Rules Order 29 rule 14, if the goods are likely to deteriorate if kept longer than necessary.
  - v. Sale in a market overt**  
SOGA does not define a market overt but in Lee v Bayes, 1856, it was defined as an "open public and legally constituted market open between the hours of sunrise and sunset and where the goods for sale are openly or publicly displayed". Under s.22 (1) of SOGA, where goods are sold in market overt, according to the usage of the market, the buyer acquires a good title to the goods, provided he buys them in good faith and without notice of any defect or want of title on the part of the seller.

**vi. Sale under voidable title**

This is ownership of the goods which is acquired by any of the vitiating factors, such as mistake or misrepresentation. Under s.23 of SOGA, when the seller of goods has a voidable title but has not avoided it at the time of the sale, the buyer acquires a good title to the goods, provided he buys them in good faith and without notice of the seller's defect of title. Sale under statutory powers

vii. **If authorised by law.** For instance, section 3 of the Disposal of Uncollected Goods Act Cap. 40 of the laws of Zambia allows the repairer (bailee) to sell goods that have been repaired and not collected by the owners within a reasonable period. Bailiffs are permitted by section 15 of the Sheriff's Act Cap. 49 to sell seized goods on behalf of the creditor so as to satisfy a judgment debt.

**viii. Sale under special common law powers**

Under section 21 (2) b of SOGA, contract of sale under any special common law or statutory powers will pass valid title to the buyer. For example, mortgagees, agents of necessity, executors and administrators fall in this category. A bank may therefore sell mortgaged property and pass valid title to the buyer when the mortgagor has defaulted on repayment of a loan.

## **SOLUTION FIVE**

### **a) Agency by consent**

Consent may be express or implied. When an agent is authorised by his principal to carry out a certain task or act in a certain capacity, he is said to have **actual authority**. Usually, an agent is **expressly appointed** by the principal to undertake certain transactions. Very often the appointment is oral, but the informality of the appointment does not make any difference to the fact that agency is created.

In **commercial transactions**, it is usual to appoint an agent **in writing**, so that the terms and extent of the relationship are set down to avoid misunderstanding. As noted above, this is not essential.

Two persons may, by their relationship or their conduct to each other, **imply** an agreement between them that one is the agent of the other. For example, an employee's duties may include making contracts for his employer, say by ordering goods on his account. The employee is, by implied agreement, the agent of the employer for this purpose. An agent authorised in this way is said to have **implied authority**.

#### **WHEREAS;**

Agency by estoppel/(or 'holding out') arises when the words or conduct of the principal **give to a third party the impression** that the agent's authority is greater than it really is and the third party, as a result, acts upon this. This introduces the concept of ostensible, or **apparent authority**.

For example, if Paul leads Tina to believe that Adam is Paul's agent, and Tina deals with Adam on that basis, Paul is bound by the contract with Tina which Adam has made on his behalf. This situation may arise in the following circumstances.

- When Adam, who dealt with Tina as Paul's authorised agent, continues to do so after his authority as agent of Paul has been terminated but Tina is unaware of it.
- When Adam, to Paul's knowledge, enters into transactions with Tina as if Adam were Paul's agent and Paul fails to inform Tina that Adam is not Paul's agent.
- When Adam, who dealt with Tina as Paul's authorised agent, acts beyond the scope of the authority actually conferred upon him by Paul but Tina is unaware of any restriction on his authority.
- Agency by estoppel can only arise where the **conduct** of the **apparent principal** creates it. Agency does not arise by estoppel if it is the 'agent' who 'holds himself out' as agent, not the 'principal' **Armagas Ltd v Mundogas SA, The Ocean Frost (1986)**.

An agent purported to conclude an agreement leasing a ship back from its buyer (the principal) for a period of three years, claiming that he had obtained specific authority for the transaction. The agent was appointed as the principal's chartering manager, however, the agent actually only had authority to conclude an agreement which lasted for one year.

**Held:** Agency of estoppel had not arisen as it was the conduct of the agent, not the principal, that created the apparent authority. The principal was not bound by the agreement.

(b) The two defences can be explained to Eddie as follows:

### **Volenti non fit Injuria**

Volenti non fit Injuria entails that a person who volunteers or consents to risk may not succeed in claiming compensation when they suffer injury in the course of events they volunteered/consented to. In this case, the company is saying that Eddie volunteered to work under the railway company hence he can't be compensated for the harm done.

However, this is a wrong defence in this aspect as there is no voluntariness on Eddie's side. In fact, if Eddie could have refused to work he was going to be fired. Therefore, this defence cannot apply in this circumstance.

### **Contributory Negligence**

Where any person suffers damage as the result partly of his own fault and partly of the fault of any other person or persons, a claim in respect of that damage shall not be defendant by reason of the fault of the person suffering the damage, but the damages recoverable in respect thereof shall be reduced to such extent as the court thinks and equitable having regard to the claimant's share in the responsibility of the damage.

Thus, this defence entails that once a person or entity is found negligence, they can also counter defence by alleging contributory negligence so that the blame is apportioned.

In the given circumstance, the company is saying that if they are found liable then they will plead that Eddie contributed to his harm. Again, this defence may not work here because Eddie was performing his work properly without any negligence hence the defence can't stand.

**C)** Implied Authority in agency law is the authority which arises where a particular action is not sanctioned by express agreement between the principal and the agent. The principal is non the less still bound. **Whereas Partner by holding out** arises where one holds himself to clients as a partner. Such an individual will be held liable as such.

**(d)** Executed consideration is given when the contract is formed . it acts as the basis upon which the contract is formed or entered into. In this, the offeree agrees to act to his detriment as a result of a promise made by the offeror to pay. This was seen in the case of **Lampleigh .v. Brathwait 1615**. Executory consideration is one which only occurs at the time the subject matter of the contract is exchanging hands. The case of Merrit.v. Merrit is instructive in this regard.

## **SOLUTION SIX**

**(a)** (i) Offer is an indication of an intention by the offeror to enter into a binding contract with another called the offeree. An offer once accepted, sets the basis upon which a contract is entered between parties. *Carlill v Carbolic Smoke ball Co* (1893) is instructive on what amounts to an offer.

(ii) Acceptance is indication of a willingness on the part of the offeree to enter into a binding contract with the offeror on the terms and conditions set out in the offer. For there to be a proper contractual relationship, it is important that the acceptance is a reflection of what is contained in the offer otherwise, it becomes a counter offer. *Hyde v Wrench* (1840) is instructive on what amounts to an acceptance.

(iii) Consideration signals the completion of a valid contract between parties. Therefore, for there to be a contract, it is imperative that the offeree gives up something of value in consideration of what the offeror has offered to give up. Refusal to hand over a gift can therefore not be enforced as it was not accompanied by some consideration on the part of the recipient. *Dunlop v Selfridge* (1915) is instructive on the matter.

**(b)** Executed consideration is that which is given before the contract is in fact completed. Executed consideration acts as the basis on which the contract has been entered that is, the offeree agrees to act to his detriment as a result of a promise made by the offeror to be paid something if he does something promised by the offeror. In this type of consideration, the actions of the offeree are always influenced by the promise made and a desire to benefit from the promise after acting on the instructions of the offeror. *Lampleigh v Brathwait* (1615) is instructive here. Where the defendant after killing another man sought the plaintiff's indulgence to secure a pardon for him from the king with a promise of 100 pounds should that pardon be secured. The defendant reneged on the promise and the plaintiff brought an action. The court held that the action was well laid because it was alleged that there was a request before the endeavour was made and where there is such a precedent request, a subsequent *assumpsit* after the execution of the consideration is binding.

(ii) Executory consideration is one which only occurs at the time the subject matter of the contract is exchanging hands. Where therefore the offeror offers to supply goods to the offeree to be delivered at a later date agreed by both parties, the offeree equally is not obliged to part away with money in consideration of the goods to be later supplied but will simply promise the offeror to pay for the goods at the time of delivery of the goods. Executory consideration therefore only takes place when the parties have both fulfilled their bargain or obligation to the contract *Merrit v Merrit* [1970] is instructive on this where a couple that was separated and the husband promised to pay the wife an amount in consideration of her agreement to pay off a mortgage on a house they owned together and that upon her completion of the payment of mortgage, he would then transfer ownership to her sole ownership. The husband did not meet his obligations after she finished paying off the mortgage and

she brought an action and the court found for her. He appealed and the appeal was dismissed.

(iii) Past consideration is one which is not influenced by any promise made by the offeror. This is where the offeree does something before any promise is made to him/her as to what benefit they would be made to derive for doing what they do but a promise is made that they would be paid something in appreciation of their works. This consideration is not enforceable usually. *Collins v Godefroy* (1831) is instructive on this. The plaintiff was subpoenaed to attend trial as a witness as a requirement under the law at the time, the plaintiff demanded to be paid by the defendant for the time spent in court as a witness. The court held that 'on principle, an action does not lie for a compensation to a witness for loss of time in attendance under a subpoena. Attendance as a witness in this case was not motivated by a promise to be paid but by operation of the law which did not provide for any payments to be made hence any demand to be paid for attending is past consideration.

- (c) the contention in *Carlill v Carbolic Smoke ball Co* (1893) was on the argument by the defendant company that there was no contract because there was no consideration by the plaintiff to constitute a contract. The defendant company offered one hundred pounds through the newspaper any person who buy and use the smoke ball three times daily for two weeks and would follow instruction as printed in the advertisement. The plaintiff acting on the instructions in the advertisement bought and used the smoke ball as indicated and suffered influenza contrary to the advertisement. The plaintiff claimed compensation as had been promised by the defendants who refused and she brought an action. The court found for her and held that there was a contract since an offer was made and one accepted it by doing as instructed and that the monies used to purchase the smoke balls was consideration enough to found a contract.

The principle of law established in the case is that when an advertisements is made in the paper or media inviting persons to act on the instructions contained there for a benefit to be derived, such cannot be considered as a mere puff but would be binding on the party making it to those that would act on it in the same manner instructed and suffer some detriment consequent to that. It was therefore established that such advertisements would constitute a proper offer and anyone acting on it as instructed would constitute a proper acceptance and the time they in fact spend heeding the instructions contained in the advertisement would equally constitute consideration enough to create a binding contract.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

---

DA 7: PRINCIPLES OF MANAGEMENT

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MONDAY 12 SEPTEMBER 2022

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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 Michael Porter defined corporate strategy and identified four (4) generic strategies. Which of the following is one of the strategies?
- A. Accountability
  - B. Fairness
  - C. Differentiation
  - D. Feedback
- (2 marks)
- 1.2 According to Mintzberg, managerial roles can be broken down into decisional, informational, and
- A. interpersonal
  - B. technical
  - C. conceptual
  - D. Liaison
- (2 marks)
- 1.3 Which of the following is one of the stages in Kurt Lewin's famous three (3) stage prescriptive model of change developed in the 1950s?
- A. Progressive development
  - B. Paid incentives
  - C. Moving to a new level
  - D. Melting resistance
- (2 marks)

1.4 According to Lewin's theory of force field analysis and organizational change, which one of the following statements is true

- A. To make a change successful it is more effective to reducing restraining forces than strengthen the drivers for change
- B. Anxiety about job security is a force for change
- C. Groups/businesses that manage have an interest in and are affected by the goals, operations or activities of the organization
- D. Getting individuals to recognize that change is desirable

(2 marks)

1.5 The partnership between private sector and government is called

- A. General partnership
- B. Limited partnership
- C. Joint sector enterprise
- D. Strategic alliance

(2 marks)

1.6 Which of the following statements regarding internal forces of motivation is true?

- A. They are more important to understand than external forces of motivation
- B. They are less important to understand than external forces of motivation
- C. They are as important as external forces of motivation
- D. They are seldom recognized by managers

(2 marks)

1.7 ..... used the terms "employee-centered" and "production-centered" to describe leader behavior

- A. Blake and McCauley
- B. Fiedler
- C. McGregor
- D. Likert

(2 marks)

- 1.8 With regard to leadership, which statement is false?
- A. Leadership does not necessarily take place within a hierarchical structure of an organization
  - B. When people operate as leaders their role is always clearly established and defined
  - C. Not every leader is a manager
  - D. All of the above

(2 marks)

- 1.9 Informal authority flows upwards to downwards or horizontally in:
- A. Formal organization
  - B. Informal organization
  - C. Business or organization
  - D. Strategic organization

(2 marks)

- 1.10 ABC trading earned ZK100m for the first-time last year. Investors are increasingly optimistic about corporate earnings and the economy in Zambia. This achievement MOST likely is .....
- A. Proprietorship
  - B. Partnership
  - C. Corporation
  - D. Conglomerate

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

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

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

### **QUESTION TWO**

- (a) Ethical values (morals) are important to an individual and the organization as a whole and good leaders are judged by the moral values in their goals and the methods they use to achieve those goals.

**Required:**

List Four (4) ways an organisation can express its ethical values. (8 marks)

- (b) Use Terry's four (4) key leadership skills to describe how a Manager can influence subordinates to willingly strive for group objectives. (8 marks)

- (c) State Four (4) leadership tasks identified by Bennis as important to Managers as innovators who focus on people, inspires trust, and hold a long-term view.

(4 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

- (a) Use the five (5) characteristics of strategic decisions to explain the importance of the macro-environment analysis to the company's current and future situation in the world. (10 marks)

- (b) One of the key roles of a Manager is work planning. Explain how the following can assist a Manager as a work planner:

(i) Task sequencing

(ii) Scheduling

(iii) Controls

(iv) Contingency

(v) Coordination

(10 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

- (a) Block described leadership as a partnership which occurs when controls shifts from the leader's authoritarian tendencies to the group members through shared decision making.

**Required:**

What four (4) things are necessary for validity of such a partnership? (8 marks)

- (b) What differences are there between internal control and external control? (6 marks)
- (c) Motivation is referred to as the process by which a person's efforts are energized, directed and sustained toward attaining a goal.

**Required:**

Define the three (3) elements in the definition.

- (i) Energy
- (ii) Direction
- (iii) Persistence (6 marks)

**[Total: 20 Marks]**

#### **QUESTION FIVE**

- (a) Use McClelland's identified central needs below to explain how a manager can use them as motivational tools.

- (i) Need for achievement
- (ii) Need for power
- (iii) Need for affiliation (12 marks)

- (b) Rewards are a form of motivation that will make a person work harder since they feel recognized and appreciated. Managers are also reminded about how the rewards are given.

**Required:**

Define the following laws that relate to reward- giving:

- (i) law of contingent reinforcement
- (ii) Law of immediate reinforcement (4 marks)

- (c) Explain the importance of:
- (i) Job description
  - (ii) Job analysis
- (4 marks)
- [Total 20 Marks]**

**QUESTION SIX**

It has been said that change is inevitable whether at individual or organizational level.

**Required:**

- (a) Describe the differences between incremental and transformational change.
- (4 marks)
- (b) Explain four (4) triggers for change for each one of the following:
- (i) Internal
  - (ii) External
- (8 marks)
- (8 marks)
- [Total: 20 Marks]**

**END OF PAPER**

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

### **SOLUTION ONE**

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

## **SOLUTION TWO**

- a) The following are ways in which an organization can express its ethical values:
- i. Transparency- telling the truth
  - ii. Providing excellence
  - iii. Good packaging
  - iv. Equality
  - v. Respect
  - vi. Loyalty
  - vii. Accountability
- b) The following are ways in which a manager can use Terry's key leadership skills to influence subordinates: Any 4.
- i. Entrepreneurship -alertness to identify and use all the business opportunities that will show up and be able to utilize the resources. This will stimulate innovation and creativity in the employees
  - ii. Interpersonal skills- having a very good work culture and be able to understand and deal with others in a respectful understanding manner.it is shown by appreciation of an individual employee giftedness and their uniqueness.
  - iii. Decision-making and problem-solving skills-having an analytical mind that looks at the bigger picture of things in order to come up with sound fair decisions that will promote the interests of all stakeholders.
  - iv. Time management and personal organization- a disciplined manager will be there to transmit their good morals and performance to the employees.
  - v. Self- development skills- the ability to learn continuously from experiences and remain optimistic, grow in self- awareness, and to exploit the learning opportunities.
- c) The following are the tasks identified by Bennis:
- i. Constantly reminding people why work is important
  - ii. Creating an atmosphere of trust
  - iii. Encouraging curiosity and risk taking in the organization culture
  - iv. Fostering an atmosphere of hope which can be particularly helpful when thing go wrong.



### **SOLUTION THREE**

- a) The following are the five (5) characteristics of strategic decisions and how they are used in the macro environment analysis:
- i. Complexity: decision may change because factors in the environment change unexpectedly it is therefore important to think and plan for the unexpected. Companies are encouraged to look at the past events and use the information to forecast the events in future.
  - ii. Uncertainty: The world has changed due to the consequences of COVID - 19, which has affected consumer behavior, preference, demand, supply and changes in company expectations. Companies are urged to live in continuous preparedness to avoid premature closures.
  - iii. Operational decision-making: There are disturbances in the way companies are operating because of the new trends of people working from home, are deprived of work force due to covid- 19 related deaths and forced down sizing.it is therefore important for companies to prepare for eventualities that may affect their operations as a company.
  - iv. An Integrated approach: companies must analyze all the different departments of the business so that plans are done on the holistic approach and appropriate responses to each situation that may arise. Being dynamic toward environment trends.
  - v. Changes: companies must learn that change is inevitable so all activities should be done with the necessary flexibility to embrace changes in the environment. The use of new technology has made automation- e-commerce possible and companies are now trading on line in the midst of COVID- 19 restrictions. Due to global warming, there is a call or companies to change the way they do business to lessen the impact of pollution on the environment. It is therefore important for companies to operate under the signs of time and embrace the changes that come.
- b) The following is how managers can be assisted as work planners:
- i. Task sequencing- prioritization arranging work according to its importance objectivity and deadline.
  - ii. Scheduling- allocation of work to individuals and work teams in order to meet the deadlines.

- iii. Controls-making sure that all routine tasks are achieving their objectives in order to meet the deadline
- iv. Contingency plans-planning for the unexpected in flexibility
- v. Coordination-ensuring cooperation for all involved

## **SOLUTION FOUR**

- a) The following are the four (4) things needed for the validity of this kind of partnership:
- i. Exchange of purpose
  - ii. A right to say no
  - iii. Joint accountability
  - iv. Absolute honesty
- b) - Internal control is self- control exercised by people who are motivated to take charge of their own behavior on the job.it is also enhanced by participative work culture in which people are treated with respect and are allowed to exercise personal initiative.
- External controls are part of the day to day performance appraisal systems, compensation and benefit systems which may also help retain well motivated and qualified employees.
- c) The following are the explanations of the elements of motivation:
- i. Energy –measure of intensity, drive and vigor put forth working hard
  - ii. Direction-favorable performance that benefit the organization
  - iii. Persistence- employees should persist in effort to achieve those goals

## **SOLUTION FIVE**

- a) Explanation of McClelland central needs for motivation.
  - i. Need for achievement – the desire to do something better.
  - ii. Need for power-the desire to control other people.
  - iii. Need for affiliation – the desire to establish and maintain friendly and warm relations with people.
  
- b) (i) The law of contingent reinforcement says, for a reward to have maximum reinforcing value, it must be delivered only if the desirable behavior is exhibited.  
(ii) While law of immediate reinforcement theory holds that the more immediate the delivery of a reward after the occurrence of a desirable behavior, the greater the reinforcing value of the reward.
  
- c) (i) Job description is defining the job in terms of its content and scope. This means finding information on duties responsibilities and all supervision and type of clients it will serve.  
(ii) Job analysis is the process of gathering information about a job in order to establish the major tasks, activities and duties pertaining to the job.

## **SOLUTION SIX**

(a) The differences between incremental and transformational change:

- Incremental change occurs at a slower pace, in bits over time. It happens without major reorganization or restructuring of the organization. Incremental change is usually not a serious problem for management in most organizations. Transformational change is change that occurs on a very large scale within a short period of time. The change is usually to a great extent with noticeable big changes.
- Transformational change requires a substantial reorganization or restructuring of the organization and its system. It usually leaves a very big effect on the people and exceptional management skills are required to implement the changes successfully.

(b) (i) Four (4) triggers for internal change are:

- Acquisition – when an organization takes over another organization and management tries to merge their systems and operations.
- Change in senior management – change in management may mean that the new managers may have their own ideas about strategy and may introduce big changes affecting the operations and systems within the organisation.
- Reorganization or downsizing. - Management may decide on the need to close down a loss making organization or re-locate its operations to a different part of the country.
- A general sense that an organization can perform better, hence need for change.
- Concerns about ineffective communication or poor performance indicators.
- A sense that skills and abilities are underutilized or concerns about a lack of commitment from employees.

- b) ii Four (4) triggers for external change are:
- mostly external change is triggered by PESTAL
  - Political
  - Economic
  - Social and cultural
  - Technological
  - Ecological
  - Legal

**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 12 SEPTEMBER 2022

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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

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

### QUESTION ONE

On 1 January 2021, Orange, a public listed company, acquired 75% equity shares in Banana Plc by an exchange of 2 shares in Orange for every 4 shares in Banana Plc plus K2.50 per acquired Banana share in cash. The market price of each of Orange's and Banana's shares at the date of acquisition was K12.00 and K6.50 respectively. On the same date, Orange acquired 30% of the equity shares of Mango Plc at a cost of K15.00 per share in cash. Only the cash consideration of the above Investments has been recorded by Orange.

The summarized draft statements of Financial Position of the three (3) companies as at 31 December 2021 are as follows:-

	Orange K	Banana K	Mango K
<b>Non-current assets</b>			
Property, Plant and Equipment	441,600	249,600	432,000
Investment in Banana and Mango	306,000	-	-
Other Investments	156,000	-	-
<b>Total non-current assets</b>	<b>903,600</b>	<b>249,600</b>	<b>432,000</b>
<b>Current assets</b>			
Inventory	165,600	148,800	86,400
Trade Receivables	76,800	36,000	57,600
<b>Total current assets</b>	<b>242,400</b>	<b>184,800</b>	<b>144,000</b>
<b>Total Assets</b>	<b>1,146,000</b>	<b>434,400</b>	<b>576,000</b>
<b>EQUITY AND LIABILITIES</b>			
Ordinary shares of K2.00 each	240,000	96,000	96,000
Retained Earnings	594,000	213,600	384,000
<b>Total equity</b>	<b>834,000</b>	<b>309,600</b>	<b>480,000</b>
<b>NON-CURRENT LIABILITIES</b>			
7% Loan notes	120,000	24,000	24,000
<b>Current Liabilities</b>	<b>192,000</b>	<b>100,800</b>	<b>72,000</b>
<b>Total Equity and Liabilities</b>	<b>1,146,000</b>	<b>434,400</b>	<b>576,000</b>

#### Additional information:

1. At the date of acquisition, Banana's Plant had a fair value of K80,000 in excess of its carrying amount and had a remaining life of five (5) years (straight line depreciation is used). All other tangible non-current assets had a fair value equal to their carrying value.
2. Additionally, Banana had an internally generated brand name on the date Orange acquired control over it. The Directors of Orange estimated the fair value of this brand name to be K24,000 with indefinite life and that it had not suffered any impairment.



3. The retained earnings of Banana and Mango at 1 January 2021 as reported in their separate financial statements were K144,000 and K264,000 respectively.
4. During the year ended 31 December 2021, Banana sold goods to Orange for K64,800. Banana had marked-up these goods by 50% on cost. Orange had one-third of the goods still in its Inventory at 31 December, 2021.
5. On 1 January 2021, Orange sold an item of Plant to Banana at an agreed fair value of K60,000. Its carrying amount prior to the sale was K48,000. The estimated remaining life of the plant at the date of sale was five years (straight line depreciation is used).
6. No dividends were paid during the year by any of the companies.
7. Orange owed Banana K17,000 at 31 December 2021 for some of the goods Banana supplied during the year.
8. The other investments are financial assets classified as FVTPL and are included in Orange's statement of financial position above at their fair value on 1 January 2021. They had a fair value of K216,000 at 31 December 2021.
9. Orange has a policy of valuing Non-controlling interest at fair value at the date of acquisition. For this purpose, the share price of Banana at the date of acquisition should be used.

**Required:**

Prepare the consolidated statement of Financial Position for Orange as at 31 December 2021. **[Total: 25 Marks]**

**QUESTION TWO**

Mwalula Ltd is a manufacturing company located in the Northern region of Zambia. The trial balance of Mwalula Ltd as at 31 March 2022 is as follows:

	<b>K'000</b>	<b>K'000</b>
Revenue (Note i)		164,000
Production costs	90,000	
Distribution costs	8,000	
Administrative expenses	26,000	
Inventory at 31 March 2021	19,710	
Interest paid on interest-bearing borrowings	3,000	
Income tax (Note iii)		100
Dividends paid on equity shares	5,000	
Property, Plant and Equipment (PPE) (Note iv)	77,000	
Provision for depreciation on PPE at 31 March 2021		22,610
Trade receivables	53,000	
Cash and cash equivalents	33,000	
Trade payables		12,000

Long term interest-bearing borrowings		50,000
Lease rentals (Note v)	20,000	
Deferred tax (Note iii)		7,000
Share capital		50,000
Retained earnings at 31 March 2021		<u>29,000</u>
	<b><u>334,710</u></b>	<b><u>334,710</u></b>

**Additional information:**

(i) On 1 April 2021, Mwalula Ltd sold goods to a customer for a price of K12.1 million. The terms of the sale allowed the customer extended credit, and the price was payable by the customer in cash on 31 March 2023. Mwalula Ltd included the K12.1 million in revenue for the current year and the corresponding entry in trade receivables. A discount rate that is appropriate for the risks in this transaction is 10%.

(ii) The carrying value of inventory at 31 March 2022 was K25 million.

(iii) The estimated income tax on the profits for the year to 31 March 2022 is K1.5 million. During the year, K1.3 million was paid in full as the final settlement of income tax on the profits for the year ended 31 March 2021. The statement of financial position as at 31 March 2021 had included K1.4 million in respect of this liability. As at 31 March 2022, the carrying amounts of the net assets of Mwalula Ltd exceeded their tax base by K28 million. This information is before taking account of the Property revaluation (see Note iv below). The rate of income tax is 30%.

(iv) The details of property, plant and equipment are as follows:

	Cost	Accumulated depreciation at 31 March 2021	Carrying Amount at 31 March 2021
<b>Component of PPE</b>	<b>K'000</b>	<b>K'000</b>	<b>K'000</b>
Land	22,000	Nil	22,000
Buildings	28,000	5,600	22,400
Plant and Equipment	<u>27,000</u>	<u>17,010</u>	<u>9,990</u>
	<b><u>77,000</u></b>	<b><u>22,610</u></b>	<b><u>54,390</u></b>

Estimate of useful economic life, at the date of purchase, of PPE components:

Land	– nil (infinite life)
Building	– 50 years
Plant and Equipment	– 4 years

On 1 April 2021, the property's open market value was K60 million, including K32 million relating to the building. The Directors wish to reflect this revaluation in the financial statements, but no entries regarding the revaluation have been made. The Directors do not want to make an annual transfer of excess depreciation to retained earnings. The original estimate of the useful economic life of the building is still considered valid. No assets were fully depreciated at 31 March 2022. All the depreciation is to be charged to the cost of sales.

(v) On 1 April 2021, Mwalula Ltd leased a large group of machines used in the production process. The lease was for 4 years, and the annual rental (payable in advance) was K20 million. The lessee has not elected to apply the recognition

exemption under IFRS 16 leases. The interest rate implicit in the lease can be taken as 9% per year.

**Required:**

Prepare Mwalula Ltd's,

(a) Statement of Profit or Loss and Other Comprehensive Income for year ended 31 March 2022. (10 marks)

(b) Statement of Financial Position as at 31 March 2022. (15 marks)

**[Total: 25 Marks]**

## SECTION B

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

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

### QUESTION THREE

1. Marcopolo Tiles (Pvt) Ltd imports tile grout and mortars, and sells them through its countrywide distribution channels which comprise own showrooms, distributorship, dealership and commission agents. The company has prepared its financial statements for the year ended 31 March 2021 and the following amounts have been extracted from the financial statements.

	<b>Marcopolo Tiles</b>		<b>Industry average</b>
	2020/21 <b>K'million</b>	2019/20 <b>K'million</b>	2020/21 <b>K'million</b>
Average trade receivables	82	76	235
Average trade payables	95	63	345
Average inventory	125	148	450
Revenue	1,410	1,260	2,530
Cost of sales	630	580	1,390

#### **Required:**

- (a) Calculate four (4) key ratios from the information provided for Marcopolo Tiles (Pvt) Ltd for both years and the industry average. (8 marks)
- (b) Discuss two (2) possible explanations for the movements in each ratio calculated in part (a) above. (6 marks)
2. The advent of general-purpose global accounting standards in the world has without doubt helped to bridge the divide between international and local accounting standards in the private and the public sector. Accounting boards such as the international accounting standards boards (IASB) and the financial accounting standards board (FASB) of the USA believe that uniform accounting practice may not be realised in the absence of agreed and well implemented global accounting standards. From time to time, accounting boards spend significant resources to initiate and complete an international financial reporting standard which will still require authoritative guidelines to successfully implement.

#### **Required:**

- (a) Explain two (2) differences between a rule-based and principle-based accounting standards (5 marks)
- (b) Distinguish between functional currency and presentation currency and explain, using examples how foreign currency transactions are translated at the reporting date in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates*. (6 marks)

**[Total: 25 Marks]**

#### **QUESTION FOUR**

Kanshi Plc. is a firm specialising in Steel manufacturing. You are the Financial Controller and you have been provided with the financial statements for the year ended 31 December 2021, together with a comparative statement of financial position below.

<b>Statements of financial position at:</b>	<b>31 December 2021</b>	<b>31 December 2020</b>
<b>Assets</b>		
<b>Non-current assets</b>		
Property, plant and equipment	128,000	94,000
Intangibles: Software	13,500	-
Investments at fair value through profit and loss	<u>15,000</u>	<u>12,500</u>
	<u>156,500</u>	<u>106,500</u>
<b>Current assets</b>		
Inventory	48,000	51,000
Trade receivables	35,000	43,500
Bank	-	<u>3,500</u>
	<u>83,000</u>	<u>98,000</u>
Total assets	<u>239,500</u>	<u>204,500</u>
<b>Equity and liabilities</b>		
Equity shares of K0.25 each	50,000	30,000
Share premium	15,000	8,500
Revaluation reserve	6,000	2,500
Retained earnings	<u>95,000</u>	<u>96,500</u>
	<u>166,000</u>	<u>137,500</u>
<b>Non-current liabilities</b>		
9% loan note	12,000	-
Environmental provision	16,200	-
Deferred tax	<u>1,800</u>	<u>2,500</u>
	<u>30,000</u>	<u>2,500</u>
<b>Current liabilities</b>		
Trade payables	35,000	55,500
Bank overdraft	2,500	4,000
Current tax payable	<u>6,000</u>	<u>5,000</u>
	<u>43,500</u>	<u>64,500</u>
Total equity and liabilities	<u>239,500</u>	<u>204,500</u>

#### **Statement of profit or loss for the year ended 31 December 2021 extracts**

	K' 000
Profit for the year	8,500
Income tax expense	5,700
Finance costs	4,000
Investment income and gain on investments	2,000

**Relevant information:**

- (i) Depreciation of property, plant and equipment for the year was K25,500,000 and there were no disposals of property, plant and equipment during the year.
- (ii) Property, plant and equipment were revalued by K3,500,000 during the year.
- (iii) The environmental provision includes the unwinding cost of K1,200,000 included in finance cost and the present value of restoration cost included in property, plant and equipment. The future cost has been estimated and discounted at a rate of 8%.By law restoration of the site will be done in 5 years' time.
- (iv) The software was acquired on 1 March 2021 for K18,000,000.
- (v) The market valuation report confirmed that the investments value had increased during the year by K1,500,000. There have been no sales of these investments during the year.
- (vi) On 1 July 2021 there was a bonus issue of equity shares of 2 for every 8 held using the share premium reserve. A further cash share issue was made on 1 October 2021. There was no redemption of shares during the year.
- (vii) Dividends were paid to equity shareholders on 30 November 2021.

**Required:**

- (a) Prepare a statement of cash flows for Kanshi for the year to 31 December 2021 in accordance with IAS 7 *Statements of cash flows*. (19 marks)
- (b) Comment why 'Management', 'Shareholders' and 'Potential Investors' may still need information about the ratios listed below in addition to the statement of cash flows.
  - (i) Return on capital employed (1½ marks)
  - (ii) Debt/debt + equity ratio (1½ marks)
  - (iii) Earnings per share (1½ marks)
  - (iv) Dividends per share (1½ marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

The purpose of financial reporting is to provide useful information to a wide range of users for them to make economic decisions. For the public sector, the users include parliament, permanent secretaries and cooperating partners. Typical financial information produced in the public sector includes the annual budget, the annual financial report and the Auditor General's report.

The department of special education in the Ministry of Education has produced the following statistics as compared to targets for the Sustainable Development Goals (SDGs) charter.

**Department:** Education

**Activity:** Training of the blind

**Period:** Five (5) years to December 2021

**Objective:** To provide functional training to blind citizens to enable them find appropriate long-term employment.

<b>Indicators</b>	<b>December 2021</b>	<b>Target</b>
Number of students completing training	76%	80%
Number of students obtaining employment	88%	100%
Average time before obtaining employment	6 months	3 months
Satisfaction with training survey (employers)	90%	100%
Teaching costs as the percentage of the total	95%	95%

**Required:**

- (a) With relevant examples, identify and briefly explain the economic decision likely to be made by parliamentarians, permanent secretaries, and cooperating partners. Note: include the type of information useful to support such a decision. (9 marks)
- (b) Using the performance indicators provided, evaluate the performance of the department of special education over the five (5) year period as compared to the targets of the SDGs charter structured under the following headings:
- (i) Efficiency (5 marks)
  - (ii) Economy (5 marks)
  - (iii) Effectiveness (6 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 8 FINANCIAL REPORTING SUGGESTED SOLUTIONS

### SOLUTION ONE

#### Orange Group's

#### **Consolidated statement of Financial Position as at 31 December 2021**

	K	K
<b><u>Non-Current Assets</u></b>		
PPE (441,600+249,600+64,000-12,000+2,400)	745,600	
Brand Name	24,000	
Investment in Mango (216,000+36,000)	252,000	
Other Investments	216,000	
Goodwill (w3)	<u>40,000</u>	1,277,600
<b><u>Current assets</u></b>		
Inventory (165,600 – 7,200) + 148,800	307,200	
Trade Receivables (76,800+(36,000 – 17,000))	<u>95,800</u>	<u>403,000</u>
Total Assets		<u>1,680,600</u>
<b><u>Equity and liabilities</u></b>		
Equity-Ordinary shares of K2.00 each	276,000	
Share Premium (w8)	180,000	
Retained Earnings	<u>715,200</u>	1,171,200
NCI (w7)		89,600
<b><u>Non-current liabilities</u></b>		
7% Loan notes		144,000
Current Liabilities (192,000-17,000)+100,800		275,800
Total Equity and Liabilities		<u>1,680,600</u>



## WORKINGS

1.	Investment in Banana		K
	Share Exchange	$75\% \times 48,000 \times \frac{2}{4} \times K12 =$	216,000
	Cash Payments	$48,000 \times 75\% \times K2.5$	<u>90,000</u>
			<u>306,000</u>

2.	Investment in Mango		K
		$30\% \times 48,000 \text{ shares} \times K15.00$	216,000

3.	Goodwill calculation	K	K
	Consideration (w1)		306,000
	NCI $25\% \times 48,000 \times K6.50$		<u>78,000</u>
			384,000
	<b><u>Represented by.</u></b>		
	Equity shares	96,000	
	Retained Earnings	144,000	
	Non-current Asset fair value adjustment	80,000	
	Brand Name	<u>24,000</u>	<u>344,000</u>
	$\therefore$ Goodwill		<u>40,000</u>

4.	NCI at acquisition	K
	$25\% \times 48,000 \text{ shares} \times K6.50 =$	78,000

### 5. Retained Earnings calculations

	Orange K	Banana K	Mango K
Balances as per question	594,000	213,600	384,000
less Pre-acquisition Earnings	-	(144,000)	(264,000)
Fair value Depreciation (K80,000= 5yrs)	-	(16,000)	-
Unrealized Profit on Intra group PPE (60,000-48,000)	(12,000)		
Excess Depreciation on PPE (12,000=5yrs)	2,400		
Gain on other Investments (216,000-156,000)	60,000		
Unrealized Profit on Goods ( $\frac{50}{150} \times \frac{1}{3} \times 64,800$ )	34,800	(7,200)	
	<u>36,000</u>	46,400	<u>120,000</u>
Banana's share (75% x 46,400)	<u>715,200</u>		
Mango's share (30% x 120,000)			

6.	Fair value adjustment	
	Brand Name	K24,000 – No impairment occurred
	Plant	K80,000 – 16,000 = K64,000

7.	NCI at reporting date.		K
	At acquisition	$25\% \times 48,000 \text{ shares} \times K6.5$	78,000
	Post acquisition Earnings	$25\% \times 46,400$	<u>11,600</u>
			<u>K89,600</u>

8.	Share Exchange proceeds		
	To Equity	$75\% \times 24,000 \text{ shares} \times K2$	36,000
	To share premium	$75\% \times 24,000 \text{ shares} \times K10$	180,000

## **SOLUTION TWO**

(a) Mwalula Limited

Statement of Profit or Loss and Other Comprehensive Income For the year ended 31 March 2022

	<b>K'000</b>
Revenue (W1)	161,900
Cost of sales (W2)	<u>(109,917)</u>
Gross profit	51,983
Distribution costs	(8,000)
Administrative expenses	(26,000)
Other income (W1)	1,000
Finance cost (W5)	<u>(7,556)</u>
Profit before tax	11,427
Income tax expense (W6)	<u>(2,800)</u>
Net profit for the period	8,627
Other comprehensive income (W7)	<u>10,920</u>
Total comprehensive income	<u>19,547</u>

(b) Mwalula Limited

Statement of financial position as at 31 March 2020

	K'000	K'000
<b>Assets</b>		
Non-current assets:		
Property, plant and equipment (W8)		115,409
Current assets:		
Inventories	25,000	
Trade receivables (W9)	51,900	
Cash and cash equivalents	<u>33,000</u>	<u>109,900</u>
		<b><u>225,309</u></b>
<b>Equity and Liabilities</b>		
Capital and reserves:		
Share capital		50,000
Revaluation reserve (W7)		10,920
Retained earnings (W10)		<u>32,627</u>
		93,547
Non-current liabilities:		
8% Loan note	50,000	
Deferred tax (W11)	13,080	
Lease liabilities (W4)	<u>35,182</u>	
		98,262

Current liabilities:

Trade and other payables (W12)	13,500	
Lease liabilities (W4)	<u>20,000</u>	<u>33,500</u>
		<b><u>225,309</u></b>

**Workings (W)**

1. Revenue

As per Trial Balance	164,000	
Reversal of deferred revenue	(12,100)	
Inclusion at present value at date of sale	<u>10,000</u>	161,900

IFRS 15 requires revenue to be measured at the fair value of goods or services provided. This is usually invoice price, discounted to present value where material. In the current period Mwalula Ltd will show finance income of K1,000,000 (K10,000,000 x 10%) and the closing receivable will be K11,000,000 not K12,100,000 – an adjustment of K1,100,000.

2. Cost of sales

Opening inventory	19,710	
Production costs per Trial Balance	90,000	
Closing inventory	(25,000)	
Depreciation (W3)	<u>25,207</u>	109,917

3. Depreciation of non-current assets

Buildings (32,000/40yrs) (see below)	800	
Purchased plant and equipment – (27,000/4yrs)	6,750	
Right-of-use asset (70,626/4) (W4)	<u>17,657</u>	
Total depreciation for the period		<u>25,207</u>

Note: The previous annual depreciation charge on the building was 560(28,000/50) so the property was 10 years old at the date of the revaluation

4. Lease liability

Year Rentals	DCF @	9%	PV
2021	20,000	0.9174	18,348
2022	20,000	0.8417	16,834
2023	20,000	0.7722	15,444
			50,626

The borrowing is treated as shown below – with an effective finance cost of 9% per annum:

Year	Opening balance	Cash paid	Balance in the period	Finance cost @9%	Closing balance
March					

	K'000	K'000	K'000	K'000	K'000
2020	50,626	0	50,626	4,556	55,182
2021	55,182	(20,000)	35,182	3,166	38,347

The K55.182m will be split into K20m (current liability) and K35.182m (non-current liability).

Right-of-use asset

Lease liability	50,626
Rent paid at the inception	<u>20,000</u>
	70,626

This means that on initial recognition K70,626,000 is included in assets. This will be depreciated over the lease term of 4 years.

5.	Finance cost				
	Interest payable on long term borrowings (per trial bal.)			3,000	
	Relating to finance lease (W5)			<u>4,556</u>	
				7,556	
6.	Income tax				
	a. Income tax expense				
	Estimate on the profits of the current year	1,500			
	Overprovision in the previous year	(100)			
	Increase in deferred tax liability	6,080			
	Deferred tax on revaluation (15,600 x 30%)	<u>(4,680)</u>		2,800	
	b. Deferred tax				
	Balance at start	7,000			
	Balance at end (15,600 + 28,000) 30%	<u>13,080</u>			
	Increase in deferred tax liability			6,080	
7.	Property revaluation surplus				
	Gross surplus (10,000 (W9) + 5,600 (W9))	15,600			
	Related deferred tax (30%)	<u>(4,680)</u>			
	Net surplus			10,920	
8.			Plant and	Right-of-	
		Property	Equipment	use asset	Total
	Cost/revaluation				
	Balance as at 1 April 2019	50,000	27,000	0	77,000

Revaluation	10,000	0	0	10,000
Acquisition of leased asset	0	0	70,626	70,626
Balance as at 31 March 2020	<b>60,000</b>	<b>27,000</b>	<b>70,626</b>	<b>157,626</b>
Accumulated depreciation:				
Balance as at 1 April 2019	5,600	17,010	0	22,610
Revaluation adjustment	(5,600)	0	0	(5,600)
Charge to income statement for this year				
(W4)	800	6,750	17,657	25,207
Balance as at 31 March 2020	800	23,760	17,657	42,217
NBV 31 March 2020	59,200	3,240	52,969	115,409
9. Trade receivables				
As per Trial Balance		53,000		
Revenue adjustment (W1)		<u>(1,100)</u>	51,900	
10. Retained earnings				
Bal b/f		29,000		
Profit for the year		8,627		
Dividends		<u>(5,000)</u>	32,627	
11. Deferred tax				
As per Trial Balance		7,000		
Transfer for the period (W6)		1,400		
On property revaluation (W7)		<u>4,680</u>	13,080	
12. Trade and other payables				
Trade payables per Trial Balance		12,000		
Income tax estimate		<u>1,500</u>	13,500	

### **SOLUTION THREE**

1. (a)(i)

	<b>Marcopolo Ltd</b>		<b>Industry Ave</b>
	<b>2020/21</b>	<b>2019/20</b>	<b>2020/21</b>
1. Accounts receivable collection period	$82 \div 1,410 \times 365$ <b>21.23 days</b>	$76 \div 1,260 \times 365$ <b>22.02 days</b>	$235 \div 2,530 \times 365$ <b>33.90 days</b>
2. Inventory turnover period	$125 \div 630 \times 365$ <b>72.42 days</b>	$148 \div 580 \times 365$ <b>93.14 days</b>	$450 \div 1,390 \times 365$ <b>118.17 days</b>
3. Accounts payable payment period	$95 \div 630 \times 365$ <b>55.04 days</b>	$63 \div 580 \times 365$ <b>39.65 days</b>	$345 \div 1,390 \times 365$ <b>90.59 days</b>
4. Gross profit margin	$780 \div 1,410 \times 100$ <b>55.32%</b>	$680 \div 1,260 \times 100$ <b>53.97%</b>	$1,140 \div 2,530 \times 100$ <b>45.06%</b>
5. Accounts receivable turnover	$1,410 \div 82$ <b>17.20 times</b>	$1,260 \div 76$ <b>16.58 times</b>	$2,530 \div 235$ <b>10.77 times</b>
6. Inventory turnover	$630 \div 125$ <b>5.04 times</b>	$580 \div 148$ <b>3.92 times</b>	$1,390 \div 450$ <b>3.09 times</b>
7. Accounts payable turnover	$630 \div 95$ <b>6.63 times</b>	$580 \div 63$ <b>9.21 times</b>	$1,390 \div 345$ <b>4.03 times</b>

(a)(ii)

**i. Accounts receivable collection period**

Lower collection period may be due to the following;

- New credit customers that are less powerful than existing customers and so have been unable to negotiate such longer terms
- Customers may be taking advantage of available prompt payment discounts
- Marcopolo may be taking a more proactive approach to recovering amounts due from credit customers.

**ii. Inventory turnover period**

Lower turnover period may be due to the following;

- Increased revenue growth of 12% over the previous year
- Better prices may be negotiated when purchasing
- Many of the purchase orders may be backed with already booked customer orders

**iii. Accounts payable payment period**

Higher accounts payable payment period may be due to the following;

- Obtaining better credit terms from suppliers
- Poor supervision on credit settlement

- More focused on credit purchases

#### **iv. Gross Profit Margin**

Gross profit margin may be improved due to the following;

- More sales in high margin items
- Less seasonal and promotional discounts
- Implementing successful cost management initiatives

#### b)(i) Principle versus rules-based accounting standards

-A principle-based accounting standard can be applied in several circumstances as long as the the spirit of the standard is followed while a rules-based standard may only be applied to a specific area of accounting.

-A principle-based accounting standard allows room for the usage of judgment but a rule based accounting standard may only be applied according the letter

-A principle-based accounting standards tends to be flexible allowing an Accountant to comply or explain non- compliance whilst a rules-based accounting standard lives less room for alternative treatment

-Principle based accounting standards are thought to be harder to circumvent as they tend to promote the substance over form view while rules-based accounting standards could be manipulated to fit legal requirements only and not the user's informational needs.

#### (b)(ii) difference between functional and presentation currency

A functional currency is currency of primary economic environment. It is in essence the currency of the country from which a company operates. A company operating from Zambia will use the Kwacha as its functional currency.

A presentation currency is a currency used to present financial statement. The functional currency of the parent company is likely to be the presentation currency although this might not always be a given. A Zambian company who parent company is in South Africa may use the Rand as its presentation currency at the directive of the parent.

Generally, the prevailing exchange rate should be used to translate foreign currency denominated assets and obligations in the statement of financial position at the reporting date. In the statement of profit or loss translation is done at the average exchange rate.



## SOLUTION FOUR

(a) Kanshi statement cash flows for the year to 31 December 2021

	K' 000	K'
	000	
Cash flows from operating activities		
Profit before tax	14, 200	
Finance costs	4, 000	
Investment income	(2, 000)	
Depreciation	25, 500	
Amortisation w1	<u>4, 500</u>	
Cash flows before working capital changes	46, 200	
Decrease in inventory 51,000 – 48,000	3, 000	
Decrease in receivables 43,500 – 35,000	8, 500	
Increase in payables 55,500 – 35,000	<u>(20,500)</u>	
Cash generated from operations	37, 200	
Finance cost paid 4,000 – 1,200	(2, 800)	
Tax paid w3	<u>(5, 400)</u>	
Net cash from operating activities		29, 000
Cash flows from investing activities		
Cash paid to acquire:		
Property, plant and equipment w1	(41,000)	
Intangible trademark w1	(18,000)	
Investment property w1	(1, 000)	
Cash received from investment income 2,000 – 1,500	<u>500</u>	
Net cash (used) in investing activities		(59, 500)
Cash flows from financing activities		
Cash received from issue of shares w2	26, 500	
Increase in long term borrowings	12, 000	
Dividends paid w2	<u>(10,000)</u>	
Net cash financing activities		<u>28, 500</u>
Net decrease in cash and cash equivalents		(2, 000)
Cash and cash equivalents last year 3,500 – 4,000		<u>(500)</u>
Cash and cash equivalents current year		<u>(2, 500)</u>

(b)

(i) Return on Capital Employed ratio

This ratio measures the profitability of the entity by taking into account the capital employed to generate that profit. The higher the ratio, the better it is for the management, shareholders and potential investors because it means better performance.

(ii) Debt/debt + equity ratio

This ratio measures the risk of investing in the entity. Higher ratio means higher risk. Potential investors need to know the risk of investing in the entity before

investing. Management and shareholders need to know the debt level before further borrowing.

- (iii) Earnings per share ratio  
This ratio measures profit each share may earn. Higher Earnings per share is better for management, shareholders and potential investors because the entity may distribute high dividends or return more profits in business for growth/expansion.
- (iv) Divided per share ratio  
This ratio measures return shareholders may be expecting to receive as dividends. This is important because some investors may be interested in higher dividends rather than long-term organisation growth.

### Workings

**K' 000**

#### W1: Assets

Property, plant and equipment		Software	
O/Balance	94, 000	O/Balance	-
Revaluation surplus	3, 500	Amortisation	(4, 500)
Non-cash provision	15, 000	Cash paid	<u>18, 000</u>
Dep	(25, 500)	C/Balance	<u>13, 500</u>
Cash paid	<u>41, 000</u>		
C/Balance	<u>128, 000</u>		
Investment property	[2 marks]		
O/Balance	12, 500		
Gain on fair value	1, 500		
Cash paid	<u>1, 000</u>		
C/Balance	<u>15, 000</u>		

#### W2: Shares and dividends

	[2 marks]	
O/Balance Equity shares and premium	30,000 + 8,500	38, 500
Bonus issue	7,500 -7,500	-
Cash received		<u>26, 500</u>
C/balance	50,000 + 15,000	<u>65, 000</u>

Retained Earnings	[2 marks]
O/Balance	96, 500
Profit for the year	8, 500
Dividends paid	<u>(10,000)</u>
C/Balance	<u>95, 000</u>

#### W3: Tax

O/Balance	2,500 + 5,000	7, 500
P/L figure		5, 700
Cash paid		<u>(5,400)</u>
C/Balance	1,800 + 6,000	<u>7, 800</u>

## SOLUTION FIVE

### (a) Examples of type of economic decisions and type of information

Decision marker	Type of decision	Type of information
Parliamentarian	Allocation and funding to the Ministry of Education	Budget proposals from the Ministry of Education in relation to other budget proposals
Permanent Secretary	Income and expenses during the year	Financial report for the Ministry and department
Cooperating Partners	Continuity of funding	Project progress report
<b>Total</b>		

### (b) Evaluation of performance at the department of special education in the Ministry of Education

Target	Brief Description
<b>Efficiency</b>	Best ratio of output to cost because outputs and costs are measured in different units. This means either the best output for a given level of cost or the least cost for a given level of output. The performance indicators suggest that the department incurred 95% of its total cost as teaching cost and this is the same as per targets. However, it is expected that a 95% ratio should produce 80% students completing training and 100% obtaining employment. The actual performance over the five (5) year period is below expectation. This would seem to suggest that the department of special education has fallen short of the efficiency levels of the set targets.
<b>Economy</b>	Least cost for desired inputs. It refers to the terms and conditions under which an organization acquires human and material resources. An economic operation acquires resources of the appropriate quality. The relative cost of providing the training is the same compared with the targets. Although the relative outputs are less than cost, this is not necessarily an indication that the resources were not acquired economically.
<b>Effectiveness</b>	Effectiveness is about achieving objectives and it means providing the right training to enable the blind find employment. The performance indicators suggest that 88% of those receiving training have been able to obtain employment. This may indicate an element of failure on the part of the training program, especially that the satisfaction survey shows a less than 100% satisfaction rating. However, this failure may also be attributable to lack of employment and not lack of skills.
<b>Total</b>	

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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TUESDAY 13 SEPTEMBER 2022

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DA 9: MANAGEMENT ACCOUNTING

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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 COMPULSORY QUESTIONS

Attempt both questions in this section.

### QUESTION ONE

Lupinda Stores Limited (LSL) operates a series of supermarkets in eastern province of Zambia. Even though competition is stiff in the retail sector, the company has a substantial share of the market which it has developed over the years. The leading supermarkets owned by the company are situated in Chipata and Petauke towns respectively.

The following are the summarized statements of profit or loss and statements of position for the two supermarkets for the year ended 31 December 2021.

#### *Income statements*

	<b>Chipata K'000</b>	<b>Petauke K'000</b>
Sales revenue	<u>336,000</u>	<u>288,000</u>
Opening inventory	50,400	19,200
Purchases	257,600	220,800
Closing inventory	<u>67,200</u>	<u>28,800</u>
Cost of sales	<u>240,800</u>	<u>211,200</u>
Gross profit	95,200	76,800
Expenses	<u>30,800</u>	<u>25,200</u>
Net profit	<u>64,400</u>	<u>51,600</u>

#### *Statement of financial position*

	<b>K'000</b>	<b>K'000</b>
Non-current assets	364,000	264,000
<b>Current assets:</b>		
Inventory	67,200	28,800
Receivables	17,360	3,600
Bank	<u>2,520</u>	<u>15,360</u>
	<u>451,080</u>	<u>311,760</u>
Payables	19,880	21,360
Proprietor's capital	<u>431,200</u>	<u>290,400</u>
	<u>451,080</u>	<u>311,760</u>

The company holds its senior management meetings on a quarterly basis 14 days before the sitting of the finance and administrative committee of the Board of Directors. The extract for the forthcoming meetings include items such as the assessment of the company's profitability, liquidity, efficiency as well as a consideration of certain parameters that that will enhance financial decisions.

LSL's leading product lines in the butchery section include fish and meat. The selling price of fish is K7 per kg and it has a variable cost of K2.94 per Kg. Meat sells for K15 per kg and

has a variable cost of K4.40 per kg. The marketing department has estimated that, for every five (5) kgs of fish sold, one kg of Meat will be sold. The organization's fixed costs per period total K123,600.

As Management Accountant, you have been requested to prepare a paper for presentation to the finance and administration committee of the Board of Directors during the forthcoming quarterly meeting.

**Required:**

- (a) Calculate the following working capital ratios that will be used to compare the performance and efficiency of the two supermarkets over the first past year.
  - (i) Current ratio; (3 marks)
  - (ii) Liquidity (acid test) ratio; (3 marks)
  - (iii) Rate of inventory turnover; (3 marks)
  - (iv) Collection period for receivables (in days); (3 marks)
- (b) Calculate the breakeven point for LSL. (6 marks)
- (c) Explainsome advantages of using ratios in performance evaluation. (5 marks)
- (d) State the two (2) limitations of ratio analysis. (2 marks)

**[Total: 25 marks]**

**QUESTION TWO**

BS Limited manufactures a single standard product and operates a system of standard costing using a fixed budget. As the company's Assistant Cost Accountant, you are responsible for preparing the monthly operating statements. Details from the budget, the standard product costs and actual results for the month ended 31 May 2020 are given below:

**Budgeted and standard cost information**

- 1. Budgeted sales and production for the month: 10,000 units
- 2. Standard cost of each unit of product:

Direct material:

X: 10kgs at K10 per kg.

Y: 5kgs at K50 per kg.

Direct wages: 5 hours at K30 per hour.

- 3. Fixed production overhead is absorbed into production at a rate of 200% of direct wages.
- 4. Budgeted sales price has been estimated to give a profit of 20% of sales price.

**Actual results for the month ended 31 May 2020:**

Production 9,500 units  
Sales 9,500 units sold at a price of 10% higher than budgeted

Direct materials:

X: 96,000 kg at K12 per Kg.

Y: 48,000kgs at K47 per kg.

Direct wages: 46,000 hours at K32 per hour.

Fixed production overhead incurred: K2,900,000.

**Required:**

- (a) Prepare the operating statement for the month of May, 2020 showing:
- (i) Budgeted profit (2 marks)
  - (ii) Variances for direct materials, direct wages, fixed overheads and sales. (8 marks)
  - (iii) Actual profit (2 marks)
- (b) Explain the causes of each variance calculate in (a) above. (13 marks)

**[Total: 25 marks]**

## SECTION B

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

Attempt any **TWO** questions in this section.

### QUESTION THREE

Home Tutorial College (HTC) teaches wholly through distance learning method. This is done by production of self-study packs which enable students to prepare for professional examinations.

During the year ended 30 September 2020, each study pack was sold at the price of K1,500 and a total of 100,000 units were produced and sold. The production costs of the various study packs offered by the college are the same.

The variable cost of a study pack during the year ending 30 September 2020 has been as follows:

	K
Direct materials	500
Direct labour	600
Other direct costs	60
Variable overheads	40
<hr/>	
Total variable costs	1,200

The fixed costs for HTC during the year have been K20 million.

During the coming year, the costs of the organization are expected to increase by the following:

	Percentage increase
	%
Direct materials	20
Direct labour	16.67
Other direct costs	67
Variable overheads	25
Fixed overheads	5

Market research has shown that when the college increases the price of its study packs to its students, as long as the additional cost price is kept below 17.5%, this is unlikely to have an effect on the number of units sold. However, for every 1% that the price is raised above 17.5%, the number of units sold can be expected to fall by 2%.



**Required:**

- (a) Calculate the selling price of the study packs if the number of study packs sold and the annual profit are to remain at the same levels. (10 marks)
- (b) Calculate the number of units that the college would have to sell if it did not change the price charged for the study packs but maintained the profit levels attained in the year ending 30 September 2020. (5 marks)
- (c) Calculate the total revenue if the price is changed and the number of units reduced. (5 marks)
- (d) Explain five (5) pricing strategies that can be used by HTC. (5 marks)

**[Total:25Marks]**

**QUESTION FOUR**

Lufwanyama Lights Limited (LLL) is a light engineering company which specializes in the manufacture of padlocks. The company has received an enquiry from a building firm which intends to make a purchase of 500 high-security padlocks of type HSP 404. The following information is available.

*Purchase price*

LLL normally sells each HSP 404 for K300 but because of the size of the order, is considering offering a discount of K40 per unit.

*Materials*

Most of the materials required to complete the order are already in stock. These were bought last month for K12,000 and, if not used on this order, have no immediate foreseeable alternative use. Additional materials costing K22,000 would need to be purchased if the order is accepted.

*Labour*

Accepting the order will require 200 hours of skilled and 50 hours of semi-skilled labour. LLL's skilled workers are not particularly busy at the moment and there are sufficient idle skilled hours to cover the orders' requirements. A casual semi-skilled worker would, however, need to be employed for work on the order. Hourly rates of pay are:

Skilled	K15.50
Semi-skilled	K13.50

### *Supervision*

If the order is accepted, no additional supervision costs are anticipated. However, the Production Manager has already spent 20 hours' overtime estimating production requirements for the order at a cost to LLL of K3,000

### *Plant and equipment*

A special machine will need to be hired for two (2) months at a cost of K5,000 per month if the order is accepted. All other plant and equipment is already owned by LLL and there is sufficient spare capacity to produce the order. The original cost of LLL's plant and equipment was K600,000 and depreciation of K20,000 relates to the two (2) months during which the order will be in progress.

### *Overhead*

Fixed overhead (excluding supervision and depreciation) is absorbed at a rate of K20 per labour hour and variable overhead is K14 per labour hour.

### **Required:**

- (a) Determine the net relevant cost or net relevant benefit of a decision to accept the order and on that basis advise the company, stating clearly how each item is treated; (16 marks)
- (b) State three (3) qualitative factors which LLL's management should consider before arriving at the final decision; (3 marks)
- (c) Explain the difference between qualitative and quantitative information in decision making. (2 marks)
- (d) State four (4) factors that must be considered in determining the price of the product or service. (4 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

Musonda Manufacturers Limited (MML) makes two (2) products, A and B. For the financial year ended 30 June 2021, the following information was assembled for preparation of the budget:

Standard data per unit

Direct materials	Standard price per Kg	Product A	Product B
	K	Kg	Kg
M1	10	10	4
M2	20	4	6

Direct Labour	Standard rate per Hour	Product A	Product B
		Hours	Hours
L1	30	8	10
L2	20	12	5

**The following additional information was available:**

1. Fixed production overhead costs were recovered on a direct labour basis.
2. Administration, selling and distribution costs were absorbed at the rate of 20% of production cost.
3. Profit was estimated at the rate of 25% of cost of making and selling the products.
4. Expected sales for the year

	Product A	Product B
Revenue	K13,494,000	K18,816,000
Units	13,000	21,479

5. Finished goods inventory valued at standard production cost was as follows:

	Product A (K'000)	Product B (K'000)
1 July 2020	1,730	1,176
30 June 2021	1,038	1,568

6. Direct materials inventory valued at standard prices was as follows:

	Material M1 (K'000)	Material M2 (K'000)
1 July 2020	640	600
30 June 2021	360	800

7. For the year ended 30 June 2020, fixed overheads had been budgeted at K5,760 and direct labour hours budgeted at 3,600 hours.
8. It is management's expectations that there will be no opening or closing work-in progress.

**Required:**

- (a) Prepare the following functional budgets:
- (i) Production budget in units (5 marks)
  - (ii) Direct Material usage budget in Units (5 marks)
  - (iii) Purchases budget in units and cost (5 marks)
  - (iv) Direct labour cost budget (4 marks)
- (b) Explain the technique of target costing. (2 marks)
- (c) Distinguish between target costing and standard costing. (4 marks)

**[Total:25Marks]**

**END OF PAPER**

## DA 9 MANAGEMENT ACCOUNTING SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) Calculation of working capital ratios

(i) Current ratio = Current Assets/Current Liabilities

	<b>Chipata</b>	<b>Petauke</b>
Current Ratio	= 87,080/19,880	= 47,760/21360
	= <b>4.4</b>	= <b>2.2</b>

(ii) Liquidity (acid test) ratio =  $\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$

	<b>Chipata</b>	<b>Petauke</b>
Liquidity (Acid test) ratio	= $\frac{87,080 - 67,200}{19,880}$	= $\frac{47,760 - 28,800}{21,360}$
	= <b>1</b>	= <b>0.89</b>

(iii) Rate of inventory turnover = Inventory/Cost of sales

	<b>Chipata</b>	<b>Petauke</b>
	= 67,200/240,800	= 28,800/211,200
	= <b>0.28</b>	= <b>0.14</b>

(iv) Collection period for receivables (in days) =  $\frac{\text{Trade Receivables} \times 365 \text{ days}}{\text{Sales Revenue}}$

	<b>Chipata</b>	<b>Petauke</b>
Inventory turnover	= $\frac{17,360}{336,000} \times 365 \text{ days}$	= $\frac{3,600}{288,000} \times 365 \text{ days}$
	= <b>19 days</b>	= <b>5 days</b>

(b) Calculation of the breakeven point for Lupinda stores Limited.

*Step 1: Calculate the contribution per kilo*

	<b>Fish</b>	<b>Meat</b>
	<b>K per kilo</b>	<b>K per Kilo</b>
Sales price	7.00	5.00
Variable cost	<u>(2.94)</u>	<u>(4.40)</u>
Contribution	<u>4.06</u>	<u>10.60</u>

*Step 2 Calculate the weighted average contribution per kilo.*

$$\frac{(5 \text{ kilos} \times K4.06 + 1 \text{ kilo} \times K10.60)}{6}$$

= **K5.15 per kilo**

*Step 3 Calculate the breakeven point in kilos*

Fixed costs/Weighted average contribution per kilo

$$= K123,600 / K5.15 = 24,000 \text{ Kilos.}$$

***Products***

Fish (24,000 x 5/6) = 20,000 kilos

Milk (24,000 x 1/6) = 4,000 kilos

Total **24,000** kilos

*Step 4: Calculate the breakeven point in sales revenue*

$$\begin{aligned} & (20,000 \text{ Kilos of Fish at K7} + 4,000 \text{ kilos of Meat at K15}) \\ & = K140,000 + K60,000 \\ & = \mathbf{K200,000} \end{aligned}$$

(c) These are the advantages of using ratios in performance evaluation:

- Financial position analysis.  
Ratios reveal the financial position of the business. This helps the banks, insurance companies and other financial institutions in leading and making investment decisions.
- Useful in simplifying accounting figures.  
Ratios simplify, summarise and systematise the accounting figures accounting figures in order to make more understandable and in lucid form. They highlight the inter-relationship which exists between various segments of the business as expressed by accounting statements. Often the figures standing alone cannot help them convey any meaning and ratios help them to relate with other figures.
- Useful in assessing the operational efficiency  
Accounting ratios helps to have an idea of the working of a concern. The efficiency of the firm becomes evident when analysis is based on accounting ratio. They diagnose the financial health by evaluating liquidity, solvency, profitability etc. This helps the management to assess financial requirements and the capabilities of various business units.

- Useful in forecasting purposes  
If ratios are calculated for a number of years, then a trend is established. This trend helps in setting up future plans and forecasting. For example, expenses as a percentage of sales can be easily forecasted on the basis of sales and expenses of the past years.
- Useful in comparison of performance.  
Through ratios comparison can be made between one departments of a firm with another firm in order to evaluate the performance of various departments in the firm.

(d) The limitations of ratio analysis in undertaking the evaluation of company's performance include:-

- All the information used in ratio analysis is derived from actual historical results
- If the rate of inflation has changed in any of the periods under review, this could mean that the numbers are not comparable across periods.
- Different companies may have different policies for recording the same accounting periods.
- Ratios related to the statement of financial position are for the particular point in time. What happens prior to and afterwards may not be considered for interpretation.

## SOLUTION TWO

a) Operating statement for the month of May, 2020.

			K'000
(i) Budgeted profit	(10,000 x K200)		2,000
(ii) Sales profit volume variance			100(A)
Standard profit of actual sales volume			1,900
Sales price variance			950(F)
			<u>2,850</u>
Cost Variances	K'000	K'000	
	(F)	(A)	
Material price:			
X		192	
Y	144		
Material Usage:			
X		10	
Y		25	
Labour rate		92	
Labour efficiency	45		
Fixed OH Expenditure	100		
Fixed OH Volume		150	
	<u>289</u>	<u>469</u>	180(A)
(iii) Actual profit			<u>2,670</u>

### Workings:

i) Calculation of standard product costs and selling price

	K
Direct Materials	
X=10kg@K10	100
Y =5Kg@ K50	250
Direct wages(5hrs@K30)	150
Fixed overhead(5hrs @200%of K30)	<u>300</u>
Standard costs	800
	<u>200</u>
Selling price	<u>1,000</u>

### ii) Variances for direct materials:

Material price variance= (Standard price – Actual price) x Actual quantity

$$X = (K10 - K12) \times 96,000 = K192,000(A)$$

$$Y = (50 - 47) \times 48,000 = K144,000 (F)$$

Material usage variance = (standard quantity – actual quantity) x Standard price

$$X = (9,500 \times 10 - 96,000) \times 10 = K10,000 (A)$$



$$Y = (9,500 \times 5 - 48,000) \times 50 = \text{K}25,000 \text{ (A)}$$

**Variances for direct wages:**

$$\begin{aligned} \text{Labour rate variance} &= (\text{Standard rate} - \text{actual hours}) \times \text{standard rate} \\ &= (9,500 \times 5 - 46,000) \times 30 \\ &= 45,000 \text{ (F)} \end{aligned}$$

$$\begin{aligned} \text{Labour efficiency variance} &= (\text{Standard hours} - \text{actual hours}) \times \text{standard rate} \\ &= (30 - 32 - 46,000) = \text{K}92,000 \text{ (A)} \end{aligned}$$

**Overhead variances:**

$$\begin{aligned} \text{Fixed overhead expenditure variances} &= \text{budgeted F.O} - \text{Actual F.O} \\ &= 10,000 \times 30 \times 5 \times 200\% - 2,900,000 \\ &= \text{K}100,000 \text{ (F)} \end{aligned}$$

$$\begin{aligned} \text{Volume efficiency variance} &= (\text{Standard hours} - \text{actual hours}) \times \text{fixed overhead rate} \\ &= (47,500 - 46,000) \times 60 \\ &= \text{K}90,000 \text{ (F)} \end{aligned}$$

$$\begin{aligned} \text{Volume capacity variance} &= (\text{Actual hours} - \text{budgeted hours}) \times \text{fixed overhead rate} \\ &= (46,000 - 50,000) \times 60 \\ &= \text{K}240,000 \text{ (A)} \end{aligned}$$

**Sales variances:**

$$\begin{aligned} \text{Sales Price variance} &= (\text{Budgeted price} - \text{Actual price}) \times \text{actual sales volume} \\ &= \text{K}(1,000 - 1,100)9,500 \\ &= \text{K}950,000 \text{ (F)} \end{aligned}$$

$$\begin{aligned} \text{Sales profit volume variance} &= (\text{Actual Sales volume} - \text{Budget Sales volume}) \times \text{Standard profit} \\ &= \text{K}(9,500 - 10,000) \times 200 = \text{K}100,000 \text{ (A)} \end{aligned}$$

iii)

Actual profit for the period		10,450,000
Sales (9,500 units @ K1,100)		
Direct materials:		
	X	
1,152,000		
	Y	
2,256,000		
Direct wages (46,000 x 32)	1,472,000	
Fixed overhead	<u>2,900,000</u>	<u>7,780,000</u>
Actual profit		<u><b>2,670,000</b></u>

b). **Causes of variances:**

- Change in market price
- Loss of previously available purchase discounts
- Use of substitute material of different prices
- Use of poor quality material
- Abnormal wastage
- Wrong mixture of materials
- Change in the basic rate
- Paying overtime for urgent work
- Inadequate training to employees

A variance should be investigated if it is material.

- Controllability  
Only controllable variances should be investigated
- Interdependence between variances  
Where there is an interrelationship between variances, the reason is already known and therefore, there is no need to investigate the variance
- Type of performance standards  
For example, an ideal performance standard will always lead to adverse cost variances. Thus, the reason is already known.
- Trend of a variance
- A worsening variance trend should be investigated even though individual variances are immaterial.
- Cost/benefit  
Only investigate a variance if the benefit of investigating a variance is greater than the cost of investigating and taking control action.

### **SOLUTION THREE**

a) Selling price

Total profit = contribution – fixed costs

Contribution per pack = K1,500 – 1,200 = K300

Total contribution = K300 x 100,000 units (packs) = K30,000,000

Fixed costs = K20,000,000

Profit = K30,000,000 – K20,000,000 = K10,000,000

New variable cost per pack:

		K
Material	500 x 1.20	600
Labour	600 x 1.1667	700
Other direct costs	60 x 1.67	100
Variable overheads	40 x 1.25	50
<b>Total</b>		<b>1,450</b>

New fixed costs = K20,000,000 x 1.05 = K21,000,000

New contribution required = Profit + Fixed cost

New contribution required = K10,000,000 + K21,000,000

New contribution required = K31,000,000

Contribution per unit (pack) =  $\frac{K31,000,000}{100,000\text{units}}$  = K310

Therefore selling price = variable cost + contribution per unit (pack)

Selling price = K1,450 + K310 = K1,760

An increase of K260 on the previous price of K1,500 or 17.33% which is below 17.5%.

b) Number of units to be sold

Units = (Target profit + Fixed costs) / contribution per unit

Contribution per unit = K1,500 – K1,450 = K50

Units = (K10,000,000 + K21,000,000) / K50

Units = 620,000 units

c) Total revenue

Total revenue = selling price x number of units sold

Selling price = K1,500 X 1.175 = K1,762.50

Total revenue = K1,762.50 X 100,000 units = K176,250,000.

But if price charged is a 18.5% on K1,500 = K1,777.50 the units sold drop by 2% from 100,000 to 98,000 units.

Total revenue = 98,000 units x K1,777.50 = K174,195,000.00

d) Five pricing strategies

(i) Market skimming

Market skimming involves charging high prices when a product is first launched in order to maximise short term profitability. Initially high prices may be charged to take advantage of the novelty appeal of a new product when demand is initially inelastic.

Once the market becomes saturated the price can be reduced to attract that part of the market that has not been exploited.

(ii) Penetration pricing

Penetration pricing is the charging of low prices when a new product is initially launched in order to gain rapid acceptance of the product.

Once market share is achieved, prices are increased.

It is an alternative to market skimming when launching a new product.

(iii) Product line pricing

A product line is a range of products that are related to one another. All Products/ services within the product line are related but may vary in terms of style, quality, price etc.

Product line pricing works by:

- capitalising on consumer interest in a number of products/ services within a range.
- making the price entry point for the basic product/ service relatively cheap.
- pricing other items in the range more highly – in order to 'complete the set' the consumer has to pay substantially more for the additional matching items.

(iv) Volume Discount

Volume discounting means offering customers a lower price per unit if they purchase a particular quantity of a product/service. In the case of HTC, volume discount could apply if customers (students) purchased more than a single study pack.

(v) Price discrimination

A price discrimination strategy is where a company sells the same product at different prices in different markets. HTC could offer relatively lower prices to students whose country's economy is under performing.

## **SOLUTION FOUR**

(a) The net relevant cost/ benefit of accepting the special order

	K	K
Relevant benefit:		
Payment by building firm (500@K300)		150,000
Relevant costs:		
Purchase of additional materials	22,000	
Casual semi-skilled labour (50hrs x K13.50)	675	
Hire of plant (2 months x K5, 000)	10,000	
Variable overhead (250 hours x K14)	<u>3,500</u>	
		<u>36,175</u>
Net relevant benefit		<b><u>113,825</u></b>

. ∴ Special order would be accepted on financial grounds alone.

### **Notes**

1. Sales revenue is relevant because it is future incremental cash flow.
2. Purchase of cost of materials in inventory is not relevant because it is a sunk cost.
3. Purchase of additional materials is relevant because it is a future incremental cash flow.
4. Cost of 200 hours of skilled labour is irrelevant because it not an incremental cost.
5. Cost of 50 hours of semi-skilled labour is relevant because it is a future incremental cash flow.
6. Production Manager's overtime is irrelevant because it is a sunk cost and is not an incremental cost.
7. Hire of special machine is a relevant cost because it is a future incremental cash flow.
8. Original cost of plant and equipment is irrelevant because it is a sunk cost.
9. Depreciation of plant and equipment is not a cash flow, so it is not relevant.
10. Absorbed fixed overheads are irrelevant because they are not a cash flow.
11. Variable overhead costs are relevant because they are future incremental cash flow.

(b) Qualitative factors which Lufwanyama Limited's management should consider before arriving at the final decision include:-

- The possibility of receiving repeat orders from the same source in future.
- Potential improvement in workforce morale as a result of the extra work- skilled labour is stated to be 'not particularly busy'.
- How quickly does the building firm require the padlocks? Can the order be completed on time?

(c)The difference between qualitative and quantitative information in decision making is that qualitative information is non-financial or numerical such as employee morale or customer reactions but is equally and very important in arriving at the final decision whilst quantitative information is that which is in form of figures, values, and numerical. Quantitative information is usually determined first in most decision scenarios before consideration of non-financial factors.

(d)Factors that must be considered in determining the price of the product or service in most cases include the following.

- Cost
- Quality
- Inflation
- Suppliers and competitors
- Customers' incomes.

**SOLUTION FIVE**

(a) Computation of selling price per unit/production cost per unit

	<b>PRODUCTS</b>	
	<u><b>A</b></u>	<u><b>B</b></u>
	<b>K.</b>	<b>K.</b>
Material1	100.0	40. 0
Material2	80.0	120.0
	180.0	160.0
DirectlabourL1	240.0	300.0
L2	240.0	100.0
	660.0	560.0
Productionoverheads@1.60	32.0	24.0
	692.0	584.0
Sellinganddistribution 20%	138.4	116.8
	830.4	700. 8
Profitmargin25%	207.6	175. 0
Sellingpriceperunit	<u>1,038.0</u>	<u>876.0</u>

<b>Units to be sold:A</b>	<b>B</b>
Std	18,816,00
<u>13,494,000</u>	<u>0</u>
1,038	876
<u>13,000</u>	<u>21,479</u>

**Openingstockfinishedgoodsinunits:**

<b>A</b>	<b>B</b>
<u>1,730,000</u>	<u>1,176,000</u>
692	584
<u>2,500</u>	<u>2,014</u>

**Closing stock finished goods in units:**

<u>A</u>	<u>B</u>
<u>1,038,000</u>	<u>1,568,000</u>
692	584
<u>1,500</u>	<u>2,685</u>

(a)

(i)

Production budget in units

	<u>A</u>	<u>B</u>	<u>TOTAL</u>
Sales in units	13,000	21,479	34,479
Closing stock	<u>1,500</u>	<u>2,685</u>	<u>4,185</u>
	14,500	24,164	38,664
Less: Opening stock	<u>(2,500)</u>	<u>(2,014)</u>	<u>(4,514)</u>
<b>Production in units</b>	<b><u>12,000</u></b>	<b><u>22,150</u></b>	<b><u>34,150</u></b>

(ii) **Direct materials cost budget:**

	<u>M1</u>	<u>M2</u>	<u>Totals</u>
	<u>K.</u>	<u>K.</u>	<u>K.</u>
Product A	120,000	48,000	168,000
Product B	<u>88,600</u>	<u>132,900</u>	<u>221,500</u>
Total	<b><u>208,600</u></b>	<b><u>180,900</u></b>	<b><u>389,500</u></b>
			<b><u>0</u></b>

(iii) **Purchases budget:**

	<u>M1</u>	<u>M2</u>	<u>Totals</u>
	<u>K.</u>	<u>K.</u>	<u>K.</u>
Material cost	2,086,000	3,618,000	5,704,000
Closing stock	<u>360,000</u>	<u>800,000</u>	<u>1,160,000</u>
	2,446,000	4,418,000	6,864,000
Opening stock	<u>(640,000)</u>	<u>(600,000)</u>	<u>(1,240,000)</u>
Material purchases in K	<u>1,806,000</u>	<u>3,818,000</u>	<u>5,624,000</u>
Material purchases in Kg.	180,600	190,900	381,800

(iv) **Direct labour cost budget:**

	<u>L1</u>	<u>L2</u>	<u>Totals</u>
	<u>K.</u>	<u>K.</u>	<u>K.</u>
Product A	2,880,000	2,880,000	5,760,000
Product B	<u>6,645,000</u>	<u>2,215,000</u>	<u>8,860,000</u>
	9,525,000	5,095,000	14,620,000



**(b)**

Target costing involves setting a target cost by subtracting a desired profit margin from a competitive market price. This target cost may be less than the planned initial product cost but it is expected to be achieved by the time the product reaches the maturity stage of the product life cycle.

**(c)** Target costing can be differentiated from standard costing can be summarised as follows:

	Standard Costing	Target Costing
<b>How costs are controlled</b>	Costs must be kept within pre-determined standard costs. Variances are calculated to check that this as happened	There is no cost slashing but continual pressure to ensure costs are kept to a minimum
<b>Relationship between product concept, cost and price</b>	Product design ↓ Cost ↓ Selling Price	Product design concept  Selling Price  Target cost  Profit margin
<b>Link with strategic goals</b>	No link. The approach is short term cost control through variance analysis	The product concept and target profit margin take into account medium-term strategic plans
<b>Time frame for cost control</b>	Standards are usually revised annually	There is continual cost reduction. Target costs are revised monthly

**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 15 SEPTEMBER 2022

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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.**

**Taxation table for paper DA10 – Taxation (2022 Examinations)**

<b>Income Tax</b>		
<b>Income band</b>	<b>Taxable amount</b>	<b>Rate</b>
K1 to K54,000	first K54,000	0%
K54,001 to K57,600	next K3,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%
<b>Income from farming for individuals</b>		
K1 to K54,000	first K54,000	0%
Over K54,000		10%
<b>Company income tax rates</b>		
On income from manufacturing and other		30%
On income from farming		10%
On income from mineral processing		30%
On income from mining operations		30%
<b>Income from farming for individuals</b>		
K1 to K54,000	first K54,000	0%
Over K54,000		10%
<b>Company Income Tax rates</b>		
On income from manufacturing and Other		30%
On income from farming		10%
On income of Banks and other Financial Institutions		30%
On income from mineral processing		30%
On income from mining operations		30%
On income from manufacture of products made out of copper cathodes		15%
<b>Capital Allowances</b>		
<b>Implements, plant and machinery and commercial vehicles:</b>		
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%
<b>Non- commercial vehicles</b>		
Wear and Tear Allowance		20%
<b>Industrial Buildings:</b>		
Wear and Tear Allowance		5%
Initial Allowance		10%
Investment Allowance		10%

<b>Low Cost Housing</b>	<b>(Cost up to K20,000)</b>	
Wear and Tear Allowance		10%
Initial Allowance		10%

<b>Commercial Buildings</b>		
Wear and Tear Allowance		2%

<b>Farming Allowances</b>		
Development Allowance		10%
Farm Works Allowance		100%
Farm Improvement Allowance		100%

### Presumptive Taxes

<b>Turnover Tax</b>		4%
---------------------	--	----

### Rental Income Tax

<b>Annual Rental Income</b>		
K800,000 or below		4%
Above K800,000		12.5%

### Presumptive tax for transporters

<b>Seating capacity</b>	<b>Tax per annum</b>	<b>Tax per quarter</b>
	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, land and buildings and shares	5%
Rate on realised value of intellectual property	5%
Rate of tax on realised value on a transfer or sale of a mining right	10%
Rate of tax on realised value on a mineral processing licence or an interest in the mineral processing licence;	10%

### Value Added Tax

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

### Customs and Excise duties on used motor vehicles

<b>Motor vehicles for the transport of ten or more persons, including the driver</b>	<b>2 years old but less than 5 years</b>		<b>Aged 5 years and over</b>	
	<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
	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

	<b>2 old years but less than 5 years</b>		<b>Aged 5 years and over</b>	
<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>
	<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>

### **Sedans**

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

### **Hatchbacks**

cylinder capacity not exceeding 1000 cc	10,705	9,278	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	14,274	12,371	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	15,041	19,553	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	16,545	21,508	10,523	13,687
Cylinder capacity exceeding 3000 cc	19,553	25,419	12,032	15,642

### **Station wagons**

cylinder capacity not exceeding 2500 cc	16,545	21,508	9,024	11,731
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	13,357	17,598
Cylinder capacity exceeding 3000 cc but not exceeding 2500 cc	22,561	29,329	18,049	23,463

### **SUVs**

Cylinder capacity not exceeding 2500 cc	21,057	27,374	9,024	11,732
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	24,065	31,284	13,357	17,598
Cylinder capacity exceeding 3000 cc	28,577	37,150	18,049	23,463

	<b>2 years old but less than 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>

### **Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
<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
<b>Panel Vans</b>				
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
<b>Trucks</b>				
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
<b>Surtax</b>				
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%

**2. Pick-ups and trucks/lorries with gross weight not exceeding 20 tones:**

	<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.</b>	<b>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.</b>	<b>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

Attempt BOTH questions in this section.

### QUESTION ONE

Malala Plc is a Zambian company engaged in manufacturing of various paints. The company was founded in 2022 and in February of the same year it was listed on the Lusaka Securities Exchange (LuSE). A quarter of the shares were offered to indigenous Zambians.

The company's statement of profit and loss for the year ended 31 December 2022 is as follows:

	Notes	K
Sales revenue		2,650,000
Cost of sales	(1)	<u>(1,060,000)</u>
Gross profit		1,590,000
Distribution and selling costs	(2)	(225,000)
Administrative expenses	(3)	<u>(581,500)</u>
Profit from operations		783,500
Investment income	(4)	<u>464,000</u>
Profit before tax		1,247,500
Income tax expense	(5)	<u>(374,250)</u>
Profit for the year		<u><u>873,250</u></u>

The following information is also available:

#### **Note 1: Cost of Sales**

This comprised of

	K
Opening inventory	297,720
Purchases	675,000
Depreciation	303,000
Loss on sale of Plant	16,680
Closing inventory	<u>(232,400)</u>
	<u><u>1,060,000</u></u>

#### **Note 2: Distribution and selling expenses**

These included the following:

	K
Repair of motor vehicles	32,540
Entertaining customers	115,310
Entertaining members of staff	55,950
Gifts of Malala plc pens to customers valued at K20 per customer	<u>21,200</u>
	<u><u>225,000</u></u>



**Note 3: Administrative Expenses:**

These included the following:

	K
Donation to a political party	46,150
Fines for breach of labour laws	22,000
Entertainment of suppliers	36,400
Donation to approved charity	11,950
Penalty for late payment of provisional income tax	23,250
Accountancy and audit fees	45,150
Share issue costs	125,000
Wages and salaries	250,750
Trade debts written off	13,100
Increase in general provision for bad debts	<u>7,750</u>
	<u>581,500</u>

**Note 4: Investment income**

Investment income comprise royalties of K163,200 (gross), dividends of K125,400 (gross) and bank interest of K176,400 (gross). Withholding tax has already been deducted at source in each case.

**Note 5: Income tax expense**

Provisional income tax paid by the company during the tax year 2022 amounted to K89,450.

**Note 6: Director's accommodation**

The company's Managing Director is accommodated in a company house for which he does not pay rent. If the house was leased out it will cost K8,500 per month. The Managing Director's gross monthly taxable emoluments is K25,000.

**Note 7: Implements, plant and machinery.**

The company had the following implements, plant and machinery on 1 January 2022.

Original cost	Income tax value	
	K	K
General Machinery	90,000	250,000
Toyota Allion (2000cc)	70,000	120,000
Manufacturing equipment	45,000	75,000

During the tax year 2022, the following transactions took place in implements, plant and machinery.

Cost/(Proceeds)	K
Purchase of light truck	350,000
Purchase of Ford Ranger Double cab van (Cylinder capacity 3000)	450,000
Purchase of manufacturing plant	325,000
Disposal of manufacturing equipment	(65,000)
The Toyota Allion car and Ford Ranger are being used by the Marketing Officer and Finance Director as personal to holder cars.	

**Required:**

- (a) Calculate the maximum capital allowances claimable by the company for the tax year ended 2022. (7 marks)
- (b) Calculate the taxable business profit for the tax year 2022. (11 marks)
- (c) Calculate the income tax payable for the tax year 2022. (5 marks)
- (d) State the date when the income tax calculated in part (c) above should be paid. (2 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Mwiinga, Mutale and Namwinga are in partnership preparing financial statements each year to 31 December. On 31 May 2022, Namwinga retired from the partnership while Mwiinga and Mutale continued to trade. A new partner, Chileshe, was admitted to the partnership on 1 September 2022.

The partnership agreement was as follows:

	Mwiinga	Mutale	Namwinga	Chileshe
Period to 31.5.2022				
Annual salaries (K)	336,000	240,000	216,000	-
Profit/Loss sharing ratio	3	:1	:1	-
Period from 1.6.2022 to 31.8.2022				
Annual salaries (K)	360,000	300,000	-	-
Profit/loss sharing ratio	2	:1	-	-
-				
Period from 1.9.2022 to 31.12.2022				
Annual salaries (K)	384,000	336,000	-	216,000
Profit/ loss sharing ratio	3	: 2	-	:1

Taxable profits for the year ended 31 December 2022 amounted to K1,200,000.

**Additional information:**

**Mwiinga, Mutale and Namwinga**

Mwiinga, Mutale and Namwinga did not have any other income in the tax year 2022.

**Chileshe**

The only other income received by Chileshe in the tax year 2022, was income from her personal investments from which she received the following investment income:

	K
Dividends from GMM Plc	15,000
Fixed deposit interest	12,000
Management fees	392,785

The above amounts represent the actual amount of cash received by Chileshe in each case. Withholding tax was deducted at the applicable rates at source.

**Required:**

(a) Prepare a computation of the allocation of the taxable profit to each partner in the tax year 2022. (12 marks)

(b) Calculate each partner's income tax payable for the tax year 2022. (13 marks)

**[Total: 25 Marks]**

## SECTION B

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

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

### **QUESTION THREE**

Mwika Namukwanya commenced employment as a Sales Representative at a Zambian resident company on 1 April 2022. She was entitled to the following benefits under her contract of employment:

Annual basic salary	K156,000
Annual lunch allowance	5% of annual basic salary
Annual housing allowance	20 % of annual basic salary

Upon completion of her probation, Mwika was awarded a salary increment of 10% of her annual basic salary effective from 1 July 2022.

The following additional benefits were provided to Mwika during her employment in the tax year 2022.

- (1) With effect from 1 July 2022, the company paid for her electricity and water bills amounting to K1,500 and K600 per month respectively in relation to her private residential accommodation.
- (2) On 30 September 2022, she was paid a bonus of 15% of her monthly basic salary for meeting her sales targets for that month.
- (3) Mwika used her own personal motor car acquired a year ago costing K180,000 throughout her employment in the tax year 2022, partly for the duties of her employment. She travelled a total of 30,000 kilometres in the tax year 2022. 3000 kilometres was travel between home and work place, 21,000 kilometres was in performance of the duties of her employment and 9,000 kilometres were for private purposes. She incurred motor car running expenses of K3,000 per month. The company paid her a travel allowance of K3,000 per month.
- (4) Mwika made the following payments from her employment for the period in December to 31 December 2022:

	K
Professional Subscriptions	1,800
National Health Insurance Scheme Contributions	4,345
NAPSA Contributions	1,248
Pay As You Earn	9,887
	40,300

(5) Mwika received the following additional income in the tax year 2022.

	K
Fixed deposit interest	1,700
Treasury bill discount	8,500
Copy right royalties	27,200
Dividends from DXT Plc (a LuSE listed company)	13,600
Dividends from EPX (a private company)	15,300

The above amounts were the actual amounts received by Mwika in each case.

**Required:**

(a) Explain the tax treatment of the following income received by Mwika in the tax year 2022, computing the amount of any tax arising in each case:

- (i) Fixed deposit interest (2 marks)
- (ii) Treasury bill discount (2 marks)
- (iii) Copyright royalties (2 marks)
- (iv) Dividends from DXT plc (2 marks)
- (v) Dividends from EPX Ltd (2 marks)

(b) Compute the income tax payable by Mwika for the tax year 2022.

(15 marks)

**[Total: 25 Marks]**

**QUESTION FOUR**

- (a) Explain any two (2) types of persons who are chargeable to Turnover Tax. (2 marks)
- (b) A tax system is a legal system of assessing and collecting taxes and for this purpose taxation is the main source of finance for public expenditure:

**Required:**

Explain any five (5) qualities of a good tax system (5 marks)

- (c) ZiCA has adopted the IESBA's Code of Ethics for Professional Accountants and all members of ZiCA must comply with the fundamental principles outlined in the Code of Ethics.

**Required:**

Explain how the fundamental principles of Professional behaviour and Professional competence and due care apply to the provision of taxation services. (4 marks)

(d) Brian Sipalo imported the following two (2) vehicles in September 2022:

**Toyota Runx Hatchback**

A brand new 1,400cc Toyota Runx Hatchback car from a motor car dealer in Japan which was manufactured in September 2022. The list price of the car was \$12,400. He paid insurance and freight charges up to the port of Dar-es-Salam amounting to \$2,800 and \$1,900 respectively. He paid clearing and forwarding agency fees of \$1,600 at the port of Dar-es-Salam and transportation costs from the port of Dar-es – Salam to the Nakonde border post amounted to \$800. Incidental costs incurred to transport the vehicle from Nakonde to Lusaka amounted to \$1,200. Motor vehicle registration fees in Lusaka amounted to \$200 and road tax was \$120

**Toyota Fortuner SUV**

A second-hand Toyota Fortuner Sport Utility Vehicle (SUV) from Japan at a list price of \$18,500. He paid insurance charges of \$1,500 and transportation costs of \$2,200, in transit to the port of Dar-es- Salam. He additionally paid motor vehicle inspection fees under the Japan Export Vehicle Inspection Centre (JEVIC) in Japan amounting to \$400. Incidental costs incurred to transport the vehicle from Nakonde to Lusaka amounted to \$300. Interpol clearance fee in Lusaka was K200, motor vehicle registration fees were K5,000, road tax was K300 and comprehensive motor car insurance was K8,500. The car has a cylinder capacity of 3,200 cc and was manufactured in January 2007.

**Additional information**

The Commissioner General had advised that for the month of September 2022, the exchange rate to be used was K17.50 per \$1. However, the kwacha depreciated during September 2022 and the exchange rate quoted in one of the local Bureaux De Change was K17.55 per \$1.

**Required:**

(i) Calculate the Customs Value (Value for Duty Purposes) of the Toyota Runx and the total import taxes paid by Brian on the importation of the vehicle.

(7 marks)

(ii) Calculate the Customs Value (Value for Duty Purposes) of the Toyota Fortuner and the total import taxes paid by Brian on the importation of the car.

(7 marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

(a) Explain the categories of properties where Property transfer tax is chargeable. (5 marks)

(b) Antonio Kambita made the following gifts and disposals of property during the tax year 2022:

(1) In February, he gifted 70% of his shareholding of 150,000 shares with a nominal value of K1 each held in MYX Ltd, a private Ltd company, to his

son Joseph and the remaining 30% of the holding to his nephew Mathews. The market value of each of the shares on that date valued using share valuation methods approved by the Commissioner General was K3.50. He acquired the entire holding four years ago at a price of K1.20 per share.

- (2) In April, he gifted his residential plot to his niece Mary. The open market value of the plot as assessed by the Commissioner General on that date was K150,000. He acquired the house six (6) years ago at a cost of K90,000. Mary paid Kambita K8,000 to cover the costs relating to the transfer of title to the property to her.
- (3) On 10 January, he sold a medium cost house for K676,200 to an unconnected third party after deducting estate agent's fees of 2% of the gross sales value. The house had been valued at K620,000 according to the latest report obtained from the Government of the Republic of Zambia.

**Required:**

Explain the Property Transfer Tax implications of each of the above disposals and calculate the amount of any property transfer tax arising in each case. (7 marks)

- (b) Senanga Ltd, is a VAT registered company making zero rated, standard rated and exempt supplies. During the month of March 2022, the company made zero rated sales of K1,890,000 which represented 20% of the total sales made in the month, standard rated sales represented 75% of the total sales made in the month and the remainder of the sales were exempt supplies.

The following expenditure was incurred during the month of March 2022:

- (1) Total purchases were K6,264,000 comprising standard rated purchases of K4,698,000 (VAT inclusive) zero rated purchases of K1,252,800 and exempt purchases of K313,200.
- (2) Purchase of office furniture at a cost of K121,800 (VAT inclusive)
- (3) Purchase of a delivery van for K452,400 (VAT inclusive)
- (4) Purchase of a pool motor car at a cost of K487,200 (VAT inclusive)
- (5) Motoring expenses which comprised petrol for the pool motor car of K18,560 and diesel for the delivery van of K104,400.
- (6) Standard rated overheads of K1,957,000 (VAT inclusive). These comprised entertainment expenses for employees of K81,200, entertainment expenses for customers of K232,000, electricity bills for the Managing Director's accommodation of K19,800, with the balance representing other general business overheads.

- (7) The company sold an old Toyota Camry motor car (2,200cc) which was used by one of the directors on a personal to holder basis for K150,000.

**Other Information:**

- (1) The input VAT on the overheads cannot be attributed directly to neither taxable nor exempt supplies.
- (2) Non-current assets are used to make both taxable and exempt supplies in proportion to the sales.
- (3) Unless stated otherwise all of the above figures are exclusive of VAT.

**Required:**

Compute the value added tax payable by Senanga Ltd for the month of March 2022. You should clearly indicate in your computation, by the use of a zero (0), any items on which VAT is not chargeable or not recoverable.

(13 marks)

**[Total: 25 Marks]**

**END OF PAPER**



## DA 10 TAXATION SUGGESTED SOLUTIONS

### SOLUTION ONE

(a) MALALA Plc  
CAPITAL ALLOWANCES FOR THE TAX YEAR 2022

	Cost/ITV K	Capital Allowance K
<b>General Machinery</b>		
Itv/bfw	90,000	
Wear & tear K250,000x 25%	<u>(62,500)</u>	62,500
Itv c/fwd	<u>27,500</u>	
<b>Toyota Allion</b>		
Itv/bfwd	70,000	
Wear & tear K120,000 x 20%	<u>24,000</u>	24,000
Itv c/fwd	<u>46,000</u>	
<b>Manufacturing Equipment</b>		
Itv b/fwd	45,000	
Disposal proceeds	<u>(65,000)</u>	
Balancing charge	<u>(20,000)</u>	(20,000)
<b>Light Truck</b>		
Cost	350,000	
Wear & tear K350,000x 25%	<u>(87,500)</u>	87,500
ITv c/fwd	<u>262,500</u>	
<b>Ford Ranger</b>		
Cost	450,000	
Wear & tear K450,000x 20%	<u>90,000</u>	90,000
Itv/cfwd	<u>360,000</u>	
<b>Manufacturing Plant</b>		
<b>Cost</b>	325,000	
Wear & tear K325,000 x 50%	<u>(162,500)</u>	162,500
Itv/ cfwd	<u>162,500</u>	_____
Total		<u>406,500</u>

(b) MALALA Plc INCOME TAX PAYABLE FOR TAX 2022

	K	K
Profit before taxation		1,247,500
Add:		
Depreciation	303,000	
Loss on sale of Manufacturing plant	16,680	
Entertaining customers	115,310	
Penalty for late payment of provisional tax	23,250	
Share issue costs	125,000	
Increase in general provision for bad debts	7,750	
Personal to holder cars: Toyota Allion	30,000	
Ford Ranger	40,000	
MD's free accommodation (K25,000x 12)x 30%	90,000	
Donation to a political party	46,150	
Fines for breach of labour laws	22,000	
Entertainment of suppliers	<u>36,400</u>	
		<u>855,540</u>
		2,103,040
Less:		
Royalties	163,200	
Dividends	125,400	
Bank interest	176,400	
Capital allowances	<u>406,500</u>	
		<u>(871,500)</u>
Adjusted business profit		<u>1,231,540</u>

( c ) MALALA Plc

INCOME TAX PAYABLE FOR THE TAX YEAR 2022

	K
Adjusted business profit	1,231,540
Investment income :	
Royalties	163,200
Bank interest	176,400
Taxable income	<u>1,571,140</u>
Income tax (30%-2%) @ 28%	439,919
Less:	
Provisional tax	(89,450)
WHT:	
Royalties K163,200x15%	(24,480)
Bank interest K176,400 x 15%	<u>(26,460)</u>
Income tax payable	<u>299,529</u>

(d) The income tax calculated in part (c) should be paid by is 5<sup>th</sup> June and and 21<sup>st</sup> June for manual and electronic submissions respectively.

**SOLUTION TWO**

**(a) ALLOCATION OF PROFIT**

	Total K	Mwinga K	Mutale K	Namwiinga K	Chileshe K
<u>Period 1</u>					
Salaries	330,000	140,000	100,000	90,000	-
Balance (3:1:1)	<u>170,000</u>	<u>102,000</u>	<u>34,000</u>	<u>34,000</u>	-
	<u>500,000</u>	<u>242,000</u>	<u>134,000</u>	<u>124,000</u>	
<u>Period 2</u>					
Salaries	165,000	90,000	75,000	-	-
Balance (2:1)	<u>135,000</u>	90,000	45,000	-	-
	<u>300,000</u>	180,000	120,000		
<u>Period 3</u>					
Salaries	312,000	128,000	112,000	-	72,000
Balance	88,000	44,000	29,333	-	14,667
Totals	400,000	172,000	141,333	-	86,667
Total Allocations	<b>1,200,000</b>	<b>594,000</b>	<b>395,333</b>	<b>124,000</b>	<b>86,667</b>

**(b) Computation of tax payable:**

	<b>Mwiinga</b>	<b>Mutale</b>	<b>Namwiinga</b>	<b>Chileshe</b>
Allocated profits	594,000	395,333	124,000	86,667
Management fees (K392,785 x 100/85)				<u>462,100</u>
Sub total	594,000	395,333	124,000	548,767
Less tax free amount	<u>(54,000)</u>	<u>(54,000)</u>	<u>(54,000)</u>	<u>(54,000)</u>
Taxable income	540,000	341,333	70,000	494,767
Tax liability:				
K3,600 @ 25%	900	900	900	900
K25,200@ 30%	7,560	7,560	7,560	7,560
Balances at 37.5%*	<u>191,700</u>	<u>117,200</u>	<u>15,450</u>	
	<u>174,738</u>			
	<b><u>200,160</u></b>	<b><u>125,660</u></b>	<b><u>23,910</u></b>	183,198

Less WHT

(69,315)

**113,883**

### **SOLUTION THREE**

(a) (i) Fixed Deposit Interest

Fixed deposit interest from the Zambian bank will not be subjected to any withholding tax because fixed deposit interest from a Zambian Bank received by an individual is exempt from tax.

(ii) Treasury bill discount

Treasury bill discount is subjected to WHT at the rate of 15% which is the final tax and therefore Mwika will not be subjected to any further tax on this income

The amount of WHT deducted at source was:  
 $K8,500 \times 15/85 = K1,500$

(iii) Copyright Royalties

The royalties are subjected to WHT at the rate of 15% which is not a final tax and hence will further be subjected to personal income tax.

The amount of WHT deducted at source is  
 $K27,200 \times 15/85 = K4,800$

(iv) Dividends from DXT plc

Dividends received by Mwika from the LuSE listed company were subjected to WHT at the rate of 0% which is a final tax and therefore will not be subjected to any further tax.

(v) Dividends from EPX Ltd

Dividends received by Mwika from the private limited company will be subjected to WHT at the rate of 15% deducted at source which is a final tax and therefore Mwika will not be subjected to any further tax on this income.

The amount of the WHT is  
 $K15,300 \times 15/85 = K2,700.$

(b) MWIKA  
PERSONAL INCOME TAX COMUTATION FOR THE TAX YEAR 2022

	K	K
Basic Salary		
(K156,000 x3/12) + (156,000 x 110% x 6/12)		124,800
Lunch allowance (K124,800 x 5%)		6240

Housing allowance (K124,800 x 20%)		24,960
Bonus (15% x K14,300)		2,145
Electricity bills (K1,500 x 6)		9,000
Water bills (K600 x 6)		3,600
Travel allowance (K3,000 x 9)		<u>27,000</u>
		197,745
Investment Income		
Copyright royalties (K27,200 x 100/85)		<u>32,000</u>
		229,745
Less: allowable deductions		
Capital allowances		
(K180,000 x 20% x 21,000/30,000)	25,200	
Motor car running expenses		
(K3,000 x 9 x 21,000/30,000)	18,900	
Professional subscriptions	<u>1,800</u>	
		<u>(45,900)</u>
Taxable income		<u>183,845</u>

<u>Income Tax</u>	Tax rate	Tax amount
On first K54,000	0%	0
On the next K3,600	25%	900
On the next K25,200	30%	7,560
On the excess (K181,300 – K82,800)	37.50%	<u>37,892</u>
		46,352
Less: Tax already paid		
PAYE		(40,300)
WHT on royalties (K32,000 x 15%)		<u>(4,800)</u>
		<u>1,252</u>

## **SOLUTION FOUR**

(a) Persons chargeable to turnover tax include:

- (1) Any person carrying on a business with an annual turnover of K800,000 or less
- (2) Any person whose income consists of amounts, which are subjected to withholding tax, where withholding tax is not the final tax.

(b) The following are the canons of a tax system:

- 1- Taxation should bear as lightly as possible on production. Taxes should not be so high that they make production very expensive.
- 2- Taxes should be easy and cheap to collect, and fall directly on the ultimate payer.
- 3- Taxes should be certain; if tax rules are complex they can be evaded.
- 4- Taxes should bear equally so as to give no individual an advantage. i.e taxes should be charged on the ability to pay.
- 5- A tax should be compatible with foreign tax systems, e.g in the case of Zambia tax system should be compatible with tax systems of the SADC and COMESA.
- 6- Taxes should be flexible. i.e it should automatically respond to changes in the rate of inflation.

### **(c) Professional behaviour**

This principle requires providing tax services to comply with relevant laws and regulations to avoid any action that discredits the profession. Members shall act in a manner consistent with the good reputation of the ZiCA and the tax profession, refraining from any conducts that might bring the Institute and/or tax profession into disrepute.

They should conduct themselves professionally with due consideration towards clients, third parties, other members of the tax profession, staff, employers and the general public. All professionals who provide tax services shall do so in accordance with appropriate standards of professional and ethical conduct.

### **Professional competence and due care**

This principle requires members to maintain professional knowledge and skill at a level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and shall act diligently and in accordance with applicable technical and professional standards when providing professional services.

Members providing tax services shall maintain professional competence and take due care in the performance of their work. To achieve this, members shall remain continuously aware of developments in the tax profession and tax legislation to



ensure that they have the requisite knowledge related to such developments, including an awareness of relevant national pronouncements and other relevant statutory requirements and regulations.

Members must take reasonable care in ascertaining a client's state of affairs, to the extent that ascertaining the state of those affairs is relevant to a statement being made on behalf of the client. Members must ensure that tax laws are applied correctly and lawfully to the circumstances of the particular client. Members shall not knowingly obstruct the proper administration of tax law.

(d) (i) COMPUTATION OF THE VDP OF THE TOYOTA RUNX

	K
Cost	12,400
Insurance	2,800
Freight	1,900
Clearing & forwarding	1,600
Transportation costs	<u>800</u>
	19,500
	<u>17.50</u>
	<u>341,250</u>

COMPUTATION OF IMPORT TAXES

	K	K
VDP	341,250	
Customs duty@30%	<u>102,375</u>	102,375
	443,625	
Excise duty@20%	<u>88,725</u>	88,725
	532,350	
Import VAT@16%	<u>85,176</u>	85,176
	<u>617,526</u>	
Total import Taxes		<u>276,276</u>

(ii) COMPUTATION OF THE VDP OF THE TOYOTA FORTUNER

Cost	\$18,500
Insurance	\$1,500
Transportation costs	\$2,200
JEVIC Inspection fee	<u>\$400</u>
	\$22,600
Exchange rate	<u>x K17.50</u>
VDP for customs purposes	<u>K395,500</u>

COMPUTATION OF IMPORT TAXES

K                      K

VDP	395,500	
Specific Customs duty	<u>18,049</u>	18,049
	413,549	
Specific Excise duty	<u>23,463</u>	23,463
	437,012	
Import VAT@16%	<u>69,922</u>	69,922
	<u>506,934</u>	
Motor vehicle surtax charge		<u>2000</u>
		<u>113,434</u>

## **SOLUTION FIVE**

(a) Categories of properties where property transfer tax is chargeable:

- Any land in Zambia (including any building, structure, or improvements thereon)
- Any share for a company that is not listed on the Lusaka Securities Exchange
- Any mining right
- Mineral processing licence
- Intellectual properties

(b) Property Transfer Tax Implications

(1) Gift of shares to Joseph

This is a transfer to an immediate family member because his son is a member of Antonio's immediate family.

The realised value is the actual consideration received if any. Since he received no consideration for the transfer, the realised value is nil and therefore no PTT will arise.

Gift of shares to Mathews

A nephew is not an immediate family member of Antonio and hence PTT will arise on this transfer. The realised value is the higher of the nominal value of the shares and their open market value.

Nominal value;

$$(30\% \times 150,000) = 45,000 \text{ shares} \times K1 = K45,000$$

Open market value

$$45,000 \text{ shares} \times K3.50 = K157,500$$

The realised value is therefore K157,500

$$\text{PTT} = 5\% \times K157,500$$

$$= \underline{K7,875}$$

(2) Gift of Residential plot

Property transfer tax will arise on transfer of the residential plot to the Niece as she is not Kambita's immediate family member.

The realised value of the house will be taken as the higher of the actual consideration received by Kambita of K8,000 and the open market value of the

property which is K150,000. The realised value of the property is therefore K150,000 being the higher amount.

The amount property transfer tax arising is therefore:

$$K150,000 \times 5\% = K7,500$$

(3) Sale of house

The sale of the house by is a transfer of property that has a realised value that is equal to the higher of the actual sales proceed and the open market value. The actual sales price before deducting the agent's fees of K690,000 (K676,200 x 100/98) is the realised value because it is higher than the open market value of K620,000.

The amount of property transfer tax arising is;

$$= 5\% \times K690,000 = K34,500$$

(c) COMPUTATION OF VAT PAYABLE

<u>Output VAT</u>	K	K
Zero rated sales (K1,890,000 x 0%)		0
Standard rated sales (K1,890,000 x 75/20) x 16%		1,134,000
Exempt Sales (VAT not chargeable)		0
Sale of Toyota Camry car (K150,000 x 16%)		<u>24,000</u>
		1,158,000

Input VAT

Standard rated purchases (K4,698,000 x 4/29)	648,000
Zero rated purchases (K1,252,800 x 0%)	0
Exempt purchases (VAT not chargeable)	0
Office furniture (K121,800 x 4/29)	16,800
Delivery van (K452,400 x 4/29)	62,400
Pool car (irrecoverable)	0
Petrol (K18,560 x 0%)	0
Diesel (K104,400 x 0)	0
Entertaining employees (irrecoverable)	0
Electricity bills (irrecoverable)	0

General business expenses		
(K1,624,000 x 4/29) x 95%	<u>212,800</u>	
		<u>(940,000)</u>
		<u>218,000</u>

**END OF 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 15 SEPTEMBER 2022

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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 COMPULSORY QUESTIONS**

Attempt **BOTH** questions in this section.

### **QUESTION ONE**

Apple Flavors Limited (AFL) is a company that manufactures an apple flavored juice which it sells currently on the local market. AFL management structure consists of the Managing Director, Finance Manager, Human Resources Manager and the Operations Manager. The shareholders of AFL have entrusted the running of the company in management as stewards.

The local market for the apple flavored juice has become saturated and the company has decided to expand its market share to other countries including the Democratic Republic of Congo (DRC). The scale of its operations have become complex due to new investments in machinery and information technology. This has resulted in the need for management to recommend to the Board of Directors for more members of staff at senior level in the accounts department as current staff is unable to cope with work and that internal controls are being compromised. The company engaged Zenith, its current auditor, to be on the interviewing panel for the Chief Financial Controller and to recommend the right candidate after shortlisting and conclusion of interviews.

An internal audit department has been established in order to ensure that accounting and internal control systems are monitored. In addition this will enhance oversight roles and help the company to achieve its objectives.

During the year, AFL supplied a consignment of apple juice to its distributors who in turn sold to other retail chain stores. One(1) of the customers who bought the company's apple juice returned the juice after experiencing stomach pains allegedly caused by poisoning after consuming the juice which had expired. A check at the medical hospital found that there was food poisoning caused by contamination of the juice. AFL was sued and the case has been taken to court and company management is due to appear. Management approached the Engagement Partner in charge of the AFL audit to be a witness in this case since the auditors attended inventory count and were familiar with related information on the same inventory regarding expiry dates.

During high school days, the Finance Manager and the Engagement Partner were members of the Scripture Union. The Engagement Partner was the Treasurer while the Finance Manager was the Chairman. During the audit, the Finance Manager informed the Engagement Partner that he was suspecting fraud and errors in the recording of foreign exchange amounts in relation to exports to the DRC.

You are an auditor in Zenith. This is the first time your firm will be auditing a company in the beverages industry. Zenith was scheduled to conduct an audit at one (1) of the major depots that keeps significant stocks of drinks and assorted ingredients for AFL. However, due to limited audit staff, the firm used the haphazard sampling method when extracting a sample of inventory for the audit. The client management estimated that 8% of the inventory is expected to be written off because it was considered obsolete. Initial risk assessment by auditors, indicated material misstatement in the values of inventory at its main warehouse managed by distributors.

During the year, Zenith recruited part-time audit staff because the current audit team members were not able to manage the workload. An in-house workshop was organized whose main objective was to discuss how to identify different types of risks and to distinguish business and audit risks. The need for this workshop arose due to a mix up in the classification of audit and business risks. This was noticed by the Audit Senior when reviewing the working papers that contained details regarding risks that Apple Flavor Limited was facing.

**Required:**

- (a) Using the information provided above, explain the meaning of the following terms:
  - (i) Accountability. (2 marks)
  - (ii) Stewardship. (2 marks)
- (b) Identify and explain three (3) ethical threats in the above scenario and suggest appropriate safeguards. (6 marks)
- (c) Explain the management and auditor responsibilities with regards fraud and error in the financial statements. (3 marks)
- (d)
  - (i) Explain the meaning of audit risk. (2 marks)
  - (ii) Identify and explain three (3) audit risks in the audit of the financial statements of AFL Ltd under the three (3) components of audit risk. (6 marks)
- (e) Explain how Zenith can assess the risk of material misstatements in the audit of the financial statements of AFL Ltd. (4 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Zambezi Ltd is a renowned supplier of cleaning chemicals .The Company has a branch in each of the ten (10) provinces of Zambia. It operates a centralized management structure where most decisions are made by Head Office. The Finance Manager is in charge of deciding the needs of each branch in terms of staff recruitment, stock levels, recording and reconciliation of stock balances both for Head Office and branches. This has affected branches as they are not able to meet customer needs on time as they have to wait for instructions from Head Office. In the last two (2) years, Zambezi Ltd increased its capacity after an acquisition of new plant and machinery. This was due to an increase in demand for cleaning and hygienic materials in the country due increased cases of Covid-19. In addition, the company diversified into production of new Covid-19 drugs which were needed in the country.

Zambezi Ltd required recapitalization which led to the option of listing its shares on the Lusaka Securities Exchange (LuSE). One of the requirements for listing shares is the establishment of an audit committee. This excited members of the Board of Directors who



have been advocating for the independence of internal and external auditors because currently both internal and external auditors report to the Board of Directors where the Managing Director is also the Chairman.

Business has been booming leading to an increase in cash collections as most customers were paying on cash basis. This has led to cashiers going away to their homes with large amounts cash. Management is concerned about this especially that cash deposits are not made regularly and cash reports are not made available on time. Recently, the company bought two (2) lap tops for senior managers worth K15,000 each. These laptops were not recorded in the asset register and have not been used in the company. The only information concerning this issue was the bank details and invoices which were kept by the Chief Accountant. The Chief Accountant is suspecting misappropriation of assets as well as fraudulent accounting and has brought this to the attention of senior management.

Your firm, Quest Chartered Accountants, has been auditor for Zambezi Ltd for the past six (6) years. However, due to a misunderstanding, Quest was removed from the audit. The dispute arose when the auditor refused to issue an unmodified opinion when the company wanted to use the audit report to support a loan application. Their removal was made verbally by the Managing Director and that any outstanding fees were going to be paid to them later. The Engagement Partner felt that the procedure for removing them was not followed since no notice was given and no meeting was organized at which they could have been heard. Later in the year, another auditor, Zone Chartered Accountants was appointed as a replacement and was in the process of gaining an understanding of business environment affecting Zambezi Ltd.

**Zambezi Ltd.'s purchasing system:**

Purchase orders are made by Head Office without consulting Branch Managers. The Purchasing Manager defended this process suggesting that Covid-19 drugs are urgently needed and that the normal tendering processes, if followed, could have delayed delivery and lives were going to be lost. He further justified the fast-track procurement process as most customers, who included hospitals, paid in advance for most of the drugs and other hygienic related materials.

In addition, in order to concentrate efforts towards delivery of supplies on time to hospitals, the reconciliations of suppliers statement balances with the payables control account balance is delayed for more than three (3) months as most of the accounting and stores staff have been transferred to stores and dispatch departments in order to help in the quick delivery of much needed supplies to government hospitals.

The Purchasing Manager collects the documents and checks them without physically verifying the quantities. Often, the checking is done manually despite the company running software that integrates stores and purchasing systems.

In order to have a continuous production system, purchasing and stores departments operate without having specific dates to stop the receipts of supplies of raw materials for the purpose of finalizing the preparation of financial statements. Further, details of payments for supplies to the branches are sent to the Head Office for payments three (3) months after production has commenced.

**Required:**

- (a) Explain two (2) procedures that Zambezi Ltd should have followed when removing Quest Chartered Accountants as its auditors. (2 marks)
- (b) Explain six (6) advantages of having an audit committee on the Board of Directors of Zambezi Ltd. (6 marks)
- (c) (i) Explain two (2) methods that Zone Chartered Accountants can use in order to gain an understanding of Zambezi Ltd risk and business environment. (4 marks)
- (ii) Explain three (3) overall responses that Zone Chartered Accountants can use when responding to significant risks in Zambezi Ltd. (3 marks)
- (d) (i) Identify and explain five (5) weaknesses in the purchasing system of Zambezi Ltd. (5 marks)
- (ii) Recommend actions to be taken for each weakness in (d) (i) above. (5 marks)

**[Total: 25 Marks]**

**QUESTION THREE**

Gwembe Mining Project (GMP) invested in the exploration of coal in the lower Zambezi. Its exploration began without approval from the Zambia Environmental Agency (ZEMA). The law requires that a company should obtain an official approval from ZEMA in addition to a mining license. All the company had done was to acquire a mining license and other necessary registration documents. Consequently, this exploration met a lot of resistance from traditional leaders who feared for the destruction of land used for farming and grazing of animals. Further, the area is close to the national park. However, the policy makers from the District Administration's office were of the view that the project should be allowed to go ahead as it will result in employment for local youths and generate tax revenue for the government. The project was allowed to take off and GMP began operations.

Since its incorporation, the company has not submitted tax returns to the Zambia Revenue Authority (ZRA). Management argued that the delay was caused by constant disruption in mining activities due to court injunctions and the unexpected resignation of the Finance Director.

The company's workforce comprises mainly locals who work as casual workers and a few full time staff. The majority of the casual workforce is being paid below the minimum wage. Management contends that the company is still recovering its capital expenditure and until it begins to make profit, the company will continue to pay wages that it can afford. Complaints have been launched with the office of the labour commissioner at district level but these matters have not been resolved.

The management at GMP consists of the Chief Operating Officer in charge of mining operations and the finance department. This was one (1) of the reasons why the filling of tax returns was not done because the Director of Finance was not available at the time. The

Chief operating Officer is also in charge of custody of GMPs assets and initiates transactions and makes payments.

Currently the company sells its coal on credit to a number of big manufacturers who account for over 80%, while the rest of the sales are made on cash basis. Most of the account holders have not been able to pay on time necessitating GMP management to create an allowance for bad debts amounting to 8% of the outstanding debt. In the last year alone, a good number of accounts receivable balances have not been paid and others have been disputing the amount calculated as shown on statements of accounts sent to them. Most of its procurements are made on a daily basis and when need arises. It does not have a list of registered suppliers. Some of the balances on receivables accounts were showing nil balances while others were showing debit and others credit balances. In addition some balances were written off at the end of the year while some customers paid their accounts at the end of the year.

Your firm has been appointed as auditor of GMP. One (1) of the issues that arose during the planning meeting with the Engagement Partner was the assessed weakness in internal controls at GMP. As Audit Senior you are considering using a positive or negative confirmation method with regards to receivable confirmations. However, the difference between the two (2) methods of confirmation and when each could be used is not understood by some of the Audit Trainees. Apart from confirmations that would be used on receivables, the Engagement Partner is proposing the use of test data on internal controls regarding the current accounting system. Further, there will be a need for the audit of accounting estimates in relation to the allowance for bad debts of 8%.

**Required:**

- (a) Identify and explain three (3) cases of non-compliance with laws and regulations by GMP. (6 marks)
- (b) Explain three (3) ways in which segregation of duties can help management to strengthen its internal controls. (3 marks)
- (c)
  - (i) Explain the meaning of tests of controls in an audit of financial statements. (1 marks)
  - (ii) Using two (2) methods of obtaining evidence, give an example of a test of control for each method. (2 marks)
  - (iii) Explain two (2) ways in which external auditors can respond to the audit risk in relation to accounting estimates. (2 marks)
- (d)
  - (i) Explain the difference between a positive and a negative confirmation. (4 marks)
  - (ii) Explain two (2) factors that can support the use of the negative confirmation method during the audit of Gwembe Ltd. (4 marks)
  - (iii) State three (3) classes of accounts receivables balances that should be included in the sample for confirmation. (3 marks)

**[Total: 25 Marks]**

## **QUESTION FOUR**

Hello Lodges Ltd (HL Ltd) operates a chain of lodges across the country. The company is owned by shareholders who are mostly local businessmen. An extract of its Statement of Financial Position for Plant, Property and Equipment for the year ended 31 December is given below:

<b>Non-current assets;</b>	<b>K'm</b>
Property, plant and equipment	590

Following the removal of entry rules for foreign tourist operators and lodges, the country has seen an increase in number of new lodges being set up, mostly in areas where HL Ltd operates. This has led to stiff competition and put pressure on AFL Ltd. in terms of the number of tourist arrivals and consequently reducing its income.

### **HL Ltd operations:**

1. HL Ltd operates a manual accounting system at both Head Office in Lusaka and all branches across the country.
2. The branch purchasing systems are not integrated with that of the Head Office. This has led to inconsistencies in keeping optimum levels of inventory. Sometimes the quantities bought are in excess of requirements which leads to food going bad.
3. Each Lodge Manager is in charge of stores and transferring excess supplies to other branches as requested by branches in need of these. However, this is done without authorization from Head Office.
4. Most banks are located near urban centers which are far from the lodges. This has resulted in the cashiers keeping cash for a longer time before it is taken to the bank.
5. Most of the lodges are located in areas where power supply is inadequate. This has led to the use of diesel-powered generators that often switch off at critical times due to lack of diesel at nearest filling stations. This results in most fresh foods going bad due to unreliable power supplies. The food that goes bad is thrown away at the discretion of each Branch Manager.
6. Due to lack of consistent power and other social amenities, it has proved difficult for staff at Hello Lodges Ltd to enjoy normal life like those in town. Schools and other shopping amenities are located very far from the lodges. This eventually led to an increased labour turnover of Chefs.
7. Most of the food is purchased in Lusaka and is transported to areas where these lodges are located. This has led to an increase in cost of food served to customers. In the end customers have been complaining that food is expensive.
8. Apart from the daily supervisory work, all accounting work is carried out by the Lodge Managers who in some cases do not have any accounting background.

In order to counter stiff competition from newly established lodges, HL Ltd expanded its operations and invested in solar renewable plants and modernized its ticketing and other necessary infrastructure in order to attract a lot of tourists. As a result of this ambitious

project, the Board of Directors suggested a private issue of 1,000,000 new ordinary shares of K1.25 each and further transfer K1,500,000 bonus shares from the share premium account to ordinary share capital. In addition, the Directors recommended a dividend to ordinary shareholders of K0.50 per share to be paid. A general meeting was held at which a resolution was passed to approve the Director's proposals. Consequently, there was an amendment to the statutory books, the share capital and share premium accounts. The transactions regarding the issue of shares and payment of the dividends have been reflected in the bank account.

Your firm is auditor for HL Ltd. After the audit had been concluded and the financial statements issued, an event which required an amendment to the financial statements occurred and was brought to the attention of the management of HL Ltd. However, HL Ltd management refused to amend the financial statements.

**Required:**

- (a) Explain five (5) financial statement assertions in relation to the figure of property, plant and equipment. (5 marks)
- (b) (i) Explain the meaning of business risk. (1 marks)  
(ii) Identify and explain four (4) business and audit risks in the audit of HL Ltd. (8 marks)
- (c) Suggest two (2) audit procedures for each of the following elements of equity in relation to HL Ltd;
  - (i) Share equity. (2 marks)
  - (ii) Issued share capital. (2 marks)
  - (iii) Transfer of shares. (2 marks)
  - (iv) Dividends paid. (2 marks)
- (d) Explain the auditor's response to the matter that appeared after financial statements had been issued. (3 marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

Bingo Brands Ltd (BB Ltd) is a leading manufacturer of tiles that it sells locally. Some of the tiles are transferred on consignment to agents while others are sold directly to customers through its outlets. The appointed agent distributes the products mostly in areas where Bingo Brand Ltd. does not have outlets. The quantities that remain at the end of the year at the agents' depots are significant.

BB Ltd has four (4) bank accounts with different banks. Bank reconciliations are performed on a monthly basis by cashiers. Some of the issues relating to banking are outstanding cheques, uncleared bank deposits and direct transfers. Other amounts appear only in the

cash book but not on the bank statement. BB Ltd obtained a loan which was secured on the assets of the company including the balance in one of the bank accounts. At the end of the year some of the bank accounts had positive balances while others had negative balances. The Financial Accountant offset negative balances against positive balances in order to have only one (1) balance for the purpose of year-end final accounts.

Your firm, Quest Chartered Accountants, is auditor for BB Ltd and attended the inventory count for BB Ltd at its outlets but is yet to verify inventory held by agents. The Engagement Partner is worried that no sufficient and appropriate audit evidence has been obtained with regards inventory held by third parties and the amounts are material and pervasive. In his view, a disclaimer of opinion would be appropriate in this regard.

In the last three (3) months before finalization of the audit, BB Ltd experienced an increase in the costs of raw materials and the condition of certain types of tiles had deteriorated. The company decided to produce this type of tiles and sell them below the cost so as to avoid further storage and other related costs. During the same year, the International Accounting Standard's Board issued a new standard that the Finance Director decided to effect earlier than expected because it was good for the outlook of financial statements. Auditors are of the view that the matter needs to be included in the audit report in a separate paragraph for the sake of disclosure.

At one of the meetings of the audit team members, a question was asked by one of the audit interns who wanted to find out the procedures for the audit of inventory held by third parties and those relating to bank balances.

The Engagement Partner recently returned from a workshop organized by the Zambia Institute of Chartered Accountants (ZiCA). Some of the issues discussed at the workshop included understanding the public perception with regards the role of the statutory auditors which leads to an expectation gap, the need for emphasis of matter paragraphs and other matter paragraphs and reasons for disclaimers of opinion.

**Required:**

- (a) Explain four (4) audit procedures that can be used to audit inventory held by third parties (agents of BB Ltd). (4 marks)
- (b) (i) Explain three (3) follow up audit procedures that should be carried out after an attendance at an inventory count. (3 marks)  
(ii) In relation to inventory valuations, state two (2) situations in which the net realizable value is likely to be less than the cost. (2 marks)
- (c) Describe four (4) audit procedures that can be used when auditing bank balances during the audit of Bingo Brands Ltd. (6 marks)
- (d) In relation to the question asked by an audit intern, explain the following:
  - (i) Other matter paragraph. (2 marks)
  - (ii) Emphasis of matter paragraph. (2 marks)
  - (iii) Disclaimer of opinion. (2 marks)

- (e) Using two (2) examples, explain the meaning of the term expectation gap. (4 marks)  
**[Total: 25 Marks]**

**END OF PAPER**

## DA 11 PRINCIPLES OF AUDITING SUGGESTED SOLUTIONS

### SOLUTION ONE

- (a) (i) **Accountability** –this is the state of management of AFL being answerable to the shareholders for their actions while performing duties .This includes various decisions that they carry out during the course of duty.
- (ii) **Stewardship** –these are the duties that management at AFL have been entrusted with as custodians of the affairs of the company on behalf of shareholders to safeguard the assets of the company.

#### **(b) Ethical matters in the audit of Apple Flavours Ltd:**

	<b>Threats</b>	<b>Safeguards</b>
(i)	Self-interest	
	Zenith to recommend a person in a senior position during the interview. Auditors should not recommend a recruitment of senior staff such as Financial Controller. This amounts to making management decisions.	Auditors can attend an interview and up to shortlisting of candidates .They should refuse to recommend a suitable candidate for a senior position.
(ii)	Advocacy threat	
	Management asked the engagement partner to be a witness in the court case.	This can compromise the independence of the external auditors. The appropriate measure is to recuse themselves or refuse to represent management in this court case.
(iii)	Familiarity threat	
	During school days, the Finance Manager and Engagement Partner were members of the Scripture Union.	The senior auditor concerned should be removed from the engagement or rotated with other auditors.

#### **(c) Responsibilities for fraud and error:**

Management is primarily responsible for detecting and preventing fraud and error in the organization. It is the responsibility of management to put in place suitable internal controls which will help it prevent and detect any fraud that may occur.

The statutory auditors should be aware that the financial statements may be misstated

due to fraud or error. Auditing standard ISA 240 *The auditor's responsibilities relating to*



*fraud in an audit of financial statements* gives guidance on the responsibilities of the auditor with regards fraud and error.

The following are the auditor responsibilities:

- Obtaining reasonable assurance that AFL Ltd.' financial statements are free from material misstatements whether caused by fraud or error.
- They are also responsible for maintaining professional skepticism throughout an audit and look out for fraud & error.
- Management can override internal controls even when these controls are actually in place.
- They also have a responsibility to consider whether adequate policies and procedures are in place to address fraud and errors as suspected to have been committed.

(d) (i) Meaning of audit risk:

An audit risk arises when an external auditor expresses an inappropriate audit opinion. For example instead of issuing a modified audit opinion, the auditor issues an unmodified opinion and vice versa.

(ii) The following are the audit risks in the audit of AFL Ltd.

**Control risk** -a control risks can arise due to the failure of AFL Ltd.'s internal controls to detect material misstatement when controls are weak. In the scenario, there is information of payments being made without approval and authorisation which indicates a weakness in internal controls. It means payments could be made for goods and services actually not even supplied.

**Detection risk** -this is a risk that can arise due to failure of the auditors procedures to detect material misstatements. In this case Zenith is auditing AFL Ltd for the first time. Chances of their audit procedures not been effective are high in the first year of audit. Further, Zenith is using haphazard sampling method which increases detection risk.

**Inherent risk** -this is a risk that can arise due to the nature of the account balance or even the nature of the industry in which the company is operating. In case of an allowance for obsolete inventory, it is not easy for auditors to ascertain the accuracy and extent of the accounting estimate as it was a management decision. Therefore there is a possibility of failure to detect material misstatements in this regard.

(e) Steps taken when identifying risks of material misstatements:

- Assess whether the identified risks are pervasive to the financial statements of AFL Ltd.
- Evaluate the identified risks as to how they can affect financial statements at the assertion level.
- Relate to what can go wrong at the assertion level. For instance how the risk can affect the accuracy of the amounts in the financial statements.

- Consider whether each identified risk in AFL Ltd, is likely to cause a material misstatement in the financial statements.

## **SOLUTION TWO**

### **(a) Procedure for removing Quest chartered Accountants;**

The Company Act guides on how external auditors can be removed from an audit engagement .In the case of Zambezi Ltd, the procedure was not followed .The correct procedure is that;

- The company should have called for an extraordinary general meeting at which an ordinary resolution should have been passed to remove auditors.
- Zambezi Ltd should have lodged a notice of removal with the Registrar within 14 days. The company failed to do this and is guilty of a crime or a fine.
- Zone Chartered Accountants should have been given the right to be heard and entitled to damages for termination of appointment.

### **(b) Advantages of an audit committee in Zambezi Ltd:**

- Strengthens the roles of internal auditor-currently internal auditors report to management who can exert influence on internal auditors. The presence of an audit committee will enhance internal auditor's independence.
- The presence of an audit committee will improve the quality of Zambezi Ltd.'s financial reports by reviewing financial reports on behalf of the Board of Directors.
- The audit committee comprise mostly Non-Executive Directors (NEDs).They are able to contribute objectively in relation to financial statements.
- An audit committee can provide a forum at which critical matters which cannot be raised by the Finance Director in the absence of an audit committee.
- The position of external auditors will be strengthened as they are now freely able to raise issues of concern directly to an independent audit committee for clarifications.
- In an event that a dispute arose between management and auditors, they will be in a good position to resolve the dispute impartially.
- Being a public listed company, Zambezi Ltd will be able to create confidence in the general public with regards to the objectivity and credibility of the financial statements. This issue to the presence of an audit committee on the board.

### **(c) (i) Zone Chartered Accountants can use any of the following methods to gain an understanding of Zambezi Ltd:**

- **Inquiries of management** – management will be required to give information to auditors which would not be possible to collect from an audit of financial statements. These inquiries can also be extended to other accounts and other departments.
- **Analytical procedures:** these are procedures that involve analyzing financial statements using ratios. The aim is to discover any plausible relationship between financial and non-financial data. For example it is expected that an increase in credit sales would also mean an increase in the receivables and number of customers.

- **Observations and Inspections** of documents-in order to verify results from inquiries, external auditors can go and witness either the counting of inventory or observe how a particular process is being undertaken.

(c) (ii) **Overall response to fraud:**

- The Engagement Partner needs to emphasis to the audit team to observe professional skepticism. They need to be alert to conditions that indicate unusual one unexpected outcomes.
- As the company has grown in size and complexity, additional audit staff will be required in order to do a quality audit that covers all areas adequately.
- Zone Chartered Accountants need to increase the level of supervision since Zambezi Ltd is a big company listed on the stock market.
- Zone Chartered Accountants should not indicate to Zambezi Ltd the type of audit procedures they will be using. They should be unpredictable when carryout an audit.
- In orders to be effective and detect material misstatements, there will be need to make changes to timing, and type of audit procedures to be used.

(d) (i)/(ii) Weaknesses & recommendations on purchasing system:

	<b>(i) Weakness</b>	<b>(ii) Recommendations</b>
1	Purchasing Manager purchasing ordering goods for other branches	The orders should be placed by the user department at the branch
	There is a possibility of ordering goods that are not needed or can order goods for personal use.	
2	Making payments before orders. There is a chance that goods ordered may not be received.	There is a need to follow the procedures. Payments should only be made when goods have been received.
	Senior managers can even make payments to their private companies that do not even exist	
3	Verifying order after goods have been used in production	Orders should be matched with goods received before goods are put in stores. If there is a mismatch, then adjustments and queries can be attended to on time.
4	Reconciling suppliers and payables control accounts after three months	Reconciliations of suppliers and payables accounts should be done promptly and regular so that any errors and discrepancies are dealt with in time.
5	Continuous receipts of supplies without a cut-off	The company should chase a cut-off date so that only supplies for the current period are included in the financial statements. If this is not done ,there is a possibility that the amounts will be misstated
6	Purchasing Manager checking and recording details manually.	Errors and omissions are likely to be made as the Purchasing Manager may not cope with the workloads at certain times.
		A computerised system should be used instead as this type of a company cannot fail to acquire computerised accounting packages.

## **SOLUTION THREE**

(a) Non-compliance with laws & regulations by GMP.

	<b>Identified non-compliance</b>	<b>Explanation</b>
<u>1</u>	Commenced operations without official approval from ZEMA	The law requires that a company working in this sector gets approval from the regulators. GMP failed in that regard.
<u>2</u>	Not filling tax returns on time	The law requires the company to file tax returns on time and GMP failed and was liable to fines.
<u>3</u>	Payment of wages below minimum requirements	The government has set minimum wage rate in order to caution workers from the impact of cost of living. GMP did not abide by this law and therefore liable to charges and fines.

(b) An explanation of how segregation of duties can help strengthen internal controls at GMP:

- Segregating of functions-key accounting functions being carried out by the Finance Manager, such as determining stock levels and reconciliation of supplier's accounts can be done by different personnel. This will ensure the integrity and confidence in internal controls.
- Segregation key important steps-steps in the purchasing system such as ordering, receipts and approval of payments should be separated in order to ensure proper existence and occurrence of a transaction is upheld.
- Carrying out of carious accounting operations can be done by different personnel.

### **(c)(i) Meaning of tests of controls:**

Tests of controls are the tests that are carried out in order to assess the effectiveness of internal controls in relation to the design of the accounting and internal controls in preventing fraud.

(ii) Examples of tests of controls using methods of obtaining evidence:

- **Inspection of documents**-these are inspected to ensure that all transactions are approved and processed in the accounting department at GMP.
- **Inquiries** about internal controls-asking management and determining who actually performs a particular transaction was important since it is management who are involved in the day to day operations of the company.
- **Re-performing** a control procedure- obtain bank statement details and bank statements to re-perform a bank reconciliation so that results are compared with that already prepared by the clients accountants at GMP
- **Observations** of controls –external auditors can go and observe and take note of the manner in which controls are being implemented at GMP.

- (iii) Two ways in which external auditors can respond to risks of accounting estimates:
- External auditors need to determine whether events occurring up to date of auditors report provide audit evidence regarding the accounting estimate of the allowance for receivables of 8%.
  - Test how management made the accounting estimate and what type of data was used to arrive at such an estimate.
  - Develop a point estimate or auditor's range to evaluate the allowance that was made by GMP management.

(d) (i) **Differences between positive and a negative confirmations:**

A **positive confirmation** – it is the type of confirmation in which external auditors ask customers to respond to the queries concerning balances whether they agree or disagree, if they disagree and to what extent. Positive confirmations are preferred by auditors as they provide additional proof that the customer exists and they owe the client.

A **negative confirmation** is sent to the customers of the client so that they can only respond when they disagree or they are disputing the amount that they are requested to confirm. It is mainly sent when the client internal controls are strong or the rate of exception is low.

- (ii) The negative confirmation can be used when auditors establishes the following in the client:

- The risks of material misstatements are assessed to be low
- External audit evidence obtained was proved to be adequate and sufficient
- The number of receivable balances were similar or homogenous in nature
- The external auditors are not aware of the circumstances or conditions that would make customers not to respond.

(iii) **Classes of balances to be chosen:**

- Old unpaid accounts
- Accounts that were written off during the accounting period
- Receivables with credit balances
- Receivables with nil balances
- Accounts which were paid at the time an audit was being carried out

## **SOLUTION FOUR**

(a) Financial statements assertions relating to account balances and disclosures of property, plant and equipment are:

- **Existence**-auditors will use this assertion to verify whether the Property ,plant and equipment is available or does exist
- **Rights and obligations**-external auditors will use this assertion in order to determine whether the recorded property, plant and equipment belong to the entity .They will have to scrutinize documents of ownership and invoices for names of the company on them.
- **Completeness**-this will use this assertion to determine whether all costs related to the non-current assets have been included and accounted for.
- **Accuracy**, valuation and allocation-those assertion will be used by auditors in order to ascertain whether the value of property, plant and equipment is correct.
- **Classification**-external auditors will use this assertion to determine whether all items relation to plant, property and equipment have been classified accordingly as non-current assets or capital expenditure.
- **Presentation** –this assertion will help external auditors to determine whether all items relating to property, plant and equipment have been disclosed and presented in accordance with I.A.S 16 *Property, Plant and Equipment*

**(b)(i) Meaning of business risk:**

A Business risk is one that will prevent the company from achieving its intended

objectives. This can be product failure or loss of key staff or loss of market share.

**(ii) The following are business and audit risks in Hello Lodges Ltd:**

- **Manual accounting system**-there is nothing wrong with using a manual accounting system. However, there is a risk of error and misstatement when the system is overwhelmed or the user gets tired. Further it takes time to locate the errors. This can delay decision making process
- **No integration between Head office and branch procurement system** -the lack of synchronization of systems between branch and Head Office can lead to overstocking of inventory and delays in responding to urgent queries from branches.
- **Verbal instructions on transfer of inventory** –this could lead to fraud and loss of inventory due to the fact that there are no written requests for transfers and approvals. There is also a risk that there can be claims of transfers and yet inventory has been misappropriated for personal use.
- **Holding cash for longer periods-**  
This can increase chance of theft of cash and money laundering by staff concerned.



- **Power disruptions** -this will result in the risk of fresh foods going bad and the company would lose capital tied up in the inventory. Customers may even be served bad food which can lead to lawsuits if they became sick after consuming such foods.
- **Loss of key staff-**  
The resignation of key staff may lead to loss of business as there will be business disruptions. For instance the resignation of a chef can lead to failure to prepare standard meals for different clients and loss of business in the end.

**(c) Audit procedures for the following:**

**(i) Audit procedures for share capital;**

- Obtain statutory documents of the company for a review to confirm if the amount reflected is the one on the statutory books.
- Obtain and review minutes of the meeting to confirm if the approval concerning share capital was done. Compare and review the resolutions taken if they agree with the amounts reflected in the books of accounts.

**(ii) Issue of shares**

- Obtain minutes of the meeting to review for any authority for approval of issue of new share capital
- Obtain and review cash book details to confirm if indeed the cash was receipted.
- Review share premium account to confirm if there was a transfer between share premium account and share capital.

**(iii) Transfer of shares:**

- Obtain correspondence regarding the transfer of shares to verify it has taken place.
- Obtain and review completed stamped transfer forms.
- Review minutes of the meetings regarding transfer of shares.

**(iv) Dividends paid:**

- Obtain and review minutes of the meeting to ascertain the authority for the payment of dividends.
- Recalculate the dividend using the rate as approved or proposed by the directors.

**(d) Auditors response to events after financial statements have been issued ;**

In view of management's refusal to make the necessary amendments to the financial statements, the auditors will require to discuss the matter with those charged with governance and seek their indulgence.

Further, the auditors will seek to find out measures taken by management to ensure that everyone in receipt of the previously issued financial statements is informed not to place reliance on these financial statements. If this has not been done the auditors will take appropriate action seek to prevent future reliance on the report issued.

## **SOLUTION FIVE**

- (a) The following are the audit procedures for the audit of inventory held by third parties;
- Direct confirmation- Quest Chartered Accountants need to seek direct confirmation from depot managers where the inventory is kept. This will confirm existence of inventory.
  - External auditors should also go and inspect records and documentation relating to inventory at the depots of the agents.
  - External auditor can obtain details such as type of and quantities relating to the inventory that was audited by third parties.
  - Obtain and inspect all documents relating to the goods dispatch and received notes by third parties.( agents /depots)
- (b) (i) The following audit procedures should be carried as follow up after an inventory count of BB Ltd has been counted and observed:
- The counted quantities must be traced to verify if actually they were counted and they exists.
  - Upon finalising the observation of count inventory, external auditors need to observe if the staff involved in the inventory count are the ones involved in the final record of inventory.
  - Verify for continuous inventory if the adjustments have been made to the final quantities physically and that any discrepancies have been made.
  - Use the last serial numbers of the goods received notes and dispatch notes in relation to the dates and verify if cut-offs are being observed.
  - Institute an inquiry about replies to confirmations on inventory that is held by third parties of BB Ltd if they agreed or disputed the balances.
  - Obtain the final inventory sheets and recalculate to verify its accuracy.
- (b) (ii) The following are situations in which the net releasable value can be lower than the cost:
- When there is an increase in cost or a fall in the selling prices.
  - When there is a physical deterioration of inventory
  - When there is a marketing decision to manufacture and sell the products at a loss.
  - When there is an error in the production or purchasing of raw materials.
- (c) The following are audit procedures that should be undertaken on bank balances:
- Bank confirmations- Since BB Ltd maintains different bank accounts, it will be important to obtain standard confirmations from each bank to confirm the existence of account balances.
  - Reconciliations- there is need to re-perform the reconciliations again independently to confirm whether it was correctly performed.

- Outstanding checks-the cashier deals with a lot outstanding cheques .auditors need to trace all outstanding cheques from BB Ltd. bank accounts before the year end and after the reconciliation had taken place. Management should be able to explain unusual cheques not yet cleared.
- Auditors need to obtain an explanation for certain entries in the cash book but not related to those on the bank statement.
- Obtain the standard confirmation letters and compare the bank balances with bank standard letters.
- Obtain documents from management regarding the entries to secured assets against bank balances.
- Confirm with the bank whether a right of setoff exists where some accounts have credit balances while others have debit balances in the same bank.
- Consider whether there is a legal right of set off of overdrafts against positive bank balances exists.

(d) (i) **Other matter paragraph:**

This is a paragraph that contains information which is not presented and disclose in the financial statements. However, this information needs to be brought to the attention of the users of the financial statements. This relates to matters that auditors feel will enhance the users understanding of the financial statements and the responsibility of the auditor. Examples include where the auditors were unable to withdraw from an audit engagement despite failing to collect enough audit evidence.

(ii) **Emphasis of matter paragraph:**

This relates to matter which has been properly presented and disclosed in the financial statements. However, auditors feel this is important for the user of financials abatements and requires a separate paragraph for emphasis purposes so that the user's understanding of financial statements is enhanced. Examples include where the company is being sued and material uncertainty exist in relation to each law suit. Other examples include a need for an application of a new standard which will have a pervasive effect on the financial statements or there was a major event that had a significant effect on the entity's statement of financial position which the users of financial reports needs to know about.

(iii) **A disclaimer of opinion:**

A disclaimer of opinion is a type of modified audit opinion. It is issued in cases where external auditors failed to collect sufficient and appropriate audit evidence because of a limitation of scope and the matter is both material and pervasive.

(e) **Meaning of expectation gap:**

This is when there is a difference between the work the auditors performs as expected by the public from what the actual reasons why an audit takes place. It is also the difference between the public perceptions of an audit is different from what the work of the auditor is for example most people feel that external auditors are appointed by the company in order to find faults in the management so that those who are found with a case are taken to court. At time the expectation gap arises due to a misunderstanding as to the meaning of an unmodified audit report. Other perceptions relates to misunderstanding that the statement of financial position is correctly stated and an audit guarantees that the company is a going concern.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 12: GOVERNANCE AND COMPANY LAW

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FRIDAY 16 SEPTEMBER 2022

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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 COMPULSORY QUESTIONS**

**Attempt both questions in this section.**

### **QUESTION ONE**

Mariah, Dan and Jade are prospective Directors of Tahoma Company as per Articles of Association. Tahoma Company currently has two (2) Directors; Mandy and Muka. Mandy and Muka have bought shares in the Company and distributed some shares to their supporters to ensure that they could control the company and thus by their majority votes prevent the appointment of Mariah, Dan and Jade because the appointment of the three (3) will make Mandy and Muka minority Directors. Mariah has heard about the conspiracy and she seeks advice from you.

#### **Required**

- (a) In harmony with the Directors' fiduciary duties advise Mariah on the position of the law as regards Mandy and Muka's actions. (20 marks)
  
- (b) Identify the circumstances that would render the office of the Director vacant. (5 marks)

**[Total: 25 Marks]**

### **QUESTION TWO**

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 (5 marks)
- (b) Purchase of its own shares (10 marks)
- (c) Discuss the advantages of preference shares over ordinary shares (10 marks)

**[TOTAL: 25 MARKS]**

## **SECTION B**

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

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

### **QUESTION THREE**

Mapulani Company Limited is a company limited by shares and incorporated three (3) years ago by John Sulu a prominent company consultant. John explained to the shareholders that once a company is incorporated, it becomes a person at law with a common seal with limited liability. This as it may, the company cannot act or undertake certain duties unless through Mateyo Banda and Kabwe Kabwe herein called the Directors of the company who are charged with the responsibilities of running the day to day affairs of the Company as guided by the articles of association. There is also intimation that the company wants to appoint new auditors and additional Directors to continue balancing the administration of Mapulani Company Limited at their next annual meeting.

#### **Required:**

- (a) Explain how Mateyo Banda and Kabwe Kabwe act as agents of Mapulani Company Limited. (5 marks)
- (b) With reference to the above, explain the importance of having your own articles as a company than the standard ones. (5 marks)
- (c) With reference to the above facts, discuss the type of meeting to be held. (5 marks)
- (d) With reference to the above facts, explain common seal and limited liability as attributes of incorporating Mapulani Company Limited. (10 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

- (a) Mcpherson Mbundu is a young entrepreneur who has been doing business for the past five (5) years. He is an ambitious young man who has a dream of becoming one of the most prominent businessmen in Zambia. However, he is not conversant with the legal framework governing entrepreneurship. He now approaches you for advise as a corporate lawyer on the various business entities that are prevalent in the



country. Advise Mr. Mbundu on the various business entities that a person can possibly form in Zambia. (16 marks)

(b) Explain the meaning of a pre-incorporation contract and its effect on a company which is not fully registered. (9 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

(a) Describe elements of corporate governance (10 marks)

(b) Distinguish a floating charge from a fixed charge (10 marks)

(c) Explain duties of a company secretary. (5 marks)

**[TOTAL:25 Marks]**

**END OF PAPER**

## DA 12 GOVERNANCE AND COMPANY LAW SUGGESTED SOLUTIONS

### **SOLUTION ONE**

a) Company directors owe a fiduciary duty to the company to exercise their powers in what they honestly consider to be the company's interest. This duty is owed to the company and not generally to individual shareholders. In exercising the powers given to them by the constitution the directors have a fiduciary duty not only to act with integrity, but also only to use their powers for a proper purpose. The powers are restricted to the purpose for which they were given. The following are the fiduciary duties Mandy and Muka owe the company.

**1. Duty to act within your powers**

These are the powers as specified in the company's Articles of Association, and they should only be exercised for the purposes intended, i.e. for the good of the company rather than the director concerned.

**2. Duty to exercise independent judgement**

You must consider all members when exercising judgement, rather than an individual or a particular group of shareholders.

**3. Duty to exercise reasonable care, skill, and diligence**

This applies to both executive and non-executive directors. Anyone with specific training and skills would be expected to apply them to their role as director, for example.

**4. Duty to avoid conflicts of interest**

This includes actual and potential 'situational' and 'transactional' conflicts, as well as direct and indirect interests. If a conflict is disclosed, the company's constitution may allow the board of directors to approve it as long as it is sanctioned in the proper manner.

**5. Duty not to accept benefits from third parties**

It can be difficult to gauge the difference between accepting a 'benefit' and simply trying to engender good relationships with a supplier/customer. Some companies have a written policy to clarify such situations.

**6. Duty to declare an interest in proposed transactions or arrangements**

Your interest must be declared before the company enters into the transaction or

arrangement. The company's Articles of Association may set out the procedures and requirements for doing so, and how the board should deal with the matter.

Mandy and Muka acted maliciously and strayed from the interest of the company and their duties. Henceforth the following actions can be taken;

1. Removal as director

The director may be removed from office if more than 50% of shareholders vote in favour, but the director must be allowed to offer their own representations during the meeting. The company's constitution determines how this process is carried out, but removal may be temporary pending further investigation, or on a permanent basis.

2. Interim injunction

This would be issued by the court with the intention of halting any ongoing actions in breach of director duties. It serves to reduce the potential for further financial loss, and prevent irreversible damage to the company. It could be that the director in question is attempting to harm the reputation of the business and bring down its value down, for example.

3. Shareholder proceedings

In limited situations, shareholders can take litigation action on their own behalf if they fear other directors might support an errant director, but this is known to be a complex process.

4. Setting aside a transaction

Under the rules on transactional conflicts of interest, an affected transaction could be set aside or company property restored.

b)

1. if the director resigns;
2. if the director becomes bankrupt or makes any compromise or arrangement with his or her creditors generally;
3. if the director suffers from mental disorder;
4. if the director is prohibited by law from being a director (which includes disqualification);

- or more rarely

5. if the director fails to take up a share qualification required by the Articles;
6. if the director is absent from board meetings for a specified period (typically six months).

## **SOLUTION TWO**

### (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 share these 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 powers to vote at meetings.

### **SOLUTION THREE**

#### **(a) Directors as Agents of a company**

A company being an artificial person at law can only have decisions made by, and indeed only act through its Directors. The Directors of a company though tasked with the day to day management of the company by the Act also act as the Agents of the company for which they manage. Mateyo Banda and Kabwe Kabwe are its directors hence acts as its agents. Thus, the Directors as Agents of the company, if acting within the scope of their duties will bind the company and will be absolved from any form of liability, however, if such Directors performed acts outside the scope of their authority, then the said Directors will be personally liable for their acts.

**(b)** It appears Mapulani Company Limited has adopted the standard articles of association. From the facts, it can be seen that the company wants to create their own articles of association for purposes of continuing their business. At the point of incorporating a company it will have to have Articles of association. The Articles of association of a company for part of the constitution of the company as they provide for the rules and regulations by which a company will be required to abide by in terms of its operations. For the purposes of uniformity and arguably so, for efficiency, the companies Act provides for model Articles of association which promoters may, at the point of incorporation adopt and have registered as against the company. Therefore, having your own articles as a company is vital as it will contain almost all the provision or situation that are needed for any future problems. Thus, the articles become very comprehensive with regards to any changes.

#### **(c)**

The meeting to be held is an annual meeting. The only meeting held annually is the annual general meeting which is held about 3 months after the financial end. The annual general meeting covers a wide array of topics to be discussed, chief among them being; the appointment of Directors and their remuneration, the consideration of Directorial and audit reports, declaration of dividends etc. The Act makes it an offence for a company and any Directors responsible to fail to convene an annual general meeting.

From the given facts, Mapulani Company Limited wants to appoint new auditors and directors thus it will be a perfect time to do so as the said issues are discussed at the AGM.

**(d)**

**(i) Common seal of a company**

The concept of legal personality entails that a company is a person at law, separate and distinct from its members and/or Directors. This is only so once it has been incorporated under the Zambian companies Act. It then follows that if a company is a corporate entity but then deemed to be a person at law, it is only but an artificial entity, existing only in the contemplation of the law and thus unable to do certain acts that can be done by a natural human being such as appending its signature to a document.

By reason of the above, it is a legal requirement under the Act that every company has a common seal bearing the company's name and the words; *common seal*, the same of which suffices as a symbol of authority of or by the company.

**(ii) Limited liability**

Once a company like Mapulani Company Limited is incorporated, it assumes another attribute called limited liability. Limited liability is a concept akin to limited liability companies. The concept entails that; where a member has fully paid up for all the shares held by himself, he is then absolved from any form of liability at the point of winding up of the company. It then follows that; if a members shares are not fully paid up for, then the converse is true, in fact, a member having any amount that remains unpaid on shares will be called upon to contribute to the assets of a company when the same is being wound up.

## **SOLUTION FOUR**

- (a) **Sole proprietorship:** Sole proprietorships are also known as 'one-man companies'. They include businesses such as retail trading, transport business (especially passenger transport), bottle stalls, barbershops, tailoring shops and farms. Although run commercially, a sole proprietorship is normally conducted on a personal basis. It is usually owned by an individual, who operates it with the assistance of family members. Sole proprietorships are easy to form and they are operated very informally. Sole proprietorships must comply with various laws, including tax laws and licensing legislation and must also comply with the Registration of Business Names Act. The most significant disadvantage of a sole proprietorship is that it has no separate existence from its owner. In the event of failure to pay the debts of the business the owner's personal assets are at risk from creditors, that is there is no limited liability. Similarly, the continuance of the business may be placed in jeopardy when the owner dies. It has no perpetual succession.

**Partnership:** A partnership is a business organisation that is owned and managed by two or more partners that normally share profits and losses equally. Just like sole proprietorship, partnerships are fairly informal and there is no separation of partners from the business (although certain types of partnership allow limited liability). Almost any type of business can be run as a partnership. Zambian law recognizes unincorporated business associations called partnerships. The law governing partnerships in Zambia is the English Partnership Act of 1890. It applies in Zambia by virtue of the English Law (Extent of Application) Act Chapter 11 of the Laws of Zambia. The statutory law on partnerships in the Act is supplemented by judicial decisions and general common law principles. Although it is possible to form a limited partnership in terms of the Limited Partnerships Act of 1907, in practice no such partnerships exist in Zambia. When the limitation of liability is desired, it is preferable for the association to be formed as a limited company under the Companies Act.

**Limited company:** There is no strict or technical definition of the word 'company'. It may be defined as an association of persons with a common purpose. In *Tennant v Stanley* 1906 Buckley J defined the word 'company' as follows: 'The word company has no strict technical meaning. It involves secondly that the consent of all the other members is not required for the transfer of a member's interest.' A company is deemed to come into existence when it is registered under the Act that is when its name is entered into the Companies' register meant for the purpose under the Act and the Registrar of Companies issues a Certificate of Incorporation to it. This certificate is in a prescribed form and states that the company is on, and from the date specified in the certificate, incorporated.



•**Public companies** a public company is always a limited company.

•**Private companies**, which can be: – **Limited by shares** – **Limited by guarantee** – **Unlimited companies**. A limited company is one where the liability of the members is limited. The members are liable to a limited amount. Beyond that limit they cannot be called upon to contribute to the liabilities of the company. Therefore, assuming that in the event of winding up of a company the assets are not sufficient to pay the liabilities, then the private property of the shareholders cannot be attached or forfeited to pay the company's liabilities. A private company limited by shares or by guarantee is obliged under the Companies Act to include the word 'limited' in its name, while a public limited company must have 'Plc' at the end of its name. Unlimited company- An unlimited company is a company having no limit at all on the liability of its members who are personally liable for the company's debts and liabilities. If, when winding up, the assets are not sufficient to discharge the liabilities then the personal property of the members can be attacked for the purpose of settling the company's obligations. However, there is still privity of contract and separate legal identity. Creditors cannot go after the property of members during the normal business of the company. It is obvious that an unlimited company can never be a public company. A pre-incorporation contract is a contract entered into before the company is duly registered.

(b) A pre-incorporation contract is a contract entered into before a company is duly registered. It has no effect on a company which is not yet registered unless the promoter leaves the contract as a draft until the company is formed or if it is to be finalized before incorporation it must contain a clause that personal liability of promoters is to cease if the company, when formed, enters a new contract on identical terms.

## **SOLUTION FIVE**

### **a) The following are the elements of corporate governance**

- Director independence and performance.
- Focus on diversity.
- Regular compensation review and management. ...
- Auditor independence and transparency.
- Shareholder rights and takeover provisions.
- Proxy voting and shareholder influence

b) A fixed charge is attached to an identifiable asset at creation. Assets can include land, property, machinery, copyright, trademark and much more. The business does not typically sell these fixed assets, and the fixed charge is applied to protect the repayment of the company debt. The simplest way to put it into perspective is to think of a mortgage; you cannot sell your house without your lender's permission, as you have not yet paid the debt off and own the house. With a fixed charge, the lender has full control of the company asset. Therefore, should any corporation want to sell that particular asset, they must have the lender's approval to do so or pay off the debt.

The term floating charge is apt, as a floating charge 'floats' by its very nature. While a fixed charge is attached to an asset that can be easily identified, a floating charge is a charge that floats above ever-changing assets.

The floating charge, or a security interest over a fund of changing company assets, allows for more freedom for a business, than the lender. While a fixed charge protects the lender, the floating charge gives more scope for the company to sell, transfer or dispose of their assets, without seeking approval from the bank. From the lender's point of view, it leaves them exposed – particularly as floating charge repayments typically recoup less than the fixed charge. However, it's impossible to attach a fixed charge on all company assets, hence the use of floating charge assets.

c)

- He is to prepare the Minutes and get it signed by the Chairman. ...
- He is to execute the decisions and resolutions passed at the meeting.
- He is to file necessary documents with the Registrar.
- Carry out given instructions
- Send copy of minutes to all members

**END OF SOLUTIONS**