



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 1: FINANCIAL ACCOUNTING

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MONDAY 14 MARCH 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: One (1) Compulsory question.  
Section B: Five (5) Optional Questions. Attempt any Four (4) questions.
3. Enter your student number and your National Registration Card number on the front of the answer booklet. Your name must **NOT** appear anywhere on your answer booklet.
4. Do **NOT** write in pencil (except for graphs and diagrams).
5. **Cell Phones** are **NOT** allowed in the Examination Room.
6. The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and depth of the answer.
7. All workings must be done in the answer booklet.
8. Present legible and tidy work.
9. Graph paper (if required) is provided at the end of the answer booklet.

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

## **SECTION A – (Compulsory)**

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

#### **QUESTION ONE**

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

- 1.1 Sales revenue should be recognized when goods and services have been supplied; costs are incurred when goods and services have been received.

The accounting concept which governs the above is the:

- A. Accruals concept.
- B. Materiality concept.
- C. Realization concept.
- D. Dual aspect concept.

(2 marks)

- 1.2 Which of the following statements is true?

- A. Irrecoverable debts are an example of a prepayment.
- B. Prepayments are included in the current assets in the statement of financial position.
- C. Prepayments are current liabilities.
- D. Prepayments decrease the profit in the income statement.

(2 marks)

- 1.3 The subscriptions receivable account of a club commenced the year with subscriptions in arrears of K100 and subscriptions in advance of K150. During the year K24,900 was received in subscriptions, including all the arrears and K240 for next year's subscriptions.

The amount to be taken to the income and expenditure for the year is:

- A. K24,410.
- B. K24,710.
- C. K25,090.
- D. K25,190.

(2 marks)

- 1.4 Which of the following is NOT a valid reason for the cash book and bank statement failing to agree?

- A. Timing difference.
- B. Bank charges.
- C. Cash receipts posted to payables
- D. Error.

(2 marks)

1.5 The public sector includes all of the following except:

- A. Central government.
- B. Local government.
- C. Not-for-profit-organisation.
- D. Parastatal companies.

(2 marks)

1.6 Computer programs are generally referred to as:

- A. Hardware.
- B. Firmware.
- C. Malware.
- D. Software.

(2 marks)

1.7 Mulopa is a wholesaler who sells goods to long-standing customers on credit. Chikwa has a credit balance of K30,000 brought down in the books of Mulopa. The means that:

- A. Mulopa owes Chikwa K30,000
- B. Chikwa owes Mulopa K30,000
- C. Mulopa has paid Chikwa K30,000
- D. Chikwa overpaid Mulopa by K30,000

(2 marks)

1.8 Which of the following is NOT an external user of financial statement?

- A. Director.
- B. Shareholder.
- C. Trade payables.
- D. Auditors.

(2 marks)

1.9 A sole trader had opening capital of K20,000 and closing capital of K9,000. During the period, the owner introduced capital of K8,000 and withdrew K16,000 for her own use.

Her profit or loss during the period was:

- A. K19,000 profit.
- B. K3,000 loss.
- C. K15,000 loss.
- D. K3,000 profit.

(2 marks)

- 1.10 Rent paid on 1 October 2019 for the year to 30 September 2020 was K3,600 and rent paid on 1 October 2020 for the year to 30 September 2021 was K4,800.

Rent payable as shown in the statement of profit or loss for the year ended 31 December 2020 would be:

- A. K3,600.
- B. K4,800.
- C. K3,900.
- D. K4,500.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### **QUESTION TWO**

The following trial balance was extracted from the books of Pinto Ltd at 31 December 2020:

	Dr K	Cr K
Share capital at K1 per share		740,000
10% Loan note		300,000
Freehold buildings at cost	700,000	
Plant at cost	600,000	
Motor vehicles at cost	48,000	
Allowances for depreciation at 1 January 2020		
- Plant		260 000
- Motor vehicles		25,000
Allowance for irrecoverable receivables		2,600
Sales		1,535,608
Purchases	980,168	
Trade receivables	111,500	
Trade payables		64,392
Irrecoverable receivables	5,064	
Administrative wages and salaries	235,848	
Rent and rates	15,624	
loan interest paid	15 000	
Retained earnings at 1 January 2020		66,368
Motor expenses	14,202	
Selling and distribution expenses	25,682	
Inventory at 1 January 2020	204,300	
Cash at bank	<u>38,580</u>	<u>          </u>
	<u>2, 993,968</u>	<u>2,993,968</u>

**The following additional information is provided:**

- (i) Inventory at 31 December 2020 – K207,040.
- (ii) The allowance for irrecoverable receivables is to be increased to K3,000.
- (iii) Allowance for depreciation are to be made on plant at 10% per annum on cost and on motor vehicles at 10% per annum using reducing balance.
- (iv) At 31 December 2020, selling and distribution expenses of K3,682 are accrued.
- (v) A dividend of 10 ngwee per share was declared before the year end.

**Required:**

- (a) Statement of profit or loss for Pinto Ltd for the year to 31 December 2020. (11 marks)
- (b) Statements of Financial position for Pinto Ltd as at 31 December. (9 marks)
- [Total 20 Marks]**

**QUESTION THREE**

- (a) The treasurer of Pemba Social Club has produced the following Receipts and Payments account for the year ended 31 December 2020:

<b>Receipts</b>		<b>Payments</b>	
	K'		K'
Balance b/f	19,500	Travelling Expenses	9,500
Subscriptions received	225,300	Refreshment supplies bought	21,600
Profits from dances	20,580	Wages for attendants	157,000
Profits on exhibits	4,450	Rent of Buildings	43,500
Refreshments takings	81,450	New Equipment bought	91,000
Sale of Equipment	1,700	Balance c/d	30,380
	<u>352,980</u>		<u>352,980</u>

**Additional Information**

- Refreshment Inventory was valued at K3,400 on 1 January 2020 and at K4,600 at 31 December 2020. There was nothing owing for refreshment inventory on either of these dates.
- On 1 January 2020 the club's equipment was valued at K162,000. Included in this figure, some equipment valued at K2,100 was sold during the year for K1,700.
- The amount to be charged for Depreciation of Equipment for the year is K26,000. This is in addition to the loss on equipment sold during the year.
- At 31 December 2020, subscriptions owing by members was K4,300 while at 1 January 2020 it was Nil.
- K23,400 of the wages is to be charged to the refreshments trading account; the remainder is to be charged in the income and expenditure account.

**Required:**

- (i) Draw up the refreshment trading account for the year ending 31 December 2020. (3 marks)
  - (ii) Calculate the accumulated fund as at 1 January 2020. (2 marks)
  - (iii) Draw up the income and expenditure account for the year ending 31 December 2020. (6 marks)
  - (iv) A statement of financial position as at 31 December 2020. (4 marks)
- (b) Journal entries to correct the following are required, but the narratives are not required.
- (i) Rent received K2,150 have been credited to the commissions Received account.
  - (ii) Bank charges K170 have been debited to the Business rates account.
  - (iii) Completely omitted from the books is a payment of motor vehicle expenses by cheque K185.
  - (iv) A purchase of office equipment for K1,210 has been entered in the purchases account.
  - (v) Returns inwards amounting to K1,080 have been entered on the debit side of the return outwards account. (5 marks)

**[Total: 20 Marks]****QUESTION FOUR**

D Muchi started trading on 1 January 2020. He is an office equipment expert providing services to small business in his area. He does not keep a double entry bookkeeping system. He has asked you, an accounting technician, to prepare his first set of accounts for the year ended 31 December 2020. He has already summarized the bank account as shown below:

Bank Summary for the Year ended 31 December 2020

	K		K
Capital introduced	10,000	Trade payables	17,680
Trade receivables	51,600	Rent	11,000
		Travel expenses	4,200
		General expenses	3,500
		Drawings	24,000
		Balance	<u>1,220</u>
		c/d	

61,600

61,600

**Additional Information**

- (i) D Muchi Transferred his personal vehicle to the business on 1 January 2020 valued at K12,000.
- (ii) Trade receivables on 31 December 2020 were K6,800 after allowing for discounts to customers of K580.
- (iii) Trade payables on 31 December 2020 were K2,390. During the year, total returns outwards was K2,330.
- (iv) The bank summary includes a payment of K1,800 for rent for the period 1 December 2020 to 28 February 2021.
- (v) During February 2021, a payment of K270 was made for electricity used during the period 1 November 2020 to 31 January 2021. The Electricity is charged to general expenses.

**Required:**

- (a) Prepare the following ledger accounts:
  - (i) Capital account. (3 marks)
  - (ii) Trade receivables account. (3½ marks)
  - (iii) Trade payables account. (3½ marks)
  - (iv) Rent expenses account. (3 marks)
- (b) Prepare a trial balance as at 31 December 2020. (7 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

Chipo and Chip have been in partnership as Business Consultants since 1 November 2019. The accounting records of the partnership have been kept by Chip. He is having some trouble extracting a list of account balances as at 31 October 2020 which agrees and has sought your help. The following is Chip's list of account balances.



### Chipo and Chip

#### List of account balances for the year ended 31 October 2020

	K	K
Equipment	180,000	
Cash and bank	7,280	
Loan from bank	50,000	
Receivables	29,500	
Payables and accrued expenses		22,150
Capital: Chipo		69,000
: Chip		50,000
Withdrawals: Chipo		13,100
: Chip		10,860
Fee income		226,680
Sundry expenses		52,820
Salaries	95,280	
Advertising	<u>22,400</u>	
	<u>384,460</u>	<u>444,610</u>

After an investigation of the books you found the following information:

- (i) An advertising bill for K1,720 has been inadvertently recorded and paid as K1,360.
- (ii) Receipts from credit customers amounting to K1,980 have been debited to cash and bank and credited to fee income.
- (iii) The balance on the heating and lighting account has been omitted from the list of account balances. The account has a balance of K6,590 but this does not include a gas bill for the last quarter of the financial year. This amounts to K910 and is due for payment in December 2020.
- (iv) Salaries from the year include salaries paid to Chipo and Chip amounting to K10,000 each.

#### **Required:**

- (a) Prepare a corrected list of account balances for the partnership as at 31 October 2020. (10 marks)
- (b) The equipment is expected to last 10 years and will have no scrap value. The partners have agreed to share profits and losses in the ratio 3:2 after allowing for interest on capital at 10% per annum and salaries of K10,000 each.

Calculate each partner's share in profit for the year.

(10 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

A company depreciates its Plant at 20% per annum, straight-line method, for each month of ownership. The following transactions took place during the past three years ending 31 December each year.

<u>Year</u>	<u>Details</u>
2017	Bought Plant (1) costing K40,000 on 1 January 2017 Bought Plant (2) costing K16,000 on 1 October 2017
2019	Bought Plant (3) costing K60,000 on 1 July 2019 Sold Plant (1) which cost K40,000 on 1 January 2017 for K11,000 on 30 September 2019
2020	Bought Plant (4) at a cost of K20,000 on 1 January 2020 Sold Plant (2) which cost K16,000 for K8,000 on 30 September 2020

#### **Required:**

From the above transactions, draw up the following ledger accounts for each of the years 2017, 2018, 2019 and 2020:

- (i) Plant at Cost Account. (6½ marks)
- (ii) Allowance for Depreciation on Plant Account. (11½ marks)
- (iii) Plant Disposal Account. (2 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 1 FINANCIAL ACCOUNTING SET B SUGGESTED SOLUTIONS**

### **SOLUTION ONE**

1.1 A

1.2 B

1.3 B

1.4 C

1.5 C

1.6 D

1.7 D

1.8 A

1.9 B

1.10 C

## SOLUTION TWO

### Pinto Ltd's

#### Statement of Profit or Loss for the year ended 31 December 2020

	K	K
Sales		1 535 608
Opening inventory	204 300	
Purchases	<u>980 168</u>	
	1 184 468	
Less closing inventory	<u>(207 040)</u>	<u>977 428</u>
Gross profit		558 180
Less: Increase in allowance in irrecoverables	400	
Allowance for depreciation:-		
Plant 10% x 600 000	60 000	
Motor vehicles 10% x (48 000 – 25 000)	2 300	
Irrecoverable receivables	5 064	
Administrative wages and salaries	235 848	
Rent and rates	15 624	
Motor expenses	14 202	
Selling and distribution expenses (25 682 + 3 682)	29 364	<u>(362 802)</u>
Operating profit		195 378
Finance costs (10% x 300 000)		<u>(30 000)</u>
Profit before tax		165 378
Retained earnings	b/f	<u>66 368</u>
		<u>231 746</u>

### Pinto Ltd's

#### Statement of Financial Position as at 31 December 2020

	K	K
<u>Non-Current Assets:</u>		
Freehold buildings	700 000	
Plant (600 000 – 320 000)	280 000	
Motor vehicles (48 000 – 27 300)	<u>20 700</u>	1 000 700
<u>Current Assets:</u>		
Inventory	207 040	
Trade Receivables (111 500 – 3 000)	108 500	
Bank	<u>38 580</u>	<u>354 120</u>
		<u>1 354 820</u>
<u>Equity and Liabilities:</u>		
Equity		740 000
Retained earnings		<u>157 746</u>
		897 746
<u>Non-current Liabilities:</u>		
10% debenture		300 000
<u>Current Liabilities:</u>		
Trade payables	64 392	
Debenture interest owing	15 000	

Accrued selling expenses  
Dividends owing

3 682	
<u>74 000</u>	<u>157 074</u>
	<u>1 354 820</u>

### SOLUTION THREE

(a) (i) **Refreshment Trading Account**

	K'	K'
Sales		81 450
Opening inventory	3 400	
Purchase	<u>21 600</u>	
	25 000	
Less closing inventory	<u>(4 600)</u>	<u>20 400</u>
		61 050
Less Bar Refreshment wages		<u>(23 400)</u>
Gross profit		<u>37 650</u>

(ii) **Opening Accumulated Fund**

	K'	K'
Equipment	162 000	
Refreshment inventory	3 400	
Bank	19 500	
:- Accumulated Fund		<u>184 900</u>
	<u>184 900</u>	<u>184 900</u>

(iii) **Pemba Social Club**

Income and Expenditure Account for the year ended 31 December 2020

	K'	K'
<u>Income</u>		
Profit on Refreshments accounts (a (i))	37 650	
Subscriptions (225 300 + 4 300)	229 600	
Profit from Dances	20 580	
Profit on exhibition	<u>4 450</u>	
<u>Expenditure</u>		292 280
Loss on sale of equipment (2 100 – 1 700)	400	
Depreciation on equipment	26 000	
Wages (157 000 – 23 400)	133 600	
Rent	43 500	
Travelling expenses of teams	<u>9 500</u>	<u>(213 000)</u>
Excess of income over expenditure		<u>79 280</u>

(iv) **Pemba Social Club's**

Statement of Financial Position as at 31 December 2020

	K'	K'
<u>Non-current Assets</u>		
Equipment (162 000 + 91 000) – (26 000 + 2 100)		224 900
<u>Current Assets</u>		
Inventory	4 600	
Subscriptions owing	4 300	
Bank	<u>30 380</u>	<u>39 280</u>
		<u>264 180</u>

Represented by	
Opening Accumulated fund	184 900
Excess of income over expenditure	<u>79 280</u>
	<u>264 180</u>

(b) **Journal Entries**

		K'	K'
(i)	Commission received	2 150	
	Rent received		2 150
(ii)	Bank charges	170	
	Business rates		170
(iii)	Motor vehicle expenses	185	
	Bank		185
(iv)	Office equipment	1 210	
	Purchases		1 210
(v)	Returns inwards	1 080	
	Returns outwards		1 080

## SOLUTION FOUR

(a)	(i)	<u>Capital Account</u>			
			K		K
	Balance	c/d	22 000	Bank	10 000
				Motor Vehicles	<u>12 000</u>
			<u>22 000</u>		<u>22 000</u>

(ii)	<u>Trade Receivables Account</u>			
		K		K
Sales (Bal. fig)	58 980	Bank		51 600
		Discount Allowed		580
		Balance	c/d	<u>6 800</u>
	<u>58 980</u>			58 980

(iii)	<u>Trade Payables Account</u>			
		K		K
Bank		17 680	Purchases (Bal.fig)	22 400
Returns outwards		2 330		
Balance	c/d	<u>2 390</u>		
		22 400		<u>22 400</u>

(iv)	<u>Rent Expense Account</u>			
		K		K
Bank	11,000	Statement of profit or loss		9,800
		Balance – prepayments	c/d	<u>1 200</u>
	<u>11, 000</u>			<u>11, 000</u>

## (b) D Muchi's

### Trial Balance as at 31 December 2020

	Dr	Cr
	K	K
Capital		22 000
Sales		58 980
Purchases	22 400	
Trade Receivables	6 800	
Trade Payables		2 390
Rent	11, 000	
Discount Allowed	580	



Purchases Returns		2 330
General Expenses	3 500	
Bank	1 220	
Travel Expenses	4 200	
Drawings	24 000	
Motor Vehicles	<u>12 000</u>	
	<u>85 700</u>	<u>85 700</u>

## SOLUTION FIVE

### (a) Chipo and Chip

List of account balances for the year ended 31 October 2020.

	Debit K	Credit K
Equipment	180,000	
Cash and bank	7,280	
Loan from bank		50,000
Receivables	27,520	
Payables and accrual expense		23,420
Capital: Chipo		69,000
: Chip		50,000
Withdrawals: Chipo	23,100	
: Chip	20,860	
Fee income		224,700
Sundry expenses	52,820	
Salaries	75,280	
Advertising	22,760	
Heating and lighting	7,500	
	<u>417,120</u>	<u>417,120</u>

### (b) Appropriation of profits: Chipo and Chip

	K	K
Fee income		224,700
Salaries	75,280	
Advertising	22,760	
Heating and lighting	7,500	
Sundry	52,820	
Depreciation on equipment	<u>18,000</u>	<u>(176,360)</u>
Net profit		48,340
Less: Salaries		
Chipo	10,000	
Chip	<u>10,000</u>	<u>(20,000)</u>
		28,340
Less: interest on capital		
Chipo	6,900	
Chip	<u>5,000</u>	<u>(11,900)</u>
		16,440
Profit share		
Chipo 3/5	9,864	
Chip 2/5	<u>6,576</u>	<u>16,440</u>

#### Workings

- Advertising bill incorrectly recorded and paid

	K
Amount due	1,720
Amount paid	<u>1,360</u>

- |                             |     |     |
|-----------------------------|-----|-----|
| Balance outstanding         | 360 |     |
| Dr Advertising              | 360 |     |
| Cr Payables accrued expense |     | 360 |
2. Receipt from credit customers credited to the wrong account
- |                |       |       |
|----------------|-------|-------|
|                | K     | K     |
| Amount posted: |       |       |
| Dr fee income  | 1,980 |       |
| Cr receivables |       | 1,980 |
3. Balance on heating and lighting account omitted and on accrued expenses omitted
- |                                 |              |
|---------------------------------|--------------|
|                                 | K            |
| Balance on account              | 6,590        |
| Accrued expense                 | 910          |
| Dr Heat and lighting            | <u>7,500</u> |
| Cr Payables and accrued expense | <u>910</u>   |
4. Inclusion of partners salaries in salaries balance
- |                      |                |
|----------------------|----------------|
| Dr Withdrawals Chipo | K10,000        |
| Dr Withdrawals Chip  | <u>K10,000</u> |
|                      | <u>K20,000</u> |

5. Adjustment of balances

Account	List of Balances		Adjustments		Amended Balances	
	Dr K	Cr K	Dr K	Cr K	Dr K	Cr K
Advertising	22,400		360		22,760	
Payables		22,150		360+910		23,420
Fee income		226,680	1,980			224,700
Receivables	29,500				27,520	
Heat and lighting	Nil		7,500		7,500	
*Withdrawals: Chipo		13,100	10,000 +	13,100	23,100	
: Chip		10,860	10,000 +	10,860	20,860	
Salaries	95,280			10,000	75,280	
*Loan from bank	50,000		(50,000)	(50,000)		50,000
* Sundry expense		52,820	52,820	(52,820)	52,820	

\*Balances posted to the wrong side of the account.

6. Depreciation:

Equipment  $K180,000 \times 10\% = K18,000$

7. Interests on capital:

Chipo  $K69,000 \times 10\% \text{ per annum} = 6,900$

Chip  $K50,000 \times 10\% \text{ per annum} = 5,000$

8. Residual profits

$$\text{Chipo } K16,400 \times \frac{3}{5} = 9,864$$

$$\text{Chip } K16,440 \times \frac{2}{5} = 6,576$$

## SOLUTION SIX

Plant Account at Cost					
2017		K'	2017		K'
Jan 1	Bank	40 000	Dec 31	Balance c/d	56 000
Oct 1	Bank	<u>16 000</u>			
		<u>56 000</u>			<u>56 000</u>
2018			2018		
Jan 1	Balance b/f	<u>56 000</u>	Dec	Balance c/d	<u>56 000</u>
2019			2019		
Jan 1	Balance	56 000	Sept 30	Plant disposal	40 000
July 1	Bank	<u>60 000</u>	Dec 31	Balance c/d	<u>76 000</u>
		<u>116 000</u>			<u>116 000</u>
2020			2020		
Jan 1	Balance b/f	76 000	Sept 30	Plant Disposal	16 000
Jan 1	Bank	<u>20 000</u>	Dec 31	Balance c/d	<u>80 000</u>
		<u>96 000</u>			<u>96 000</u>
2021					
Jan 1	Balance b/f	80 000			

Allowance for Depreciation on Plant Account					
2017		K'	2017		K'
Dec 31	Balance c/d	<u>8 800</u>	Dec 31	SPL (8 000 + 800)	<u>8 800</u>
2018			2018		
Dec 31	Balance c/d	20 000	Jan 1	Balance b/f	8 800
		<u>20 000</u>	Dec 31	SPL (8 000 + 3 200)	<u>11 200</u>
					<u>20 000</u>
2019			2019		
Sept 30	Plant Disposal (8 000 + 8000 + 6000)	22 000	Jan 1	Balance b/f	20 000
Dec 31	Balance c/d	<u>13 200</u>	Dec 31	SPL (6 000 + 3 200 + 6 000)	<u>15 200</u>
		<u>35 200</u>			<u>35 200</u>
2020			2020		
Sept 30	Plant disposal	9 600	Jan 1	Balance	13 200

Dec 31	Balance			b/f	200
	c/d	<u>22 000</u>	Dec 31	SPL (12 000 + 4 000 + 2 400)	<u>18 400</u>
		<u>31 600</u>			<u>31 600</u>

2021			
Jan 1	Balance		22 000
	b/f		

#### Plant 1, Disposal Account

	K'		K'
Plant	40 000	Allowance for Dep'n (8 000 + 8 200 + 6 000)	22 000
		Bank	11 000
		Loss on Disposal - SPL	<u>7 000</u>
	<u>40 000</u>		<u>40 000</u>

#### Plant 2 Disposal Account

	K'		K'
Plant	16 000	Allowance for Dep'n	9 600
Profit on disposal - SPL	<u>1 600</u>	Bank	<u>8 000</u>
	<u>17 600</u>		<u>17 600</u>

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 2: QUANTITATIVE ANALYSIS

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WEDNESDAY 16 MARCH 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 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/statistical formulae book **MUST** be provided to you. **Request for one if not given by the Invigilators.**

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

## **SECTION A – (Compulsory)**

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

#### **QUESTION ONE**

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

- 1.1 The analysis based on study of price fluctuations, production of commodities and deposits in banks is classified as

- A. Sample series analysis.
- B. Numerical analysis.
- C. Time series analysis.
- D. Experimental analysis.

(2 marks)

- 1.2 If  $X$  is measured in hours and  $Y$  is measured in minutes, then correlation coefficient has the unit:

- A. Hours.
- B. Minutes.
- C. Both hours and minutes.
- D. No unit.

(2 marks)

- 1.3 How do we classify a desired rate of return which is minimum by actual rate of return?

- A. present cash flow.
- B. future cash flow.
- C. negative cash flow.
- D. positive cash flow.

(2 marks)

- 1.4 Determine the annual percentage rate of interest of a deposit account that has a nominal rate of 9% compounded monthly.

- A. 9.83%.
- B. 10.38%.
- C. 9.38%.
- D. 9.43%.

(2 marks)

- 1.5 How do we classify the accumulated series of deposits as future sums of money?

- A. nominal fund.
- B. sinking fund.
- C. annuity fund.



D. marginal fund.

(2 marks)

- 1.6 Mr. Mwenda Kamoto earned simple interest amount of K7000 after 8 years with interest K2000. The rate is:

A. 5%.  
B. 8%.  
C. 3.6%.  
D. 17.5%.

(2 marks)

- 1.7 The sampling process should satisfy the condition of that all the items in the population have an equal chance of being selected.

A box contains 5 red cards (R), 7 blue cards (B) and 13 white cards (W). Two cards are selected at random. The probability that both cards are blue without replacement is:

A. 0.06.  
B. 0.08.  
C. 0.05.  
D. 0.07.

(2 marks)

- 1.8 The interest rate per year is 16 and the compounding occurs every quarter, what is the interest rate per compounding period?

A. 0.04.  
B. 0.4.  
C. 0.004.  
D. 40.

(2 marks)

- 1.9 In calculating annuity, the assumption involved is that every payment is?

A. Different.  
B. Equal.  
C. Marginal.  
D. Nominal.

(2 marks)

- 1.10 Given that  $P(A \cap B) = 0.20$  and  $P(A/B) = 0.40$ , what must be the  $P(B)$ ?

A. 0.1.  
B. 0.2.  
C. 0.4.  
D. 0.5.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

- (a) A computer has a scrap value of K400, five (5) years after purchase. If the depreciation rate is 28%, calculate the value of the computer when it was bought five (5) years ago.  
(4 marks)
- (b) A sample of seven households from a small city was taken and some information on their incomes and food expenditures for the last month was collected. The information obtained (in hundreds of kwacha) is given in the table below:

<b>Income (X) (in hundreds of kwacha)</b>	55	83	38	61	33	49	67
<b>Food Expenditure (Y)</b>	14	24	13	16	9	15	17

**Required:**

- (i) Draw the scatter diagram of these data. (3 marks)
- (ii) Calculate the equation of the regression line of  $y$  on  $x$  (9 marks)
- (iii) Calculate the coefficient of correlation  $r$ . (4 marks)

**[Total: 20 Marks]**

### QUESTION THREE

- (a) A survey revealed that 35% of the executives said that good employees leave companies because they are unhappy with the management. Assume that this result holds true for the current population of senior executives for a certain firm. Let  $x$  denote the number in a random sample of five senior executives who hold this opinion. Find the probability that:
- (i) Exactly three (3) senior executives in this sample hold the said opinion. (3 marks)
- (ii) At most two (two) senior executives in this sample hold the said opinion. (3 marks)
- (iii) At least two (2) senior executives in this sample hold the said opinion. (3 marks)
- (iv) Two to four (4) senior executives in this sample hold the said opinion. (4 marks)
- (b) Let  $x$  be the number of magazines a person reads every week. Based on a sample survey of adults, the following probability distribution table was prepared.

$x$	0	1	2	3	4	5
$P(x)$	0.36	0.24	k	0.10	0.07	0.05

**Required:**

- (i) calculate the mean of  $x$ . (3 marks)  
 (ii) standard deviation of  $x$ . Interpret these measures. (4 marks)

**[Total: 20 Marks]****QUESTION FOUR**

- (a) The cash flow of two projects A and B for four (4) years are shown below:

YEAR	PROJECTS	
	A	B
1	1200	2000
2	800	950
3	1000	800
4	750	1000

The cost of the capital is 5%. The initial investment is K3500.

**Required:**

Which project must be selected? (10 marks)

- (b) Tolito drink company manufactures two (2) types of drink X and Y using Mutondo fruit from a particular forest. Each unit of X and Y drink consumes one (1) gramme fruit. The maximum weight of fruit available in an hour is 50g. The other requirement is that at least 20g of X drink should be supplied in order to get quality drinks. The price of bottle of X drink is K5 and Y is K6.

**Required:**

- (i) Write down the Objective function. (3 marks)  
 (ii) Construct Constraint functions to maximize the objective function. (7 marks)

**[Total: 20 Marks]****QUESTION FIVE**

- (a) The distance Mulenga will travel on his motor bike on one (1) litre of petrol may be modelled by a normal distribution with mean 125 and standard deviation 10.

**Required:**

- Given that Mulenga starts a journey with one (1) litre of petrol in his motorbike's tank. Find the probability that, without refueling, she can travel
  - More than 110 kilometers (2 marks)
  - Between 140 and 160 kilometers (2 marks)
- Find the longest journey Mulenga can undertake, if he is to have a probability of at least 0.9 of completing it on one liter of petrol. (4 marks)

- (b) KASTA runs a restaurant. The lunch menu is freshly prepared each morning and KASTA has to decide how many meals to make each day. KASTA has analysed daily sales over the past few months and established four possible demand levels and their associated probabilities. She has produced the following payoff table to show profits which could be earned from the lunch sales in the restaurant.

Supply level	Demand level			
	550	650	720	970
Probability	0.20	0.25	0.30	0.25
550	2170	990	910	840
650	2170	1622	1495	1390
720	2170	1622	2115	1885
970	2170	1622	2115	2596

Assume the level of demand for lunches in the restaurant is uncertain.

**Required:**

- (i) Which daily supply level will she close if she uses minimax regret criterion? (7 marks)
- (ii) Which daily supply level will she close if she uses Hurwicz criterion? (5 marks)
- [Total: 20 Marks]**

**QUESTION SIX**

- (a) The average number of errors per page is 3.

**Required:**

Calculate the probability that there is:

- (i) no error on a page. (2 marks)
- (ii) more than one error on a page. (3 marks)

- (b) The table has data depicting that petrol consumption depends on the number of days the machine has been used.

NUMBER OF DAYS	1	2	3	4
PETROL	20	20	10	10

**Required:**

Calculate the Coefficient of Correlation by Product Moment method. (10 marks)

- (c) Mr. Dickson Nyambe deposited K540 in an account offering 10% interest compounded quarterly for three (3) years.

**Required:**

Calculate the amount. (5 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 2 QUANTITATIVE ANALYSIS**

### **SUGGESTED SOLUTIONS**

#### **SECTION A**

##### **SOLUTION ONE**

1.1 C

1.2 D

1.3 C

1.4 C

1.5 B

1.6 A

1.7 D

1.8 A

1.9 B

1.10 D

## SECTION B

### SOLUTION TWO

$$A_t = 400, i = \frac{28}{100} = 0.28, t = 5$$

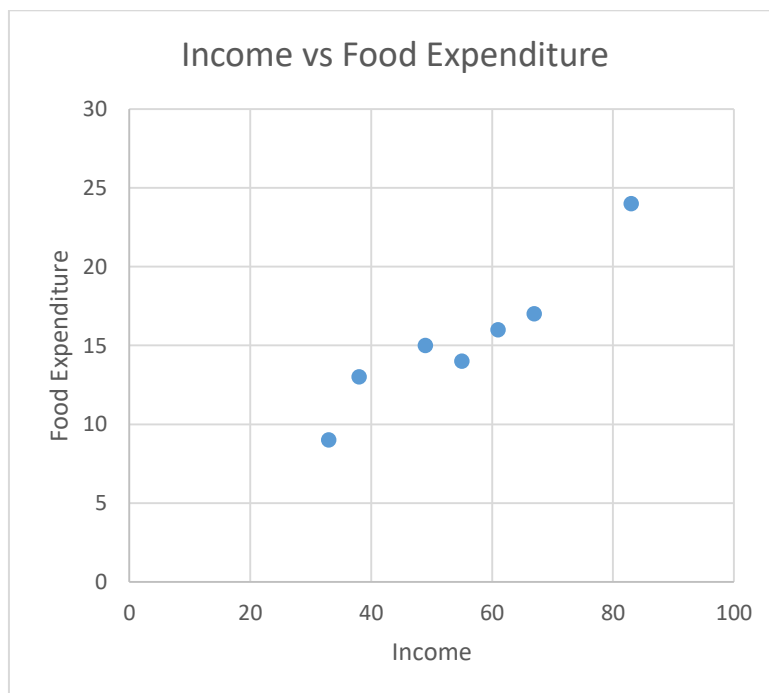
$$A_t = A_0(1 - i)^t$$

$$A_0 = \frac{A_t}{(1 - i)^t}$$

$$A_0 = \frac{400}{(1 - 0.28)^5}$$

$$A_0 = \frac{400}{0.1935}$$

$A_0 = K2067.18$  (Original price of the computer five years ago)



X	Y	X2	Y2	XY
55	14	3025	196	770
83	24	6889	576	1992
38	13	1444	169	494
61	16	3721	256	976
33	9	1089	81	297
49	15	2401	225	735
67	17	4489	289	1139
386	108	23058	1792	6403

Therefore,

$$\beta = \frac{n \sum XY - \sum X \sum Y}{n \sum X^2 - (\sum X)^2} = \frac{7 \times 6403 - 386 \times 108}{7 \times 23058 - (386)^2} = 0.252$$

and

$$\alpha = \bar{Y} - \beta \bar{X} = \frac{108}{7} - 0.252 \left( \frac{386}{7} \right) = 1.5$$

Hence, the least-squares regression line is

$$y = \alpha + \beta x = 1.5 - 0.252x$$

$$\begin{aligned} \text{i.} \quad r &= \frac{n \sum xy - \sum x \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}} \\ &= \frac{7(6403) - (386)(108)}{\sqrt{[7(23058) - 386^2][7(1792) - 108^2]}} \\ &\quad \mathbf{r = 0.95} \end{aligned}$$

### SOLUTION THREE

Let  $X$  denote the number of executives in this sample who hold the said opinion.

Therefore, we have that;

$$n = 6, \quad P(\text{success}) = p = 0.3 \quad (q = 1 - p = 0.7), \quad \text{So that } X \sim B(6, 0.3).$$

$$\text{And we know that: } P(X = x) = \binom{n}{x} p^x q^{n-x} = \binom{n}{x} p^x (1 - p)^{n-x}, \quad x = 0, 1, 2, \dots, n.$$

$$P(X = 0) = \binom{6}{0} (0.35)^0 (1 - 0.35)^{6-0} = 0.0754$$

$$P(X = 1) = \binom{6}{1} (0.35)^1 (1 - 0.35)^{6-1} = 0.2437$$

$$P(X = 2) = \binom{6}{2} (0.35)^2 (1 - 0.35)^{6-2} = 0.3280$$

$$P(X = 3) = \binom{6}{3} (0.35)^3 (1 - 0.35)^{6-3} = 0.2355$$

$$P(X = 4) = \binom{6}{4} (0.35)^4 (1 - 0.35)^{6-4} = 0.0951$$

$$P(X = 5) = \binom{6}{5} (0.35)^5 (1 - 0.35)^{6-5} = 0.0205$$

$$P(X = 6) = \binom{6}{6} (0.35)^6 (1 - 0.35)^{6-6} = 0.0084$$

- i.  $P(X = 3) = P(3) = 0.2355$
- ii.  $P(X \leq 2) = P(0) + P(1) + P(2) = 0.0754 + 0.2437 + 0.3280 = 0.6471$
- iii.  $P(X \geq 2) = 1 - [P(0) + P(1)] = 1 - [0.0754 + 0.2437] = 0.6809$
- iv.  $P(2 \leq X \leq 4) = P(2) + P(3) + P(4) = 0.3280 + 0.2355 + 0.0951 = 0.6586$

(b)

$x$	0	1	2	3	4	5
$P(x)$	0.36	0.24	k	0.10	0.07	0.05

$$k = 0.18$$

- i.  $E(X) = \sum X \cdot P(X = x) = (0 \times 0.36) + (1 \times 0.24) + (2 \times 0.18) + (3 \times 0.1) + (4 \times 0.07) + (5 \times 0.05) = 1.43$



$$E(X^2) = \sum X^2 \cdot P(X = x) = (0^2 \times 0.36) + (1^2 \times 0.24) + (2^2 \times 0.18) + (3^2 \times 0.1) \\ + (4^2 \times 0.07) + (5^2 \times 0.05) = 4.23$$

Therefore,  $(X) = E(X^2) - [E(X)]^2 = 4.23 - 1.43^2 = 2.1851$  .

$$\text{Standard deviation} = \sqrt{2.1851} = 1.48$$

## SOLUTION FOUR

(a)	PROJECT A				
	YEAR	CASH	DF	DF(C)	PV
	1	1200	0.9524	0.9524(1200)	1142.88
	2	800	0.9070	0.9070(800)	725.6
	3	1000	0.8638	0.8638(1000)	863.8
	4	750	0.8227	0.8227(750)	
	<u>617.025</u>				
			(1)	(1)	ΣPV =
			<u>3349.31</u>		

$$NPV = \Sigma PV - \text{Cost} = 3349.31 - 3500 = -K150.70 \quad (1\text{mark})$$

PROJECT B				
YEAR	CASH	DF	DF (C)	PV
1	2000	0.9524	0.9524(2000)	1904.8
2	950	0.9070	0.9070(950)	861.55
3	800	0.8638	0.8638(800)	691.04
4	1000	0.8227	0.8227(1000)	<u>822.7</u>
		(1)	(1)	$\Sigma PV =$ <u>4280.19</u>

$$NPV = \Sigma PV - \text{Cost} = 4280.19 - 3500 = K780.19$$

Project B be selected

- (b) (i)  $Z = 5x + 6y$
- (ii)  $x + y \leq 50$
- $x \geq 20 \quad (2)$
- $x \geq 0 \quad (1)$
- $y \geq 0 \quad (1)$

## SOLUTION FIVE

(a)

$$\mu = 125,$$

$$\sigma = 10$$

$$1. \quad (i) P(x > 110) = P\left(Z > \frac{110-125}{10}\right) = P(Z > -1.5) = 0.4332 + 0.5 = 0.9332$$

$$(ii) \quad P(140 < x < 155) = P\left(\frac{140-125}{10} < Z < \frac{155-125}{10}\right)$$

$$= P(1.5 < Z < 3.0) = 0.49865 - 0.4332 = 0.06545$$

$$2. \quad Z = \frac{X-\mu}{\sigma}, \quad 1.28 = \frac{X-125}{10}; \quad 12.8 = X - 125, \text{ Therefore } X = 137.8$$

(b)

(i) using minimax regret Criterion

Supply level	Demand level				Maximum	Minimum
	550	650	720	970		
Probability	0.20	0.25	0.30	0.25		
550	530	632	1205	1756	1756	
650	530	0	620	1206	1206	
720	0	0	0	791	791	
970	530	0	0	0	530	530

Supply level 970 will be chosen

(ii) using the Hurwicz criterion

Supply level	Optimistic ( $\alpha$ )	Pessimistic ( $1 - \alpha$ )	Total
550	$0.8 \times (2170)$	$0.2 \times (840)$	1904
650	$0.8 \times (2170)$	$0.2 \times (2170)$	2014

720	$0.8 \times (2700)$	$0.2 \times (2170)$	5404
970	$0.8 \times (2170)$	$0.2 \times (2170)$	2060.4

Supply level 720 will be chosen

## SOLUTION SIX

(a)  $m = 3/\text{page}$

$$P(x) = \frac{m^x e^{-m}}{x!}$$

(i)  $P(x=0) = \frac{3^0 e^{-3}}{0!} = \frac{(1)(0.0498)}{1} = 0.0498$

(1)

(ii)  $P(x > 1) = P(x=2) + P(x=3) + \dots +$

$$= 1 - P(x \leq 1)$$

$$= 1 - (P(x=0) + P(x=1)) \quad (1)$$

$$= 1 - \left( \frac{3^0 e^{-3}}{0!} + \frac{3^1 e^{-3}}{1!} \right)$$

$$= 1 - \left( \frac{(1)(0.0498)}{1} + \frac{3(0.0498)}{1} \right)$$

$$= 1 - (0.0498 + 0.1494)$$

$$= 1 - 0.1992 = 0.8006 \quad (1)$$

(1)

(b)

X	X <sup>2</sup>	Y	Y <sup>2</sup>	XY
1	1	20	400	20
2	4	20	400	40
3	9	10	100	30
<u>4</u>	<u>16</u>	<u>10</u>	<u>100</u>	<u>40</u>
$\Sigma x = 10$	$\Sigma x^2 = 30 \quad (1)$	$\Sigma y = 60$	$\Sigma y^2 = 1000 \quad (1)$	$\Sigma xy = 130 \quad (1)$

$$R = \frac{n \Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[n \Sigma x^2 - (\Sigma x)^2][n \Sigma y^2 - (\Sigma y)^2]}}$$

$$= \frac{4(130) - (10)(60)}{\sqrt{[4(30) - 10^2][4(1000) - 60^2]}}$$

$$= \frac{520 - 600}{\sqrt{(120 - 100)(4000 - 3600)}}$$

$$= \frac{-80}{\sqrt{(20)(400)}}$$

$$= \frac{-80}{\sqrt{8000}}$$

$$= \frac{-80}{89.4}$$

$$= -0.894$$

(c)  $P = \text{K}540 \quad i = 0.1 \quad n = 3 \quad m = 4$

$$A = P (1 + i/m)^{mn}$$

$$= 540(1 + 0.1/4)^{3(4)}$$

$$= 540(1.025)^{12}$$

$$= 540(1.3449)$$

$$= \text{K}726.25$$

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 3: BUSINESS ECONOMICS

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TUESDAY 15 MARCH 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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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 In the definition of a public good, the term 'non-rival' means that.....

- A. One person's use of the public good does not reduce the amount available to others
- B. The public good is produced by the government without any competition
- C. The public good is produced at zero marginal cost
- D. The public good is mostly consumed by free riders.

(2 marks)

1.2 Which of the following events would shift the demand curve for Good X, which is a normal good, to the right?

- A. An increase in the price of a substitute good.
- B. A decrease in the price of Good X.
- C. An increase in the price of a complementary good.
- D. A decrease in consumer income.

(2 marks)

1.3 If the cross-price elasticity of demand between goods X and Y is positive then.....

- A. X and Y are complements.
- B. X and Y are substitutes.
- C. The demand for X and Y are both price elastic.
- D. The demand for X and Y are both price inelastic.

(2 marks)

1.4 Firm X and Firm Y were previously in direct competition, but now they plan to merge. This combination would be considered a.....

- A. Vertical merger.
- B. Complementary merger.
- C. Horizontal merger.
- D. Conglomerate merger.

(2 marks)

1.5 If a few firms share most of an entire industry's revenues, the market structure is most likely.....

- A. Monopolistically competitive
- B. Perfectly competitive
- C. A monopoly
- D. An oligopoly

(2 marks)



1.6 The transactions demand for money will be greater the.....

- A. Higher the price level.
- B. Lower the level of real income.
- C. Higher the rate of interest.
- D. Higher the speculative (asset) demand for money.

(2 marks)

1.7 The Phillips curve shows that the.....

- A. Higher the level of prices, the lower will be the rate of unemployment.
- B. Higher the rate of inflation, the lower will be the rate of unemployment.
- C. Lower the level of prices, the lower will be the rate of unemployment.
- D. Higher rate of inflation, the higher will be the rate of unemployment.

(2 marks)

1.8 The short run aggregate supply schedule tells us that an increase in the average price level will encourage firms to.....

- A. Reduce output and increase employment.
- B. Reduce output and employment.
- C. Increase output and reduce employment.
- D. Increase output and employment.

(2 marks)

1.9 A fiscal policy to combat a recession would call for .....

- A. An increase in taxes.
- B. A decrease in the reserve requirement.
- C. An increase in government spending.
- D. A decrease in the discount rate.

(2 marks)

1.10 The view that nations can benefit from international trade on the basis of absolute advantage was developed by.....

- A. Heckscher-Ohlin.
- B. Adam Smith.
- C. David Richardo.
- D. John Maynard Keynes.

(2 marks)

**[Total: 20 Marks]**

## SECTION B:

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

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

#### QUESTION TWO

- (a) Contrast how a market system and a command economy try to cope with economic scarcity. (8 marks)
- (b) Outline any four (4) factors that may promote economic growth. (8 marks)
- (c) Explain any two (2) characteristics of public goods. (4 marks)

**[Total: 20 Marks]**

#### QUESTION THREE

- (a) A company producing a health drink called Best has plans to carry out a new advertising campaign to publicize Best's properties of bringing vitality and health to the consumer.

##### **Required:**

Use demand and supply curves to show the following:

- (i) The effects of advertising on the equilibrium price and quantity for Best. (5 marks)
  - (ii) The cost of producing the drink goes up (5 marks)
  - (iii) The Government decides to give a subsidy (5 marks)
- (b) The demand equation for Good X is  $Q_d = 15 - 0.5P$  and the supply equation for Good X is  $Q_s = 3 + 2P$ , where P is the price.

##### **Required:**

- (i) Determine the equilibrium price and quantity. (2 marks)
  - (ii) What is the implication when the price is K6? (3 marks)

**[Total: 20 Marks]**

### **QUESTION FOUR**

(a) Distinguish between short run and long run costs. (4 marks)

(b) Assume a firm has the following costs:

Output	Total cost	Average cost	Marginal cost
0	0		
1	2		
2	4		
3	8		
4	16		
5	32		
6	64		
7	128		
8	256		

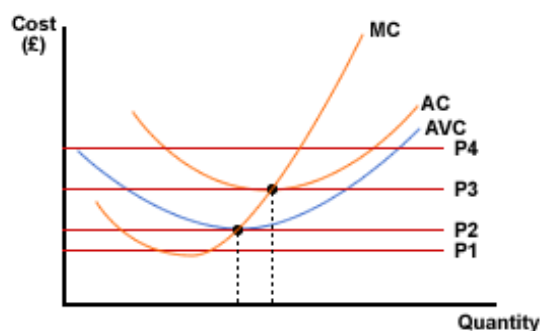
#### **Required:**

(i) Complete the table above (4 marks)

(ii) If the market price for the output produced is 32 and the market structure is perfectly competitive, what level of output is the profit maximizing level of output. Justify your answer.

(3 marks)

(c) Examine the diagram that is given below, which represents a firm in a perfectly competitive market.



#### **Required:**

Explain what price the firm would require to:

(i) stay in the market in the long run (3 marks)

- (ii) stay in the market in the short run (3 marks)
- (iii) leave the market at once (3 marks)

**[Total: 20 Marks]**

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

**QUESTION FIVE**

- (a) Draw a two-sector model of the circular flow model and label it correctly. (6 marks)
- (b) Distinguish between the resource market and product market in the circular flow model. (4 marks)
- (c) Assume that, an increase in aggregate expenditure of K120 million will cause an increase in the equilibrium level of Gross Domestic Product of K360 million.  
Calculate the multiplier and the marginal propensity to consume domestically produced goods. (4 marks)
- (d) Explain the solution to demand deficiency unemployment according to the Keynesians. (6 marks)

**[Total: 20 Marks]**

**QUESTION SIX**

- (a) Assume that the Central Bank pursues an expansionary monetary policy.
  - (i) Explain any three (3) tools that the Central Bank would use to achieve this. (6 marks)
  - (ii) Draw a correctly labeled money market graph and show the short-run effect of the expansionary monetary policy on the nominal interest rate. (6 marks)
- (b) Explain any four (4) types of unemployment. (8 marks)

**[Total: 20 Marks]**

**QUESTION SEVEN**

- (a) Explain four (4) methods a country can use to reduce its trade deficit other than the use of quotas and tariffs. (12 marks)
- (b) Outline any two (2) advantages and any two (2) disadvantages of fixed exchange rate regime. (8 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 3 BUSINESS ECONOMICS**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

1.1 A

1.2 A

1.3 B

1.4 C

1.5 D

1.6 A

1.7 B

1.8 D

1.9 C

1.10 B

## **SOLUTION TWO**

a)

### **Market economy**

- A market system allows for the private ownership of resources and coordinates economic activity through market prices.
- Participants act in their own self-interest and seek to maximize satisfaction or profit through their own decisions regarding consumption or production.
- Goods and services are produced and resources are supplied by whoever is willing to do so.
- The result is competition and widely dispersed economic power.

### **Command economy**

- The command economy is characterized by public ownership of nearly all property resources and economic decisions are made through central planning.
- The planning authority, appointed by the government determines production goals for each enterprise.
- The division of output between capital and consumer goods is centrally decided based on long-term priorities.

### **b) Economic growth**

- Investment – this is current output that is not consumed. An increase in investment will result in higher production in the future.
- Education and training – this improves the productivity of the labour force and thereby raises the economic growth rate.
- Technological change – this increases the productive potential of an economy.
- Improved management skills – this will lead to improved efficiency, better economic organisation and greater output.
- Increased government expenditure and reductions in taxation which boosts the incentive for firms to raise investment and worker to take up employment.
- Structural reforms such as privatization, reductions in market distortions such as breaking up monopolies and making it easier and less bureaucratic for firms to take on workers and offer new products and series and new firms to set up business.
- Population growth – this increases the productive potential of an economy and provides a steady increase in demand that will improve the investment climate.
- Improving health standards means you will get more hours of work per worker so raising economic growth.

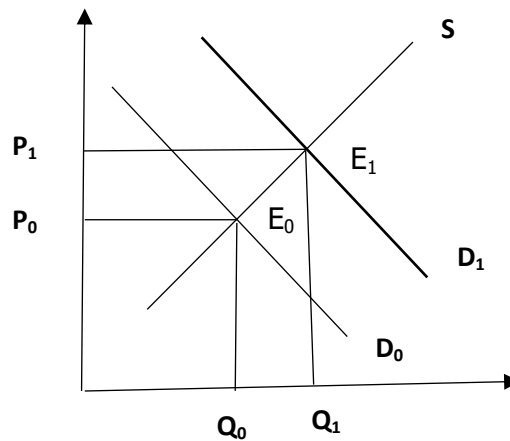
### **c) Characteristics of Public goods**

- Non rivalry – The consumption of a good by one person does not prevent the consumption of that good by anyone else. Goods have large external benefits of consumption relative to private benefits. This makes such goods socially desirable but these goods would not be profitable for individuals to provide for themselves – examples include pavements and street lighting.
- Non-excludability – People reap the benefits of the good even if they have not paid for it. It is not possible to provide the good without others also benefiting and as a result, they have no incentive to pay for it. This creates the free rider problem.

### SOLUTION THREE

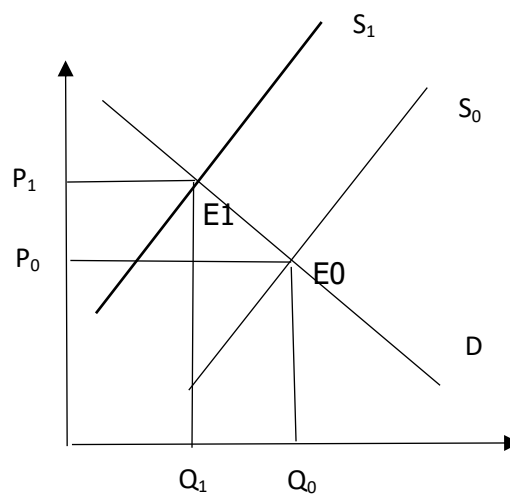
#### a) Effects on price and quantity

i)

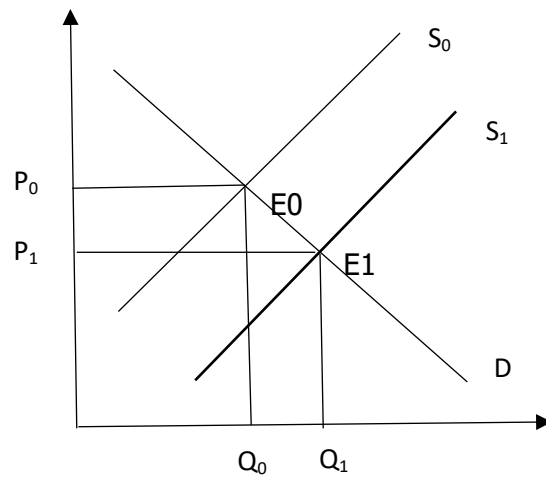


A new advertising campaign is likely to attract new buyers of the drink and more likely increase the buying rate of existing buyers. This will lead to an increase in demand. This increase in demand will shift the demand curve to the right, leading to a higher equilibrium point at a higher price and higher quantity as shown above.

- ii) When the cost of producing the drink goes up, it leads to a reduction the quantity produced. This will lead to a reduction in supply and the supply curve will shift upwards to the left to a new equilibrium point at higher price and lower quantity as shown below.



iii)



When the government gives a subsidy to the producer, it makes it cheaper to produce the drinks. This leads to an increase in the quantity supplied of Best drinks, 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.

b)

i) Equilibrium  $Q_d = Q_s$

$$15 - 0.5P = 3 + 2P$$

$$15 - 3 = 2P + 0.5P$$

$$12 = 2.5P$$

$$\mathbf{P = 4.8, Q = 12.6}$$

ii) When price is K6, there will be a surplus, because at K6, producers are willing to sell more and consumers demand less of the good.

Any prices above equilibrium cause a surplus. Eventually, prices will tend towards equilibrium point.



## SOLUTION FOUR

a) The **short run** is a production planning period in which at least one factor of production is fixed in quantity. While the **long run** is a production planning period in which all factors of production can be varied in quantity.

b) i) Table

Output	Total cost	Average cost	Marginal cost
0	0	-	-
1	2	2	2
2	4	2	2
3	8	2.7	4
4	16	4	8
5	32	6.4	16
6	64	10.7	32
7	128	18.3	64
8	256	32	128

ii) Profit maximizing condition is where  $MR=MC$ . If the price is K32, then the MR is also K32. MC is K32 at 6 units of output. Therefore, the firm is maximizing output at 6 units.

c)

i) A perfectly competitive firm will only stay in the market in the long-run if it is earning normal profits. This is at price **P3**.

It is not possible to continue earning super normal profits in the long-run because they are competed away by new entrants. No firm will continue to operate in the long-run if it is making losses.

ii) A perfectly competitive firm will only stay in the market in the short run if it is earning super normal profits or losses. This is at price **P4** (abnormal profits) or **P2** (losses, but covering AVC)

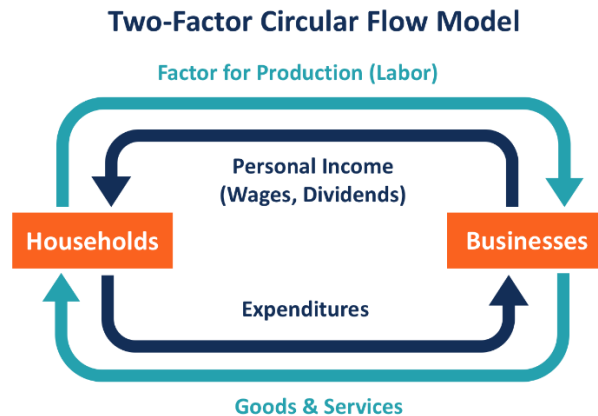
It is possible for a firm to earn super normal profits in the short run before new entrants join the industry.

It is also possible for a firm to make losses but still continue operating. It may do so if it is still able to cover its average variable costs, hoping that in the long run, the situation might improve.

iii) A perfectly competitive firm will leave the market at once if it is making losses to the level where it cannot even cover its average variable costs. So at price **P1**, the firm will leave the market at once!

## SOLUTION FIVE

### a) Two sector model



### b) Resource market and product market

The resource markets are where the owners of the resources (the households) sell their resources to the buyers of the resources (businesses). In the product markets, businesses sell the goods and services they have produced to the buyers of the goods and services, the households.

### c) The multiplier is given by;

Multiplier  $k$  = change in GDP/change in aggregate expenditure

$$k = 360/120 = 3$$

MPC;

$$k = 1/(1 - \text{MPC}),$$

$$\text{MPC} = 2/3$$

d)

Demand deficient unemployment is due to insufficient aggregate demand in the economy as a whole. The main solution for demand deficient unemployment advocated by Keynesian economists is an expansionary fiscal policy.

The expansionary fiscal policy is usually associated with an increase in government expenditure which it is believed will then have a multiplier effect on aggregate demand.

An alternative to increasing government expenditure is cutting the tax rate which should in turn lead to increased demand in the form of higher consumption and investment.

## SOLUTION SIX

### a) Expansionary Monetary Policy

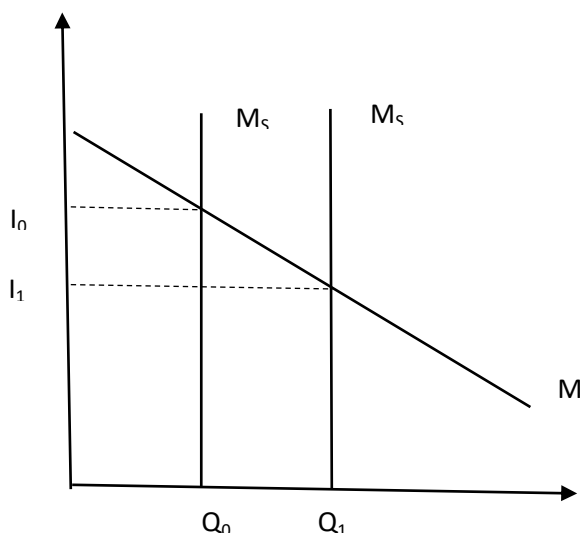
**Lower the short-term interest rates:** The adjustments to short-term interest rates are the main monetary policy tool for a central bank. Commercial banks can usually take out short-term loans from the central bank to meet their liquidity shortages. In return for the loans, the central bank charges a short-term interest rate. By decreasing the short-term interest rates, the central bank reduces the cost of borrowing to commercial banks.

Subsequently, the banks lower the interest rates they charge their consumers for loans. Therefore, whenever the central bank lowers interest rates, the money supply in the economy increases.

**Reduce the reserve requirements:** Commercial banks are obliged to hold a minimum amount of reserves with a central bank. In order to increase the money supply, the central bank may reduce reserve requirements. In such a case, commercial banks would have extra funds to be lent out to their clients.

**Expand open market operations (buy securities):** The central bank may also use open market operations with government-issued securities to affect the money supply in the economy. It may decide to buy large amounts of the government-issued securities (e.g., government bonds) from institutional investors to inject additional cash into the domestic economy.

### b) Money market graph



When the central bank pursues an expansionary monetary policy, money supply will shift from  $MS_0$  to  $MS_1$ . This will lead to a reduction in interest rates  $I_0$  to  $I_1$ . The interest rates will drop with an increase in money supply.

### c) Types of unemployment

- Frictional – is the irreducible minimum amount of unemployment caused by labour market turnover when new people enter the labour force and look for jobs and existing workers change jobs. Frictional unemployment is most easily identifiable

when unemployment is low and the majority of the workforce has been unemployed only for a short time.

- Structural – occurs because changes in the regional, occupational and industrial structure of the demand for labour do not match changes in the structure of the supply of labour. Changes in demand may be due to international competition e.g. shipping decline in UK or new technology e.g. motor car industry.
- Regional – refers to the case where a whole region is in decline due to closure of one or more industries within the region. Regional unemployment is identifiable if the unemployment in a particular region is substantially higher than other regions of a country.
- Demand Deficient – is due to insufficient aggregate demand in the economy as a whole so that full employment is not achieved. Demand deficient unemployment affects all regions but some are affected more than others. A sign of demand deficient unemployment is that the unemployment rate is quite high across the whole country.
- Real Wage Unemployment – occurs because real wages are too high in relation to labour productivity. At the going real wage it does not pay for firms to employ all the labour force that is willing to work at the real wage.
- Voluntarily unemployed are not willing to work at the going real wage rate. One key factor that may raise the amount of welfare payments.

## **SOLUTION SEVEN**

### **a) Methods to deal with deficits**

- Devaluation – this makes imports more expensive in domestic currency terms and exports cheaper in foreign currency terms. This should lead to a fall in import volumes and a rise in export volumes.
- Fiscal restraint – a cut in fiscal expenditure (rise in taxes) will have reverse multiplier effects on national income resulting in reduced import expenditure via the marginal propensity to import.
- Monetary restraint – as tight monetary policy will via higher interest rates restrain consumer expenditure and investment. This will reduce national income and import expenditure.
- Productivity improvements – increased productivity will improve the competitiveness of exports and the ability of import competing industries to compete against imports.
- Subsidies – the government could subsidize exports of import competing industries.
- Government procurement policies could change such that government expenditure is switched away from imported goods to domestically produced goods so improving the trade balance.
- A government could introduce exchange controls that restrict its citizens ability to purchase foreign exchange and hence imports. If this is the case then they may switch expenditure from imports to domestically produced goods.

### **b) Fixed Exchange Rate Regime**

Advantages of fixed exchange rates

- Fixed exchange rates give greater certainty, and hence encourage foreign trade, allowing the potential gains from trade to be realized.
- Fixed exchange rates can lead to lower inflation when the domestic currency is fixed relative to a low inflation currency. By pegging to a low inflation currency a country can send a signal to economic agents that they need to keep their wage demands and prices under control otherwise the country will lose some of its competitiveness and jobs.
- Fixed exchange rate can also force discipline on governments since the fear of devaluation may prevents governments pursuing irresponsible macroeconomic policies, e.g. if a government deliberately expands aggregate demand to increase popularity with voters, a balance of payments deficit will arise and so it may have to constrain aggregate demand to prevent an excessive balance of payments deficit.
- Fixed exchange rates can promote international policy coordination. Frequently fixed exchange rate systems are maintained by two or more countries that cooperate to maintain a fixed exchange rate system. This may lead to a superior economic outcome

Disadvantages of fixed exchange rates

- A major problem with a fixed exchange rate is that the authorities will lose their monetary autonomy if their currency is under pressure to devalue then they have to raise interest rates to protect the domestic currency even if this is not desirable for the domestic economy.

- If there is a balance of payments deficit, the level of domestic aggregate demand must be reduced, which can have serious effects in terms of higher unemployment and lost output.
- Fixed exchange rates may prove inappropriate compared to floating exchange rates when an economic shock hits the economy because the exchange rate is not free to adjust to the shock. Instead the economic shock may require unnecessarily large adjustments in the real economy.
- The government may find it difficult in practice to maintain a fixed exchange rate, as holders of substantial cash balances may speculate that there will be a devaluation. This means that fixed exchange rate regimes can be subjected to speculative attacks requiring the authorities to pursue deflationary policies such as reducing budget deficits and tightening monetary policy by raising short term interest rates.
- Fixed exchange rates can on occasion be maintained only by imposing controls on capital flows, together with quotas and tariffs. This is economically inefficient as it prevents an efficient allocation of global capital and trade.

**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 16 MARCH 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 allocated are indicated against each question.

- 1.1 Which of the following is a feature of Microsoft Windows
- A. Multitasking.
  - B. Offline processing.
  - C. The Cloud.
  - D. Multi access.
- (2 marks)
- 1.2 Which of the following storage devices uses a microchip to store data.
- A. Magnetic tape.
  - B. Memory card.
  - C. Optical disc.
  - D. VCD.
- (2 marks)
- 1.3 Which statement best describes a social media application.
- A. an application software used to share information among people with a common interest
  - B. an application solely for designing diagrams on the computer
  - C. system software which comes with a computer hardware
  - D. none of the above
- (2 marks)
- 1.4 Unscrambling of data being transmitted on a network is called .....
- A. Decoding.
  - B. Encoding.
  - C. Encryption.
  - D. Decryption.
- (2 marks)
- 1.5 ..... type of software provides the user with special tools to perform disk formatting, transferring files and malware detection.
- A. Application.
  - B. Presentation.
  - C. Browser.
  - D. Utility.
- (2 marks)



1.6 Which one of the following refers to a staff briefing meeting?

- A. The annual general meeting.
- B. Command meeting.
- C. Consultative meeting.
- D. Management committee meeting.

(2 marks)

1.7 State one example of informal communication

- A. Writing a memo to colleagues.
- B. A discussion on the new changes in the organization while having lunch with a colleague.
- C. Writing a letter of invitation for an interview to a potential employee.
- D. Inviting staff for a meeting.

(2 marks )

1.8 State one factor that affects the choice of medium

- A. Language.
- B. Emotions.
- C. Status.
- D. Cost.

(2 marks )

1.9 Concreteness is one of the 7Cs of effective communication which means \_\_\_\_\_

- A. One should use fewer words to talk about a lot of things
- B. Communication must contain all the facts required by the audience
- C. One should emphasize on one or very few points at a time
- D. One should avoid ambiguous words and phrase.

(2 marks)

1.10 Which of the following is not an example of non-verbal communication?

- A. Tone of voice.
- B. Face-to-face.
- C. Nodding.
- D. Folded arms.

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

**This section has two parts:**

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

### **1. INFORMATION TECHNOLOGY**

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

#### **QUESTION TWO**

- (a) Accounting systems cannot be effective and efficient in operations when software controls are not put in place.

State with an example how the software control will ensure that the system is functional with minimal problems. (4 marks)

- (b) Backing of information on computer is critical for recovery.

Explain what Differential backup is. (3 marks)

- (c) Distinguish between Knowledge Work systems and Office Automation Systems.

(5 marks)

- (d) Data processing is a series of actions or steps performed on data to verify, organise, transform, integrate and extract data in an appropriate output form for subsequent use. Methods of processing must be rigorously documented to ensure the utility and integrity of the data.

List any two (2) advantages and two (2) disadvantages of batch processing.

(4 marks)

- (e) Your job demands a good understanding of IT networks and other technology terms. Give at least two (2) scenarios when an extranet is used in an organization.

(4 marks)

**[Total: 20 Marks]**

#### **QUESTION THREE**

- (a) The internet is a useful tool especially when it comes to office operations. It is important to also understand some terminologies that are used.

Explain the following:

(i) World Wide Web (3 marks)

(ii) Denial of Service Attack (3 marks)

- (b) All communication between the different software applications and the database are controlled by special software called the DBMS.  
Distinguish between a Database and a Database Management System (4 marks)
- (c) Distinguish between a Copyright © and a Registered Trade Mark ® (4 marks)
- (d) Give any three (3) advantages of data warehousing (6 marks)
- [Total: 20 Marks]**

#### **QUESTION FOUR**

- (a) Information is derived from raw data. This raw data should be of quality in order to produce quality information for decision making.  
Explain the differences between data and information. (4 marks)
- (b) As an accountant you need to be proficient in spread sheets. Explain the following features of excel with an example
- (i) Cell reference. (3 marks)
  - (ii) Function. (3 marks)
- (c) A value chain is a business model that adds value to its customers. It consists of primary and support activities, all of which add value to the products or services offered by the business.  
List any five (5) the primary activities of the value chain model. (5 marks)
- (d) State the meaning of WIMP (2 marks)
- (e) URL uniquely identifies a resource on the Internet.  
What do the acronym URL stand for? (1 mark)
- (f) Explain the meaning of a macro used in excel? (2 marks)
- [Total: 20 Marks]**

## **2. COMMUNICATION**

**ATTEMPT ANY TWO (2) FROM QUESTIONS: FIVE, SIX AND SEVEN**

### **QUESTION FIVE**

The Human Resources Department will soon conduct the interviews for the position of a clerk which is vacant in the accounts department that you supervise. Due to a busy schedule, the Human Resources Manager has requested you to draft a letter of invitation for interviews.

**Required:**

- (a) State five (5) reasons oral communication is preferred over written interviews in most organizations. (5 marks)
- (b) Write a letter of invitation for interview to a potential employee. (15 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

- (a) With the aid of diagrams, illustrate the four (4) types of communication network patterns that exist in organisations. (8 marks)
- (b) With appropriate examples, explain the following channels of communication in organisations:
  - (i) Vertical. (4 marks)
  - (ii) Horizontal. (4 marks)
  - (iii) Diagonal. (4 marks)

**[Total: 20 Marks]**

### **QUESTION SEVEN**

It has been observed that there has been communication breakdown among staff in an organisation. In order to resolve this challenge, management has unanimously approved the open door policy of running the organisation.

**Required:**

- (a) State three (3) advantages of the open door policy can bring to communication in your organisation. (3 marks)
- (b) State any five (5) barriers to effective communication in an organisation. (5 marks)
- (c) Prepare a memo informing members of staff about the open door policy. (12 marks)

**[Total: 20 Marks]**

**END OF PAPER**

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

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

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

## **SOLUTION TWO**

### **a) Software controls**

The process of the physical storage in a definitive software library of all software to ensure that correctly released, licensed and authorized versions of software are in use

### **b) Differential**

- A differential backup is a cumulative backup of all changes made since the last full backup, i.e., the differences since the last full backup. The advantage to this is the quicker recovery time, requiring only a full backup and the last differential backup to restore the entire data repository.

### **c) Distinguish between Knowledge Work systems and Office Automation Systems.**

- KWS are used by professional to create new knowledge and integrate with the organisation
- KWS is a specialised system built to promote the creation of knowledge and to make sure that knowledge and technical skills are properly integrated into the business. KWS allows you to create a culture that can significantly improve efficiency and employee happiness
- OAS are used by data worker who carry out routine office work
- OAS are tools that enables data to move from one system to another on its own without human intervention and inaccuracies
- OAS is cost effective and accurately manages data

### **d) Advantages of batch processing**

- Easy error detection
- there is no need for expensive and special hardware

### **Disadvantages of batch processing**

- There is duplication of data in batch processing
- Information produced is not instant as the system goes through a number of phases before data is available

e) **An extranet can be used in the following scenarios:**

- Providing a pooled service which a number of business partners can access
- Exchange news which is of use to partner companies and clients
- Share training or development resources
- Exchange potentially large volumes of transaction data (using EDI for example)

### **SOLUTION THREE**

(a)

(i) World Wide Web - WWW is a service that runs on the internet offering access to vast documents of information connected via hyperlinks. The web operates on the client server format.

(ii) Denial of Service Attack - DoS attack is an attack on the information system that denies legitimate users of the system access to the information. This can happen when the system is taken over by cyber criminals who flood the system requests that it fails to process legitimate request and thus denying access

(b) A database is a structured collection of logically related data stored to meet the information needs of an organisation while a DBMS is a software that is used to manage the database that handles the storage, retrieval and updating of data in a computer system.

(c) Copyright is used to protect the intellectual work whereas trademark protects the use of the company's name and its product names and brand identity

(d) 3 advantages of data warehousing

- Delivers Business Intelligence
- Provides competitive advantages
- Improves the decision-making process
- Enables data mining



## **SOLUTION FOUR**

a)

- Data is unprocessed facts, data is in its raw form whilst Information is data which has undergone processing and makes sense to the user
- Data is a collection of facts and information puts those facts into context
- Data points are individuals and sometimes unrelated while information maps out that data to provide a big picture view of how it all fits together
- Data on its own is meaningless and when its analysed and interpreted, it becomes meaningful information

b) As an accountant you need to be proficient in spreadsheets. Explain the following features of excel with an example where possible

(iv) Cell reference

- A cell reference is a unique address that identifies a particular cell in a spreadsheet. The cell reference is made of the column letter and the row number eg B6 means that the cell we are refereeing to is column B and row 6

(v) Function

- A function is a predefined formula that performs calculations using specific values in a particular order. They are already available in compared to formulas

c) List the primary activities of the value chain model

- Inbound logistics
- Operations
- Outbound logistics
- Marketing and sales
- Service

d) WIMP is a graphical user interface that uses Windows, Icons, Mouse and Pull-down menus (also referred to as Windows, icons, Menus and Pointer

e) URL - Uniform Resource Locator

f) A macro is a set automated actions you want to carry out as many times

## **SOLUTION FIVE**

- (a) Oral communication is used during interviews because;
- There is instant feedback
  - Information is easily clarified
  - It easily promotes interpersonal relations
  - Notes can easily be made from the discussions
  - It is very swift/ fast.
  - Messages go straight to the recipient.
  -
- (b) Mwelwa general Dealers  
Po. Box 30360  
Kitwe

Ref : Mwe / 118/21

Date : any date during examination time

Kennedy Chikoti

P.O. Box 30192

Kitwe

Dear Sir,

### **Invitation for a job interview for a position of an accounts clerk**

Following a job application letter that we received from you, we wish to thank you for applying for a job as an accounts clerk of this organization.

We have reviewed your application and would like to discuss your qualification further in an interview.

This will be a great chance for you to learn about our company as well as the position in more detail.

The interview will be with our Human resources manager, The finance manager and the assistant accountant. The interview is scheduled to take place on (indicate day, date, time and venue during examination period)

If the time is not suitable for you, kindly let us know what your availability is for next week as interview schedule for all our potential employees will still be held the whole of next week from Monday to Friday only.

Our offices are located along A15 Sibweni road, parklands, Kitwe.

Bring your original certificates and an identity card with you.

Your consideration for this opportunity will be appreciated.

Yours faithfully

Sender's signature

Sender's name

Sender's job title

## SOLUTION SIX

**Both Question 7 (a) and (b) tests candidates on knowledge and understanding of communication patterns and formal channels of communication that exists in organization for a smooth flow of information. Both questions are taken from unit 7A of the syllabus.**

(a) The communication network patterns that exist in organizations are:

- The wheel

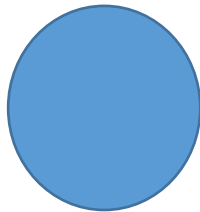


- The network/ all channel/ web

- The

**Y**

- The circle



- 

- The chain



(b) (i) **Vertical communication** is usually official communication which consists of upward and down ward communication. eg the supervisors issuing instructions to a junior employee or a junior employee reporting on the work progress to a supervisor.

(ii) **Horizontal communication** is also official communication where

staff at the same level communicate issues affecting their work operations. Eg. Staff in the accounts department information on how they can handle a busy work schedule and share the work load in order to quickly finish the assigned tasks given to them by a supervisor.

(iii) **Diagonal communication** is official communication that cuts

across several levels in the organization. It allows people from different department to coordinate various work activities for a common goal. Eg staff in the procurement department communicates with accounts department on the prices of items that the organization wish to procure

## **SOLUTION SEVEN**

### a) Advantages

- It creates transparency
- it provides employees an unlimited platform to be heard
- it helps to stop the spread of rumours

### b) Barriers

- giving a lot of information at once
- using inappropriate language
- being emotional when sending or receiving information
- the status of the sender or receiver can be a destruction
- use of wrong medium

### c)

## **Zambezi Financial Institution**

### **MEMO**

**TO:** All Members of Staff

**Ref:** 2021/1

**FROM:** Tobias Palata (ED)

**Date:** (any day during the exams)

**SUBJECT: INTRODUCTION/ APPROVAL OF THE OPEN-DOOR POLICY**

This memorandum serves to inform you that after careful deliberation, management has determined it necessary to introduce an open-door policy to mitigate communication breakdown that we have been experiencing in our organisation due to unnecessary red tape.

Following a number of complaints, and general low productivity, it is hoped that the introduction of this policy will help bring to an end the many conflicts and challenges that we face. An open-door policy indicates that to employees that supervisors or management is open to any employees' complaints, questions and suggestions at all times.

Please note that we are taking this necessary step to ensure that we create an enabling environment for all.

T.P

cc. Board Members

Enc.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 5: COST ACCOUNTING

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TUESDAY 15 MARCH 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 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).
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## SECTION A – Multiple Choice

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

### QUESTION ONE

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

- 1.1 Cost details relating to one unit of product Z are shown below:

	K
Direct materials	8.00
Direct labour	1.20
Direct expenses	0.75
Production overheads	2.18

The prime cost of one unit of product Z is:

- A. K9.20.
- B. K12.18.
- C. K9.95.
- D. K11.38.

(2 marks)

- 1.2 Yellow limited had the following information relating to output levels and overhead costs:

	<u>January</u>	<u>December</u>
Units produced	36,000	42,000
Total overhead costs	K173,600	K198,660

The variable cost per unit (to nearest two decimal places) is:

- A. K2.60.
- B. K4.18.
- C. K4.52.
- D. K3.55.

(2 marks)

- 1.3 Red limited operates a bonus scheme to increase production. Details below are available for one (1) employee:

Employee wage rate	K9 per hour
Time allowed for job	40 minutes
Time taken for job	25 minutes

The company calculates the bonus payable to the employee as 45% of the time saved on the job.

The bonus for the employee (to nearest two decimal places) is:

- A. K2.25.
- B. K1.01.
- C. K3.75.
- D. K1.69.

(2 marks)

- 1.4 During July, Black limited produced 10,000 units of product B and sold 9,400 units of product B. If there was no opening inventory in July:

- A. Profits reported using absorption costing will be lower than profits reported using marginal costing.
- B. Profits reported using absorption costing and marginal costing will be the same.
- C. Profits reported using absorption costing will be greater than profits reported using marginal costing.
- D. Profits reported using marginal costing will be greater than profits reported using absorption costing.

(2 marks)

- 1.5 XY Ltd had the following stores record for the month of July:

July 1 receipt 100 units, cost K1.00 per unit  
July 2 issue 60 units  
July 3 Receipt 40 units, cost K1.20 per unit  
July 10 Issue 60 units  
July 13 Receipt 20 units, cost K1.30 per unit  
July 24 Receipt 20 units, cost K1.50 per unit  
July 29 Issue 60 units

Assuming that XY Ltd uses FIFO costing approach, the value of the issue on July 10 is:

- A. K60.
- B. K64.
- C. K72.
- D. K75.

(2 marks)

- 1.6 Zed Ltd operates an incentive scheme to pay its staff. Workers are paid based on either a piece work rate of K0.84 per unit produced or 80% of pay based on the hourly rate, whichever is higher. The company produces one product, X5 and the standard time to make this product is 7 minutes. The following information for a week in December relates to one worker.



Hours worked	37
Rate of pay per hour	K12.20
Units of X5 produced	505

The amount of pay that the worker will receive is:

- A. K451.40.
- B. K361.12.
- C. K424.20.
- D. K339.36.

(2 marks)

1.7 Which of the following costs is a direct cost?

- A. Factory maintenance.
- B. Wood for a furniture worker.
- C. Brushes and materials used by factory cleaners.
- D. Oil for factory machinery.

(2 marks)

1.8 ZY DAC uses process costing to value its production and all materials are input at the start of the process. The following information relates to the process for one (1) month:

Input	3,000 units
Opening work in progress inventory	400 units
Normal loss expected	10% of input
Closing work in progress inventory	200 units

The total actual losses in the month were 400 units. The number of completed units transferred from the process was:

- A. 2,800 units.
- B. 2,900 units.
- C. 3,000 units.
- D. 3,200 units.

(2 marks)

1.9 Which of the following are period costs?

- A. Depreciation on factory equipment.
- B. Factory rent.
- C. Selling and distribution costs.
- D. Wages for factory workers.

(2 marks)

- 1.10 BM Limited company manufactures a product called Mopani and relevant data for December 2020 is as follows:

	<b>Budgeted/Standard</b>	<b>Actual</b>
Production units	1,800	1,900
Labour hours	9,000	9,400
Fixed production	K36,000	K39,480

The fixed production overhead capacity and efficiency variance for December 2020 are:

<b>Capacity</b>	<b>Efficiency</b>
A. K1,600 (A)	K400 (A)
B. K1,600 (F)	K400 (F)
C. K1,600 (A)	K400 (A)
D. K1,600 (F)	K400 (A)

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

Jikebo Limited is a company situated in Solwezi North Western province of Zambia. The company is one of the suppliers to the mining sector in the region and manufactures a single product that is essential in the operation of the mining equipment. The standard cost per unit of the product is as follows.

	K
Selling price	270.00
Direct materials	60.00
Direct labour	24.00
Variable overheads	15.00

Annual fixed production overheads are budgeted to be K2,400,000 and Jikebo Limited expects to produce 1,920,000 units of the product each year. Overheads are absorbed on a per unit basis. Actual overheads are K2,400,000 for the year.

Budgeted fixed selling costs are K480,000 per quarter.

Actual sales and production units for the first quarter of 2020 are given below:

	January-March
Sales	240,000
Production	280,000

There is no opening inventory at the beginning of January.

#### **Required:**

Prepare statements of profit or loss for the quarter, using:

- (a) Marginal costing (10 marks)
- (b) Absorption costing (10 marks)

**[Total: 20 Marks]**

### QUESTION THREE

Kumwesu Manufacturing Company operates a standard absorption costing system. The following was the budgeted cost statement for the year 2019.

Budgeted production: 12,000 units

	K
Direct Materials (3 Kilos per unit)	144,000
Direct labour cost (1.5 hours per unit)	108,000
Variable Overheads (based on direct labour hours)	36,000
Fixed Overheads (based on direct labour hours)	<u>54,000</u>

**Total Cost****342,000**

Actual activities for the year 2019 were as follows:

Actual production: 13,900 Units

Direct Materials purchased and used	42,000 kgs at a cost of K189,000
Direct labour costs	22,000 hours at a cost of K110,000
Variable production Overheads	K44,480
Fixed Production Overheads	K54,000

**Required:**

- (a) Calculate the following variances:
- (i) Material price and usage (4 marks)
  - (ii) Labour rate and efficiency (4 marks)
  - (iii) Variable production overhead expenditure and efficiency (4 marks)
  - (iv) Fixed production overhead expenditure and volume (4 marks)
- (b) Reconcile the actual cost with the budgeted cost. (4 marks)
- [Total: 20 Marks]**

**QUESTION FOUR**

- (a) Masala Limited manufactures Domestic Stoves to order and has the following budgeted overheads for the year, based on normal activity levels. Budgeted overheads in the Welding department amounted to K12,000,000 whilst in the Assembly department amounted to K20,000,000. Budgeted labour hours in the Welding department were 30,000 hours whilst labour hours in the Assembly department were 20,000 hours. Selling and administrative overheads are 25% of factory cost.

An order for Domestic Stoves 500 made as Batch 45, incurred the following costs.

Materials	K240,000
Labour	200 hours in the Welding Department at K15 per hour
	400 hours in the Assembly Department at K25 per hour

K100,000 was paid for the hire of a Coring machine for testing the diameters of the drill bits.

**Required:**

Calculate the cost per unit for Batch 45. (10 marks)

(b) Explain the following cost accounting terms:

- |       |                 |           |
|-------|-----------------|-----------|
| (i)   | Cost elements   | (2 marks) |
| (ii)  | Prime costs     | (2 marks) |
| (iii) | Overhead costs  | (2 marks) |
| (iv)  | Cost behaviour  | (2 marks) |
| (v)   | Cost allocation | (2 marks) |

**[Total: 20 Marks]**

### **QUESTION FIVE**

Kalupezha Limited is a chemical engineering company located in Chingola Copperbelt province of Zambia. The company makes a lubricant known as "Oilish" by subjecting certain crude chemicals to two successive processes. The output of process 1 is passed to process 2, where it is blended with other chemicals. The process costs for period 3 were as follows:

#### **Process 1**

Materials; 3,000 kgs @ K25 per kg  
Labour costs amounted to K12,000  
Process plant time: 12 hours @ K200 per hour.

#### **Process 2**

Materials; 2,000 kgs @ K40 per kg  
Labour costs amounted to K8,400  
Process plant time: 20 hours @ K135 per hour.

General overheads for period 3 amounted to K35,700 and is absorbed into process costs on a process labour basis.

The normal output of process 1 is 80% of input, while that of process 2 is 90% of input.

Waste matter from process 1 is sold for K20 per kg, while that from process 2 is sold for K30 per kg.

The output for period 3 was as follows:

<b>Process 1</b>	2,300 Kgs
<b>Process 2</b>	4,000 Kgs

There was no inventory of raw materials or work in progress at either the beginning or end of the period, and it may be assumed that all available waste matter had been sold at the prices indicated.

**Required:**

Prepare the following accounts:

- (a) Process 1 account (8 marks)
- (b) Process 2 account (8 marks)
- (c) Abnormal gain account (2 marks)
- (d) Abnormal loss account (2 marks)

**[Total: 20 Marks]**

**QUESTION SIX**

- (a) The following information relates to component TZ that is used in the manufacture of popular cosmetics.

Maximum inventory has been set at	8,000 units
Usage per month: Maximum	1,760 units
Minimum	1,440 units
Anticipated delivery period: Maximum	6 months
Minimum	3 months

**Required:**

Calculate the following for component TZ

- (i) Reorder level (2 marks)
  - (ii) Reorder quantity (3 marks)
  - (iii) Minimum level (3 marks)
- (b) State five (5) effects or implication of stock-outs. (5 marks)
- (c) State five (5) types of holding costs. (5 marks)
- (d) Explain the purpose of an inventory count. (2 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA5 COST ACCOUNTING**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

1.1 C

1.2 B

1.3 B

1.4 C

1.5 B

1.6 C

1.7 B

1.8 A

1.9 C

1.10 B

## SOLUTION TWO

### Absorption Costing profit statement

	K'000
Sales revenue (240,000 units x K270)	64,800
Less Cost of Sales	
Opening inventory	-
Production costs (280,000 units x K100.25)	28,070
Less closing inventory (40,000 units K100.25)	<u>(4,010)</u>
	24,060
Add under-absorbed overheads	<u>250</u>
	<u>(24,310)</u>
Gross profit	40,990
Less Fixed Selling Overheads	<u>480</u>
Net profit	<b><u>40,510</u></b>

### Marginal Costing profit statement

	K'000
Sales revenue (240,000 units x K270)	64,800
Less cost of sales	
Opening inventory	-
Variable production costs (280,000 units x K99)	22,720
Less closing inventory (40,000 units x K99)	<u>(3,960)</u>
	<u>(18,760)</u>
Contribution	46,040
Less Fixed Costs	
Production Overheads	600
Selling Overheads	<u>480</u>
Net profit	<b><u>44,960</u></b>

## Workings

### 1. Overhead Absorption Rate

OAR = Budgeted Fixed Overheads/Budgeted units

Quarterly Budgeted Overheads = K2,400,000/4 = K600,000

Quarterly budgeted Production units = 1,920,000/4 = 480,000 units

: . OAR = K600,000/480,000 units = **K1.25 per unit**

### 2. Calculation of costs per unit

#### 2.1 Absorption costing

Variable costs + Fixed Costs  
(K60+K24+K15 + K1.25) = **K100.25**



## 2.2 Marginal

$$\text{Variable Costs} = K60 + K24 + K15 = \mathbf{K99}$$

### 3. Closing inventories

Opening Inventory + Production – Sales

$$0 + 280,000 - 240,000 = \mathbf{40,000} \text{ units}$$

### 4. Under/or over absorption of overheads

Actual production	= 280,000 units
Budgeted production	= <u>480,000</u> units (Quarterly)
Under –production	= 200,000 units
Valued @std OAR per unit	<u>x K1.25</u>
Under absorption	<b><u>K250,000</u></b>

### SOLUTION THREE

a) Standard cost card

Direct materials	3kg @ K4/kg	=	K12
Direct labour	1.5 hrs @ K6/hr	=	K9
Variable production OHs	1.5 hrs @ K2/hr	=	K3
Direct materials	1.5 hrs @ K3/hr	=	<u>K4.5</u>
Standard cost per unit			<b><u>K28.5</u></b>

**Material price variance** **K**

42,000 kg should have costed X K4/kg = 168,000

But did cost = 189,000

**21,000 (A)**

**Material usage variance**

13,900 units should have used X 3kg = 41,700kg

But did use = 42,000kg

300kg (A)

X K4

**1,200 (A)**

**Labour rate variance** **K**

22,000hrs should have costed X K6/hr. = 132,000

But did cost = 110,000

**22,000 (F)**

**Labour efficiency variance**

13,900 units should have taken X 1.5hrs = 20,850hrs

But did take = 22,000hrs

1,150hrs (A)

X K6

**6,900 (A)**

**Variable production OH expenditure**

K

22,000hrs should have costed X K2/hr = 44,000

But did cost = 44,480**480 (A)****Variable production OH efficiency**1,150hrs (A) X K2/hr **2,300 (A)****Fixed production OH expenditure**

12,000units should have costed X K4.5 = 54,000

But did cost = 54,000-**Fixed production OH volume**(12,000units -13,900units) X K4.5 = **K8,550 (F)****b) Reconciliation statement** K

Budgeted cost (13,900units X K28.5) 396,150

	<b>F</b>	<b>A</b>	
	K	K	
Material price	-	21,000	
Material usage	-	1,200	
Labour rate	22,000	-	
Labour efficiency	-	6,900	
Variable OH expenditure	-	480	
Variable oh efficiency	-	2,300	
Fixed OH expenditure	-	-	
Fixed OH volume	<u>8,550</u>	-	
	<u>30,550</u>	<u>31,880</u>	<u>1,330 (A)</u>
Actual cost			<b><u>397,480</u></b>

## SOLUTION FOUR

(a) Cost per unit of Batch 45

	K
Direct materials	240,00
Direct labour:	
Welding (200 labours x K15)	3,000
Assembly (400 hours x K25)	10,000
Direct expense	<u>100,000</u>
Prime costs	353,000
Overheads:	
Welding (200 hours x K400)	80,000
Assembly (400 hours x K1,000)	<u>400,000</u>
Factory Costs	833,000
Selling and Administration (25% of factory costs)	<u>208,250</u>
Total Costs	<b><u>1,041,250</u></b>

: . Cost per unit = K1,041,250/500  
= **K2,082.50**

### Workings

#### 1. Overhead Absorption Rates

OAR = b=Budgeted Overheads/Budgeted Absorption Base

Welding Department = K12,000,000/30,000 Labour hours = K400 per labour hour

Assembly Department = K20,000,000/K20,000 = K1,000 per labour hour

(b) Explanation of cost accounting terms

#### a. Cost elements

A cost element is the cost of a resource that is consumed in the production of goods and services. Examples include materials, labour and other general overhead costs.

#### b. Prime costs

This is the sum of direct costs including direct materials, direct labour and direct expenses. These are costs that cannot be associated or traced with a particular cost unit or cost centre

**c. Overhead costs**

This is the sum of all indirect costs including indirect materials, indirect labour and indirect expenses. These costs cannot easily be identified, traced and attributed to a particular cost centre.

**d. Cost behaviour**

Cost behaviour is the way in which costs are affected by changes in the volume of output. The basic principle of cost behaviour is that as the level of activity rises, costs will usually rise. It will cost more to produce 2,000 units of output than it will cost to produce 1,000 units.

**e. Cost allocation**

This is when items of cost are identifiable or charged directly with some products or departments. For instance, wages paid to workers of service department can be allocated to the particular department. Indirect materials used by a particular department can also be allocated to the department.

## SOLUTION FIVE

### (a) Process 1 Account

Details	Units	K	Details	Units	K
Materials	3,000	75,000	Normal loss	600	12,000
Labour		12,000	Transfer to process 2	2,300	94,300
Plant time		2,400			
Overheads (W1)		21,000	Abnormal loss	100	4,100
	<b>3,000</b>	<b>110,400</b>		<b>3,000</b>	<b>110,400</b>

### (b) Process 2 Account

Details	Units	K	Details	Units	K
Process 2 materials	2,300	94,300	Normal loss	430	12,900
Materials	2,000	80,000	Transfer to finished goods	4,000	193,488
Labour		8,400			
Plant time		2,700			
Overheads (W2)		14,700			
Abnormal gain	130	6,288			
	<b>4,430</b>	<b>206,388</b>		<b>4,430</b>	<b>206,388</b>

### (c) Abnormal Gain Account

Details	Units	K	Details	Units	K
Normal loss	130	3,900	Process 2	130	6,288
Profit and loss		2,388			
	<b>130</b>	<b>6,288</b>		<b>130</b>	<b>6,288</b>

### (d) Abnormal loss Account

Details	Units	K	Details	Units	K
Process 1	100	4,100	Normal loss	100	2,000
			Profit and loss		2,100
	<b>100</b>	<b>4,100</b>		<b>100</b>	<b>6,288</b>

## Workings

### 1. Overheads

$$\text{Process 1} = 12,000 / 20,400 \times \text{K}35,700 = \text{K}21,000$$

$$\text{Process 2} = 8,400/20,400 \times \text{K}35,700 = \text{K}14,700$$

2. **Process 1 cost per unit** =  $\frac{\text{Cost of production} - \text{Scrap value of normal loss}}{\text{Expected Output}}$

$$= \frac{\text{K}110,400 - \text{K}12,000}{2,400 \text{ units}}$$

$$= \text{K}41 \text{ per unit}$$

3. **Process 2 cost per unit** =  $\frac{\text{Cost of production} - \text{Scrap value of normal loss}}{\text{Expected Output}}$

$$= \frac{\text{K}200,100 - \text{K}12,900}{3,870 \text{ units}}$$

$$= \text{K}48.37 \text{ per unit}$$

## **SOLUTION SIX**

### (a) Calculation of Inventory Levels

- (i) Re-order Level = Maximum Usage x Maximum Lead time  
= 1,760 units x 6 months  
= **10,560 units**
- (ii) Reorder Quantity = Max. Inventory – (Re-order level – min usage x max L/time)  
= 8,800 – (10,500 – (1,440 – 3))  
= **1,760 units**
- (iii) Minimum Level = Reorder level – (Average usage x Average lead time)  
= 10,560 – (1,600 units x 4.5 days)  
= **3,360 units**

### (b) Stock outs are a situation where the organization runs out of inventory. The implications or effects include:-

- (i) Lost contribution from lost sales
- (ii) Loss of future sales due to disgruntled customers
- (iii) Loss of customer goodwill
- (iv) Cost of production stoppages
- (v) Labour frustration over stoppages
- (vi) Extra costs of urgent, small quantity, replenishment orders

### (c) Five (5) types of holding costs include:-

- (i) Costs of storage and stores operations
- (ii) Interest charges.
- (iii) Insurance costs.
- (iv) Risk of obsolescence.
- (v) Deterioration

### (d) The purpose of an inventory count is to determine the physical quantities and their value at the end of the period.

**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 18 MARCH 2022

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

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## SECTION A- (Compulsory)

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

#### QUESTION ONE

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

1.1. Which one of the following is not a source of law in Zambia?

- A. Precedents.
- B. Carlil v. carbolic smokeball.
- C. Hansards.
- D. Acts of parliament.

(2 marks)

1.2. Mukuni put up a poster with the words '*Brand new Ford Ranger, orange in colour, 2021 model, for sale at K1,200, 000 Cash*'. Mukuni's action regarding contract formation is known as:

- A. An advertisement.
- B. An offer to sell.
- C. A contract for sale of motor vehicle.
- D. None of the above.

(2 marks)

1.3. One of the rules governing consideration is that, 'Consideration must be sufficient'. This means that:

- A. It must be paid in cash.
- B. Must be equal in value to the consideration received.
- C. Must be capable in law of being regarded as consideration by courts.
- D. None of the above.

(2 marks)

1.4. A contract of sale is .....

- A. Where ownership is transferred immediately from the seller to the buyer upon the goods being appropriated to the contract.
- B. Where ownership of the goods is subject to some condition to be fulfilled.
- C. Where ownership of the goods is to be transferred at a future time.
- D. Where ownership will be transferred upon payment by cheque or cash.

(2 marks)

1.5. Rita's car was stolen by Webster who sold it to Toyota Zambia the car dealers. Toyota Zambia sold it to Lipo. Which principle is therefore applicable under the sale of goods Act.

- A. Bona fide purchaser for value without notice.
- B. Stare decisis.
- C. Property in the goods principle.
- D. Caveat emptor principle.

(2 marks)

1.6. Where an employee is engaged under an oral contract of a period less than a week. The employer according to the Zambian Employment Act, must give him notice of termination of employment of up to:

- A. 12 hours' notice.
- B. One (1) week notice.
- C. 24 hours' notice.
- D. 14 days' notice.

(2 marks)

1.7. Which list below contains the conditions for agency of necessity.

- A. Existence of principal; legal capacity of the principal; unable to reach the principal; and agent acting on behalf and in the best interest of the principal.
- B. Principal capable of being ascertained; agent acting on behalf of principal; existence of principal; and legal capacity of principal.
- C. Disclosed principal; principal being capable of being ascertained; agent acting on behalf of principal; and existence of principal.
- D. Legal capacity of the principal; agent acting on behalf of the principal; principal capable of being ascertained; and disclosed principle.

(2 marks)

1.8. The law that manufacturers of food stuffs are liable for injuries caused by their defective products without having to prove fault on their part is an example of .....

- A. Tort of breach of duty of care.
- B. Tort of breach of healthy laws.
- C. *Res ipsa loquitor* (The facts speak for themselves).
- D. None of the above.

(2 marks)

1.9. Which of the following is not true about partnerships?

- A. Death of a partner dissolves partnership.
- B. A lawyer and a businessman can own a law firm.
- C. Bankruptcy of an ordinary partner does end partnership.

D. End of the period for which the partnership was formed is good enough to end a partnership.

(2 marks)

1.10. One of the main purposes of an Arbitration Clause in a partnership deed is .....

- A. To reduce on the costs of litigation by settling matters outside court.
- B. To reduce the cost of litigation by settling matters in fast track courts.
- C. To avoid partners breaching their fiduciary duty to each other.
- D. To ensure that partners share profits equally.

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

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

### **QUESTION TWO**

Mr. Kaluba of Six miles Lusaka wants to buy a Toyota Vitz car; he eventually meets Perez, a dealer in car hire and sales. Mr. Kaluba informs Pérez of his wishes of buying a car but he however, does not state his budget. Perez eventually shows the prospective customer a range of cars in his work shop and finally Mr. Kaluba settles for his heart's desire a Vitz, he is given a price of the Toyota Vitz valued at K55,000.00. Mr. Kaluba responds by saying I can only afford K35,000.00 and further tells Perez if you do not answer by tomorrow I will consider your silence to have materialized into acceptance. Perez does not answer and sells the Vitz to Mainza Monga a rich Tonga boo in the Southern Province of Zambia. Aggrieved by this turn of events Mr. Kaluaba wants to sue Perez.

#### **Required:**

- (a) Explain to Mr. Kaluba why he can't be successful if he decided to sue Perez in the scenario above. (10 marks)
- (b) Briefly explain four (4) ways of terminating an offer. (8 marks)
- (c) Define the concept Constitutional supremacy. (2 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

- (a) Citing at least two (2) examples, distinguish public law from private law. (5 marks)
- (b) Explain the jurisdiction of the court of Appeal. (3 marks)
- (c) Distinguish specialty contracts from simple contracts. (5 marks)
- (d) Differentiate a contract of sale from an agreement to sell. (3 marks)
- (e) List four (4) indications of a contract of service. (4 marks)

**[Total: 20 Marks]**

### **QUESTION FOUR**

The contract of Sale of goods Act has a number of implied terms and conditions; these are provided for the smooth running of trade.

#### **Required:**

- (a) List any four (4) implied terms in the contract of Sale of Goods Act. (4 marks)
- (b) List any four (4) types of tort. (4 marks)
- (c) Outline ways by which a custom can be valid at law. (8 marks)
- (d) Define "invitation to treat", and give an example. (4 marks)

**[Total: 20 Marks]**

### **QUESTION FIVE**

Briefly discuss the following:

- (a) Describe the elements of a partnership. (10 marks)
- (b) Divisions of the High Court for Zambia. (5 marks)
- (c) Persuasive precedents (5 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

- (a) Define a contract of service (2 marks)
- (b) Identify the retrospective effects of agency by ratification (8 marks)
- (c) Outline the situations in which the agent has power to bind the principal (10 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA6 BUSINESS LAW**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

1.1. C

1.2. B

1.3. C

1.4. A

1.5. A

1.6. C

1.7. A

1.8. D

1.9. B

1.10. A

## **SOLUTION TWO**

- a) The legal issue at hand is whether Mr. Kaluba has a legal right to claim from Perez. A contract is a legally binding agreement between parties which agreement is enforceable at law. According to the facts at hand, Perez the car dealer offered Mr. Kaluba a Toyota Vits for sell valued at K55, 000.00 and Mr. Kaluba counter offered with a value of K35, 000.00 at common law the effect of a counter offer is to cancel the entire offer and make a new offer on different terms. In the case of *Hyde v Wrench*, it was indicated that once the offeree counter offers the act is deemed to be rejection of the offer and the offeror has the legal right to agree to the counter offer or not. The objective of a counter off at law is that the act in itself has the element of exchanging the legal obligation between the parties. This enables the offeree to take the position of the offeror. In application to the law cited above, Mr. Kaluba does not have a good case against Perez.

Further, Mr. Kaluba had indicated to Perez that if he does not respond to the counter offer it will be deemed that he had accepted the new conditions. In the case of *Felthouse v Bindley*, it was indicated that silence does not materialize to acceptance. In application to the law cited above it safe to conclude that Mr. Kaluba cannot as well rely on this point as a ground to claim from Perez.

- b) An offer is an invitation by the offeror to be bound by certain terms directed to the offeree. However, though an offer may be made it may also be terminated as follows;
1. Counter offer, this is when the offeree makes a new offer by not agreeing to the terms of the offeror. The legal effect of a counter offer is that it cancels the original offer.
  2. Revocation of an offer is simply the act of withdrawing the offer before it is accepted by any person.
  3. Lapse of time, this is the expiry of time within which an offer can be valid. If once the time has expired no person had accepted the offer the offer terminates.
  4. Death of the offer especially where the offer had to do with personal service such writing a book. When the offerror dies the offer terminates.
- c) This is a constitutional concept that states that the constitutional is the highest law of the land and any other law that contradicts it is null and void. Concept has made it law that any piece of legislation should conform to the constitution.



### **SOLUTION THREE**

- a) Public law governs relations among states whereas private law governs relations among citizens. Examples of public law are constitutional law, international law and criminal law whereas examples of private law are family law, tort law and contract law.
- b) The Court of Appeal has jurisdiction to hear appeals from the High Court except for matters under the exclusive jurisdiction of the Constitutional court. It can also hear appeals from the quasi-judicial bodies except a local government election.
- c) Specialty contracts also known as contracts by deed have to be in writing. The law demands that they be by deed. They must be signed, sealed and delivered. These contracts must be attested and witnessed. On one hand, simple contracts are those contracts not by deed. These are informal contracts and usually are orally made.
- d) A contract of sale is whereby ownership is transferred immediately from the seller to the buyer whereas an agreement to sell is where ownership of the goods is to be transferred at a future time or subject to some condition to be fulfilled.
- e) The four indications of a contract of service are;
- The master's power of selection of his servant
  - Payment of wages or remuneration
  - Master's right to control the method of doing the work
  - Masters right to suspend or dismiss.

## **SOLUTION FOUR**

a) The following are implied terms in a contract of Sale of Goods Act

- Implied term as to title
- Implied term as to satisfactory of quality
- Sale by sample
- Sale by description

b) -Tort of negligence

- Animal liability
- Defamation
- Strict liability
- Tort of nuisance

c) The following are ways by which a custom may be valid at law:

- Uniformity, for a custom to be valid it must operate without changing throughout time. A custom that changes with time lacks consistence and is deemed to be misleading hence cannot be law.
- Conformity with written law, for a custom to be recognized by the law it must not be repugnant with any written law or any rule of natural justice.
- Reasonableness, for a custom to be recognized at law must be something that is morally accepted and not causing injustice to the law. For example, a custom that requires a woman to be cleansed after the death of her husband was rejected for being unreasonable at law.
- Conformity, for a custom to be valid it must operate without ceasing at any point in its application.

D) an invitation to treat is a willful act by the offeror to give the offeree the opportunity to make an offer on the conditions and terms of the offeror. For example, where ShopRite makes an advert in the paper for the sale of a micro wave at k1950.99, at Christmas festival. This offer is valid but for a limited time, this also means that Shoprite reserves the right to change the terms in that period.

## **SOLUTION FIVE**

- (a) A partnership is established under the Partnership Act 1890. It requires two or more persons coming together with a common purpose to form a business with intention to profit. Partnerships are unlimited liability companies meaning, the partners in the ship are all liable jointly and severally for the debts and wrongs of the company. A partnership will usually dissolve in event of death of anyone of the partners.
- (c) *Divisions of the High Court*:- The High Court for Zambia is established pursuant to Article 133 of the Constitution and is the third highest court in Zambia after the Court of Appeal, and the Supreme Court/Constitutional Court (the two are at par).

It has four (4) divisions:

Industrial Relations Court – For labour and industrial disputes

Commercial Court – Commercial/business related matters

Family Court – For Family matters like divorce.

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

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

## **SOLUTION SIX**

- a) This an agreement between employer and employee which governs a relationship between both parties
- b) Effects of agency by ratification ;
  - The principal may sue/ be sued by third parties
  - The agent no longer has any liability to 3<sup>rd</sup> parties
  - The agent is no longer liable for exceeding his authority
  - The principal is liable to pay the agent reasonable remuneration
- c) Situations where agent binds principal;
  - Where principal gives consent to agent action.
  - Where the principal has consented implicitly
  - Where the agent acts without the principals consent but the principal is estopped from denying the agent authority
  - Operation of law
  - By ratification

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL ONE

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DA 7: PRINCIPLES OF MANAGEMENT

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MONDAY 14 MARCH 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: 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**

### **QUESTION ONE**

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

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. Each question is allocated two (2) marks.

- 1.1 Which of the following functions of management was identified by Henri Fayol (1841-1925)
- A. Planning, decisional, processing, monitoring, directing.
  - B. Commanding, managing, Decisional, communication, computing.
  - C. Planning, organizing, commanding, coordinating, controlling.
  - D. Managing, controlling, computing, sorting, labeling.
- (2 marks)
- 1.2 Which of the following best explains the nature of external stakeholders.
- A. Individuals/organisations that have direct interest in the business but do not work for it.
  - B. Groups that do not have any direct involvement with the business.
  - C. Groups that have an interest in what the business does.
  - D. Groups/businesses that manage who have an interest in and are affected by the goals, operations or activities of the organisation .
- (2 marks)
- 1.3 Which one of the following is an example of an internal stakeholder.
- A. Shareholders.
  - B. Employees.
  - C. Suppliers.
  - D. Financiers.
- (2 marks)
- 1.4 Which one of the following types of organization culture did Harrison name the Greek God "Athena"
- A. Power.
  - B. Existential.
  - C. Task.
  - D. Role.
- (2 marks)

- 1.5 An external appraisal involves identifying opportunities that can be exploited by the organization's strengths. which of the following best describes opportunities:
- I. What is their inherent profit-making potential.
  - II. What is the company's comparative performance.
  - III. What is the comparative capability profit of competitions.

What might affect the organization

- A. I, IV,III.
- B. I,II,IV.
- C. II,I,IV.
- D. I,II,III.

(2 marks)

- 1.6 Which of the following is most likely to be identified as the four different management styles distinguished by Research Unit at Ashridge Management college

- A. Involves.
- B. Joins.
- C. Delegates.
- D. Tells and sells.

(2 marks)

- 1.7 Which two (2) of the following are the key factors taken into account in achieving job enrichment.

- I. Permitting workers greater freedom and control over the scheduling and pacing of their work as opposed to machine pacing.
- II. Providing workers with the opportunity to have greater direct contact with clients, consumers or users of the product or service.
- III. Providing workers with an opportunity to exercise different skills and perform different operations.
- IV. Providing workers with an opportunity to exercise discretion or self-management.

- A. I and III.
- B. II and IV.
- C. I and II.
- D. I and IV.

(2 marks)

- 1.8 Which one of the following is **NOT** a characteristic of public sector organisations:

- A. Accountability.
- B. Transparency.
- C. Funding.

D. Limited resources.

(2 marks)

1.9 Which of the following is **not** one of the stages in Kurt Levin's famous three (3) stage prescriptive model of change developed in the 1950s?

- A. Unfreezing current attitudes.
- B. Refreezing attitudes at the new level.
- C. Moving to a new level.
- D. Melting resistance.

(2 marks)

1.10 A statement about what an organisation wants to become, which sets out an organisations' future, is referred to as:

- A. Mission.
- B. Values.
- C. organizational goals.
- D. vision.

(2 marks)

**[Total: 20 Marks]**



## **SECTION B**

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

### **QUESTION TWO**

Many of the classical writers were concerned with the improvement of management as a means of increasing productivity. Henry Fayol is a French industrialist whose contributions are termed as operational management or administrative management. He followed "The Classical Approach" to the evolution of management thought. Based on your knowledge and understanding of his work....

#### **Required:**

- (a) Outline the five (5) functions of management (5 marks)
- (b) Outline and explain the Management levels and functions. (9 marks)
- (c) Henry Fayol was able to synthesize 14 principles of management after years of study. Within the 14 principles lies what is known as 'Scalar Chain' and 'Esprit de Corps'. Briefly explain these terminologies (6 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

The Max Weber theory/model is well known in most organisations and it provides a rational system of co-ordinating human activities, based on the hierarchy of authority. In other words it constitutes the most efficient and rational way in which human activity can be organized and that systematic processes and organized hierarchies are necessary to maintain order, maximize efficiency, and eliminate favouritism. Some of the views are consistent with the Fayolism theory.

#### **Required:**

- (a) State the other name of this model and give four (4) characteristics of this model. (10 marks)
- (b) The Max Weber theory/model has been criticized for several reasons. Explain five (5) reasons as to why this is so. (10 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

- (a) Stakeholders interest is what a business organization does and sometimes in a position to influence the decisions that are made. Describe the influence of the following stakeholders on the organization.

- (i) Lenders
- (ii) Government
- (iii) Shareholders
- (iv) Community

(12 marks)

- (b) Since the coming of the covid-19 pandemic companies worldwide are struggling with business and working hard toward cost reduction. As a business student use the objectives of purchasing to explain how companies may recover in business.

(8 marks)

**[Total: 20 Marks]**

#### **QUESTION FIVE**

- (a) Explain the responsibilities of a purchasing manager in a manufacturing company and how they can improve company performance. (12 marks)

- (b) Describe the characteristics that distinguish Courtyard Hotel from Mopani Copper mines. (8 marks)

**[Total: 20 Marks]**

#### **QUESTION SIX**

- (a) Beep has just been given a position as Manager of Finance, remind him about his functions as Financial Manager. (8 marks)

- (b) Managers are encouraged to choose organization structures that bring about better performance. Describe the four (4) advantages of a functional structure. (8 marks)

- (c) Corporate level, objectives may be based on three (3) things that it wants to achieve. Explain the three (3) bases.

(4 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA7 PRINCIPLES OF MANAGEMENT**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

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

## **SOLUTION TWO**

a)

- Planning
- Organizing
- Staffing
- Leading or Direction or Coordination
- Controlling

b)

- Top-level management
- Middle level management
- Lower level management

### **Top level management functions**

- To formulate goals and policies
- To formulate budgets
- Require an extensive knowledge of management roles and skills.
- They have to be very aware of external factors such as markets
- To appoint top executives etc.

### **Middle level management functions**

- Mid-level managers have a specialised understanding of certain managerial tasks.
- They are responsible for carrying out the decisions made by top-level management.
- To train motives & develop supervisory level
- To monitor and control the operations performance etc....

### **Low level management**

- To train & develop workers
- To assign job
- To give orders and instructions
- To report the information about the workers e.tc....

c)

### **Scalar Chain**

Scalar chain is the chain of command and the lines of reporting that are clear, sensible and understood.

Scalar chain is a chain of all supervisors from the top management to the person working in the lowest rank. Hierarchy presents itself in any given organization. This varies from senior management (executive board) to the lowest levels in the organization. Henry Fayol's "hierarchy" management principle states that there should be a clear line in the area of authority (from top to bottom and all managers at all levels). This can be seen as a type of management structure. Each employee can contact a manager or a superior in an emergency situation without challenging the hierarchy. Especially, when it concerns reports about calamities to the immediate managers/superiors.

### **Esprit de corps**

**Esprit de corps** is a French phrase that translates into 'group spirit'. The management principle 'esprit de corps' of the 14 principles of management stands for striving for the involvement and unity of the employees. Managers are responsible for the development of morale in the workplace; individually and in the area of communication. Esprit de corps contributes to the development of the culture and creates an atmosphere of mutual trust and understanding.

### **SOLUTION THREE**

- a) Name of the model - The classic model of bureaucracy or theory of bureaucracy or Weber and bureaucracy

FOUR characteristics of this model

- There should be a hierarchy of authority, from the top management down to workers at the bottom. Information should flow up the chain of command and instructions and directions should pass down the chain
- A bureaucracy should operate in an impersonal and impartial way. There should be clear statements of duties, responsibilities and procedures and written rules of conduct.
- There should be division of labour and specialisation of work.
- The promotion of individuals within the organisations should be based on their achievements.

- b) Criticism of the model based on the following reasons.

- There is too much emphasis on conformity with rules and procedures, and record keeping. By following rules strictly, it is easy to lose sight of the purpose for which the rules were made
- Managers within the bureaucracy may have too much concern for position and status, and may not be flexible and adoptable in their approach to management. Positions and responsibilities in the organisation can lead to officious bureaucratic behaviour
- Initiative may be discouraged by the existence of rules and procedures
- Impersonal relations can lead to stereotyped behaviours and lack of responsiveness to individuals incidents or problems
- Bureaucracy may give managers the opportunity to hide from responsibility, by following the rules and claiming that they were just following the rules when anything goes wrong
- Most important of all, bureaucracies are slow to react to change. In a dynamic and ever-changing business environment, bureaucracies may be uncompetitive against other, less bureaucratic companies

## **SOLUTION FOUR**

a) The following are the stakeholder influence on the organization:

i. **Employees**

Employees are probably the most important asset of a business organization that is large enough to employ them. The employees and their employer need each other. The responsibilities of the organizations to its employees should go beyond the terms and conditions of service in the employment contract and should recognize their wellbeing. Organizations have a social contract with their employees, where employees expect the employer to treat them in a fair way.

ii. **Lenders**

The influence of lenders depends on the extent to which a business relies on borrowing. Banks have the power to refuse new lending when a business asks for it, and they can demand a high interest rate or security for a loan when they have doubts about the credit risk of the borrower. When a company gets into financial difficulties, the lenders are often the first to take legal action for the recovery of what they are owed.

iii. **Government**

Government is a major buyer of various goods and services. In addition, the government is an important external stakeholder. The laws and regulations made by government could be favorable to business or might seem damaging to business. Business organizations may form associations or group in order to present their concerns to government and try to influence government decisions. The government has an interest in the success of the country's businesses, on which the government depends for tax revenue and the national economy depends for its wealth and employment. However, government also has other objectives such as the protection of consumers and the public.

iv. **Shareholders**

In public limited companies, the main shareholders are not involved in the running of their company. The shareholders expect the directors to protect their investment, by avoiding excessive risks, and to provide them with a good return on their investment in the form of dividends and share price growth. When shareholders are dissatisfied with the performance of the company, they have limited powers to take action against management, although in some cases they may be able to force a change of directors and senior management.

v. **The community**

The community expects large companies to act as good corporate citizens and contribute to the well-being of the society in which they operate. Large companies may engage in projects to help the community, in matters such as health, education and sport. Such activities can help to enhance the reputation of the company.

b) The following are the objectives of purchasing

- The appropriate quantities of materials or services
- Product of the required quality
- At an acceptable price and
- With suitable arrangements for delivery (for example the timing and location of deliveries)



## SOLUTION FIVE

a) The following is the purchasing manager responsibility towards recovery:

- **Purchases for production.** Purchasing raw materials, components, sub-assemblies, consumable stores and capital equipment for the production function.
- **Purchases for administration and other activities.** Purchasing supplies and equipment for all the other areas of the business (for example, buying computers, motor cars, telephone systems, office furniture, paper and other stationary items)
- **Cost control.** Ensuring that the organization gets value for money and pays a reasonable price for the quality of the goods or services that are purchased.
- **Supplier management.** Locating suppliers and dealing with them (for example, discussing prices, discounts, delivery lead times and the specifications for components chasing late deliveries; authorizing payments).
- Obtaining **information** on availability, quality, prices, distribution and suppliers for the evaluation of purchasing alternatives.
- Maintenance of **inventory levels.**

b) The following are the characteristics that distinguish Courtyard Hotel from Mopani Copper mines.

**Courtyard** is a service provision organization, and do not manufacture products, whereas **Mopani** is a mining organization, which processes raw mineral materials, the following are some characteristics which distinguish Courtyard from Mopani:

- **Customer involvement.** The surroundings in which the service is provided, and the characteristics of that service are therefore vital to enhance the experience of the customer.
- **Time perishable.** it is not possible to store services and are wasted if they are not used. For example, an empty seat on a train for a journey represents income that is lost forever; that seat for that journey, will never have been sold.
- **Intangibility.** Production organization offer customers a tangible product which they can physically see and touch and which remain with the customer for as long as they choose to keep that product. Services however are less tangible and the benefits they provide are far more difficult to describe. The benefits of services are more likely to relate to emotions, feelings and the experiences gained.
- **People-oriented.** The operations of service organizations are generally more people oriented than those of production organizations. It is therefore necessary for

this to be taken into consideration when developing the workforce, as the individuals selected will directly influence the customer perceptions of the service provided.

- **Performance measurement.** It can be harder to measure performance effectively for a service organization as it can be difficult to measure output accurately. For example, the quality of service provided by a professional services firm will be determined in part by the perception of the customer. In addition, there is unlikely to be a single important criterion by which to measure performance.

## SOLUTION SIX

a) The following are the functions of a financial manager:

- Making investment decisions
- Financing decisions
- Making dividend decisions
- Making operating decisions that affect profits cost reduction and price increase

b) The following is a description of the advantages of a functional structure:

- **Economies of scale can be realized.** When people doing similar work are grouped together, they can share the use of larger and more efficient equipment. This can make them more efficient and productive.
- **Benefits of work specialization.** Organizing work on a functional basis means that within each function the work can be specialized. People have greater opportunity for specialized training, and they can develop specialized skills, in which they are knowledgeable and efficient.
- **Monitoring of the environment is more effective.** Each functional group is aware of developments in its own area of operations and can therefore identify and respond to changes more quickly.

c) Three bases.

- i. Make a profit and increase a profit each year.
- ii. Grow the business by expanding into the markets of other countries or into other areas of business.
- iii. Become the largest competitor in the markets.
- iv. In large organizations, some functional specialization is necessary, because it is impossible for everyone to be capable and efficient in all aspects of the organizations activities.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 8: FINANCIAL REPORTING

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MONDAY 14 MARCH 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

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

### **QUESTION ONE**

On 1 October, 2019, Kala Ltd acquired 75% of the equity share capital of Mala Ltd. The acquisition was through a share exchange of three (3) shares in Kala Ltd for every five (5) shares acquired in Mala Ltd plus an immediate cash payment of K10 million. The share issue has not yet been recorded by Kala Ltd. At the date of acquisition of Mala Ltd, the market price of each of Kala Ltd share was K10.

The balance of the carrying amount of investments in Kala Ltd.'s statement of financial position is in respect of the investment in Pala Ltd which Kala Ltd made on 1 July 2019.

Below are the summarized draft financial statements of Kala Ltd and Mala Ltd:

Statements of financial position as at 31 March 2020:

	<b>Kala Ltd K'000</b>	<b>Mala Ltd K'000</b>
<b>Assets</b>		
<b>Non current assets</b>		
Property, Plant and Equipment	52,250	36,000
Investments	<u>16,000</u>	
	<u>68,250</u>	<u>36,000</u>
<b>Current assets</b>		
Inventories	12,300	3,340
Trade receivables	15,600	4,250
Cash	<u>6,500</u>	<u>1,300</u>
Total current assets	<u>34,400</u>	<u>8,890</u>
Total assets	<u>102,650</u>	<u>44,890</u>
<b>Equity and liabilities</b>		
Equity		
Equity shares of K1 each	40,000	16,500
Revaluation reserve at 31 March 2020	7,000	-
Retained earnings	<u>37,500</u>	<u>13,250</u>
Shareholders' funds	<u>84,500</u>	<u>29,750</u>
<b>Non current liabilities</b>		
5% loan note	8,100	3,200
<b>Current liabilities</b>		
Trade payables	8,500	7,850
Tax payable	<u>1,550</u>	<u>4,090</u>
Total current liabilities	<u>10,050</u>	<u>11,940</u>
Total equity and liabilities	<u>102,650</u>	<u>44,890</u>

**The following information is relevant:**

1. At the date of acquisition of Mala Ltd, the fair values of its net assets were equal to their carrying amounts with an exception of the following:
  - An item of plant had its fair value K3 million lower than its carrying amount. The plant had a remaining life of five (5) years at the date of acquisition. Mala Ltd has not incorporated this fair value change into its separate financial statements.
  - The fair value of Mala Ltd.'s properties exceeded their carrying amount by K900,000. The properties had a remaining useful economic life of 15 years on the date of acquisition. The Kala Ltd Group policy is to revalue all properties to current market values at the end of each year. In its own financial statements, Mala Ltd measures property at depreciated historic costs. At 31 March 2020, the market value of Mala Ltd.'s property was K980,000 higher than its carrying value.
2. In the post acquisition period, Mala Ltd sold goods to Kala Ltd for K4.5 million at a markup of 25%. 60% of these goods were in inventory of Kala Ltd at 31 March 2020.
3. As a result of the intra group trading in (2) above, Kala Ltd.'s payables included K1.2 million payable to Mala Ltd which did not agree with the receivable reported by Mala Ltd. The difference arose due to goods worth K0.2 million dispatched on 23 March 2020 by Mala Ltd which were only received by Kala Ltd on 6 April 2020 and due to cash of K0.4 million dispatched by Kala Ltd before the year end only being received by Mala Ltd on 4 April 2020.
4. Mala Ltd.'s profit for the year ended 31 March 2020 was K8.25 million.
5. Kala Ltd.'s policy is to value the non-controlling interest of Mala Ltd at the date of acquisition at its fair value which the directors determined to be K6.75 million.
6. Due to recent adverse publicity concerning one of Mala Ltd.'s major products, the goodwill which arose on acquisition of Mala Ltd.'s has been impaired by K4.7 million.
7. Except where indicated otherwise, assume that all items of income and expenses accrue evenly throughout the year.
8. Kala's Ltd investment in Pala Ltd represents a 25% holding in Pala Ltd. The holding gives Kala Ltd significant influence over Pala Ltd.'s financial and operating policies. Pala Ltd.'s profit for the year ended 31 March 2020 was K7.5 million and Pala Ltd paid dividends during the year ended 31 March 2020 of K3 million. Kala Ltd has accounted for the dividend income from Pala Ltd. There was no impairment loss of the investment in Pala Ltd.

**Required:**

Prepare the consolidated statement of financial position for the Kala Ltd group as at 31 March 2020.

**[Total: 25 Marks]**

## **QUESTION TWO**

Lyaen Ltd is specialized in the manufacture and sale of electrical goods to mining companies in Zambia. The following trial balance relates to Lyaen Ltd as at 30 November 2020:

	<b>K'000</b>	<b>K'000</b>
Equity shares of K0.50 each at 30 November 2020		200,000
Share premium at 30 November 2020 (note (v))		82,000
Retained earnings at 1 December 2019		62,400
Property at cost (note (ii))	200,000	
Plant and equipment at cost	178,000	
Accumulated depreciation at 1 December 2019:		
Property		40,000
Plant and equipment		58,000
Equity financial asset investment (note (vi))	20,000	
Inventory at 1 December 2019	186,800	
Trade receivables(note (iii))	124,600	
Trade payables		111,200
Finance costs	1,400	
Bank		9,200
Deferred tax		10,800
Investment income		3,200
Revenue (note i)		1,428,400
Distribution costs	56,800	
Administrative expenses	165,600	
Production cost	1,072,000	
	<u>2,005,200</u>	<u>2,005,200</u>

**The following additional notes are relevant:**

- i) On 1 March 2020, Lyaen Ltd sold electrical goods to one of its customers (included in revenue above) for K60 million. As part of a sale agreement, Lyaen Ltd is to provide servicing for these electrical goods for three (3) years from the date of sale. The cost of servicing to Lyaen Ltd is K1.2 million per annum. Lyaen Ltd uses a gross profit markup of 20% on all services of this type. The sales value of servicing has been included in the selling price of K60 million. Ignore discounting on servicing obligation.
- ii) To reflect marked increase in property prices, Lyaen Ltd decided to revalue the property on 1 December 2019. The directors accepted a report of an independent surveyor who valued the property at K192 million on that date. The property was being depreciated over an original life of 20 years which has not changed as a result of revaluation. Lyaen Ltd does not make a transfer to retained earnings of excess depreciation. The revaluation gain will create a deferred tax liability (see note (vii)) below.

All plant and equipment is depreciated at 20% per annum using reducing balance method.

Depreciation of all property, plant and equipment is charged to cost of sales. No depreciation has yet been charged on any non-current assets for the year ended 30 November 2020.

- iii) On 30 November 2020, Lyaen Ltd factored trade receivables with a carrying value of K24 million to Your Finance Solution Ltd under the agreement that any factored receivables outstanding after three (3) months will be refunded to Your Finance Solution Ltd. Lyaen Ltd received an immediate K20 million and would pay Your Finance Solution Ltd 3% per month interest on any uncollected balance of receivables.
- iv) The value of Lyaen Ltd.'s inventory on 30 November 2020 was K226.4 million.
- v) On 30 September 2020, Lyaen Ltd made a rights issue of shares of one new share for every four (4) shares held at K0.90 per share. This share issue has already been recorded by Lyaen Ltd. Lyaen Ltd.'s directors declared a dividend of K0.15 per share on 31 October 2020 for all shares in issue.
- vi) The equity financial asset investments are held at fair value through profit or loss and at 30 November 2020, they had a fair value of K17 million.
- vii) A provision for income tax for the year ended 30 November 2020 of K97.2 million is required. At 30 November 2020, the tax base of Lyaen Ltd net assets was K60 million less than their carrying value. This excludes the effects of the revaluation of the property. The income tax rate of Lyaen Ltd is 30%.

**Required:**

- (a) Prepare the statement of profit or loss and other comprehensive income for Lyaen Ltd for the year ended 30 November 2020. (11 marks)
- (b) Prepare a statement of changes in equity for Lyaen Ltd for the year ended 30 November 2020. (3 marks)
- (c) Prepare the statement of financial position for Lyaen Ltd as at 30 November 2020. (11 marks)

**[Total: 25 Marks]**



## SECTION B

Attempt two questions only from this section

### QUESTION THREE

B-Cliff Limited intends to acquire 100% shares in a better private company among the two (2) firms which have been its key suppliers of raw materials in the recent past. Consequently, B-Cliff Limited has the following draft statements for two (2) companies; Bweza Limited and Chiza Limited companies as part of its due diligence exercise. The two (2) companies operate from the same industry and their shareholders are open to sell shares to any competitive bidder.

**Statements of profit or loss for the year ended 31 December, 2021.**

	<b>Bweza Limited</b>	<b>Chiza Limited</b>
	K'000	K'000
Revenue	22,000	21,500
Cost of Sales	(12,000)	(7,500)
Gross profit	10,000	14,000
Operating expenses	(2,500)	(1,000)
Operating profit	7,500	13,000
Finance cost	(500)	(200)
Profit before tax	7,000	12,800
Tax	(2,500)	(4,500)
Profit for the year	<u>4,500</u>	<u>8,300</u>
Note: Dividends paid during the year	<b>600</b>	<b>700</b>

**Statements of financial position for the year ended 31 December 2021**

	<b>Bweza</b>	<b>Chiza</b>
<b>Asset</b>	<b>Limited</b>	<b>Limited</b>
Non-current assets	K'000	K'000
Tangible non-current	140,000	110,000
Intangible assets	-	40,000
	<hr/>	<hr/>
	140,000	150,000
<b>Current assets</b>		
Inventory	7,000	6,500
Receivables	3,000	2,500
Cash and Bank	-	6,000
	<hr/>	<hr/>
	10,000	15,000
	<hr/>	<hr/>
Total assets	<b>150,000</b>	<b>165,000</b>
	<hr/>	<hr/>
<b>Equity and liabilities</b>		
Equity shares K1 each	33,000	60,000
Share premium	26,500	25,700
Retained earnings	10,500	13,300
	<hr/>	<hr/>
	70,000	99,000
<b>Non-current liabilities</b>		
10% Loan	50,000	
5% Loan		40,000
<b>Current liabilities</b>		
Trade payables	3,400	2,100
Taxation	24,100	23,900

Bank overdraft	2,500	-
	<hr/>	<hr/>
	30,000	26,000
	<hr/>	<hr/>
Total equity and liabilities	<b>150,000</b>	<b>165,000</b>
	<hr/>	<hr/>

The following forecast ratios have been calculated by B-Cliff Limited's Senior Accountant and will be considered by the Board of Directors when arriving at the final decision on which company to acquire.

### **Ratios**

ROCE	10%
Gross profit margin	50%
Operating profit margin	30%
Asset turnover	2 times
Quick ratio	1:1
Receivable collection period	30 days
Payables payment period	60 days
Inventory turnover	3.5 times
Total gearing (debt/debt+equity)	50%
Interest cover	10 times

### **Required:**

- (a) Calculate for both Chiza Limited and Bweza Limited the ratios equivalent to the ratios above. (10 marks)
- (b) Prepare a report to the Directors that assesses the relative financial performance and financial position of Chiza Limited and Bweza Limited taking into account the calculated ratios in (a) above. (15 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

IFRS 15 *Revenue from Contracts with Customers* prescribe the revenue model in which the core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. There are five (5) steps in the revenue recognition model.

**Required:**

- (a) Identify and explain the first two (2) steps in the five (5)-step model for the recognition of revenue. (8 marks)
- (b) Tinka Ltd is a company that prepares financial statements in accordance with IFRSs and the company entered into the following revenue based contracts during the year ended 31 December 2020.
- (i) Tinka Ltd is a mobile phone services provider. On 1 July 2020, Tinka Ltd entered into a contract to supply a customer with a cellphone handset for immediate delivery on that date and voice and data services to be delivered over the following 24 months. Tinka Ltd received a total amount of K5.8 million on 1 July 2020 as contract consideration. The stand alone selling prices of the handset and, voice and data services were K6 million and K0.72 million respectively. Ignore discounting for this part of the question.
- (ii) On 1 October 2020, Tinka Ltd sold goods to a customer for K22.491 million. The contract allows the customer to pay for the goods after two (2) years. Tinka's Limited cost of capital is 8%.

**Required:**

Explain the accounting treatment of the above items (i) and (ii) and show financial statement extracts for the year ended 31 December 2020. (12 marks)

- (c) Giving appropriate examples, explain the nature of costs that can be included as part of the cost of manufactured inventory according to *IAS 2 Inventories*. (5 marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

The conceptual framework is a tool that can be used to assist the IASB in developing and revising IFRSs. One of the items discussed by the framework is 'measurement'. Measurement involves quantifying in monetary terms, amounts arising from transactions which must be attached to the elements that are recognized in financial statements using appropriate measurement basis. The conceptual framework for financial reporting provides a number of possible measurement bases and no single method is favoured over others. However, the framework states that under given circumstances, one method may provide more useful information than the other.

**Required:**

- (a) Briefly describe the four (4) different measurement bases that are available to entities that follow provisions of the IASB Conceptual Framework for financial reporting. (8 marks)
- (b) Luluta Plc. owns a building that it uses for factory operations which it purchased on 1 April 2014. for K6.75 million. The building is being depreciated at 10% per annum on cost. The building could be sold to another entity that produces similar goods as

Luluta Plc. for K4.0 million. Luluta Plc. would incur costs to sell amounting to K0.6 million.

In addition, if Luluta Plc. was to replace the building with a new one, it would cost K6.9 million. The cash flows expected to flow to Luluta Plc as a result of the factory building for the next four (4) years of asset's remaining life are as follows:

Year ending 31/03/21 – K2.5 million  
Year ending 31/03/22 – K1.55 million  
Year ending 31/03/23 – K1.9 million  
Year ending 31/03/24 – K2.2 million

Additional service costs in respect of the building of K350,000 are expected to be incurred in year 1.

The relevant discount rate for Luluta Plc is 8% and discount factors at this rate are as follows:

Year 1	0.926
Year 2	0.857
Year 3	0.794
Year 4	0.735

**Required:**

Calculate the value of the building using all the bases identified in answer (a) above as at 31 March 2020. (12 marks)

- (c) Outline five (5) disadvantages to Luluta Plc. of using historic cost accounting. (5 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA8 FINANCIAL REPORTING

### SUGGESTED SOLUTIONS

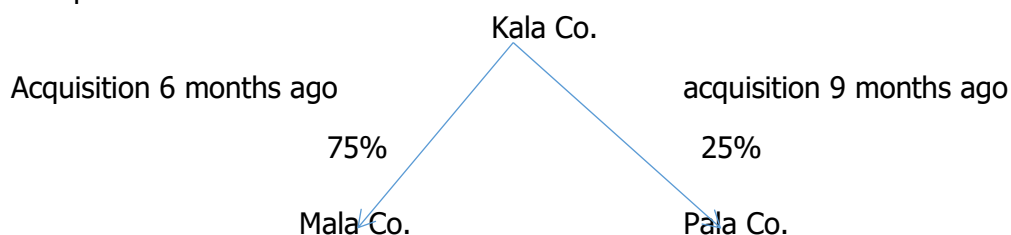
#### SOLUTION ONE

Kala Group consolidated Statement of financial position as at 31 March 2020

<b>Non current assets</b>	<b>K'000</b>
Property, Plant and Equipment ( $52,250 + 36,000 - 2,700 + 980$ W4)	86,530
Goodwill (W2)	62,775
Carrying amount of investment in Pala Co (W10)	<u>6,844</u>
Total non current assets	<u>156,149</u>
<b>Current assets</b>	
Inventory ( $12,300 + 3,340 + 200 - 540$ W5 & W6)	15,300
Receivables ( $15,600 + 4,250 - 400 - 1,400$ )	18,050
Cash ( $6,500 + 1,300 + 400$ )	<u>8,200</u>
Total current assets	<u>41,550</u>
Total assets	<u>197,699</u>
<b>Equity and liabilities</b>	
Equity shares ( $40,000 + 7,425$ W11)	47,425
Share premium (W11)	66,825
Revaluation reserve (W8)	7,083
Retained earnings (W7)	37,710
Non controlling interest (W9)	<u>6,566</u>
Shareholder's funds	<u>165,609</u>
<b>Non current liabilities</b>	
5% loan notes ( $8,100 + 3,200$ )	11,300
<b>Current liabilities</b>	
Trade payables ( $8,500 + 7,850 + 200 - 1,400$ W6)	15,150
Tax payable ( $1,550 + 4,090$ )	<u>5,640</u>
Total current liabilities	<u>20,790</u>
Total equity and liabilities	<u>197,699</u>

**WORKINGS: all figures in the workings below have three zeros knocked off.**

1. Group structure



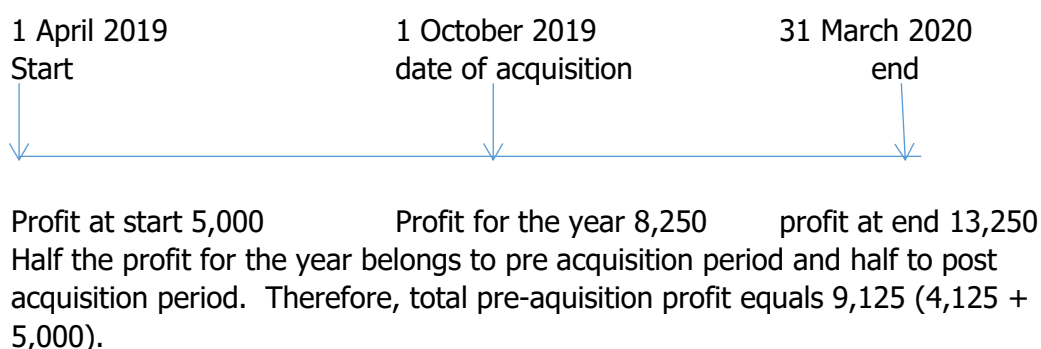
2. Goodwill on acquisition of Mala Co.

Purchase consideration:

K'000

Share exchange [75% x 16,500/5 x 3 shares x K10]	74,250
Cash	10,000
Non controlling interest	<u>6,750</u>
	91,000
Less net assets acquired:	
Share capital	16,500
Pre-acquisition retained earnings	9,125
Fair value adjustments:	
Plant	(3,000)
Property	<u>900</u>
	(23,525)
Gross goodwill	67,475
Less impairment loss	<u>(4,700)</u>
Net Goodwill	<u>62,775</u>

3. Pre acquisition retained earnings of Mala Co.  
Accounting period:



4. Fair value adjustments

	At acquisition	movement	at reporting	revn surplus	revalued
Plant	(3,000)	300*	(2,700)	-	-
Property	900	30	870	110	980

\*Depreciation on excess FV  $3,000/5 \text{ yrs} \times 6/12 = 300$

5. Provision for Unrealized profit  
PUP equals  $60\% \times 4,500 \times 25/125 = 540$

6. Intra group balance cancellation

Kala Co. payables to Mala Co.	1,200
Goods in transit from Mala Co. to Kala Co.:	
Dr Kala Inventory	200,000
Cr Kala Payables	200,000

Cash in transit from Kala co.:	
Dr Mala cash	400,000
Cr Mala receivables	400,000

This entails that Mala Co.'s receivables from Kala were 1.8 million before any adjustment for the goods and cash in transit.

**7. Group retained earnings**

	Kala Co	Mala Co	Pala Co
Per question	37,500	13,250	
Less pre-aquisition profits		(9,125)	
Post acquisition profits		4,125	
9/12 x (7500-3000)			3,375
PUP		(540)	
Add property depreciarion (W4)		(30)	
Less depreciation reversal(W4)		300	
Kala's share of Mala Co (75% x3,855)	2,891	3,855	
Kala Co share of Pala (25% x 3,375)	844		
Impairment loss of G/will 75% x 4,700	(3,525)		
Consolidated retained earnings	<u>37,710</u>		

**8. Group revaluation reserve**

Kala rev reserve	7,000
Kala Co.'s share of Mala Co post acq rev reserve(75% x 110 W4)	<u>83</u>
Consolidated rev reserve	<u>7,083</u>

**9. NCI at reporting**

NCI at acquisition	6,750
NCI share of Mala Co. post acq. retained earnings (25% x 3,855)	964
NCI share of impairment loss (25% x 4,700)	(1,175)
NCI share of revaluation reserve (25% x 110)	<u>27</u>
	<u>6566</u>

**10. CA of investment in Pala Co.**

Cost of investment (16,000-10,000)*	6,000
Kala's share of Pala Co post acqun retained earnings(25%x3,375)	<u>844</u>
Total CA	<u>6,844</u>

\*not that the only investment recorded by Kala Co.'s financial statements is cash consideration of K10,000. As total investment in the parent financial statement is 16,000, 6000 is cost of investing in Pala Co.

**11. Share exchange values**

$$75\% \times 16,500 / 5 \times 3 = 7,425 \text{ shares}$$

X K1

K7,425

To share capital

xK9

K66,825

To share premium



## SOLUTION TWO

- a) Lyaen's statement of profit or loss and other comprehensive income for the year ended 30 November 2020.

	K'000
Revenue (1,428,400 – 3,240)(w1)	1,425,160
Cost of sales (w7)	<u>(1,068,400)</u>
Gross profit	356,760
Administrative expenses (165,600-4,000)(w3)	(161,600)
Distribution costs	(56,800)
Fair value loss of financial assets	(3,000)
Investment income	<u>3,200</u>
Operating profit	138,560
Finance cost	<u>(1,400)</u>
Profit before tax	137,160
Income tax (w6)	<u>(104,400)</u>
Profit for the year	32,760
Other comprehensive income:	
Revaluation surplus(32,000-9,600) (w2)	<u>22,400</u>
Total comprehensive income	<u>55,160</u>

- b) Lyaen's statement of changes in equity for the year ended 30 November 2020

	Equity	Share	Revaluation	Retained	Total
	Shares	premium	reserve	earnings	
	K'000	K'000	K'000	K'000	K'000
Balances b/f	160,000	50,000	-	62,400	272,400
Total comp. income	-	-	22,400	32,760	55,160
Share issue (w4)	40,000	32,000	-	-	72,000
Dividends declared (w5)	<u>-</u>	<u>-</u>	<u>-</u>	<u>(60,000)</u>	<u>(60,000)</u>
Balances c/f	<u>200,000</u>	<u>82,000</u>	<u>22,400</u>	<u>35,160</u>	<u>339,560</u>

- c) Lyaeni's statement of financial position as at 30 November 2020

	K'000
<b>Non current assets</b>	
Property, Plant and equipment (PPE) (w2)	276,000
Financial asset equity investment	<u>17,000</u>
Total non current assets	<u>293,000</u>
<b>Current assets</b>	
Inventory	226,400
Receivables (124,600 + 24,000)(w3)	<u>148,600</u>
Total current assets	<u>375,000</u>
Total assets	<u>668,000</u>

## Equity and liabilities

### Equity:

Equity shares	200,000
Share premium	82,000
Retained earnings (answer (b))	35,160
Revaluation reserve (w2)	<u>22,400</u>
Total equity	<u>339,560</u>

### Liabilities:

#### Non current liabilities

Deferred tax	27,600
Deferred income (w1)	<u>1,800</u>
Total non current liabilities	<u>29,400</u>

#### Current liabilities

Trade payables	111,200
Bank overdraft	9,200
Factor loan (w3)	20,000
Current tax payable (w6)	97,200
Deferred income (w1)	1,440
Dividends declared (w5)	<u>60,000</u>
Total current liabilities	<u>299,040</u>
Total equity and liabilities	<u>668,000</u>

## WORKINGS (ALL AMOUNTS IN THE BELOW WORKINGS HAVE K'000 KNOCKED OFF)

### 1. Revenue

- The sale of electrical goods has performance obligation at a point in time and so need to be included in full from the date of sale.
- The sale of servicing has performance obligations that are satisfied over time and need to be recognized to the extent of performance obligations satisfied.
- Cost of servicing for 1 year is 1,200  
Add gross profit markup (20/100 x 1,200) 240  
Sales value of servicing for 1 year 1,440
- As sale took place on 1 March 2020 and reporting date is 30 November, 2020, 9 months performance obligation are satisfied out of 36 months as at the reporting date as follows:
  - 9/36 months x 4,320 (1,440 x 3 years) = 1,080
  - Therefore, income of K3240 (4,320-1,080) is to be deferred at 30 November 2020 as follows:

Current liability	=1,440
Non current liability	=1,800

### 2. Property, plant and equipment

	Property K'000	plant and equipment K'000
Cost b/f @ 1 Dec 2019	200,000	178,000
Less acctd dep'n b/f	<u>(40,000)</u>	<u>(58,000)</u>

CA b/f at 1 Dec 2019	160,000	120,000
Revaluation surplus	<u>32,000</u>	<u>-</u>
Revalued/CA c/f	192,000	120,000
Depreciation expense		
Property (192,000/16 years (12,000)		
Plant & Equip (20% $\times$ 120,000)		<u>(24,000)</u>
CA c/f at 30 November 2020	<u>180,000</u>	<u>96,000</u>

Total PPE figure is K276,000 (180,000+96,000)

Deferred tax attributable to revaluation gain is 30%  $\times$  32,000 = 9,600

### 3. Factored receivables

- Due to a charge of interest on uncollected balance inherent in the agreement as well as non bearing of risks by factor by virtue of claiming back money on receivables remaining outstanding after three months, this factoring in substance is a loan acquired by Lyaen secured on receivables.
  - The receivables must remain on Lyaen's statement of financial position and proceeds of the sale treated as loan. The difference between carrying amount of factored receivables and proceed which is charged to administrative expenses should be reversed. The following double entries will be required for the reversal:
  - Dr receivables 24,000 (to bring back in books)  
Cr Factor loan 20,000 (amount received is liability)  
Cr Administrative expenses 4,000 (to reverse earlier expensed amount)
- Note that no finance cost would be recognized as factoring took place on last day of accounting period.

### 4. Rights issue

It was of a proportion of 1 for 4 and new issue was already included in the trial balance figures. This means the proportion of trial balance figure is 5 (4 existing plus 1 new issue per 4 existing)

If 5 = K200,000

Then 4 = X

$X = K200,000 \times 4/5 = K160,000$ .

- K160,000 is value of share capital before rights issue meaning the difference is value of rights issue K40,000 (K200,000 – K160,000).
- Number of newly issued shares = 80,000 (40,000/0.50)
- Therefore, share premium from new issue is K32,000 (80,000 shares  $\times$  K0.40)

### 5. Dividends payable

Total shares in issue at date of payment

=  $K200,000 / K0.50 \times K0.15$

=60,000

=recorded as Dr retained earnings Cr dividends payable

6. Income taxes

Current tax  
Provision for current tax c/f      97,200

Dr profit or loss    97,200  
Cr current tax liab    97,200

Deferred tax  
Taxable temporary difference      60,000  
Deferred tax liability at reporting (30% x 60,000)      18,000  
Less deferred tax liability b/f      10,800  
Charge to profit and loss      7,200

Total charge to profit and loss statement 104,400 (97,200 +7,200)

7. Cost of sales

Opening inventory      186,800  
Production cost      1,072,000  
Closing inventory      (226,400)  
Depreciation: property      12,000  
                 Plant & equipment      24,000  
To profit & loss      1,068,400

### **SOLUTION THREE**

Ratio	K'000	Bweza	K'000	Chiza	Forecast
ROCE	$7+0.5/115+50*100\%$	4.5%	$12.8+0.2/99+40*100\%$	9.4%	10%
Gross profit margin	$10/22*100\%$	45%	$14/21.5*100\%$	65%	50%
Operating profit margin	$7+0.5/22*100\%$	34%	$12.8+0.2/21.5*100\%$	60%	30%
Asset turnover	$22/115+50$	0.13	$21.5/99+40*100\%$	0.15	2 times
Quick ratio	$10-7/5.4$	1:1.24	$15-6.5/4.1$	1:2.07	1:1
Receivable collection period	$3/22*365$	49 days	$2.5/21.5*365$	42 days	30 days
Payables payment period	$3.4/12*365$	103 days	$2.1/7.5-365$	102 days	60 days
Inventory turnover	$12/7$	1.7 times	$7.5/6.5$	1.2 times	3.5 times
Total gearing	$50/70+50*100\%$	42%	$40/99+40*100\%$	29%	50%
Interest cover	$7+0.5/0.5$	15 times	$12.8+0.2/0.2$	65 times	10 times

### **Assessment of performance and Position**

#### **Performance**

The return on capital employed for Chiza limited company of 9.4% looks better than that of Bweza limited company which is standing at 4.5% although both firms could not reach the forecasted ratio of 10% for the year ended 31 December, 2018. The above implies that Chiza company was able to generate a higher return out of its capital employed compared to Bweza limited company. A higher return on capital employed for Chiza company limited implies that shareholders could be earning an expected rate of return on the capital invested in the business. This observation is supported by the fact that the operating profit margin and asset turnover ratios of Chiza limited company (60% and 0.15 times respectively) are better than those of Bweza limited company (34% and 0.13 times respectively). Chiza limited company was able to efficiently utilize its resources efficiently in the period under review compared to Bweza limited company.

Further, Chiza limited company achieved a higher gross profit margin of 65% compared to 45% attained by Bweza limited. It appears that Chiza limited company was able to contain its variable expenses to minimum. It also implies that the two firms could be pursuing different pricing strategies with Bweza limited company charging a lower price in order to penetrate its market. More information is thus required for us to arrive at a firm conclusion.

### **Position**

The quick ratio of Chiza limited company of 1:2 is higher than that of Bweza limited company of 1:24. While it is true that Chiza is able to comfortably offset its short term obligations, the quick ratio 1:2 is indicative of the fact that Chiza limited company could be sitting on idle cash which is not good for proper working capital management. Bweza Limited company quick ratio is weakened by the fact that it closes the year with an overdraft. Overdrafts carry a premium risk because the bank can recall the facility any time.

The receivable collection period for both target firms fails to meet the ideal number of 30 days (Bweza:49, Chiza: 42). This indicates increased risk of irrecoverable debts if any one of the companies is acquired. Good credit control policies can help to minimise the mentioned risk.

The payable payment period for both firms will need the attention of B-Cliff managers. Bweza and Chiza companies registered a payable payment period of 103 and 102 respectively. The similarities in the number of payable days is telling of the trade terms offered by the suppliers of the market to which both firms belong. Lagging payments maybe good for cash flow management but can greatly erode supplier relations. A longer payment period leads to discounts forgone.

Bweza company limited was able to convert stock into sales at a faster rate compared to Chiza limited (Bweza: 1.7, Chiza 1.2). This ratio could be misleading if one of the companies bought extra stock in anticipation of shortages.

The gearing ratio for Bweza company limited (42%) and that of Chiza company limited (29%) are both below the maximum forecasted figure of 50%. The above figures are indicative of the risk profile of the shareholders of both companies. The shareholders are likely to have less appetite for a higher financial risk.

Interest cover ratio shows that Chiza company limited (65 times) strong position to offset its interest obligations compared to Bweza company limited (15times).

### **Conclusion**

From the assessment above, Chiza is likely to be a better investment option. More information will be needed to arrive at a good conclusion as it is not advisable to make a big financial decision solely on ratio analysis.

## **SOLUTION FOUR**

**Note that figures in workings have three zeros knocked off**

- a) The first two steps in the five-step revenue recognition model are:
- Identify the contract (s) with the customer.
  - Identify the performance obligations in the contract

### **Identify the contract (s) with the customer.**

A contract with a customer may be entered into orally, in writing or impliedly. A contract will exist when all of the following can be demonstrated having been met:

- The parties to the contract have approved the contract, that is no disagreements exist regarding each one's rights and duties.
- Each party's rights and duties regarding the goods and services to be transferred and consideration involved are clearly identified.
- The payment terms and conditions for the goods or services to be transferred are clearly identified
- The contract has commercial substance
- The collection of the consideration by the seller from the customer for the goods supplied is probable

### **Identify the separate performance obligations in the contract**

Performance obligations are promises to transfer distinct goods or services to a customer. Some contracts contain more than one performance obligation. For example:

- An entity may enter into a contract with a customer to sell a machine, which includes one year's free servicing and maintenance or,
- An entity may enter into a contract with a customer to provide 5 Dinner meals as well as provide a snack before each dinner meal

A performance obligation is a distinct promise to transfer specific goods or services, distinct from other goods or services

Performance obligation is distinct when its fulfilment:

- ✓ provides specific benefits associated with it, in its own right or together with other fulfilled obligations
- ✓ is separable from other obligations in the contract – goods or services offered are not integrated or dependent on other goods or services provided already under the contract;

- Identifying performance obligations may result in unbundling contracts into performance obligations, or combining contracts into a performance obligation, to recognise revenue correctly.
- Unbundling a contract may apply when incentives are offered at the time of sale, such as free servicing or enhanced warranties. In this case servicing and warranties are performance obligations that are distinct and revenue relating to them needs to be recognised separately from the goods or services promised on the contract to which they relate.

Circumstances which could result in contracts being combined:

- it is negotiated as a package with a single commercial objective
  - consideration for one contract depends on the price or performance of the other contract
- b) (i) IFRS 15 requires that in a contract that comprise many performance obligations, an entity shall allocate the transaction price to the separate performance obligations in the contract by reference to their relative stand alone selling prices.

Tinka's separate performance obligations are a mobile phone handset and the talk time. The bundled price of K5.8 million has to be allocated to the two performance obligations based on the stand alone selling prices as follows:

Stand alone selling prices:	K'000
Mobile phone hand set	6,000
24 months airtime	720
Total	6,720

Therefore, revenue to be recognized on mobile phone handset sale is:

$$\text{Mobile phone handset} = K6,000/K6,720 * K5,800 = 5,179$$

And revenue to be recognized in connection with airtime sale is:

$$\text{Airtime} = K720/K6,720 * K5,500 = K155$$

The financial statements for Tinka for the year ended 31 December 2020 would reflect as follows:

#### **Profit and loss for year ended 31 December 2020**

Revenue (K5,179 + K155)	5,334
-------------------------	-------

#### **Statement of financial position extract as at 31 December 2020**

##### Current liabilities

Deferred income (K720 + K155)	565
-------------------------------	-----



Note that as the date of sale is 6 months before the end of the accounting period, only 6 months out of the 24 months worth of talk time need recognizing as revenue. This is K155,000 and the balance of K565,000 is then recognized as deferred income under current liabilities.

(ii) Step 3 of the 5 step recognition model is on determining the transaction price. The transaction price is consideration that an entity expects to be entitled to in exchange for transferring goods and services to a customer. In determining this transaction price, an adjustment for time value of money is made to a transaction price for the effects of financing.

As Tinka's customers were required to pay for the goods after two years, the revenue would require discounting as follows:  $K22,491 \times 1/1.08^2 = K19,282$ . Therefore, revenue would be recognized of K19,282 in profit and loss, finance income of K386  $[8\%(K19,282 \times 3/12)]$  would be recognized in profit or loss for the year ended 31 December 2020. In addition, a receivable comprising of discounted expected revenue and unwinding of the discount will be recognized of K19,678  $(19,282 + 396)$  in the statement of financial position as at that date.

#### **Statement of profit and loss extract for the year ended 31 December 2020**

Revenue	19,282
Finance income	396

#### **Statement of financial position extract as at 31 December 2020**

##### Current asset

Receivable	19,678
------------	--------

c) Costs included in manufactured inventory include:

- Direct labour cost
- Direct materials cost
- Direct expenses
- Production overheads absorbed
- Carriage cost of materials

Costs that can not be included in the cost of manufactured inventory include:

- Cost of abnormal material wastage
- Cost of wasted labour cost
- General overheads
- General overheads
- Storage costs of manufactured goods
- Design errors of manufactured goods

## SOLUTION FIVE

- a) The four bases of measurements according to the IASB's Conceptual Framework for financial reporting are as follows:

### Historic cost

Historic cost would typically reflect the cost of acquiring or creating an asset or taking on a liability, with both measures being adjusted for transaction costs. Over time, historical cost is further adjusted to reflect for example the consumption of an asset or the fulfilment of part or all of a liability. It is described as an entry value.

### Current cost

Assets are carried at the amount of cash that would have to be paid if the same or an equivalent asset was acquired currently. Liabilities are carried at the amount of cash that would be required to settle the obligation currently.

### Fair value

Fair value for example reflects a price that would be received or paid for selling an asset or transferring a liability from the perspective of market participants.

### Present value

Assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate. Liabilities are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities.

b) i) Historic cost	K'000
Cost	6,750
Less 6 years dep'n ( $10\% \times 6750 \times 6$ yrs)	<u>(4,050)</u>
Carrying amount at 31 March 2020	<u>2,700</u>

ii) Current cost	K'000
Cost	6,900
Less 6 yrs dep'n ( $10\% \times 6,900 \times 6$ yrs)	<u>(4,140)</u>
	<u>2,760</u>

iii) Fair value	
Sales value	4,000
Less costs to sell	<u>(600)</u>
Net fair value	<u>3,400</u>

iv) Present value			
	Cash flows	discount factor	Present value
Year 1	2,150,000(2500-350)	0.926	1,990,900
Year 2	1,550,000	0.857	1,328,350
Year 3	1,900,000	0.794	1,508,600

Year 4	2,200,000	0.735	<u>1,617,000</u>
Total as building value			<u>6,444,850</u>

c) Five disadvantages of historic cost accounting

- Carrying amount of non current assets is often substantially below the current value.
- As carrying amounts of assets will be lower, depreciation expenses will be unusually low in such a way that calculated profits will be overstated.
- The effect of increasing prices of goods in general is not taken into account and hence value tends to be understated. This means customers benefit while suppliers lose out.
- The overstatement of profit and understatement of assets prevent a meaningful calculation of ROCE.
- All statement of profit or loss expenses do not reflect the current value of assets consumed hence profit is overstated.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

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LEVEL TWO

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DA 9: MANAGEMENT ACCOUNTING

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TUESDAY 15 MARCH 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**

Mutinta loves to bake and has decided to start her own business in Luanshya. She has developed a delicious low calorie cupcake recipe and has created two varieties: Vanilla Cream and Chocolate. Mutinta hopes to commence production in September 2022 and has conducted some market research to assess the interest in, and demand for, her products. She has K5,000 of savings to use for the business, but will require additional bank funding to get business started. Mutinta has prepared the following information relating to her business:

1. Estimated sales demand

<b>Cupcakes</b>	<b>September</b>	<b>October</b>	<b>November</b>	<b>December</b>	<b>January</b>	<b>February</b>
Vanilla Cream	1,000	1,500	1,600	1,800	1,200	2,000
Chocolate	1,500	1,650	1,800	2,200	2,100	2,230

Mutinta has obtained orders from a hotel that specializes in arranging conferences and events. She also has orders from local restaurants and coffee shops. She estimates that 30% of her customers will pay cash immediately and has agreed to give one month's credit to the remaining customers.

2. The Vanilla Cream cupcakes will have a selling price of K1.80 each while the chocolate cupcakes will sell for K1.95 each for the first three months but she intends to increase these prices by 10% after that time and will maintain the new price levels thereafter.
3. The cupcakes are made using the same basic ingredients but with a different topping. Mutinta has calculated that for each variety of cupcakes, the basic ingredient cost is 20% of the selling price while the cost of the topping is 8% of the selling price. In line with the selling price increase of 10% noted in 2 above, Mutinta also expects an increase in the cost of ingredients of 10% after the first three months of operations.
4. In terms of paying for ingredients and toppings, Mutinta has negotiated that she will get one month's credit from the ingredient suppliers but must pay cash immediately for topping purchases.
5. Some months ago, Mutinta successfully applied for a grant from the local Enterprises Board. She will receive K5,100 in total, to be paid in two equal installments, September 2022 and January 2023.

6. To start production, Mutinta will need to purchase some kitchen equipment in September costing K4,500. The equipment is expected to last for four years and will have no scrap value at the end of that time.
7. Mutinta has located suitable premises, which have been approved by the food safety authority, and which will cost K1,200 per month to rent. The landlord requires one month's rent as a deposit, and this must be paid with the first month's rent.
8. Other operating costs including power, packaging, insurance, administration expenses and depreciation of kitchen equipment are expected to be K4,005 for the year. Additionally, Mutinta will employ two staff in the business and will pay wages of K1,320 each per month. The relevant costs are paid in the month in which they are incurred.

**Required:**

- (a) Prepare a Cash budget for Mutinta's business, on a monthly basis, for the six month period commencing 1 September 2022, clearly showing the closing balances at the end of each month. (16 marks)
- (b) Explain Zero based Budgeting (ZBB) and outline the two benefits of ZBB over traditional budgeting methods. (4 marks)
- (c) Explain the implementation of Zero Based Budgeting (ZBB). (5 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

A publishing firm sells a popular novel at a cost plus 100% profit mark up on marginal cost of each copy. In 2020, a total of 1,000 copies were sold.

The following production cost per copy has been made available to you:

	<u>K</u>
Direct material	45
Direct labour	40
Variable overheads	<u>15</u>
	<u>100</u>

Fixed production overhead is K80,000 per year while annual fixed selling and administration overheads amount to K70,000.

**Required:**

- (a) Calculate the current selling price. (3 marks)
- (b) Management is concerned about the low sales demand resulting in a loss. To this effect, management feels changing pricing policy from a cost plus to an optimal pricing strategy would automatically change sales demand and result in profit.

Market research shows that reduction in the selling price per copy from the one calculated in (a) above to K120 will increase sales demand to 5,000 copies. There will be no change in the variable cost per copy but fixed production overhead will treble while fixed selling and administration overhead will increase by 50%.

**Required:**

- (i) Calculate the optimal price. (8 marks)
- (ii) Determine the margin of safety and the C/S ratio based on the optimal price. (6 marks)
- (iii) Calculate the sales revenue the publishing firm requires to achieve K90,000 annual profit based on the optimal pricing strategy. (4 marks)
- (c) State any four (4) assumptions in limiting factor analysis (4 marks)

**[Total: 25 Marks]**

## SECTION B

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

### **QUESTION THREE**

Tonka Twende Limited is a company located in Choma district in Southern province of Zambia and solely engaged in the manufacture of Diapers. Present sales are direct to retailers, but in recent years there has been a steady decline in output because of increased foreign competition. In the last trading year (2020) the accounting report indicated that the company produced the lowest profit for 10 years.

The forecast for 2021 indicates that the present deterioration in profits is likely to continue and it is expected that 126,000 Diapers will be sold. The company considers that a profit of K800,000 should be achieved to provide an adequate return on capital. The Managing Director has asked that a review be made of the present pricing and marketing policies. The Marketing Director has completed this review, and passes a proposal on to you for evaluation and recommendation, together with the income statement for the year ended 31 December 2020.

Tonka Twende Limited Income statement for the year ending 31 December 2020.

	K
Sales revenue (140,000 Diapers @K15)	<b><u>2,100,000</u></b>
Factory cost of goods sold:	
Direct materials	140,000
Direct labour	490,000
Variable factory overheads	84,000
Fixed factory overheads	<u>308,000</u>
Total factory costs	<u>1,022,000</u>
Administration overheads	196,000
Selling and distribution overhead:	
Sales commission (2% of sales)	28,000
Delivery costs (variable per unit sold)	70,000
Fixed	<u>56,000</u>
Total non-factory costs	<u>350,000</u>
Total costs	<b><u>1,372,000</u></b>
Profit	<u>728,000</u>



The information to be submitted to the Managing Director includes the following two (2) proposals:

### **FIRST PROPOSAL**

To proceed on the basis of analyses of market research studies which indicate that the demand for diapers is such that 10% reduction in selling price would increase demand by 40%.

### **SECOND PROPOSAL**

To proceed on the basis of a view by the Marketing Director that a 10% price reduction, together with a national advertising campaign costing K42,000 may increase sales to the maximum capacity of 200,000 diapers.

#### **Required:**

- (a) Calculate the break-even units of diapers and the sales value based on the 2020 accounts. (5 marks)
- (b) Calculate the margin of safety. (2 marks)
- (c) Calculate the number of diapers that should be sold in order for the company to achieve a target of K800,000. (3 marks)
- (d) Comment on the first proposal to be submitted to the managing director and calculate the number of units Tonka Twende Limited need to sell in order to generate a target profit of K800,000. (6 marks)
- (e) Comment on the second proposal. (4 marks)
- (f) In standard costing, a manager will use variance analysis as a method of control.

#### **Required:**

State any five (5) factors which should be considered to decide whether or not to investigate a variance. (5 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

Maximo Company has been in business producing a limited range of products. The company has been using traditional manufacturing philosophies. The Managing Director of the company has recently come from a workshop where the presenter had emphasized the need for companies to get accustomed to the modern manufacturing philosophies if they are to remain competitive and relevant in the modern business environment.

**Required:**

- (a) Discuss the advantages and disadvantages of back flush accounting. (6 marks)
- (b) Explain the product life cycle costs and give examples. (9 marks)
- (c) Describe Goldratt's five (5) steps of dealing with bottleneck activities. (10 marks)

**[Total: 25 Marks]****QUESTION FIVE**

- (a) The extracts below are from the financial records of Mkushi Limited for the past two (2) years.

YEAR	2019	2020
	K	K
Inventories:		
Raw materials	205,200	275,500
Work-in-progress	143,640	184,680
Finished goods	164,160	245,100
Purchases	984,200	1,333,800
Cost of sales	1,436,400	1,846,800
Sales Revenue	1,641,600	2,052,000
Trade Receivables	326,800	492,480
Trade Payables	164,160	200,070

**Required:**

- (i) Calculate the length of the cash operating cycle for each of the following years. (8 marks)
  - (ii) State five (5) strategies that could be undertaken to shorten the cash operating cycle. (5 marks)
- (b) A cash budget is a statement in which estimated future cash receipts and payments are tabulated in such a way as to show the forecast cash balance of a business at defined intervals. It can help to indicate the short-term expected cash surplus and/or cash deficit.

**Required:**

Explain three (3) ways of managing a cash surplus and three (3) ways of dealing with a cash deficit indicated in the cash budget. (6 marks)

- (c) Explain any three (3) differences between financial and management accounting. (6 marks)

**[Total: 25 Marks]****END OF PAPER**

## DA9 MANAGEMENT ACCOUNTING

### SUGGESTED SOLUTIONS

#### SOLUTION ONE

a) **Cash budget for the six months commencing 1<sup>st</sup> September 2021**

	Sept.	Oct.	Nov.	Dec.	Jan.	
<b>Feb.</b>						
<b>Cash receipts:</b>	K	K	K	K	K	K
County Grant	2,550	-	-	-	2,550	
-						
Total receipts	<u>1,418</u>	<u>5,083</u>	<u>6,060</u>	<u>6,958</u>	<u>7,862</u>	
<b>7,440</b>						
Total Receipts	<b><u>3,968</u></b>	<b><u>5,083</u></b>	<b><u>6,060</u></b>	<b><u>6,958</u></b>	<b><u>10,412</u></b>	
<b>7,440</b>						
<b>Cash payments:</b>						
Payments	378	1,418	1,695	1,941	1,926	
2,075						
Wages costs	2,640	2,640	2,640	2,640	2,640	
2,640						
Rent of premises	2,400	1,200	1,200	1,200	1,200	
1,200						
Administration costs	240	240	240	240	240	
240						
Purchase equipment	<u>4,500</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
-						
Total cash payments	<b><u>10,158</u></b>	<b><u>5,498</u></b>	<b><u>5,775</u></b>	<b><u>6,021</u></b>	<b><u>6,006</u></b>	
<b>6,155</b>						
Net Cash flow	(6,190)	(415)	285	937	4,406	
1,285						
Opening cash bal	<u>5,000</u>	<u>(1,190)</u>	<u>(1,605)</u>	<u>(1,320)</u>	<u>(383)</u>	
<b>4,023</b>						
Closing cash bal	<b><u>(1,190)</u></b>	<b><u>(1,605)</u></b>	<b><u>(1,320)</u></b>	<b><u>(383)</u></b>	<b><u>4,023</u></b>	
<b>5,308</b>						

Workings

**(W1) Receipts from customers**

	Sept.	Oct	Nov.	Dec.	Jan.	
<b>Feb.</b>						
	K	K	K	K	K	K
Vanilla Cream	1,800	2,700	2,880	3,564	2,376	
3,960						

Chocolate	<u>2,925</u>	<u>3,217.5</u>	<u>3,510</u>	<u>4,719</u>	<u>4,505</u>
	<u>4,783</u>				
Total sales	<u>4,725</u>	<u>5,918</u>	<u>6,390</u>	<u>8,283</u>	<u>6,881</u>
	<u>8,743</u>				
Cash sales 30%	1,418	1,775	1,917	2,485	2,064
	<u>2,623</u>				
Due after 1 (70%)	-	3,308	4,143	4,473	5,798
	<u>4,817</u>				
Total receipts	<b><u>1,418</u></b>	<b><u>5,083</u></b>	<b><u>6,060</u></b>	<b><u>6,958</u></b>	<b><u>7,862</u></b>
	<b><u>7,440</u></b>				

**(W2) Purchases required**

	September	October	November	December	January	February
	K		K		K	
Ingredients-20%	<u>945</u>		<u>1,184</u>		<u>1,278</u>	
	<u>1,749</u>				<u>1,657</u>	
Payable	-		945		1,184	
					1,278	
						1,657
Topping -8% of sales	<u>378</u>		<u>473</u>		<u>511</u>	
	<u>699</u>				<u>663</u>	
						<u>677</u>
Total payments	<b><u>378</u></b>		<b><u>1,418</u></b>		<b><u>1,695</u></b>	
	<b><u>2,392</u></b>				<b><u>1,941</u></b>	
						<b><u>2,334</u></b>

**(W3) Administration costs**

	K
Total annual administration costs	4,005
Less: Depreciation (non cash cost) K4, 500/4 Years	<u>1,125</u>
Total cash annual administration costs	<b><u>2,880</u></b>
Cash administration costs per month	<b><u>240</u></b>

- b) Explain Zero Based Budgeting and outline TWO benefits of ZBB over traditional budgeting

Zero based budgeting implies a different approach from traditional budgeting. It requires activities to be re-evaluated each time a budget is produced. Each functional budget is prepared on the basis that each cost element is justified as though the activity were occurring for the first time. No item of expenditure is included in the budget without full prior evaluation and justification. Zero based budgeting attempts to eliminate unnecessary expenditure being retained in budgets from year to year.

**Advantages of Zero Based Budgeting**

- It eliminates unnecessary expenditure being retained in budgets
- It allows questions to be asked by managers before committing funds and not afterwards as in traditional budgeting
- It focuses attention on achieving value for money

- It leads to a greater understanding by management of the workings of the organization
- If properly implemented, it should lead to a more efficient allocation of resources
- Any other relevant point

c) **Implementation of Zero Based budgeting**

**Step 1: Decision units**

Decision units are programmes of work, capital expenditure programmes or areas of activity etc.

**Step 2: Decision packages**

Decision packages are documents which identify and describe the specific activity so that it can be evaluated and ranked against other activities.

**Step 3: evaluation (choice)**

Each activity (decision package) is evaluated.

Activities which cost more than they are worth are dropped.

**Step 4: ranking**

Each activity or decision package is ranked on the basis of its benefits to the organization

**Step 5: resource allocation**

Resources are allocated according to the funds available and the ranking of packages.

## SOLUTION TWO

(a) Current selling price

	K
Direct material	45
Direct labour	40
Variable production overhead	<u>15</u>
	100
Profit (100% of K100)	<u>100</u>
Selling price	<u>200</u>

(b) (i) Optimal price

$$P = a - bQ$$

$$b = \frac{\text{Change in price}}{\text{Change in demand}}$$

$$= \frac{K200 - K120}{1,000 - 5,000}$$

$$= 80/4,000$$

$$= \underline{0.02}$$

$$a = \text{current price} + \frac{\text{demand at current price}}{\text{change in demand when price changes by Km}} \times Km$$

$$= K200 + \frac{1,000}{4,000} \times K80$$

$$= \underline{K220}$$

Demand equation and marginal revenue equations;

$$P = 220 - 0.02Q$$

$$MR = 220 - 0.04Q$$

For profit maximization,  $MR = MC$ ; but  $MC = K100$

Hence:  $220 - 0.04Q = 100$

Optimum demand = 3,000 copies

$$\begin{aligned} \text{Optimal price} &= 220 - 0.02(3,000) \\ &= \underline{K160} \end{aligned}$$

(ii) Revised fixed overheads

	K
Production overhead (K80,000 x 3)	240,000
Selling and administration (70,000 x 105%)	<u>105,000</u>

345,000

$$\begin{aligned}\text{Break even sales units} &= \frac{\text{K}345,000}{\text{K}100/\text{copy}} \\ &= \underline{3,450 \text{ copies}}\end{aligned}$$

$$\text{Budgeted sales units} = 5,000 \text{ copies}$$

$$\begin{aligned}\text{Margin of Safety} &= 5,000 \text{ copies} - 3,450 \text{ copies} \\ &= \underline{1,550 \text{ copies}}\end{aligned}$$

$$\begin{aligned}\text{C/S ratio} &= \frac{\text{Contribution per unit}}{\text{Selling price}} \times 100\% \\ &= \frac{\text{K}100}{\text{K}160} \times 100\% \\ &= \underline{62.5\%}\end{aligned}$$

(iii) Target sales revenue to make K90,000 profit

$$\begin{aligned}&= \frac{\text{K}345,000 + \text{K}90,000}{0.625} \\ &= \underline{\text{K}696,000}\end{aligned}$$

(c) Assumptions in limiting factor analysis

- Fixed costs will be the same
- The unit variable cost is constant
- The estimates of sales demand for each product, and the resources required to make each product, are known with certainty.
- Units of output are divisible.

### SOLUTION THREE

- (a) (i) Breakeven point (units) = Fixed Costs/Contribution per unit  
= K560,000/K9.10  
= 61,538 units
- (ii) Breakeven point (sales revenue) = Breakeven sales units x selling price per unit  
= 61,538 units x K15  
= K923,070
- OR Breakeven point (sales revenue) = Fixed costs/Contribution Sales Ratio  
= K560,000/0.6067  
= K923,076.93

Differences are due to rounding off.

#### **Workings**

1. Contribution per unit

	K
Original selling price	<u>15.00</u>
Less variable cost	
Direct materials	1.00
Direct labour	3.50
Variable factory overheads	0.60
Delivery expenses	0.50
Sales commission	<u>0.30</u>
Total variable costs	<u>5.90</u>
Contribution per unit	<b><u>9.10</u></b>

2. Contribution Sales Ratio = Contribution/sales x 100  
= 9.10/15 x 100  
= **60.67%**

3. Fixed costs

Fixed factory overheads	308,000
Fixed Administrative overheads	196,000
Fixed selling overheads	<u>56,000</u>
Total Fixed Costs	<b><u>560,000</u></b>

- (b) Marginal of Safety = Budgeted sales – Breakeven sales  
= 126,000 units – 61,538 units  
= **64,462 units**

As a percentage = 64,462/126,000 x 100  
= **51.16%**

- (c) Number of units sold to achieve a target profit of K800,000

= Fixed Costs + Target profit  
Contribution per unit



$$= \frac{K560,000 + K800,000}{K9.10}$$

$$= \mathbf{149,451 \text{ units}}$$

- (d) Financial evaluation of proposal (i)  
The price elasticity of demand (PED) is 4 times and therefore elastic. The demand is sensitive to slight changes in the price.

	K
Revised selling price (K15 x 0.90)	13.50
Less variable costs	<u>(5.90)</u>
Contribution per unit	<b><u>7.60</u></b>
Number of units (140,000 x 1.4)	196,000

	K
: . Total contribution (196,000 units x K7.60)	1,489,600
Less Fixed costs	<u>(560,000)</u>
Profit	<b><u>929,600</u></b>

- (e) Financial evaluation of proposal (ii)

	K
Revised selling price	13.50
Less variable costs	<u>(5.60)</u>
Contribution per unit	7.60
Fixed costs (K560,000 + 42,000)	K602,000
Number of units	200,000 units

	K
: . Total contribution (200,000 units x K7.60)	1,520,000
Less fixed costs	<u>(602,000)</u>
Profit	<b><u>918,000</u></b>

The reduction in the price will lead to reduced profit because the costs will remain unchanged.

- (f) Deciding whether to investigate a variance.

- Materiality
- Controllability
- Variance trend
- Cost-benefit analysis
- Interrelationship of variances.

## **SOLUTION FOUR**

- (a) Back flush costing is appropriate for organizations trying to keep inventories to the very minimum. In such circumstances, the recording of every little increase in inventory value as each nut and bolt is added, is simply an expensive and non-value added activity that should be eliminated.

### **Disadvantages of back flush costing**

- It is only appropriate for JIT operations where production and sales volumes are approximately equal
- It is claimed that it should not be used for external reporting purposes. If, however, inventories are low or are practically unchanged from one accounting period to the next operating income and inventory valuations derived from back flush accounting will not be materially different from the result using the conventional systems. Hence, in such circumstances back flush accounting is acceptable for external financial reporting.
- It is vital that adequate production controls exist so that cost control during the production process is maintained.

### **Advantages of back flush costing**

- It is much simpler, as there is no separate accounting for WIP
- Even the finished goods account is unnecessary
- The number of accounting entries should be greatly reduced as are the supporting vouchers, documents and so on.
- The system should discourage managers from producing simply for inventory since working on material does not add value until the final product is completed or sold.

### **(b) Life cycle costing**

Product life cycle costs are incurred from the design stage through development to market launch, production and sales, and their eventual withdrawal from the market.

The following are component elements of a product's cost over its life cycle:

- Research and development costs.
- Technical data cost
- Training costs
- Production costs

- Distribution costs
- Marketing costs
- Inventory costs
- Retirement and disposal costs.

(c) To manage bottlenecks effectively, Goldratt proposes a five step process:

1. Identify the bottleneck or binding constraint.
2. Exploit the bottleneck to get the highest possible output which should never be delayed.
3. Subordinate operations prior to the bottleneck to operate at the same level as the bottleneck.
4. Elevate the system bottleneck by taking steps to increase resources or improve its efficiency.
5. The removal of one bottleneck will create another elsewhere in the system, therefore go back to the first step.

## SOLUTION FIVE

(a) (i) Calculation of the cash operating cycle

	2019	2020
	Days	Days
Raw materials holding period (Raw material/Purchases x 365 days)	76	75
Less payables payment period (Payables/purchase x 365 days)	<u>(61)</u>	<u>(55)</u>
Add Work in progress (WIP/Cost of sales x 365 days)	37	37
Finished good days (Finished goods/Cost of sales x 365)	42	48
Receivables days (Trade Receivables/Sales x 365 days)	<u>73</u>	<u>88</u>
	<b><u>167</u></b>	<b><u>193</u></b>

(ii) Five (5) strategies that could be used to reduce the cash operating cycle include:-

- Reduce raw materials inventory holding by reviewing slow moving lines and re- order levels
- Obtain more finance from suppliers by delaying payments,
- Reduce work in progress by reducing production volume or improving production techniques and efficiency.
- Reduce finished goods inventory by reorganizing the production schedules and distribution methods.
- Reduce credit given to customers by involving and following up overdue amounts quickly or offering discount incentives.

(b) A cash budget is a basically a statement tabulating future cash receipts and payments to show the forecast cash balance of a business at defined intervals. Appropriate management action need to be taken in response to forecast cash deficits or surpluses depending on the situation is expected to be short-term or long-term.

### Short-term cash surplus

Methods of dealing with cash surplus in the short term include:-

- Pay suppliers early in return for settlement discounts
- Increase trade receivables and inventory
- Invest in short term investments such as 90 days Term Deposits or Treasury Bills

### Short-term cash deficit

Strategies for managing short-term cash deficit shown by the cash budget include:-

- Arrange a bank overdraft.
- Delay major items of capital expenditure

- Improve collection period or delay creditor collection period
- Reduce non-essential payments delaying payments to suppliers
- Reduce inventories levels

(c) Three major (3) differences between financial accounting and management accounting include:-

- Financial accounting is the preparation of financial reports for external use whilst management accounting is the preparation of financial reports for internal use.
- Financial accounting is a legal requirement whilst management accounting is not a legal requirement.
- The format of financial accounting reports are prescribed by the law whilst the formats of management accounts are as per management discretion.
- Financial accounting reports on historical financial information whilst management accounting reports both on historic and future information

**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 17 MARCH 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 DA 10 – Taxation (2021 Examinations)

### Income Tax

#### Standard personal income tax rates

Income band	Taxable amount	Rate
K1 to K48,000	first K48,000	0%
K48,001 to K57,600	next K9,600	25%
K57,601 to K82,800	next K25,200	30%
Over K82,800		37.5%

#### Income from farming for individuals

K1 to K48,000	first K48,000	0%
Over K48,000		10%

#### Company Income Tax rates

On income from manufacturing and other	35%
On income from farming	10%
On income of Banks and other Financial Institutions	35%
On income from mineral processing	30%
On income from mining operations	30%

### Mineral Royalty

#### Mineral Royalty on Copper

Range of Norm Price	Mineral Royalty Rate
Less than US\$4,500	5.5% of norm value
From US\$4,500 to less than US\$6,000	6.5% of norm value
From US\$6,000 to less than US\$7,500	7.5% of norm value
From US\$7,500 to less than US\$9,000	8.5% of norm value
From US\$9,000 and above	10% of norm value

#### Mineral Royalty on other minerals

Type of mineral	Mineral Royalty Rate
Base Metals (Other than Copper, Cobalt and Vanadium)	5% on norm value
Cobalt and Vanadium	8% of norm value
Energy and Industrial Minerals	5% on gross value
Gemstones	6% on gross value
Precious Metals	6% on norm value

## **Capital Allowances**

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

Wear and Tear Allowance – Plant used normally	25%
Used in Manufacturing and Leasing	50%
Used in farming and agro-processing	100%

### **Non- commercial vehicles**

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

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

### **Low Cost Housing (Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

### **Commercial Buildings**

Wear and Tear Allowance	2%
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### **Farming Allowances**

Development Allowance	10%
Farm Works Allowance	100%
Farm Improvement Allowance	100%

## **Presumptive Taxes**

<b>Turnover Tax</b>	4%
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### **Presumptive Tax for Transporters**

<b>Seating capacity</b>	<b>Tax per annum</b> K	<b>Tax per day</b> K
From 64 passengers and over	10,800	29.60
From 50 to 63 passengers	9,000	24.70
From 36 to 49 passengers	7,200	19.70
From 22 to 35 passengers	5,400	14.80
From 18 to 21 passengers	3,600	9.90
From 12 to 17 passengers	1,800	4.90
Less than 12 passengers and taxis	900	2.40



### Property Transfer Tax

Rate of Tax on Realised Value of Land, Land and Buildings and shares	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 transfer of Intellectual Property	5%

### Value Added Tax

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

### Customs and Excise

#### Customs and Excise duties on used motor vehicles

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

Motor cars and other motor vehicles principally designed for the transport of persons including station wagons and racing cars	Aged 2 to 5 years		Aged over 5 years	
	Customs duty	Excise duty	Customs duty	Excise duty
	K	K	K	K
<b>Sedans</b>				
cylinder capacity not exceeding 1000 cc	12,490	10,824	7,136	6,185
Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc	16,058	13,917	8,564	7,422
Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc	16,545	21,508	8,423	10,950
Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc	18,049	23,463	10,528	13,687

Cylinder capacity exceeding 3000 cc	22,561	29,329	12,032	15,642
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### **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

### **Aged 2 to 5 years**

### **Aged over 5 years**

### **Motor vehicles for the transport of goods –with compression-ignition internal combustion piston engine (diesel or semi-diesel):**

**Customs  
duty**

**Excise  
duty**

**Customs  
duty**

**Excise  
duty**

**K**

**K**

**K**

**K**

### **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 tonnesbut not exceeding	26,311	11,402	15,348	6,651

3.0 tonnes

GVW exceeding 3.0 tonnesbut not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
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Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
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Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes,	30,697	13,302	24,119	10,452
--	--------	--------	--------	--------

**with spark ignition internal combustion piston engine**

### **Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
--	--------	-------	-------	-------

GVW exceeding 1.5 tonnesbut not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
--	--------	-------	--------	-------

GVW exceeding 3.0 tonnesbut not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601
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### **Trucks**

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
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GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
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GVW exceeding 5.0 tonnesbut not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
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GVW exceeding 10.0 tonnesbut not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
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GVW exceeding 20 tonnes	51,898	0	19,461	0
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GVW exceeding 20 tonnes,	37,086	28,432	13,907	10,662
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**with spark ignition internal combustion piston engine**

## 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:**

**Customs Duty**

Percentage of Value for Duty Purposes	15%
Minimum specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	10%
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3. **Buses/coaches for the transport of more than ten persons**

**Customs Duty:**

Percentage of Value for Duty Purposes	15%
Minimum Specific Customs Duty	K6,000

**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	
Seating Capacity of 16 persons and less	25%
Seating Capacity of 16 persons and more	0%
4. **Trucks/lorries with gross weight exceeding 20 tonnes**

**Customs Duty:**

Percentage of Value for Duty Purposes	15%
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**Excise Duty:**

Percentage of Value for Duty Purposes for Excise Duty Purposes	0%
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## SECTION A

**Attempt BOTH questions in this section.**

### **QUESTION ONE**

- (a) The distinction between employment and self-employment is very important in taxation. It is important to identify whether one is self-employed or not as this has a bearing on how income generated by the individual is classified for taxation purposes, as well as how the individual is assessed to income tax. The Zambia Revenue Authority (ZRA) uses a number of tests to distinguish between employees and independent self employed contractors.

**Required:**

Explain any six (6) tests that can be used by the ZRA to distinguish between an employee and a self-employed person for taxation purposes. (6 marks)

- (b) Chicken Moyo Limited is a small company that has been operating for some time in the northern part of Zambia. The company is good at making pies, Pizas and Shawamas. The Director for Chicken Moyo Ltd takes tax obligations seriously and as such, he has always ensured that tax returns and payments are done on time. The company has always been paying turnover tax from its inception.

In January 2021 and February 2021 sales amounting to K120,000 were recorded in each month respectively. The company forecasted sales to remain constant at this level per month in the next two months. From 1 May 2021, sales were expected to reduce to K45,000 per month up to September 2021. Sales were expected to increase in October 2021 by 60% and then remain constant at this level up to December 2021.

All of the above figures are VAT exclusive.

**Required:**

Using the annual VAT registration threshold, establish when Chicken Moyo Limited will be required to register for VAT. (5 marks)

- (c) Lulu and Nana are in Partnership. Their final tax adjusted business profit for the year ended 31 December 2021 was K760,000. Up to 30 April, 2021, profits and losses were shared between Lulu and Nana in the ratio of 3:2 after allowing annual salaries of K80,000 and K96,000 respectively. From 1 May 2021 profits and losses were to be shared in the ratio of 5:2 between Lulu and Nana after allowing for annual salaries of K120,000 for each individual and annual interest on capital of K24,000 and K18,000 respectively.

During the tax year 2021, the partners received the following investment income from each individual's personal investments:

- Lulu received rental income of K51,000 (net) from a personal private property, she has let out.
- Nana received royalties of K68,000 (gross).

**Required:**

Calculate the income tax payable by each partner for the tax year 2021. (14 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

PJK Plc is a Zambian resident company engaged in manufacturing. In March 2021 the company listed its shares on the Lusaka Securities Exchange (LuSE) and issued 35% of its issued equity shares to indigenous Zambians. The following is the statement of profit or loss for the year ended 31 December 2021:

	Notes	K
Revenue		21,340,200
Cost of sales	(1)	<u>(10,320,000)</u>
Gross profit		11,020,200
Distribution expenses	(2)	(2,300,000)
Administration expenses	(3)	(4,100,000)
Other operating expenses	(4)	(3,700,000)
Other Income	(5)	<u>250,000</u>
Profit before tax		1,170,200
Income tax expense	(6)	<u>(409,570)</u>
Profit for the year		<u><u>760,630</u></u>

**The following additional information is relevant:**

(1) Included in cost of sales is depreciation of K800,000, impairment losses of K89,000 and profit on sale of a Nissan Tiida Motor car of K40,000. The balance is made up of revenue expenses which are all allowable for tax purposes.

(2) Distribution expenses is made up of the following:

	K
Installation of company owned Billboards	200,000
Entertaining customers	120,000
Bonus paid to marketing staff for meeting the target	310,000
Other allowable marketing expenses	<u>1,670,000</u>
	<u><u>2,300,000</u></u>

(3) Administration expenses comprise of the following:

	K
Directors' salaries	1,100,000
Employees' salaries	1,800,000
Penalty for late payment of provisional income tax	46,000
Other revenue allowable expenses	<u>1,154,000</u>
	<u>4,100,000</u>

(4) Other operating expenses are made up of the following:

	K
Donation to approved public benefit organization	109,000
Donation to political parties	122,000
Increase in general provision for irrecoverable debts	117,000
Loans to employees written off	56,000
Loans to employees previously written off now recovered	(60,000)
Gifts to suppliers of food hampers each costing K200	50,000
Staff canteen expenses	130,000
Share issue costs	12,000
Legal fees in defending title to company's Land	70,000
General allowable expenses	<u>3,094,000</u>
	<u>3,700,000</u>

(5) Other income includes dividends from FDS Plc K70,000 (gross), rental income of K62,000 (gross) and royalties K118,000 (gross). Withholding tax had been deducted at source in each case.

(6) This represents provisional income tax paid during the year ended 31 December 2021.

(7) The company has employed two (2) differently abled persons on a permanent basis. Their salaries are included in the employees' salaries in note (3) above.

(8) Capital expenditure

At 1 January 2021, the company had the following implements plant & Machinery:

<b>Asset</b>	<b>Income tax value</b>	<b>Cost</b>
	K	K
Nissan Tiida Car	48,000	80,000
Manufacturing plant	75,000	150,000

During the year ended 31 December 2021 the company entered into the following transactions:

	K
Sold Nissan Tiida Car	(90,000)
Bought Manufacturing Equipment	200,000
Bought office equipment	120,000
Bought Toyota Prado Car (2,900 cc)	400,000
Bought Nissan Murano Car (2,400 cc)	210,000

The Toyota Prado Car and the Nissan Murano Car are used by the Finance Director and the Marketing Director respectively on a personal-to-holder basis. It has been agreed with the Commissioner General that the private use by each Director of each car is 45%.

(9) Building

The company bought an old factory building at a cost of K1,320,000. Included in this amount is K120,000 for the cost of land. The building was brought into use on 1 August 2021.

**Required:**

- (a) Calculate the maximum capital allowances claimable by the company for the tax year 2021. (9 marks)
- (b) Calculate the tax adjusted business profit for the tax year 2021. (11 marks)
- (c) Calculate the final amount of income tax payable by the company for the tax year 2021. (5 marks)

**[Total: 25 Marks]**



## SECTION B

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

### **QUESTION THREE**

- (a) The Zambia Institute of Chartered Accountants (ZICA) has adopted the IESBA's Code of Ethics for Professional Accountants and all members of ZICA must comply and apply these principles.

#### **Required:**

Explain how any four (4) fundamental principles of the code of ethics apply to professional accountants providing taxation services. (8 marks)

- (b) George, a sole trader, has been in business for many years running a farming business and has always prepared his financial statements annually to 31 December. His annual turnover has always exceeded K800,000. The statement of profit or loss for the year ended 31 December 2021, showed a net profit of K442,100. This profit figure was arrived at after taking into account the following:

- (1) Other income amounting to K88,450 which was made up of royalties of K38,250 (net), dividends of K10,200 (net), Bank interest of K4,000 (gross) and rental income of K36,000 (net). Withholding tax had already been deducted at source.
- (2) Salaries amounting to K230,000. This was made up of the annual nominal salary for George of K112,000 and employees' salaries amounting to K118,000.
- (3) Motor car running expenses amounting to K54,000. These expenses were incurred on George's car which is used by him for both business and private purposes. It has been agreed with the Commissioner General that George uses the car 45% for business purposes.
- (4) General operating expenses amounting to K402,000. This was made up of the following:

	K
Legal fees in connection with acquisition of land	8,000
Legal fees incurred in defending title to existing assets	11,000
Entertaining customers	23,000
Entertaining employees	25,000
Gifts of calendars bearing the business name costing K60 each	7,200
Increase in general provision for bad debts	6,800
Depreciation	34,100
Loan to former employee previously written now recovered	(5,000)
Donation to political party	13,350
Other revenue allowable expenses	<u>278,550</u>
	<u>402,000</u>

### **Additional information**

- (1) The only asset qualifying for capital allowances at 1 January 2021 was George's motor car which had an income tax value of K48,000 on that date. The motor car was acquired in the tax year 2019 at a cost of K80,000 (see also note 3 above).

During the year ended 31 December 2021, George incurred the following expenditure:

Purchase of farm Tractor	K62,000
Purchase of combine harvester	K70,000
Expenditure on construction of a farm dwelling	K25,000
Expenditure of drilling a new borehole	K30,000
Expenditure on prevention of soil erosion	K15,000

- (2) George paid provisional income tax amounting to K21,800 for the tax year 2021.

#### **Required:**

- (i) Calculate the amount of capital allowances claimable by George for the tax year 2021. (6 marks)

- (ii) Calculate the amount of income tax payable by George for the year 2021. (11 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

- (a) Pule imported a brand new 3000cc, BMW-X5 SUV, from Japan in January 2021. The cost price of the motor car was \$6,500. He paid freight charges of \$1,950 and insurance costs in transit to the port of Dar-es-salaam was \$1,235. \$1,150 was paid to a clearing and forwarding agent to transport the motor car from Dar-es-salaam to Nakonde. Incidental costs incurred from Dar-es-Salaam to the point of entry into Zambia amounted to \$ 1,105. He incurred fuel costs of K2,000 from Nakonde to Lusaka.

Motor vehicle registration costs within Zambia amounted to K3,000. The exchange rate as approved by the commissioner General was K21.50

#### **Required:**

- (i) Calculate the total import taxes paid by Pule on the importation of vehicle. (7 marks)
- (ii) Explain the conditions to be met for the customs officer to use the transaction value method to value imported goods for duty purposes. (4 marks)
- (b) Chanda Katongo set up a business dealing in auto parts and general trading in January 2021. He estimated that his turnover for the financial year 2021, will be well

above K800,000. Katongo therefore registered for Value Added Tax (VAT) immediately after commencing trading.

During the month of December 2021, he made standard taxable supplies of K1,050,000. Purchases from registered suppliers amounted to K450,000 out of which 70% were standard rated while 20% were zero rated and the balance were exempt.

The following standard rated expenses were incurred during December 2021:

	K
Entertaining customers	80,000
Entertaining suppliers	50,000
Motor car expenses	100,000
Telephone Bills	10,000
Stationery	14,000
Utility bills relating to the business	12,000

Chanda purchased a motor van at a cost of K120,000 (VAT inclusive) after disposing off a Toyota corolla for K45,000 (VAT inclusive). He also sold excess furniture for K20,000 (VAT inclusive).

Unless specifically stated all the above transactions are VAT exclusive.

**Required:**

- (i) Calculate the VAT payable for the month of December 2021. (You should indicate using a zero (0) in your computation, items on which VAT is not recoverable) (10 marks)
- (ii) Explain any four (4) conditions which must be met for input VAT on expenditure to be recoverable. (4 marks)

**[Total: 25 Marks]**

**QUESTION FIVE**

- (a) Turnover is chargeable in Zambia on a businesses whose annual turnover is K800,000 or less at the rate of 4% of the gross monthly turnover. However certain types of businesses are exempt from paying turnover tax.

**Required:**

State any six (6) persons who are **not** required to pay turnover tax. (6 marks)

- (b) Presumptive taxes for transporters are levied on public passenger transporters in Zambia at prescribed rates depending on the seating capacity of the vehicle.

**Required:**

- (i) Briefly explain why the Government of Zambia introduced Presumptive taxes for transporters. (4 marks)
- (ii) Explain any five (5) benefits presumptive taxes for transporters have over the regular assessed system. (10 marks)
- (c) Chewe Mwansa has been in business for quite some time. She had been preparing accounts annually to 31 December and paying all the relevant taxes.

She bought two (2) Toyota Rosa buses each with a seating capacity of 30 passengers including the driver. She also acquired six (6) Toyota Vitz motor cars each a sitting capacity five (5) passengers including the driver at a cost of K76,000 each. She used all of the above vehicles in her public passenger transportation business commencing on 1 January 2021.

Each Toyota Rosa bus cost K195,000 and earned K3,500 per day for three (3) working days per week, for four (4) weeks per month, throughout the tax year 2021.

Each of the Toyota Vitz motor cars earned K260 per day, for six (6) working days per week, for four weeks per month, throughout the tax year 2021.

Chewe Mwansa employed eight drivers, two for the Toyota Hiace busses and six for the motor cars. Toyota Rosa bus drivers received an all-inclusive salary of K24,000 per month each while the Toyota Vitz drivers received a salary of K17,500 per month all inclusive.

Toyota Rosa buses running expenses averaged K31,000 per month per bus. The Toyota Vitz car running expenses averaged K960 for each car per month. Each driver made a NAPSA contribution of 5% of their salary and Chewe Mwansa also contributed 5% of each driver's salary to NAPSA as employer's contribution.

**Required:**

Calculate the total amount of presumptive taxes paid by Chewe Mwansa for the tax year 2021. (5 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 10 TAXATION

### SUGGESTED SOLUTIONS

#### SOLUTION ONE

(a) The following are the tests that are used by Zambia Revenue Authority to distinguish between an employee and self-employed person for taxation purposes:

(1) Types of contract

If there is a contract of service, it will indicate the existence of relationship of master and servant. A contract for services will indicate the existence of self-employment.

(2) Work performance

Employees must perform the duties assigned to them themselves while the self-employed may hire other people to perform the work for them.

(3) Control

The work of an employee is controlled by the employer who will normally stipulate working hours and other people to perform the work for them.

(4) Payment and financial risk

Employees are paid an agreed salary on monthly or weekly basis and incur no form of financial risk. In order to earn extra sum employees will have to work overtime. Self-employed persons are normally paid a proportion of the contract price based on the amount work performed, They will also bear the full financial risk management.

(5) Place of work

Employees will normally be told where the duties are to be performed from. This is normally at the employer's premises or at the premises of the client. Self-employed persons will perform duties at a place of their choice.

(6) Tools and equipment

An employer will provide the tools and equipment which the employees are to use. Self-employed persons will provide their own tools and equipment.

(7) Engagement and dismissal

The employer will take on and dismiss employees. A self – employed person will normally enter in to a contract with a client specifying the beginning and end.

(8) Exclusivity

Employees normally work for only one employer. A self-employed person will normally work for a number of clients.

(b) VAT Threshold computation

The cumulative sales are as follows:

	K	K
1 January 2021 to 30 April 2021 (4 x K120,000)	480,000	480,000
1 May 2021 to 30 September 2021 (5 X K45,000)	225,000	705,000
31 October 2021 (K45,000 X 1.6)	72,000	777,000
30 November 2021	72,000	849,000
31 December 2021	72,000	921,000

The K800,000 threshold is exceeded in November 2021 and therefore Chicken Moyo was required to register for VAT before 31 December 2021.

**(c) Lulu and Nana**

Computation Income Tax payable for the tax year 2021

	Lulu	Nana	Total
From 1/01/21 to 30/04/21	K	K	K
Salaries	26,667	32,000	58,667
Share of Profit 3/2	<u>116,800</u>	<u>77,866</u>	<u>194,666</u>
Total	<u>143,467</u>	<u>109,866</u>	<u>253,333</u>
From 1/05/21 to 31/12/21			
Salaries	80,000	80,000	160,000
Interest on capital	16,000	12,000	28,000
Shares of Profit 5:2	<u>227,619</u>	<u>91,048</u>	<u>318,667</u>
Total	<u>323,619</u>	<u>183,048</u>	<u>506,667</u>
Total Income from partnership	467,086	292,914	760,000
<u>Investment Income</u>			
Royalties	<u>-</u>	<u>68,000</u>	<u>68 000</u>
Total assessable Income	467,086	360,914	828,000
Les tax free Income	<u>(48,000)</u>	<u>(48,000)</u>	
Chargeable Income	419,086	312,914	
Income tax			
Next K9,600 x 25%	2,400	2,400	
Next K25,200 x 30%	7,560	7,560	
Excess			
K384,286/K278,114 x 37.5%	<u>144,107</u>	<u>104,293</u>	
Income tax liability	154,067	114,253	
Less withholding tax:			
Royalties (68,000 x 15%)	<u>-</u>	<u>(10,200)</u>	
Final Income tax payable	<u>154,067</u>	<u>104,053</u>	

## SOLUTION TWO

(a) PJK Plc

Capital allowances for the tax year 2021

Assets	Cost/ITV K	Capital allowance K
<u>Factory Building</u>		
Cost	1,200,000	
Wear & Tear @5% x K1,200,000	<u>(60,000)</u>	60,000
Income tax value c/f	<u>1,140,000</u>	
<u>Nissan Tiida Car</u>		
Income tax value b/f	48,000	
Disposal proceeds (restricted to cost)	<u>(80,000)</u>	
Balancing charge	<u>(32,000)</u>	(32,000)
<u>Manufacturing plant</u>		
Income tax value b/f	75,000	
Wear & Tear @50% x K150,000	<u>(75,000)</u>	75,000
Income tax value c/f	<u>Nil</u>	
<u>Manufacturing equipment</u>		
Cost	200,000	
Wear & tear @50% x K200,000	<u>(100,000)</u>	100,000
Income tax value c/f	<u>100,000</u>	
<u>Office equipment</u>		
Cost	120,000	
Wear & tear @25% x K120,000	<u>(30,000)</u>	30,000
Income tax value c/f	<u>52,500</u>	
<u>Toyota Prado Car</u>		
Cost	400,000	
Wear & tear @20% x K400,000	<u>(80,000)</u>	80,000
Income tax value c/f	<u>320,000</u>	
<u>Nissan Murano Car</u>		
Cost	210,000	
Wear & tear @20% x K210,000	<u>(42,000)</u>	42,000
Income tax vale c/f	<u>168,000</u>	
<u>Bill Boards</u>		
Cost	200,000	
Wear & tear @25% x K200,000	<u>(50,000)</u>	50,000
Income tax value c/f	<u>150,000</u>	

Total capital allowances	<u>405,000</u>
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### Working

Qualifying expenditure of the factory building

	K
Total cost	1,320,000
Less:	
Cost of land	(120,000)
Qualifying expenditure	1,200,000

(b) PJK PLC

ADJUSTED BUSINESS PROFIT FOR THE TAX YEAR 2021

	K	K
Profit before tax		1,170,200
Add:		
Depreciation	800,000	
Impairment losses	89,000	
Installation of company bill boards	200,000	
Entertaining customers	120,000	
Penalty for late payment of tax	46,000	
Donation to political parties	122,000	
Increase in general provision	117,000	
Loan to employees written off	56,000	
Gifts to suppliers of food hampers	50,000	
Staff canteen expenses	130,000	
Share issue costs	12,000	
Personal-to-holder car benefit:		
Toyota Prado Car	40,000	
Nissan Murano Car	<u>30,000</u>	
		<u>1,812,000</u>
		2,982,200
Less:		
Profit on disposal	40,000	
Loans to employees recovered	60,000	
Dividends	70,000	
Rental income	62,000	
Royalties	118,000	
Relief for employing differently abled		
Persons (K2,000 x 2)	4,000	
Capital allowances (a)	<u>405,000</u>	
		<u>(759,000)</u>
Adjusted business profit		<u>2,223,200</u>



(c) COMPANY INCOME TAX COMPUTATION FOR THE TAX YEAR 2021

	K
Adjusted business profit	2,223,200
Add:	
Royalties	<u>118,000</u>
Total taxable income	<u>2,341,200</u>
Income tax @28% x K2,341,200	655,536
Less:	
Provisional income tax	(409,570)
WHT-Royalties (K118,000 x 15%)	<u>(17,700)</u>
Income tax payable	<u>228,266</u>

The income tax rate for the tax year 2021 will be:

	%
Normal income tax rate	35
Less:	
Discount for listing the shares on LuSE	(2)
Discount for issuing more than 1/3 of shares to indigenous Zambians	<u>(5)</u>
Income tax rate for 2021	<u>28</u>

## **SOLUTION THREE**

### **(a) Fundamental Principles of the code of ethics**

#### **Integrity**

Members shall be straightforward and honest in all professional and business relationships. The principles of honesty and integrity impose an obligation on the practitioner to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness.

This means that a member providing taxation services must not knowingly be associated with reports, returns, communications or other information where the member believes that the information contains a materially false or misleading statement or calculation or statements or information furnished recklessly.

#### **Objectivity**

Members shall not allow bias, conflict of interest or undue influence of others to override professional or business judgements. Members shall be impartial and not allow prejudice or bias, conflict of interest or the influence of others to override their objective judgement in relation to tax matters.

In situations where a member is required to act as an advocate for a client when representing or assisting them before tribunals or courts of law, the member shall ensure that the client is aware that the member has an obligation not to mislead the Court or Tribunal and to safeguard their professional objectivity.

#### **Professional competence and due care**

Members shall 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.

This means that members engaged in 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.

#### **Confidentiality**

This means that a tax practitioner must respect the confidentiality of information he acquires whilst performing professional services and should not disclose the information to third parties or use it for his own benefit, with specific authority from the client or legal or professional duty to do so.

(b) Taxation of farming income

(i) COMPUTATION CAPITAL ALLOWANCES FOR THE TAX YEAR 2021

K	
Motor car	
Wear & Tear ( $K80,000 \times 20\% \times 45\%$ )	7,200
Farm Tractor	
Wear & Tear ( $K62,000 \times 100\%$ )	62,000
Combine Harvester	
Wear & tear ( $K70,000 \times 100\%$ )	70,000
Farm Dwelling	
Farm improvement ( $K20,000 \times 100\%$ )	20,000
Borehole	
Farm works ( $K30,000 \times 100\%$ )	30,000
Prevention of soil erosion	
Farm works ( $K15,000 \times 100\%$ )	<u>15,000</u>
Total capital allowances	<u>204,200</u>

(ii) GEORGE

COMPUTATION OF THE FINAL TAXABLE FARMING PROFIT FOR THE TAX YEAR 2021

	K	K
Net profit for the year		442,100
Add:		
George's nominal salary	112,000	
Motor car running expenses ( $K54,000 \times 55\%$ )	29,700	
Legal fees- acquisition of land	8,000	
Entertaining customers	23,000	
Increase in general provision	6,800	
Depreciation	34,100	
Donation to political party	<u>13,350</u>	
		<u>226,950</u>
		669,050
Less:		
Royalties	38,250	
Dividends	10,200	
Bank interest	4,000	
Rental income	36,000	
Loan to former employee recovered	5,000	
Capital allowances	<u>204,200</u>	
		<u>(297,650)</u>
Adjusted farming profit		371,400
Add:		
Royalties ( $K38,250 \times 100/85$ )		<u>45,000</u>
Total taxable income		<u>416,400</u>

COMPUTATION OF INCOME TAX PAYABLE FOR THE TAX YEAR 2021

Non-farming income

First K45,000 @0%	0
(The whole amount is exempt since it is less than K48,000)	
Farming income	
First K3,000 @0%	0
Balance K368,400 @10%	<u>36,840</u>
Income tax liability	36,840
Less:	
Provisional income tax paid	(21,800)
WHT- Royalties (K45,000 x 15%)	<u>(6,750)</u>
Income tax payable	<u>8,290</u>

#### **SOLUTION FOUR**

##### (a) COMPUTATION OF IMPORT TAXES PAID BY PULE

###### COMPUTATION OF VDP

	\$	
Cost Price	6,500	
Freight charges	1,950	
Insurance costs	1,235	
Clearance charges	1,150	
Incidental costs	<u>1,105</u>	
	<u>11,940</u>	
VDP	K	K
\$11,940 x 21.50	256,710	
Customs Duty ZMW256,710 x 30%	<u>77,013</u>	77,013
	333,723	
Excise duty ZMW333,723 x 30%	<u>100,117</u>	100,117
	433,840	
VAT ZMW433,840 x 16%	<u>69,414</u>	69,414
	<u>503,254</u>	
Total import taxes		<u>246,544</u>

- (ii) - No relationship should exist with the seller
- No part of the sale proceeds to the seller
  - No restriction on the use of the goods
  - No conditions should deter the determination of the VDP

##### (b) (i) CHANDA

###### COMPUTATION OF VAT PAYABLE FOR THE MONTH OD DECEMBER 2021

###### Out Put VAT

	K
Sales K1,050,000 x 16%	168,000

Sale of Corolla motor car K45,000 x 4/29	6,207
Sale of excess furniture K20,000 x 4/29	<u>2,759</u>
	176,966

#### Input VAT

##### Standard rated

Purchases K450,000 x 70% = K315,000 x 16% 50,400

##### Zero rated

K450,000 x 20% = K90,000 x 0% 0

##### Exempt

K450,000 x 10% = K45,000 -

Entertaining customers, irrecoverable -

Entertaining suppliers, irrecoverable -

Motor car expenses, K100,000 x 16% 16,000

Telephone bills, irrecoverable -

Stationery, K14,000 x 16% 2,240

Utility bills, K12,000 x 16% 1,920

Purchase of van, K120,000 x 4/29 16,552

(87,112)

VAT payable K176,966 - K87,112

**89,854**

#### (ii) Recovery of input VAT

Input VAT is **recoverable** if the following conditions are met:

- (1) At the time the supply was made, the trader was a **registered trader** for VAT purposes.
- (2) The supply must have been made **to the taxable person** making the claim.
- (3) The supply must be **supported by evidence**. The evidence is normally in the form of the tax invoice.
- (4) The person making the claim must **use the goods or services for business**. Personal expenses do not qualify for relief.
- (5) The amount available for recovery is that which is **accurately calculated**. The tax must be the amount that accurately relates to the supply.
- (6) The VAT should **not** be that which is **irrecoverable**

## **SOLUTION FIVE**

- (a) The following are the persons not required to pay turnover tax:
- (1) Any person whose annual turnover is more than K800,000
  - (2) Any person whose annual turnover is below K800,000 but has voluntarily registered for value added tax
  - (3) Any individual or partnership carrying on the business of public service vehicle for the carriage of persons
  - (4) Any partnership carrying on business irrespective of whether the annual turnover is over K800,000 or not.
  - (5) Any person whose business earnings are subjected to withholding tax where the withholding tax is the final tax.
  - (6) Income of partners arising from the partnership since the partnership producing that profit is excluded from turnover tax.
- (b) Presumptive taxes:
- (i) The following are the reasons why the Government of Zambia introduced Presumptive tax:
    - (1) The Government introduced presumptive tax system to simplify the tax management by small taxpayers.
    - (2) The idea was to increase compliance level by small taxpayers who fall in the presumptive tax brackets and taxpayers are not required to maintain accounting records as this would be challenging.
  - (ii) Presumptive taxes has the following benefits:
    - (1) The process of dealing with taxes has been simplified because there is no requirement to file returns, no requirement to keep proper business and accounting records, and the taxes payable are predictable and therefore ease the cash flow planning process.
    - (2) Presumptive taxes are cash flow friendly because operators find it fairly easy to pay a whole range of fees on a daily basis, such as loading fees, because the amounts look small and do not seriously disrupt their daily cash flow position.
    - (3) No need for professional consultancy services since paying the levies is as straightforward as paying loading fees. Therefore, there is very little intellectual or professional effort required.

(4) Equity as all transporters are expected to play their part, hence, there are no free riders as the case was before the introduction of presumptive tax.

(5) Allowance for breakdowns as levies are only charged for vehicles that are on the road during the tax accounting period.

(2 mark per valid point up to 10 marks)

(c) **Chewe Mwasa**

(i) Che Mwana computation of total presumptive tax payable in the tax year 2021.

	K
Toyota Vitz K2.50 x 6 x 4 x 6 x 12	4,320
Toyota Rosa busses K14.80 x 3 x 4 x 2 x 12	<u>4,262</u>
Total presumptive tax for the year will be:	<u>8,582</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 17 MARCH 2022

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**

**There are TWO (2) questions in this section. Both questions must be attempted.**

### **QUESTION ONE**

Zinco Co. is a small scale mining company owned by Mr. Mwange and Mrs. Lungu. The company commenced its mining operations after successfully obtaining a loan from the Citizens Economic Empowerment Cooperation. Zinco has five permanent employees which include Mr. Mwange as Managing Director. Due to her old age, Mrs. Lungu rarely works in the company but frequently attends meetings.

In 2020, Zinco Co. expanded its operations largely due to increased demand for copper. In turn management were overwhelmed with operational and administrative challenges that resulted in inefficiencies, fraud and errors due to inadequate qualified staff. As a result of this unforeseen expansion, Mr. Mwange called for a meeting at which he proposed to hire the services of external auditors. Consequently he knew of a friend from school days who had formed Corridor Chartered Accountants. Mrs. Lungu opposed the appointment of the external auditor stating that a non-statutory audit would be preferred since the company is a form of a partnership and not a listed company. Despite that, Mr. Mwange went ahead and appointed Corridor Chartered Accountants as auditors. He later promised some shares to the Managing Partner of Corridor Chartered Accountants as a gesture of friendship and a means of consolidating their good old relationship once Zinco Co. is listed on the Lusaka Securities Exchange.

Mr. Mwange's daughter recently completed her ZiCA Advisory level and was seconded to Corridor Chartered Accountants as an intern so that she could later join her father's company. During the audit for the year 2020, the audit team was accommodated at the company guest house in order to reduce the cost of travelling to and from Zinco Co.'s premises. In addition to free accommodation, they were provided with free meals and transport over the weekend to their homes.

During the year 2020, one miner was involved in an accident and sued Zinco Co. for compensation demanding a large amount of money that the company considered to be beyond its reach. Before the case came up in court, Mr. Mwange approached the Engagement Partner to be a witness in court since he knew exactly the financial difficulties the company was in and would defend it in its quest to persuade the courts to reduce the amount of compensation as demanded by the injured employee.

The fortunes of 2020 did not last for a long period of time. The copper prices in the year 2021 began to fall. This forced the company to apply for a second loan from a bank but unfortunately the financial performance was not as good to guarantee a successful loan application. This worried the Zinco Co. owners in case the bank asked for audited financial statements to support the loan application. Zinco Co. approached Corridor Chartered Accountants to consider issuing an unmodified opinion for the audit report of 2020 so that the loan application could be successful. They later threatened Corridor Chartered Accountants with removal if they did not issue an unmodified opinion. After trading for a year, a dispute arose regarding a tax query between the Zambia Revenue Authority and Zinco Co alleging that Zinco Co. was involved in tax evasion. Mrs. Lungu, one of the owners of Zinco Co. regretted that if the dispute continued, then she will have no choice but to propose that the company be sold.

The Engagement Partner at Corridor Chartered Accountants was concerned with the way audit documentation was being kept and retained. This was due to the fact that barely after one year of the previous audit papers went missing. At one planning meeting, he emphasized the importance of keeping adequate audit documentations and prudent retention, which was not being done properly so far. In addition the working papers were showing benchmark materiality in the range of ½% - 1% of revenue and 5%-10% of profit after tax. During the same planning meeting, some of the audit team members who mostly comprised Junior Auditors, wanted to know the difference between materiality for the financial statements as a whole and performance materiality.

**Required:**

- (a) Explain four (4) advantages of a non-statutory audit for Zinco Co. (6 marks)
- (b) Distinguish materiality for the financial statements as a whole from performance materiality. (2 marks)
- (c) Identify and explain four (4) ethical issues and suggest suitable safeguards in the audit of the financial statements of Zinco Co. (8 marks)
- (d)
  - (i) Explain the importance of audit documentation during the audit of Zinco Co. (6 marks)
  - (ii) Explain one (1) document that should be kept during the audit, its importance and how long such should be retained. (3 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Greener Safaris Ltd is a company that has been operating as a Tour and Safari business since 2009 in the Southern National Park. Owing to the increase in tourist arrivals before the advent of COVID-19, the company saw the need for an expansion of its operations to Luangwa National Park.

The Management at Greener Safaris Ltd applied for a license and requested for an Environmental Impact Assessment from Zambia Environmental Management Agency. However, even before an Environmental Impact assessment could be conducted, the company started its operations which resulted in fines and penalties due to non-compliance with the relevant Laws and Regulations. In order to encourage local employment, Greener Safaris Ltd employed school going children in order to enable them earn some money for their school fees which matter received adverse media publicity. In addition the Greener Safaris Ltd management has not paid its taxes since its inception.

The company has no internal audit department but has employed an accountant who also attends to administrative matters. Management does not see the need for an external audit as it feels that an internal auditor can perform the same roles as those of external auditors especially that now there was an outbreak of Covid-19 and number of bookings to the Luangwa National Game Park reduced.

The following is the procedure for cash receipts and related internal controls:

1. The client's bookings are done through phone calls and emails. The only time the staff get to see who had booked in, is after two (2) weeks. There are no log books to indicate details of clients who had booked in. All booking details are kept on loose sheets of paper.
2. Client bookings are approved by the Accountant. All cash and cheques collected from booking payments by the Accountant are deposited after two (2) weeks. Management decided to do this in order to reduce the cost of travelling from the camp site to the bank at the district. Bank reconciliations are not prepared on a regular monthly basis and in some cases are prepared once in three months.
3. All bookings and cash records are kept manually which frequently result in errors.
4. For local tourists who obtain services on credit, the Accountant has to approve bookings and verify the accuracy of information. This is due to the fact that management is too busy in Lusaka and only goes to the camp site at least once a month.
5. For customers who go directly to the camp site, the recommendations are done by the local tour guides who show them some few sites before actual bookings are made. In addition, local tour guides are also involved in the recording and processing of bookings despite not having the necessary skills and experience in this area.

Your firm has been appointed as auditors and you are in-charge of the audit of the financial statements of Greener Safaris Ltd. A Preliminary assessment of risk shows that internal controls in Greener Safaris Ltd are weak.

**Required:**

- (a) Explain three (3) responsibilities of the auditors of Greener Safaris Ltd regarding compliance with laws and regulations and state two (2) audit procedures that should be performed by the auditors. (5 marks)
- (b) Explain six (6) matters that should be documented during the audit of Greener Safaris Ltd (GS). (6 marks)
- (c) Distinguish internal auditors from external auditors. (6 marks)
- (d) (i) Identify any four (4) weaknesses in the cash receipt system of Greener Safaris Ltd. (4 marks)  
(ii) Recommend measures to address the weaknesses identified in (i) above. (4 marks)

**[Total: 25 Marks]**

## **SECTION B**

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

### **QUESTION THREE**

Durable Parts Ltd is a company that manufactures bearings that it supplies to motor shops. The company imports certain components of machinery that it uses in the manufacture of spare parts.

#### **The purchases system**

The procurement system for purchases of raw material starts with the raising of requisition notes by the Production Manager. Thereafter, the requisition is sent for approval. Once approval has been obtained, an order is made to any supplier on the list of approved suppliers that are registered with the company. Later on deliveries, accompanied with delivery notes and supplier invoices, are received. The Stores Officer checks the goods received against the purchase orders. When orders are agreed with the goods delivered, a Goods Received Note (GRN) is raised and copies sent to accounts, the Production Manager and one copy retained by the stores office. At the end of the month a statement of account is received from the suppliers and payments are made on account.

#### **Purchases of non-current assets**

The firm buys most of its non-current assets from Germany. The shipment of non-current assets enters the country via the Chirundu border where they are cleared by an appointed agent who has the necessary documentation relating to the purchase. Once the plant and machinery is cleared by the customs and excise department, trucks load the cargo en-route to Lusaka where the factory is located. All plant and equipment received is recorded in the non-current asset register.

A review of the working papers that were received by the Engagement Partner shows that the auditors collected some of the evidence required for audit finalization. The Engagement Partner was concerned as to the reliability of some of the audit evidence that was gathered during the audit for the year.

You are the Engagement Partner in Zenith Chartered Accountants appointed to be in charge of the audit of Durable Parts Ltd. The Audit Manager is of the view that the audit can be performed efficiently by the use of directional testing. In addition, he recommended that narrative notes, flowcharts, questionnaires and checklists should be used as methods of recording the client's internal control system.

#### **Required:**

- (a) Explain four (4) techniques that auditors can use to record the internal control system of Durable Parts Ltd and explain two (2) advantages of each technique. (8 marks)
- (b) Explain three (3) audit procedures that should be performed in the audit of plant and equipment acquired by Durable Parts Ltd for each of the following assertions:
  - (i) Existence. (3 marks)
  - (ii) Completeness. (3 marks)
  - (iii) Rights and obligations. (3 marks)

(c) Explain the meaning of directional testing, giving two (2) examples of how it can be used in the financial statements of Durable Parts Ltd. (4 marks)

(d) Explain four (4) qualities of audit evidence that can influence the reliability of audit evidence in the audit of the financial statements of Durable Parts Ltd. (4 marks)

**[Total: 25 Marks]**

#### **QUESTION FOUR**

Wealth Living Home Ltd is a renowned household name in the provision of home products on credit mainly to civil servants. The products include stoves, fridges, sofas and mattress. Wealth Living Home Ltd operates a centralized warehouse in Lusaka where various household products are kept. Orders are processed and after verifications, details are confirmed by comparing details on the pay-slips and the introductory letter from the civil service board. The company has over 5,200 customers. About 60% of the customers are teachers, 30% of them are from health sector and the remainder from the private sector.

The economy has not been performing well in the last one year. This has contributed to a wage freeze that has made it difficult for the government to increase salaries for civil servants. Consequently, most civil servants have less disposable income. This has resulted in a good number of them failing to pay their installments on time. In some cases, Wealth Living Home Ltd has had to repossess some of the goods earlier sold due to non-payment. In order to be prudent, management at Wealth Living Home Ltd has made a provision of 8% as an allowance for receivables.

Wealth Living Home Ltd is considering conducting inventory counts in view of the poor inventory control experienced in the past. The company wishes the auditors to recommend the best inventory count method from among:

1. Perpetual or continuous method.
2. Year-end date inventory count and
3. Inventory count a few days before or after the period end.

Your firm has been appointed as auditors of Wealth Living Home Ltd. Among other concerns is the size of the client's operations resulting in a large number of transactions. The firm is considering using sampling to select items for testing. The audit is at the planning stage and the Audit Manager is considering to using random sampling, block selection or systematic selection. The audit team will be required to carry out a receivables confirmation of selected receivables at the period end and it is concerned about the level of exceptions arising from the results of the confirmations.

#### **Required:**

(a) Explain the difference between auditors and management point estimate in relation to accounting estimates. (2 marks)

(b) Explain the following different types of sample selection methods:

- (i) Random selection. (2 marks)
- (ii) Block selection. (2 marks)
- (iii) Systematic selection. (3 marks)

- (c) Explain the three (3) methods of inventory count as suggested by management of Wealth Living Home Ltd. (6 marks)
- (d) Identify and explain five (5) reasons for exceptions arising from a receivables confirmation in the audit of receivables. (10 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

- (a) Kafue Drilling Ltd specializes in drilling of bore holes. It is located in Kafue District and charges K25, 000 per borehole. Most of its clients are those who have acquired plots for the first time. The firm has a policy of drilling bore holes on cash and credit basis.

You are the Senior Auditor in the audit of the financial statements of Kafue Drilling Ltd and you are reviewing the current file that was obtained from the Audit Junior.

The working papers revealed the following:

1. About 75% of the receivables are owed by BC Ltd. BC Ltd is a real estate developer that builds houses for sale. However, due to economic down turn, very few of the houses had been sold. Consequently the firm has not been able to pay for the boreholes that were drilled on credit by Kafue Drilling Ltd. Later in subsequent period it came to light that BC Ltd was declared insolvent. This occurred before the auditor's report was signed.
2. Included in the receivables balance at the period was an amount of K30,000 from one customer. After the financial statements had been finalized and the audit report signed but before the issuing of the financial statements it was established that the debt of K30,000 was irrecoverable.
3. It was also discovered that an invoice amounting to K23,500, was omitted from the accounts. This was discovered after the finalization of the audit and the financial statements had been issued.
4. There was a cash balance of K12,560 at the end of the year and the auditors conducted a cash count at the period end. In addition cheques amounting K7,000 were found unbanked.
5. There was a case in court against Kafue Drilling Ltd. The settlement of this case is certain according to information obtained from legal consultants of Kafue Drilling Ltd; the company is liable to pay a lot of money in form of compensation.
6. During the year, fire caused damage to part of plant and machinery .The cost of repairs is yet to be known.

You are the Engagement Partner in charge of the audit of Kafue Drilling Ltd and reviewing the working papers that contained items 1 to 3 above. One of the Audit Juniors sought clarification as to what the responsibilities of the auditors are and what would be the impact on the audit report regarding items 1 to 3 above. Further, the Audit Junior felt that there were some adjusting and non-adjusting events during the end of the year but could not understand how to deal with them.

**Required:**

- (i) Explain, giving examples, the difference between an adjusting and non-adjusting events. (4 marks)
  - (ii) Explain any four (4) audit procedures for cash counts in note 4 above. (4 marks)
  - (iii) Explain the auditor's responsibility in relation to information in the working papers 1 to 3 above. You are also required to state clearly in note 2 and 3 what auditors would do in case management refuses to make amendments. (7 marks)
- (b) Lusaka Drop-in Center takes care of the interest of street children. The drop-in center provides shelter, accommodation and food to street kids who agree to be taken off the street.

The staff establishment at the Drop-in Centre is fifteen. Out of fifteen, two are permanent staff consisting of Accounts and Administrative Manager and the Social Worker. The Accounts and Administrative Manager is in charge of fundraising and preparing of the financial statements that he presents to the Board of Trustees at the end of the year. None of the members of the Board of Trustees has knowledge of either accounting or auditing. The Social Worker is in charge of collecting details about the street children and convincing them to leave the street. The rest of the members of staff are volunteers with no knowledge of accounting or exposure of having worked in an accounting environment and are not usually found at the office the whole day.

Once they arrive at the drop in center, the children are put into school and taught life serving skills such as carpentry and brick- laying. Despite not having a predictable and certain source of income, the Drop-in Centre has some fundraising ventures as described below:

1. Tins are placed at the entrance of shopping malls. Well-wishers drop in whatever amount they have. The total number of tins taken out is only established after volunteers return them to the office. The tins are later emptied at the office; the cash counted and deposited at the bank. The amount of cash collected has been assessed as significant.
2. The drop-in center staff organize weekly fundraising walks especial at the traffic lights. Motorist who have anything to contribute pay into boxes that are carried by volunteers to the office. The cash collected is later taken to the office two weeks later for counting and later deposited at the bank.
3. In order to reduce the escalating cost of food, the drop-in center has set up a shop within town and a garden for vegetables in order to supplement its tight budget that is usually funded by donors.

Your firm has been appointed as auditor of Lusaka Drop-in Centre. Your initial assessment indicates that there is an audit risk associated with the audit of Lusaka Drop-in Centre. In addition, you need to obtain a letter of representation from the Board of Trustees of Drop-in Centre. This was necessitated by the fact that previous auditors had not obtained any written representations in the past and no explanation was given.

**Required:**

- (i) Explain audit risk and its components in relation to the audit of Lusaka Drop-in Centre. (4 marks)
- (ii) Identify and explain two (2) weaknesses in the way the cash is collected by Lusaka Drop in Centre. (2 marks)
- (iii) Explain the purpose of and procedures for obtaining written representation. (4 marks)

**[Total: 25 Marks]**

**END OF PAPER**



## **DA 11 PRINCIPLES OF AUDITING**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

- (a) Zinco Co. will benefit from a non-statutory audit in the following ways:
- (i) A non-statutory audit will be beneficial in that the dispute between the partners that arose can be cleared of any wrong doing by an audit. This will remove any suspicion by the other partner.
  - (ii) Tax query- a dispute arose due to a tax query. Therefore by having a non-statutory audit, Zinco Co. management will be cleared of allegation of tax evasion. In addition, ZRA will be assured that the tax payment were correct.
  - (iii) Audited financial statements will be a true basis for negotiations when the firm's assets are being sold. In an event that the partners go ahead and sell the business, then an audited financial statement will be a correct basis on which negotiations can begin.
  - (iv) A sleeping partner such as Mrs. Lungu will be assured that financial statements show a true and fair view. This view will be enforced due to the fact that the financial statements have been audited.

(b) **Distinction between performance materiality and materiality for the financial statements as a whole:**

At the planning stage of the audit the auditors will determine materiality for the financial statements as a whole using professional judgement and the basis agreed upon. For example the audit team may set materiality for the financial statements as a whole at K10 000

In order to reduce the chance that undetected misstatements may exceed the materiality level for the financial statements as a whole, the audit team will usually set a performance materiality level which will be used in the audit at an amount lower than the materiality level for the financial statements as a whole. In this example performance materiality may be set at K7 000.

(c) **Identification of threats and safeguards**

	Threats	Safeguards
1	Familiarity threats  Mr. Mwange's daughter worked at Corridor Chartered Accountants before joining the partnership. She is too close to the staff at the audit firm	It will be important for the audit staff like her to be rotated or be removed from the audit. Leaving them in that position can compromise independence and objectivity
2	Self-interest threat  Mr. Mwange promised shares to an engagement partner. This will create self-interest which can compromise professional relationship between the client and the auditor	The partners should decline the offer of shares in the client company.
3	Advocacy threat  Corridor Chartered Accountants have been asked to be a witness in a case involving client and a third party	This will create a compromise in terms of independence and objectivity. The best is to recuse themselves as auditors
4	Intimidation threat  The auditors have been told to give an unmodified opinion or risk being replaced. This amounts to an intimidation threat.	Auditors should decline to succumb to such threat. They should bring it to the attention of their professional body such as ZiCA.

(d) (i) **Documentation during an audit is important for the following reasons;**

- It provides evidence and basis on which an auditor's opinion is based
- It provides the stakeholders with an assurance that the audit was conducted in accordance with IPSAs
- Audit documentation helps an audit team to plan and perform an audit effectively
- The audit documentation facilitates supervision and direction of an audit.
- Audit documentation allows matters of continuing importance to be retained for future reference.
- By maintaining proper documentation, auditors are able to conduct a quality audit. This also helps them to review the initial plans.
- Audit documentation can be of great help in future when auditors are sued by a third party. They can use the documentation to provide proof of what they have done in case of a query.

(ii) **Document to be kept, importance of and length of retention;**

Documents to be kept

- All vital information such as financial statements should not be deleted by external auditors in any way.
- All the working papers and other audit evidence will form property of the auditors and that its confidentiality should be maintained at all times.

Importance of keeping working papers

- The retention of working papers is important for further quality review and can also be used in court cases when a client or lawful officer such as the ACC and DEC request the documents.

Length of period of retention

- Auditors should retain the documents for a period of 5 years before disposing of them.

## SOLUTION TWO

- (a) Auditor's responsibilities with regards compliance with laws & regulations during the audit of GS:
- (i) Reading minutes of the meetings-. This will reveal concerns and comments relating to non-compliance can also be found in the minutes of the meetings if members had expressed their concern regarding a non-compliance issue.
  - (ii) They should also obtain sufficient and appropriate audit evidence from GS whether the client complies with the laws and regulations.
  - (iii) External auditors will also be required to come up with audit procedures that can help to identify non-compliance with the laws and regulations that have an effect on the financial statements.

### **Audit procedures for compliance with laws and regulations**

- (i) Reading GS's minutes-Reading minutes can reveal certain discussions that could have been recorded during an audit.
  - (ii) External auditors should also enquire from GS's management legal team whether there have been any law suits against the firm.
  - (iii) External auditors should perform substantive audit procedures on account balances, transactions and disclosures relating to laws and regulations.
- (b) **Matters that can be documented during an audit are:**
- (i) An analysis of different transactions and account balances for Greener Safaris.
  - (ii) A record of trends of past ratios of Greener extracted from the financial statements.
  - (iii) Written representations regarding laws and regulations that were received from management at GS.
  - (iv) A number of risks that were identified and assessed during an audit of GS.
  - (v) Details and types of audit procedures that were applied to transactions during an audit.
  - (vi) The auditors can also document the nature, timing, extent and results of audit procedures.

- (c) Differences between internal and external auditors

Factors	Internal auditors	External auditors
Scope	The work of internal auditors is to make an assessment whether internal controls are working effectively	To form an opinion on whether financial statements show a true and fair view
Status	Internal auditors are employees of the	External auditors are

	entity	independent
Reporting	Internal auditors report to management	External auditors report to the shareholders
Format of reports	The report depends on internal rules and regulations	The reports are standardized and conform to the ISAs on reporting

(d)

(i) Weaknesses

1. Weak internal controls-this can resulting in fraudulent activities as there is no one tasked with issues relating to internal controls

2. Bank reconciliations being done after two months

3. Accountants approving bookings and receiving cash. There is a possibility that some of the cash received may not be recorded.

4. Depositing cash after two weeks  
This can cause accountants to use money for personal needs or even misappropriate the money.

5. Local guides getting involved recording and processing bookings

(ii) How to address weakness

Management needs to strengthen internal controls or a strong internal control system.

Reconciliations should be done regular in order to have correct recorded updated information

There is a need to segregate duties in order to ensure existence and occurrence of the transactions.

Collections from bookings should be recorded and banked promptly and not after two weeks. This can lead to loss of cash

This can lead to mistakes and loss of revenue. Local guides may not have adequate knowledge of processing booking.

## **SOLUTION THREE**

**(a) The following techniques are used to record internal control systems:**

**(i) Narrative notes:**

These are the description of internal control system in form of notes.

Advantages:

- Can easily be prepared even by a trainee auditors
- They can be used for most of the systems as an auditor takes note of the description from the client.
- They can be helpful to external auditors as they provide a description of the entire system.

**(ii) Flow charts;**

These are the representative of the client internal control system in form of diagrams. They show the commencement of the transaction and the end.

They contain symbols that represent inputs and outputs.

**Advantages:**

- They can be prepared in the shortest possible time as only lines and symbols are used.
- Even those who are not well experienced can find it easy to prepare
- Flow charts can be used in the recording of the entire internal control system from start to finish.

**(iii) Questionnaires**

Questionnaires can be in form of Internal Control Questionnaires (ICQs) or Internal Control Evaluation Questionnaires (ICEQs). The ICQs are meant to establish whether internal controls actually do exist while internal control evaluation questionnaires are used to determine whether there are controls which can prevent or detect specific errors and omissions.

**Advantages**

- ICQ questions can be used to capture the entire internal controls
- They can be prepared in a shortest possible of time as they mostly contain questions that can be answered using YES or NO
- They are easy to use and control in terms of distribution.

**Or ICEQs**

**Advantages:**

- They can be used for a variety of systems as questions are set in terms of objectives of the public entity where respondents are working.
- By answering questions, it will be easy to know which internal controls are the client is using
- They can show or expose deficiencies where substantive testing is needed.

Note award same marks for either ICQs or ICEQs.

(iv) **Checklists**

Checklists can be used as substitutes to questionnaires. The only difference is that instead of questions, different statements are phrased that can be ticked or marked off. Tick boxes are provided so that respondents can either tick YES or NO.

They have similar advantages and disadvantages of questionnaires.

(b) **Audit procedures for plant and machinery**

**Existence:** it is an assertion that helps to assess whether an item that has been recorded actually exist.

- Auditors need to confirm whether management have policies and procedures for inspecting plant and machinery physically with that recorded in the general ledger.
- Inspections-auditors need to inspect high value plant and machinery that are recorded in the asset register to confirm if they exist and are in good condition.

**Completeness:** It is an assertion that relates to the fact that all related information has been recorded and included in the account balance

- Obtain the non-current assets register and confirm with the general ledger to confirm if they all have been recorded. Any difference will have to be noted.
- Accuracy, valuation and allocation-obtain valuation certificates in order to confirm with corresponding values on other documents.
- Re-perform calculations of the revaluation surplus and compare with the amount of surplus in the books of Durable parts Limited.

**Rights and obligations:** It an assertion that explains the fact that the entity has rights and obligations to the ownership of assets.

- Obtain the invoices and other relevant documents that indicate title or ownership of the plant and machinery. This should reveal whether they are in the name of the company.
- Confirm whether all plant and machinery is being put to use.
- Obtain relevant documentation, if any, for any asset that was acquired under an operating or finance lease.

(c) **Directional testing:**

This is an audit procedure that takes advantage of the use of double entry system. It reduces the volume of transactions that are needed to be tested. The principle behind directional testing is that if the debit side is overstated, then it follows that even the credit side is overstated. Likewise if the credit side is understated, then the debit side is also understated. Therefore assets are tested for overstatement, while liabilities are tested for understatements.

First example, if the debit side of plant and machinery is overstated, then it follows that even the credit side (Payables / bank account is also overstated). Liabilities and Incomes are tested for understatements. If the credit side of payables account is understated, then even the debit side is also understated.

- (d) **Qualities that influences the reliability of audit evidence:**
- Original copies –original copies are more reliable as compared to photocopies which may be tempered with.
  - Written documents – these are more reliable as can be used for future reference as compared to oral evidence.
  - External auditors-the evidence which is obtained from external auditors is more reliable since they use audit standards to obtain them than that from internal auditors.
  - Entity – the evidence that is obtained from the records of the company is more reliable than elsewhere as long as its internal controls are strong.
  - External audit evidence which is obtained from external sources is more reliable as it comes from third parties who are independent from the client.



## SOLUTION FOUR

- (a) **The difference between auditor's point and management point estimate.**  
A point estimate is a percentage of an estimation that has been set by management. The level of estimation of an allowance set by the auditors is known as auditors range or point estimate while that of management is known as management's point estimate.
- (b) **Sample selection methods:**
- (i) **Random selection**—in this method of selecting a sample, the first item is selected randomly without any biasness. This means that other items not chosen have equal chances of being selected.
  - (ii) **Block selection** – this is a sample that is obtained from a batch of documents that have similar characteristics. For instance 50 cheques can be obtained and examined for date stamping or to find out if they are all being signed for. .
  - (iii) **Systematic sampling** —it is a sampling method in which a first sample is obtained randomly. Thereafter, the next item is picked at the same intervals the first sample that was picked. .
- (c) **WLHC can conduct its inventory counts using the following methods:**
- (i) **Periodical stock taking** —it is a type of stocktaking that takes place at least one a year. This saves a lot of valuable time for both customers and staff as they are not inconvenienced so much to a large extent. It is also a method that is favored by external auditors as they can conduct a quality audit and save time for other risky areas.
  - (ii) **Before and after year end**— it's a type of counting inventory just before or immediately after the year has ended. This depends on the time between the inventory count and the time financial statements are prepared and business systems of internal controls are evaluated.
  - (iii) **Perpetual or continuous inventory count**— involves the counting of inventory on a continuous basis or regularly. It also depends on accuracy of the records, having satisfactory internal controls. The method has the advantage of giving accurate balances of inventory at the end of the year. It is also possible that accurate up to date records and slow moving goods can be identified and disposed of.
- (d) **The following are reasons for differences in balances from a receivables confirmation:**
- (i) **Cut-off** —related issues—this is mainly caused by the client and the third party having different dates in relation to year-end financial statements. As a results one amount can be accounted for in different financial years, especially when a positive confirmation was requested.
  - (ii) **Disputes** – one of the debtors may not agree with the amount alleged to be wing. This will end up into adjustments to the allowances for bad debts.

- (iii) **Unreconciled cash balances**- at times, an amount paid by the debtor maybe known at the end of the year after financial statements have been prepared.
- (iv) **Netting off balance** –at time when the same customer is a supplier, this may result in netting off the balances. For instance the one who was a creditor may end up becoming a debtor and cause an exception to occur amount to occur.
- (v) **Teeming and lagging**-At times in an attempt to steal , some accounts staff may not update an account balance for a receivable , they may hide the money. They may shift the amount to other customers who have already paid.

## **SOLUTION FIVE**

### **(a) Adjusting and non-adjusting events:**

- (i) An adjusting event is one which provides evidence that existed at the statement of financial position date. This will require adjusting in order to give a true and fair view of the financial statements. For example a pending court case whose outcome is certain as mentioned in the scenario.

A non-adjusting event is an event that indicates conditions that exist after the balance sheet date. These require disclosure in the financial statements as notes to accounts. For example a destruction of plant at the end of the financial year.

### **(ii) Audit procedures for cash counts:**

- Cash count balances- counted balances at the end of the year should agree with the amount of cash as presented in the balance sheet.
- External auditors should obtain relevant cash certificates from the officials as KD Ltd to confirm ownership.
- If any, obtain any unbanked cheques or cash received in position of KD Ltd. and perform reconciliations.
- Verify whether the cash balances are the ones appearing in the statement of financial position at the year end.

### **(iii) Auditors responsibilities regarding information in note 1 to 3**

#### **Note 1:**

For this item, the auditor's report has not yet been prepared. The auditor has the responsibility to provide an audit for this item. Auditors need to enquire as to what amendments management need to make regarding this item. If management makes an amendment, the auditors will have to come up with audit procedures for the same item.

**Note 2:** Auditors have no responsibilities to conducted audit procedures or make enquiries regarding the financial statements after the date of the auditor's report. If auditors become aware of the said issue, they need to discuss that with management. If management amends the financial statements, then auditors have a duty to carry out additional audit procedure regarding the same item and provide a new report. If management refuses to amend the financial statements, auditors can modify the report. If the report has already been provided to the client then auditors will request management not to issue the financial statement. If that has been done, then auditors shall take action so that stakeholders do not rely on the previous auditor's report that was issued.

#### **Note 3:**

The auditors have no responsibility to perform audit procedures or make enquiries regarding this matter as it occurred after the financial statements have been issued. However, if auditor become aware of it, and had been known to the audited at the date of the auditor's report, auditors will discuss with management and determine whether financial statements need amendment.

Auditors shall also issue a new or amended auditor's report, which will include an explanatory paragraph known as an emphasis of matter. If management does not

take necessary, the auditor shall notify management and those charged with governance that the auditor will seek to prevent future reliance on the report.

**(b) Lusaka Drop-in Center:**

**(i) Audit risk and its components:**

An audit risk arises when an auditor expresses an inappropriate audit opinion when the financial statements are materially misstated.

Components of audit risks in Drop-in Centre

**Inherent risks:**

- The significance of domination and receipts-It can be difficult to prevent misappropriation of cash as records of numbers of tins are not known before volunteers go out to solicit for donations. There is a possibility of some of the tins will not be been returned to the office by volunteers.
- The lack of predictable income can make it difficult to establish the relationship between expenditure and income.
- Uncertainty of future income- inherent risks can arise in the absence of unreliable income.

**Control risks:**

- Time allocated to company operations. Given the fact that most of the staff are on voluntary basis, they will no spend adequate time and furthermore, most of the volunteers do not vet knowledge or work experience in an accounting environment.
- Lack of accounting skills at Board level – as none of the members on the board has accounting or auditing knowledge, it will be difficult for them to put in place an effective internal control system.

**Control environment:**

- No recognized structure comprising committees such as audit committee .This will lead to overlapping of responsibilities among Board members and staff in general.
- No segregation of duties-t will be difficult to establish the existence and accurate of amounts collected. For instance the accountant is in charge of collections of cash and preparation of financial statements.

**(ii) Weaknesses in the cash collecting system:**

- The people involved in the collection of cash do not have accounting knowledge or exposure of an accounting environment.
- There are no records for signing to indicate the name of the donor and amount donated.

**(iii) Purpose of written representation**

- External auditors will obtain written representations on matters that have been found material and significant during the audit.
- A written representation could be the only audit evidence that could be available as the case maybe for Lusaka Drop –in Centre.
- Written representations are obtained so that management re-affirms its obligations for preparing financial statements.

### **Procedure for obtaining written representations**

The auditor will determine at the end of the year, which matters are important on which representations are needed. This is due to the fact that at times, oral evidence was obtained.

They will then prepare a draft letter of representation and submit it to management. Management is expected to review the letter, make amendments if possible. They will later print and let management sign to confirm the representation. The date of the representation of the representation letter should be as close to the auditor's report as possible. KD Ltd the responsible party from which representations should be obtained.

**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 18 MARCH 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 (2) COMPULSORY QUESTIONS.

**Attempt both questions**

### **QUESTION ONE**

*Bridgepack Investments* is a Zambian company owned by an elite family called the *Kalimamukwentos* and belong to the *Mpla Group of Companies*, a Consortium under the management of yet another elite family of Muchinga province who have, over the years become a household name; the *Mpempas*.

Bridgepack Investments is embarking on an ambitious project dubbed; *The Zambia Goldhub Project*, in order to be able to successfully run this project and achieve its intended purpose, Bridgepack Investments will have to raise capital or in fact borrow the total sum of **\$67,000.00**.

At a meeting held on the 24 day of January, 2021, the Directors of *Bridgepack investments* agreed that they would need external funding for the purposes of running this project. They intend on raising this issue at the coming *116 Annual General Meeting* in the presence of all the Stakeholders and or stockholders.

It is agreed at the *Annual General Meeting* that the borrowing process be preceded by the change of *Bridgepack Investments* from an unlimited company to one limited by shares in order to make it more attractive for borrowing purposes.

Knowing that you are a self-proclaimed expert in matters of this nature, the Directors of *Bridgepack Investments* approaches you for advice.

#### **Required:**

- (a) With your vast knowledge on Governance and Corporate law, compare the concept of Stockholders to that of Stakeholders. (12 marks)
- (b) Examine the key difference between a *Company Limited by shares* and an *Unlimited Company* in terms of liability. (8 marks)
- (c) Discuss the borrowing powers of a company. (5 marks)

**[Total: 25 Marks]**

### **QUESTION TWO**

- (a) Explain five (5) advantages of principles based approach (10 marks)
- (b) Explain the role of the Chairman in running a company (10 marks)
- (c) Explain the Powers of court in reduction of share capital (5 marks)

**[Total: 25 Marks]**

## SECTION B

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

### **QUESTION THREE**

The Director for Evershine Debt Managers, in his remarks at the Annual General Meeting held on the 21 of January 2022 said "it is plainly inconceivable for anyone in the company to assume that Directors can be fired or otherwise vacate office of directorship for any reason, Directors have absolute power to do as they please. They are not like Company Secretary whose duties are limited"

#### **Required:**

- (a) (i) Explain to the Director for Evershine Debt Managers the circumstances under which a Director may vacate office. (5 marks)
  - (ii) Briefly explain to the Director of Evershine, the powers of Directors in a Company. (5 marks)
  - (i) Explain to the Director of Evershine the duties of a Company secretary during and after the meeting. (10 marks)
- (b) Explain the Powers of a Liquidator. (5 marks)

**[Total: 25 Marks]**

### **QUESTION FOUR**

- (a) *Victor Musopelo* was recently appointed as *Auditor General* of Igbo State in the Northern Islands of Nigeriana. Following his appointment, he was invited to speak at a *Chief Financial Officers (CFO's)* seminar held at the Five seasons New York Hotel.

The items lined up on the Agenda paper required those tasked to discuss matters touching on need for every corporate entity to have an Audit Committee.

The Deputy Auditor General, *Dr. Kaulule* was, prior to the Seminar requested to prepare a presentation on the reduction of share capital and the capital and financing of companies.

The entire ceremony was however unable to proceed as a result of load shedding and the back-up Generator's failure to kick in when the power failure occurred. The foregoing notwithstanding, Michael, one of the new entrant Accountants to have recently joined the Accounting practice would like to satisfy his curiosity and has since approached you for guidance.

#### **Required:**

With reference to the above statement, explain to Michael the six (6) duties of an audit committee. (18 marks)



- (b) Differentiate between reduction of share capital by cancellation and paying off paid up share capital. (7 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

The Cynic says "the concept of capital maintenance and capital reduction in company law is of no relevance as they refer to the same thing. And further the concept of compulsory winding up is meaningless and the legislators should do away with such"

#### **Required:**

- (a) (i) Explain to the Cynic the concepts of capital maintenance and capital reduction. (8 marks)
- (ii) Briefly explain to the Cynic the meaning of compulsory winding up. (7 marks)
- (b) Describe ways in which directors are appointed into office. (10 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## **DA12 GOVERNANCE AND COMPANY LAW**

### **SUGGESTED SOLUTIONS**

#### **SOLUTION ONE**

##### **The Stockholder theory:**

- i. Once a company limited by shares has been incorporated, it is as a matter of law that no one person can or should own all the shares in the said company and as such, there will be numerous shareholders in any given limited company.

Suffice to note that the shareholders of a company are not the persons involved in the day to day running of the company's affairs and therefore will appoint a Board of Directors to oversee the everyday running of the company. The question that arises one too many times is; to whom do the Directors of the company owe a responsibility and or legal duty to?

The preceding question in the aforementioned paragraph perhaps may be answered by what is known as; the *Stockholder theory*, this theory is one that focuses on the interests of the Shareholders. The gist of this theory is that it adopts from the principles of Agency and argues that; the Shareholders are the appointing authority of the Board of Directors and as such, the former are the principal, whereas, the latter are the Agents.

The foregoing being the case, it is argued that only Shareholders would be properly said to have a legitimate claim over the company and its affairs, and that the Directors are legally duty-bound to ensure that the interests of the Shareholders are secured.

##### **Stakeholder theory:**

A company once in motion will have various persons and/or group of persons that can affect and are affected by the company achieving its objectives, these may either be; persons, groups and/or non-human entities, the foregoing is what is known as the *Stakeholder theory*.

The Stakeholder theory hinges on the argument that companies are so big and may sometimes have a huge impact on society and as such the said company must be

corporately responsible to a larger group of Stakeholders and not only the Shareholders. The King report presses that; when adopting the Stakeholder principle of corporate governance, the Board of Directors ought to take into account the interests and/or legitimate expectations of all the Stakeholders.

In conclusion, it would appear that a comparison between the *Stockholder theory* and the *Stakeholder theory* is that the former seeks to serve and/or advance the interests of the Shareholders of a company and places the Board of Directors under the shadow of the Shareholder, whereas the latter advocates for a broader approach in the manner in which the Board of Directors makes its decisions, the said Stakeholder theory mandates the Board to be able to look at the interest of all Stakeholders involved in the affairs of the company.

- ii. The incorporation of a Company takes various forms, these being; a company limited by shares and/or guarantee, an unlimited company, etc. The major difference amongst all these companies mentioned is largely determined by the extent of the liability of the Members of these respective companies, however, for our purposes here, we will focus on a company that is limited by shares and one that is unlimited.

The extent of liability for a company limited by shares is such that; the Members and/or Shareholders are only liable to the extent of their unpaid up shares at such a time that the company is being wound up, whereas for a company of unlimited liability, the Members and/or Shareholders will be called upon to contribute if, at the time of winding up the company, the assets of the company are not enough to meet its liabilities and/or obligations.

- iii. Any company that is involved in trade has, bestowed upon it the right to borrow funds and/or charge the assets of the said company for the purposes of running the business of the said company. This is important to the corporate and business in that companies will normally require external funds to run and grow the business profits. Further to the above, it must be noted that this power to borrow is bestowed not only by the Act, but also by a company's Articles of Association which *usually* give express power to borrow and charge assets, suffice to note that; there usually will be a limit on how much, and to what extend the company's asserts may be charged for purposes of securing a loan facility.

## **SOLUTION TWO**

### a) Advantages of principles based approach

- It avoids the need for inflexible legislation
- It is less burdensome in terms of time and expenditure
- Allows companies develop their own approach
- Enforcement on a comply or explain basis
- Protects investors

### b) Role of chairman

- \* Running the board and setting its agenda
- \* Ensuring the board receives accurate and timely
- \* Ensuring effective communication with shareholders
- \* Ensuring sufficient time is allowed to discuss controversial issues
- \* Taking lead in board development
- \* Encouraging active engagement by all the members

### C) Powers of court in reduction of share capital;

- \* Check whether all creditors consented to reduction of share capital
- \* Check whether the creditor's claims have been discharged
- \* Check whether the Creditor's claim has been secured

Make an order confirming the reduction on such terms and conditions it thinks fit.

### **SOLUTION THREE**

(a)

- Removal by members/ fired by members by way of vote
- Removed by members if he misses meetings
- termination
- Resignation
- Death

(b) **Powers of directors**

- Manage the affairs of a company on daily basis
- Appoint an attorney
- Sign Cheques
- Borrow money

(c) **Duties of secretary after the meeting**

- Write up minutes
- Carry out instructions given by the meeting
- File returns
- Send copy of minutes to everyone

(d) **Powers of a liquidator**

- Carry on the business of the company as it is necessary for the beneficial winding up of the company
- Wind up all the affairs of the company
- Pay creditors

## **SOLUTION FOUR**

- i. Under the study of the topic on Corporate Governance, we have been told that each and every company must have an Audit Committee as required by the Corporate Governance rules. The question that then begs an answer is; what is role(s) does the said audit committee play in running of a company? The following are the roles of the Audit Committee in the company:
  1. **Investigations**

The Audit Committee will usually be the one to implement and review the results of one-off investigations.
  2. **To review financial statements and systems**

This means that the Audit Committee is charged with the responsibility of ensuring that it reviews both quarterly (if published) and annual accounts.
  3. **Liaise with external Auditors**

The audit of a company's books usually happens in a two-step process, there is first an internal audit that is conducted, then comes an external audit, it is the duty of the Audit Committee to appoint and remove external Auditors and to help external Auditors resolve any problems they may encounter.
  4. **Review of Risk Management**

The Audit Committee is the Committee within a company and/or institution that must ensure that there is a formal policy in place and review the arrangements for risk management.
  5. **Review of an Internal audit**

It is also the duty of the Audit Committee look at the objectivity, technical knowledge and professional standards of the Internal Auditors, and to equally review the scope, resources and results of the audit.
  6. **Review of internal control**

The Audit Committee must also play a significant role in the reviewing of the adequacy of internal controls.
- ii. There are various methods of reduction of capital, we will for the purposes of this part focus on the reduction by cancellation and reduction by paying off paid up share capital.

**Reduction by cancellation of share capital**

Capital can be reduced by cancelling any paid-up share capital which is lost or unrepresented by available assets. Suffice to note that; where a company intends on reducing its capital because it has had a loss of finance, it must demonstrate that the said loss is permanent and not fleeting.

**Paying off paid up share capital**

Sometimes a company may sale out part of its business undertaking and the monies or shares received is distributed amongst Member, and when this happens, the capital of the company can be reduced by paying off any paid-up share capital to the Shareholders that is in excess of the needs of the company at the material time.

It would appear that the difference between the reduction of capital by cancellation and reduction by paying off paid up share capital is such that, in the latter, there is taking place a total cancellation of share capital which is not commensurate with the available assets of the company at the time, whereas, in the formal, a reduction occurs by paying off any paid up share capital which is in excess of the company's needs.

## **SOLUTION FIVE**

- a) Capital maintenance, also known as capital recovery, is an accounting concept based on the principle that a company's income should only be recognized after it has fully recovered its costs or its capital has been maintained.

Capital reduction is the process of decreasing a company's shareholder equity through share cancellations and share repurchases, also known as share buybacks. The reduction of capital is done by companies for numerous reasons, including increasing shareholder value and producing a more efficient capital structure.

b) **Compulsory liquidation (by court order)**

Compulsory liquidation of a company requires obtaining a court order. This process starts with an application to the court alleging that one or more of the required grounds exist. The application may be brought by the company or a majority of its directors, or by the Registrar of Companies, or by a creditor. Applications by creditors are by far the most important and common.

c) **Appointment of directors**

Appointment of Directors by Signatures to the Memorandum:

Appointment of Directors by Company in the General Meeting:

Appointment of Directors by Board of Directors

Appointment of Directors by Third Parties (Sec. 255): The articles may permit the third parties for the appointment of director as their nominee, but the number of directors so appointed should not exceed one- third of the total number of directors and they are not liable to retire by rotation.

Appointment of Directors by Proportional Representation

Appointment of Directors by the Central Government

d) **Importance of Good governance**

- Provides the necessary responsibilities and practices to ensure benefits realization,
- Optimize resources
- Optimize risks while ensuring an organization is compliant with local laws and regulations



- Provides value to stakeholders.
- Provides a higher level of documented control and accountability than is needed in many other industries.
- Facilitates a high level of trust by clients and consumers.

## **END OF SOLUTIONS**