



**QUESTION AND ANSWER  
FOR  
DECEMBER 2018**

**DIPLOMA IN ACCOUNTANCY PROGRAMME**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 1: FINANCIAL ACCOUNTING

---

MONDAY 10 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## SECTION A – (Compulsory)

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

#### **QUESTION ONE**

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

- 1.1 What is the source document for the purchases returns day book?
- A. Invoice
  - B. Receipt
  - C. Credit note
  - D. Goods received note
- (2 marks)
- 1.2 On 1 January 2016, Misa Company bought a Scanner at a cost of K7, 000 by cheque. Its estimated useful life was 4 years. Depreciation is charged at a rate of 20% using the reducing balance method.
- Assuming its financial year is from January to December; calculate the depreciation charge for 2017
- A. K1, 750
  - B. K 5,600
  - C. K1, 400
  - D. K1, 120
- (2 marks)
- 1.3 Once a business has been formed, it is assumed that it will continue to be in existence for a foreseeable future. Where the assumption does not hold true then assets in a statement of financial position must be valued at their break - up value.
- Which concept does this statement relate to?
- A. Prudence
  - B. Accrual
  - C. Going concern
  - D. Consistency
- (2 marks)
- 1.4 Zaku company had on 1 January 2018 a balance brought down of its receivables totaling at K20, 000. During the year to December 2018, the firm received a total cash of K13, 000 from its customers. Total discount allowed were K2, 000. The closing balance of its receivables at 31 December 2018 stood at K25, 000.
- Calculate the sales figure:
- A. K20, 000
  - B. K5, 000
  - C. K10, 000
  - D. K30, 000
- (2 marks)

- 1.5 An error in which an incorrect amount is picked from source and posted to the correct account is called:
- A. Error of omission
  - B. Error of Principle
  - C. Error of transposition
  - D. Error of original entry
- (2 marks)
- 1.6 A cash flow statement according to IAS 7 must be classified under three important headings. Which of the following order of the headings is correct according to the standard?
- A. Investing, operating, financing
  - B. Operating, financing, investing
  - C. Investing, financing, investing
  - D. Operating, investing, financing
- (2 marks)
- 1.7 A company's purchases figure for the year was K50,000, while its closing inventory was K15,000. The company uses a margin percentage of 20% to calculate its profit.
- What is the company's gross profit for the year?
- A. K8,750
  - B. K7,000
  - C. K13,000
  - D. K10,000
- (2 marks)
- 1.8 The elements of prime cost are:
- A. Direct materials, direct labour, overheads
  - B. Direct materials, direct labour, direct expenses
  - C. Direct labour, direct expenses, overheads
  - D. Production cost, direct materials, direct labour
- (2 marks)
- 1.9 Which of the following is not one of the reasons for the difference in the balances between the bank column of the cash book and the bank statement?
- A. Standing order
  - B. Credit transfer
  - C. Dishonored cheque
  - D. Trial balance
- (2 marks)

10. Below is a statement of financial position extract for Lulu Ltd Company for the two years.

	2017 K'000	2018 K'000
Ordinary share capital	5,000	8,000
Share premium	-	600
Bank Loan	2,500	2,000

Calculate the total cash flow from financing activities for the year 2018?

- A. K3, 100,000 cash inflow
- B. K4, 100,000 cash inflow
- C. K1, 900,000 cash inflow
- D. K2, 900,000 cash outflow

(2 marks)

**[Total: 20 marks]**

## SECTION B

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

### QUESTION TWO

- (a) Mercy and Grace are in partnership sharing profits and losses in the ratio 2: 3. Below is their trial balance as at 31 March 2017.

		Dr	Cr
		K'000	K'000
Sales revenue			200,500
Purchases		50,000	
Returns inwards		5,000	
Returns outwards			6,100
Carriage inwards		2,000	
Carriage outwards		3,400	
Inventory at 1 April 2016		10,300	
Discounts		8,200	5,000
Trade receivables		100,000	
Payables			80,000
Bad debts		1,500	
Allowance for receivables			5,000
General expenses		4,300	
Electricity bill		6,000	
Staff Salaries		40,000	
Rent		12,000	
Office equipment (cost K70 million)		56,000	
Fixtures and fittings at cost		40,000	
Allowance for depreciation as at 1 April 2016			
- Fixtures and fittings			4,000
Cash at bank		10,000	
Drawings:	Mercy	11,000	
	Grace	13,000	
Capital:	Mercy		35,000
	Grace		45,000
Current accounts:	Mercy	4,500	
	Grace	3,400	
		<u>380,600</u>	<u>380,600</u>

**Notes:**

- (i) Closing inventory at 31 March 2017 was valued at K30, 000,000.
- (ii) Staff salaries owing at the end of the year was K5, 000,000.
- (iii) Electricity bill amount shown in the trial balance above was paid for 16 months to 31 July 2017.
- (iv) Make an allowance for receivables of 2% on receivables.
- (v) Depreciation for the year is to be made as follows:
  - Office equipment at 20% using reducing balance method.
  - Fixtures and fittings at 5% on cost.
- (vi) Interest on capital is charged at the rate of 5% on capital.
- (vii) Interest on drawing for the year is to be charged as follows: Mercy K550, 000, Grace K650, 000.
- (viii) Partners salaries: Mercy K300, 000, Grace K400, 000.

**Required:**

- (a) Prepare Mercy's and Grace's partnership statement of profit or loss and appropriation account for the year ended 31 March 2017. (13 marks)
  - (b) Prepare the partners current accounts for the year ended 31 March 2017. (5 marks)
  - (c) Identify two (2) typical contents of the partnership agreement. (2 marks)
- [Total: 20 marks]**

### **QUESTION THREE**

- (a) MM Limited makes agricultural machinery for sale to major suppliers in the industry. The following figures were extracted from its trial balance at 31 March 2018:

<b>Details</b>	<b>K'000</b>
Sales	2,200
Purchases of Raw materials	650
Carriages inwards	40
Carriage outwards	100
Sales returns	80
Purchases returns	60
Manufacturing labour costs	200
Factory supervising labour costs	75
Office salaries	108
Other costs:	
Heating and lighting (factory K132 000 and Admin offices K33 000)	165
Rent and insurance (factory K98 000, and Admin offices K24 000)	122
Factory machinery at cost	1,000
Accumulated depreciation of factory machinery	400
Delivery vehicles at cost	300
Accumulated depreciation of vehicles	100
Office machinery at cost	120
Accumulated depreciation of office machinery	80
Opening inventory at 1 April 2018: Raw materials	175
Work-in-progress	425
Finished goods	115

At 31 March 2018, the following information was also available:

1. Raw materials, Work-In-Progress and finished goods balances as at 31 March 2018 were as follows:

Raw materials	K147 000
Work-In-Progress	K392 000
Finished	K138 000

2. Accruals and prepayments at 31 March 2018 were as follows:

- Heating and lighting accrued (factory K12 000, and Admin. Offices K3 000)
- Rent prepaid (factory K18 000, and Admin. Offices K4 000)

3. Depreciation is to be calculated as follows:

- Factory machinery, 10 percent, straight line.
- Delivery vehicles, 20 percent, reducing balance.
- Office machinery, 25 percent, reducing balance.

4. Delivery vehicles are used entirely for the delivery of finished goods.



**Required:**

- (i) Prepare the manufacturing account of MM Limited for the year ended 31 March 2018. (7 marks)
- (ii) Prepare the statement of profit or loss of MM limited for the year ended 31 March 2018. (7 marks)
- (b) Mr Kanu Phiri runs a business providing equipment for bakeries. He always makes a note of his credit sales but he is not sure on how to account for VAT on his sales. Currently, the VAT rate is 16%. During the first week of March 2018, the following credit sales took place. All figures include VAT.

March 1 K. Banda bought cake tins priced at K580.

March 3 F. Jere bought K1 392 worth of equipment.

March 4 W. Sashi bought a new oven for K4 640.

March 6 P. Ponya purchased goods at a cost of K2 552.

March 7 K. Banda bought some oven-proof dishes at a cost of K696.

**Required:**

Enter the above transactions in Mr Kanu Phiri's sales day book clearly showing for each transaction the net sales value, VAT amount and the Invoice amount.

(6 marks)

**[Total: 20 Marks]**

## **QUESTION FOUR**

Below is Kay's Company statement of profit or loss for the year ended 31 March 2017 and statements of financial position as at 31 March 2016 and 2017.

Kay's Company

Statement of profit or loss for the year ended 31 March 2017

	K'000	K'000
Revenue		800
Raw materials consumed	85	
Staff costs	100	
Depreciation	<u>130</u>	
		(315)
Profit on disposal of non-current asset		<u>15</u>
		500
Interest received		33
Interest		<u>(50)</u>
Profit before tax		483
Taxation		<u>(110)</u>
Profit for the year		<u>373</u>
Dividends proposed		<u>75</u>
Retained profit		<u>298</u>

Kay's Company

Statement of financial position as at 31 March

	2017	2016
	K'000	K'000
<b>Assets:</b>		
<b>Non-Current Assets</b>		
Property, plant and equipment		
Cost	1,600	1,400
Depreciation	<u>(280)</u>	<u>(210)</u>
	1,320	1,190
<b>Current Assets</b>		
Inventory	30	50
Receivables	82	65
Cash	<u>55</u>	<u>28</u>
	<u>167</u>	<u>143</u>
<b>Total Assets</b>	<u>1,487</u>	<u>1,333</u>
<b>Equity and liabilities</b>		
<b>Capital and reserves</b>		
Share capital	450	400
Share premium	45	35
Retained earnings	<u>813</u>	<u>510</u>
	1,308	945
<b>Non-current liabilities</b>		
Bank loan	107	310

Current liabilities			
Trade payables	22		48
Interest payable	10		15
Proposed dividend	10		5
Taxation	<u>30</u>		<u>10</u>
		<u>72</u>	<u>78</u>
Total equity and liabilities		<u>1,487</u>	<u>1,333</u>

Notes:

1. During the year the company bought a new equipment at a cost of K300,000

**Required:**

Prepare Kay's cash flow statement for the year ended 31 March 2017 using the indirect method according to IAS 7. **[Total: 20 Marks]**

## **QUESTION FIVE**

- (a) The following extract is from the cashbook of Mundia, a sole trader for the month of March, 2018 and shows the company's bank transactions:

Cashbook (bank column only)			
	'K'		'K'
1/3/18 Balance b/f	27,501	14/3/18 payable	4,176
10/3/18 Receivable	12,069	16/3/18 Income tax	7,839
20/3/18 Sales	6,582	19/3/18 Sales tax	2,943
27/3/18 Receivable	21,747	19/3/18 payable	9,870
	_____	31/3/18 Balance c/d	<u>43,071</u>
	<u>67,899</u>		<u>67,899</u>

Mundia's bank statement for March was received on 2 April and shows the following:

Bank statement for month of March 2018

Date	Details	Debit	credit	balance
1/3/18	Opening balance			22,935
1/3/18	Lodgments 212		7,473	30,408
2/3/18	Cheque 148	2,907		27,501
10/3/18	Insurance Direct Debit	7,239		20,262
14/3/18	Lodgments 200		12,069	32,331
16/3/18	Cheque 152	4,176		28,155
18/3/18	Cheque 154	7,839		20,316
20/3/18	Cheque 156	9,870		10,446
24/3/18	Lodgment 218		6,582	17,028
30/3/18	Bank charges	1,689		15,339

You have been informed that although cheque numbers 212 and 148 appear on the bank statement now, they were passed through the cash book in the month of February 2018.

**Required:**

- (i) A reconciliation of the opening balances so as to bring them into line as at 1 March 2018. (2marks)
  - (ii) An adjusted cashbook for Mundia as at 31 March 2018. (3marks)
  - (iii) A reconciliation statement of the balance per bank statement to the balance per adjusted cash book as at 31 March 2018. (3marks)
- (b) In addition to the errors and omissions that affected Mundia's bank account and statement, a closer look at the company's other ledger accounts reviewed the following errors had been committed:
- 1. A cash discount of K625 allowed by Mukuni, Mundia's supplier had not been entered in the payables control account.
  - 2. The proprietor, Mundia made drawings of cash of K3,500 for private use during March but this had been debited to wages and salaries account.
  - 3. The total of the purchases day book of K813,575 had been posted to the purchases account as K813,755.
  - 4. The purchase of a motor van had been entered in a motor van account as K86,345 instead of K86,534.
  - 5. A loan from the bank of K74,200 had been entered on the credit side of the capital account.

**Required:**

- (i) Prepare journal entries required to correct all of the above errors. (Narrations are not required) (10 marks)
- (ii) Post the correcting entries to the suspense account to determine the difference that arose in trial balance as a result of errors (i) to (v) above. (2 marks)

**[Total: 20Marks]**

## **QUESTION SIX**

Below is a trial balance for B Banda, a sole trader extracted from the ledger for the year ended 31 December 2017:

### **B Banda's Trial Balance as at 31 December 2017**

	<b>Dr</b>	<b>Cr</b>
	K'000	K'000
Cash in hand	2,400	
Bank overdraft		10,500
Capital at 1 January 2017		50,200
Trade receivables and payables	35,500	17,165
Allowance for receivables		1,420
Returns inwards	5,100	
Returns outwards		3,400
10% Bank loan repayable 2030		100,000
Rent received		8,500
Loan interest	5,000	
Discount allowed	2,400	
Discount received		1,415
Premises at cost	60,000	
Motor Vehicles at cost	50,000	
Allowance for depreciation:		
• Premises		1,200
• Motor Vehicles		2,500
Inventory at 1 January 2017	17,300	
Revenue		210,500
Purchases	200,600	
Motor expenses	3,300	
Lighting and heating	4,300	
Salaries	20,900	
	<u>406,800</u>	<u>406,800</u>

### **Notes:**

1. Inventory at 31 December 2017 was valued at K18,700,000.
2. Cash purchases of K500,000 were incorrectly entered in both the cash and purchases account as K600,000.
3. Light and heating prepaid at 31 December 2017, K1,000,000.
4. Salaries accrued at 31 December 2017 K2,200,000.
5. Rent receivable accrued at 31 December 2017 K 1,000,000.
6. Part of the loan interest was accrued at 31 December 2017.

7. Create an allowance for receivables of 3% on trade receivables at 31 December 2017.
8. Allowance for depreciation for the year to 31 December 2017 is to be provided as follows:

Premises at 2% using reducing balance method.  
Motor Vehicle's at 5% using the straight line method.

**Required:**

- (a) Prepare B Banda's statement of profit or loss for the year ended 31 December 2017.  
(10marks)
- (b) Prepare B Banda's statement of financial position as at 31 December 2017.  
(10marks)

**[Total: 20Marks]**

**END OF PAPER**

## **DA 1: FINANCIAL ACCOUNTING – SOLUTION**

### **SOLUTION ONE**

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





### c) Typical contents of the partnership agreement

- Capital Contribution
- Profit – Sharing Ratio
- Rate of Interest on Capital
- Any Partnership Salaries
- Drawings

### Workings

<b>Note 1:</b> Cost of raw materials used	K000
Opening inventory	175
Purchases (650+40-60)	<u>630</u>
	805
Closing inventory	<u>147</u>
Cost of raw materials used	<b><u>658</u></b>

<b>Note 2:</b> administration expenses	K000
Office salaries	108
Heating and lighting (33+3)	36
Rent and insurance (24-4)	20
Depreciation on office machines (25% x 40)	<u>10</u>
	<b><u>174</u></b>

<b>Note 3:</b> Selling and distribution expenses	K000
Carriage outwards	100
Depreciation on delivery vehicles (.2 x 200)	<u>40</u>
	<b><u>140</u></b>

### **SOLUTION THREE**

#### **a) (i) MM Ltd's**

##### **Manufacturing account for the year ended 31 March 2018.**

	K000	K000
Cost of raw materials (note 1)		658
Direct labour		<u>200</u>
Prime cost		858
Add: Factory overheads:		
Factory supervision labour	75	
Heating and lighting (132 +12)	144	
Rent and insurance (98-18)	80	
Depreciation on factory machines	<u>100</u>	399
Opening w.i.p	425	
Less closing wip	<u>392</u>	33
Cost of production		1290

#### **ii) MM Ltd's**

##### **Statement of Profit or Loss for the Year ended 31 March 2018**

	K000	K000
Sales (2200 – 80)		2 120
Opening inventory	115	
Cost of production	<u>1290</u>	
	1 405	
Closing inventory	<u>138</u>	(1 267)
Gross profit		853
Less: selling and distribution (note 3)	140	
Administration (note 2)	174	<u>314</u>
Net profit		<b><u>539</u></b>

#### **b) K. Phiri's**

##### **Sales Day Book**

Date	Details	Net	Vat	Total
March 1	K. Banda	K 500	K 80	K 580
March 3	F. Jere	1 200	192	1 392
March 4	W. Sashi	4 000	640	4 640
March 6	P. Ponya	2 200	352	2 552
March 7	K. Banda	<u>600</u>	<u>96</u>	<u>696</u>
	<b>Total</b>	<b><u>8 500</u></b>	<b><u>1 360</u></b>	<b><u>9 860</u></b>

## Workings

### Note 1: Receipts on disposal of PPE

#### **PPE ACCOUNT**

Balance B/F	K000 1 400	∴ Disposal (bal. fig)	K000 1 000*
Bank additions	300	Balance c/d	1 600
	1 700		1 700
<b>Allowance for depreciation on PPE A/C</b>			
∴ Disposal	60*	Balance B/F	210
Balance c/d	280	SPL	130
	340		340
<b>Non-Current Asset Disposal Account</b>			
PPE	100	Accum'd Depn	60
Profit on disposal	15	∴ Bank	55
	<b><u>115</u></b>		<b><u>115</u></b>

Note 2: Dividend paid calculation

$$\begin{aligned}
 \text{Dividend paid} &= \text{Opening balance} + \text{SPL} - \text{closing balance} \\
 &= 5\,000 + 7\,500 - 10\,000 \\
 &= \mathbf{K70\,000}
 \end{aligned}$$

**Note 3:** Interest Paid Calculation

$$\begin{aligned}
 \text{Interest paid} &= \text{Opening balance} + \text{SPL} - \text{closing balance} \\
 &= 15\,000 + 50\,000 - 10\,000 \\
 &= \mathbf{5\,5000}
 \end{aligned}$$

**Note 4:** Tax Paid Calculation

$$\begin{aligned}
 \text{Tax paid} &= \text{Opening Balance} + \text{SPL} - \text{Closing Balance} \\
 \text{Tax paid} &= 10\,000 + 110\,000 - 30\,000 \\
 \text{Tax paid} &= \mathbf{90\,000}
 \end{aligned}$$

**SOLUTION FOUR****Kays****Statement of cash flows for the year ended 31 March 2017**

Net cash flows from operating activities	K000	K000
Profit before tax	483	
adjust for: depreciation expense	130	
Profit on disposal	(15)	
Interest receivables	(33)	
Interest payable	50	
Decrease in inventory	20	
Increase in receivables	(17)	
Decrease in payables	(26)	
Cash generated from operations		592
Interest received	33	
Interest paid	(55)	
Tax paid	(90)	
Dividends paid	(70)	(182)
Net cashflow from operating activities		410
Cash flows from investing activities		
Payments to acquire PPE	(300)	
Receipts from sales of PPE	55	
Net cash flows from investing activities		(245)
Cash flows from investing activities		
Cash flows from financing activities		
Issue of share capital (495 – 435)	60	
Long-term loans repaid (310-107)	(203)	
Net cash flows from financing		(143)
Increase in cash and cash equivalents		22
Cash and cash equivalent at 1.4. 2016		28
Cash and cash equivalent at 31.3.2017		50*

Actual cash in hand is "55 000", some printing error could be contained in question data.

**SOLUTION FIVE**

a) (i) **Bank reconciliation statement at start 1.3.2018**

	K	
Balance as per bank statement	22 935	
Add outstanding lodgments (212)	<u>7 473</u>	
	30 408	
Less unrepresented Cheque (148)	<u>2 907</u>	
Balance as per Cash Book	<u>27 501</u>	

ii) **Adjusted cash book**

Balance	43071	Direct debit – insurance	7 239
		Bank charges	1 689
		<b>∴adjusted balance</b>	<b>34 143</b>
	<b><u>43071</u></b>		<b><u>43 071</u></b>

iii) **Bank Reconciliation Statement at 31 March 2018**

	<b>K</b>
Adjusted cash book balance	34 143
Less outstanding lodgment	<u>21 747</u>
	12 396
Add unrepresented cheque	<u>2 943</u>
Balance as per bank statement	<b><u>15 339</u></b>

b) (i) **Journal entries**

K

K

1) Trade payables (discount received)	625	
Suspense		635
2) Drawings	3 500	
Wages and salaries		3 500
3) Suspense	180	
Purchases		180
4) Motor van	189	
Suspense		189
5) Capital	74 200	
Bank loan		74 200

ii)

**Suspense account**

Difference in books (bal. fig)	634	Trade payables	625
Purchases	<u>180</u>	Motor van	<u>189</u>
	<b><u>814</u></b>		<b><u>814</u></b>

## **SOLUTION SIX**

### **a) B. Banda's**

#### **Statement of profit or loss for the year ended 31.12.2017**

	K000	K000
Sales 210500 – 5100		205 400
Opening inventory	17 300	
Purchases (200600 – 100 – 3400)	<u>197 100</u>	
	214 400	
Closing inventory	<b><u>(18 700)</u></b>	<b><u>(195 700)</u></b>
Gross profit		9 700
Add: Discount received	1 415	
Rent received (8500+ 1000)	9 500	
Decrease in allowance on receiver	<u>355</u>	<u>11 270</u>
		20 970
Less: depreciation on premises	1 176	
Depreciation on motor vehicles	2 500	
Loan interest (5000+5000)	10 000	
Discount allowed	2 400	
Motor expenses	3 300	
Lighting and heating (4300 – 1000)	3 300	
Salaries (20900 + 2200)	<u>23 100</u>	<u>45 776</u>
Net loss		<b><u>(24 806)</u></b>

### **b) B. Banda's**

#### **Statement of Financial Position as at 31.12.2017**

<b>Non-Current Assets</b>	<b>Cost</b>	<b>Accum'd Depn</b>	<b>NBV</b>
	K000	K000	K000
Premises	60 000	2 376	57 624
Motor vehicles	50 000	5 000	45 000
			102 624
<b><u>Current assets</u></b>			
Inventory		18 700	
Trade receivables(35500 – 1065)		34 435	
Cash (2400 +100)		2 500	
Prepaid light and heating		1 000	
Accrued rent receivable		<u>1 000</u>	<u>57 635</u>
			<u>160 259</u>
<b>Capital and liabilities</b>			
Capital		50 200	
Less net loss		<u>(24 806)</u>	25 394



Non – current liability			
10% bank loan			100 000
Current liabilities			
Trade payables		17 165	
Accrued loan interest		5 000	
Accrued salaries		2 200	
Bank overdraft		10 500	34 865
			<b><u>160 259</u></b>

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 2: QUANTITATIVE ANALYSIS

---

WEDNESDAY 12 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question. You will be told when to start writing.
2. This paper is divided into TWO 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. Formulae are provided in a separate booklet.
10. Graph paper (if required) is provided at the end of the answer booklet.

## SECTION A – (Compulsory)

Attempt all ten (10) multiple choice questions

### QUESTION ONE

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

- 1.1 In correlation analysis, the correct range of the correlation coefficient is:
- A. 0 and 1
  - B. -1 and 0
  - C. -1 and 1
  - D. Greater than 0
- (2 marks)
- 1.2 A sample of five salesmen received the following new orders for last quarter sales: 15, 10, 30, 90 and 70.  
The standard deviation of the orders is:
- A. 31.5
  - B. 43
  - C. 35.3
  - D. 1245
- (2 marks)
- 1.3 Express as a fraction 0.015 in its lowest term.
- A.  $\frac{15}{1000}$
  - B.  $\frac{3}{200}$
  - C.  $\frac{3}{20}$
  - D. 15/100
- (2 marks)
- 1.4 What sum of money when reduced by 20% is equal to K200?
- A. 250
  - B. 40
  - C. 160
  - D. 240
- (2 marks)

- 1.5 A volunteer ambulance service handles 0 to 5 service calls on any given day. The probability distribution for the number of service calls is as follows:

Number of service calls	0	1	2	3	4	5
Probability	0.10	0.15	0.30	0.20	0.15	0.10

What is the variance in the number of service calls?

- A. 4.7721
- B. 3.3975
- C. 2.6642
- D. 5.4419

(2 marks)

- 1.6 First step in calculation of net present value is to find out

- A. Present value of equity
- B. Future value of equity
- C. Present value of cash flow
- D. Future value of cash flow

(2 marks)

- 1.7 An investor is considering putting up a major project in the western part of Zambia. The project requires an investment of K10,000 now, but it requires a further investment of K2,500 one year later. In return, the investor will be paid K8,500 in four years' time and another K8,500 in seven years' time. Compute the net present value of the investment when the discount rate is 4%.

- A. K2,631.43
- B. K1,321.29
- C. 1,733.47
- D. 2,169.22

(2 marks)

- 1.8 A charge account at a certain department store is approximately normally distributed with an average balance of K80 and a standard deviation of K30. What is the probability that a charge account randomly selected has a balance between K65 and K95?
- A. 0.2659
  - B. 0.4233
  - C. 0.4007
  - D. 0.3830
- (2 marks)

- 1.9 The price of mobile phones in different outlets of mobile city are to be ranked prior to the calculation of Spearman's rank correlation coefficient. The following data below lists the outlet and their respective prices.

Outlet	A	B	C	D	E	F	G	H
Price (K'00)	18	24	23	23	19	23	19	25

What is the rank of outlet C?

- A. 5
  - B. 4
  - C. 3.5
  - D. 3
- (2 marks)
- 1.10 Two per cent (2%) of items from a production line are defective. What is the probability that only one of them is defective if two items were selected at random?
- A. 0.9600
  - B. 0.0196
  - C. 0.0392
  - D. 1.00
- (2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

A class frequency distribution for the duration of twenty long – distance telephone calls in minutes is given below:

Call Duration (Minutes)	Frequency
4 – 7	4
7 – 10	5
10 – 13	7
13 – 16	2
16 – 19	1
19 – 22	1

**Required:**

**Calculate:**

- (a) The mean call duration (2 marks)
- (b) The median call duration (3 marks)
- (c) The lower quartile call duration (3 marks)
- (d) The upper quartile call duration (3 marks)
- (e) The modal call duration (3 marks)
- (f) The standard deviation of call duration (4 marks)
- (g) The coefficient of variation of call duration (2 marks)

**[Total: 20 Marks]**

### QUESTION THREE

- (a) Define the following terms:
  - (i) Risk (1 mark)
  - (ii) Uncertainty (1 mark)
- (b) During the past five years, Mr. Mulyokela owned two stocks that had the following annual rates of return:

Year	Stock A	Stock B
1	0.19	0.08
2	0.08	0.03
3	-0.12	-0.09
4	-0.03	0.02
5	0.15	0.04

- (i) Compute the arithmetic mean annual rate of return for each stock. Which stock is most desirable by this measure? (5 marks)
- (ii) Compute the standard deviation of the annual rate of return for each stock. By this measure, which is the preferable stock? (7 marks)
- (c) Suppose that we have two events, A and B, with  $P(A) = 0.50$ ,  $P(B) = 0.60$ , and  $P(A \cap B) = 0.40$
- (i) Find  $P(A/B)$  (2 marks)
- (ii) Find  $P(B/A)$  (2 marks)
- (iii) Are A and B independent? Give a reason for your answer. (2 marks)

**[Total: 20 Marks]**

**QUESTION FOUR**

- (a) Many colleges in Zambia offer different courses for students. The following are the courses offered by a business college in Muchinga and also the number of students registered for each course.

Name of course	Number of students registered
Banking and finance (BF)	15
Business administration (BA)	25
ZICA	30
Purchasing and supply (PS)	10

- (i) Draw the pie chart for the given data (5 marks)
- (ii) Draw the bar chart for the data (5 marks)

- (b) A building contractor regards the cost of fulfilling a particular contract as a normally distributed random variable with mean K 500,000 and standard deviation K50,000.
- (i) What is the probability that the cost of fulfilling the contract will be between K460,000 and K 540,000? (3 marks)
- (ii) What is the probability that the cost of fulfilling the contract will be less than K600,000? (3 marks)
- (iii) The probability is 0.2 that the contract will cost less than how much to fulfill? (4 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

- (a) Suppose an analyst takes a random sample of 10 recent truck shipments made by a company and records the distance in miles and delivery time to the nearest half-day from the time that the shipment was made available for pick-up.

Distance (km) (X)	55	80	35	60	30	50	70	65
Delivery time (hours) (Y)	14	24	12	16	10	15	20	18

- (i) Determine the least square regression line for the data above. (8 marks)
- (ii) What would be the days of delivery if the truck has to cover a distance of 500 kilometres? (2 marks)
- (iii) Calculate the coefficient of correlation (4 marks)
- (b) The women economic empowerment organization would like to help the group of women to establish a business and have encouraged members to be investing their monies in banks. If an individual is given K5,000 invested at 8% compounded interest per annum for four years.
- (i) Calculate the value of the investment at the end of four years. (3 marks)
- (ii) Compute the present value of receiving K10,000 in four years at a discount rate of 8%. (3 marks)

**[Total: 20 Marks]**



### **QUESTION SIX**

- (a) The distribution of number of soccer fans in three clubs; Nkana, Power and Zanaco from two cities of Lusaka and Kitwe is as follows:

<b>CLUB</b>	<b>LUSAKA</b>	<b>KITWE</b>	<b>TOTAL</b>
NKANA	800	1,200	<b>2,000</b>
POWER	900	1,000	<b>1,900</b>
ZANACO	1,500	600	<b>2,100</b>
<b>TOTAL</b>	<b>3,200</b>	<b>2,800</b>	<b>6,000</b>

- (i) Calculate the probability of selecting a fan from Lusaka, correct to 2 decimal places. (3 marks)
- (ii) A Power fan is selected, what is the probability that the fan is from Kitwe, correct to 2 decimal places. (4 marks)
- (iii) A fan from Lusaka is selected at random, what is the probability that he/she supports Zanaco football club, correct to 2 decimal places. (3 marks)
- (b) A company is contemplating an investment project which requires an initial outlay of K50,000. The investment is expected to produce the following of cash flows over the next four years.

Year	1	2	3	4
Cash flows	16,000	25,600	22,400	12,800

#### **Required:**

- (i) Compute the NPV at discount rate of 10% per annum. (9 marks)
- (ii) State, giving a reason whether the investment is profitable or not. (1 mark)

**[TOTAL: 20 MARKS]**

**END OF PAPER**

## DA 2: QUANTITATIVE ANALYSIS – SOLUTIONS

### Section A

#### SOLUTION ONE

1.1 C

1.2 C

$$SD = \sqrt{\frac{1}{n-1} \sum (x - \bar{x})^2}$$

Since  $\bar{x} = 43$ , then

$$SD = \sqrt{\frac{1}{5-1} \sum (x - 43)^2} = 35.3$$

1.3 B  $\frac{15}{1000} = 3/200$

1.4 A

$$\frac{80}{100} \times x = 200, \quad x = 200 \times 100/80 = 250$$

1.5 B

$$\begin{aligned} \text{Mean} = E(X) &= \sum_x x P(X = x) = \sum_{x=0}^5 x P(X = x) \\ &= 0(0.10) + 1(0.15) + 2(0.30) + 3(0.20) + 4(0.15) + 5(0.10) \\ &= 0 + 0.15 + 0.60 + 0.60 + 0.60 + 0.50 \\ &= 2.45 \end{aligned}$$

$$\begin{aligned} E(X^2) &= \sum_{x=0}^5 x^2 P(X = x) \\ &= 0^2(0.10) + 1^2(0.15) + 2^2(0.30) + 3^2(0.20) + 4^2(0.15) + 5^2(0.10) \\ &= 0 + 0.15 + 1.2 + 1.8 + 2.4 + 2.5 \\ &= 9.4 \end{aligned}$$

$$\begin{aligned} \therefore \text{Var}(X) &= E(X^2) - (E(X))^2 \\ &= 9.4 - (2.45)^2 = 3.3975 \end{aligned}$$

1.6 C

1.7 **B**

$$NPV = \sum_{k=1}^n P_k (1+i)^{t_0-t_k}$$

$$\begin{aligned} i &= 0.04, P_k = -10,000, t_1 = 0, -2500, t_2 = 1, 8500, t_3 = 4, 8500, t_4 = 7 \\ &= (-10,000)(1.04)^0 - (2500)(1.04)^{-1} + (8500)(1.04)^{-4} + (8500)(1.04)^{-7} \\ &= -10,000 - 2403.85 + 7265.84 + 6459.30 \end{aligned}$$

$$\therefore NPV = \text{K}1321.29$$

1.8 **D**

$$\begin{aligned} P(65 < X < 95) &= P\left(\frac{65-\mu}{\sigma} < \frac{X-\mu}{\sigma} < \frac{95-\mu}{\sigma}\right) \\ &= P\left(\frac{65-80}{30} < Z < \frac{95-80}{30}\right) = P(-0.5 < Z < 0.5) \\ &= 1 - P(Z < -0.5) - P(Z > 0.5) = 1 - 0.3085 - 0.3085 = 0.3830 \end{aligned}$$

1.9 <b>A</b>	Outlet	A	B	C	D	E	F	G	H
	Price	18	24	23	23	19	23	19	25
	Rank	1	7	<b>5</b>	5	2.5	5	2.5	8

1.10 **C**  $P(\text{Error}) = 0.02$  ,  $P(\text{No Error}) = 0.98$

$P(\text{Only 1 error}) = P(\text{1st has and 2nd doesn't})$  or  $P(\text{1st doesn't and the 2nd has})$

$$= (0.02 \times 0.98) + (0.98 \times 0.02)$$

$$= 0.0196 + 0.0196$$

$$= \mathbf{0.0392}$$

**SECTION B****SOLUTION TWO**

Call Duration	$x$	$f$	$fx$	$x - \bar{x}$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$	$cf$
4 – 7	5.5	4	22.0	-5.1	26.01	104.04	4
7 – 10	8.5	5	42.5	-2.1	4.41	22.05	9
10 – 13	11.5	7	80.5	0.9	0.81	5.67	16
13 – 16	14.5	2	29.0	3.9	15.21	30.42	18
16 – 19	17.5	1	17.5	6.9	47.61	47.61	19
19 – 22	20.5	1	20.5	9.9	98.01	98.01	20
		$\sum f = 20$	$\sum fx = 212$			$\sum f(x - \bar{x})^2 = 307.8$	

$$(a) \bar{x} = \frac{\sum fx}{\sum f} = \frac{212}{20} = 10.6$$

(b) Here,  $\frac{n}{2} = \frac{20}{2} = 10$ . So 10–13 is the median class

$$\text{Median} = l + \left( \frac{\frac{n}{2} - cf}{f} \right) \times h$$

$$= 10 + \left( \frac{\frac{20}{2} - 9}{7} \right) \times 4 = 10 + \left( \frac{1}{7} \right) \times 4 = 10 + 0.57 = 10.57$$

(c) Here,  $\frac{n}{4} = \frac{20}{4} = 5$ , so 7–10 is the lower quartile class.

$$\text{Lower quartile} = l + \left( \frac{\frac{n}{4} - cf}{f} \right) \times h$$

$$= 7 + \left( \frac{\frac{20}{4} - 4}{5} \right) \times 4 = 7 + \left( \frac{1}{5} \right) \times 4 = 7 + 0.8 = 7.8$$

(d) Here,  $\frac{3n}{4} = \frac{3 \times 20}{4} = 15$ . So 10–13 is the upper quartile class.

$$\text{Upper quartile} = l + \left( \frac{\frac{3n}{4} - cf}{f} \right) \times h$$

$$= 10 + \left( \frac{\frac{3 \times 20}{4} - 9}{7} \right) \times 4 = 10 + \left( \frac{6}{7} \right) \times 4 = 10 + 3.43 = 13.43$$

(e) Here frequency of class interval 10 – 13 is maximum so it is the modal class

$$\text{Mode} = l + \left( \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \right) \times h$$

$$= 10 + \left( \frac{7 - 5}{2(7) - 5 - 2} \right) \times 4 = 10 + \left( \frac{2}{7} \right) \times 4 = 10 + 1.14 = 11.14$$

$$(f) S^2 = \frac{\sum f(x - \bar{x})^2}{n - 1} = \frac{307.8}{20 - 1} = \frac{307.8}{19} = 16.2$$

$\therefore$  Standard Deviation =  $\sqrt{16.2} = 4.025$

$$(g) C.V = \frac{S}{\bar{x}} \times 100\% = \frac{4.025}{10.6} \times 100\% = 37.97\%$$

### SOLUTION 3

(a)

- i. Risk is a probability or threat of damage, injury, liability, loss or any other negative occurrence that is caused by external or internal vulnerabilities and that may be avoided through pre-emptive action.
- ii. Uncertainty is a situation where there is multiple alternatives resulting in a specific outcome, but the probability of the outcome is not certain and it is not possible to measure in quantitative terms.

(b)

- i. Computations of Arithmetic means of each stock

$$\text{STOCK A} = \frac{0.15 + 0.08 + (-0.12) + (-0.03) + 0.19}{5} = 5.40\%$$

$$\text{STOCK B} = \frac{0.08 + 0.04 + (-0.09) + 0.06 + 0.03}{5} = 2.40\%$$

STOCK A is the most desirable since it offers a higher annual rate of return on average.

- ii. Computations of standard deviations of each stock.

$$\text{STOCK A} = \sqrt{\frac{(0.15 - 0.054)^2 + (0.08 - 0.054)^2 + (-0.12 - 0.054)^2 + (-0.03 - 0.054)^2 + (0.19 - 0.054)^2}{5 - 1}} = 12.82\%$$

$$\text{STOCK B} = \sqrt{\frac{(0.08 - 0.024)^2 + (0.03 - 0.024)^2 + (-0.09 - 0.024)^2 + (0.02 - 0.024)^2 + (0.04 - 0.024)^2}{5 - 1}} = 6.66\%$$

Stock B is the most desirable to a risk –adverse investor since it offers a lower standard deviation

(c)

i. 
$$P(A/B) = \frac{P(A \cap B)}{P(B)} = \frac{0.40}{0.60} = 0.6667$$

ii. 
$$P(B/A) = \frac{P(A \cap B)}{P(A)} = \frac{0.40}{0.50} = 0.8$$

iii. Two events A and B are said to be independent if and only if

$$P(A \cap B) = P(A)P(B)$$

$$P(A \cap B) = 0.40, P(A)P(B) = 0.50 \times 0.60 = 0.30$$

$$\text{Since } P(A \cap B) \neq P(A)P(B)$$

$$0.40 \neq 0.30$$

Events A and B are not independent

## **SOLUTION FOUR**

a)

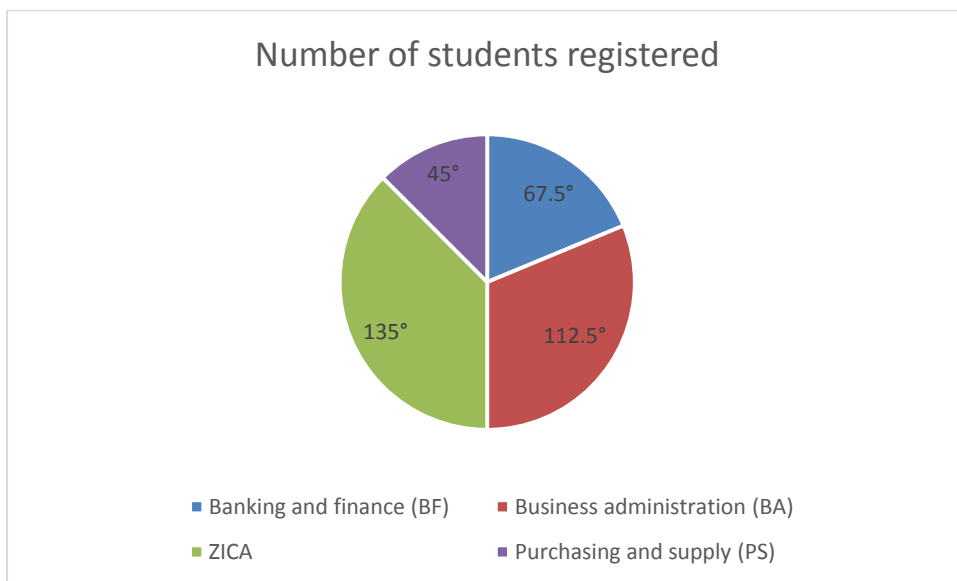
i) PIE CHART

banking and finance (BF) =  $15/80 * 360 = 67.5^\circ$

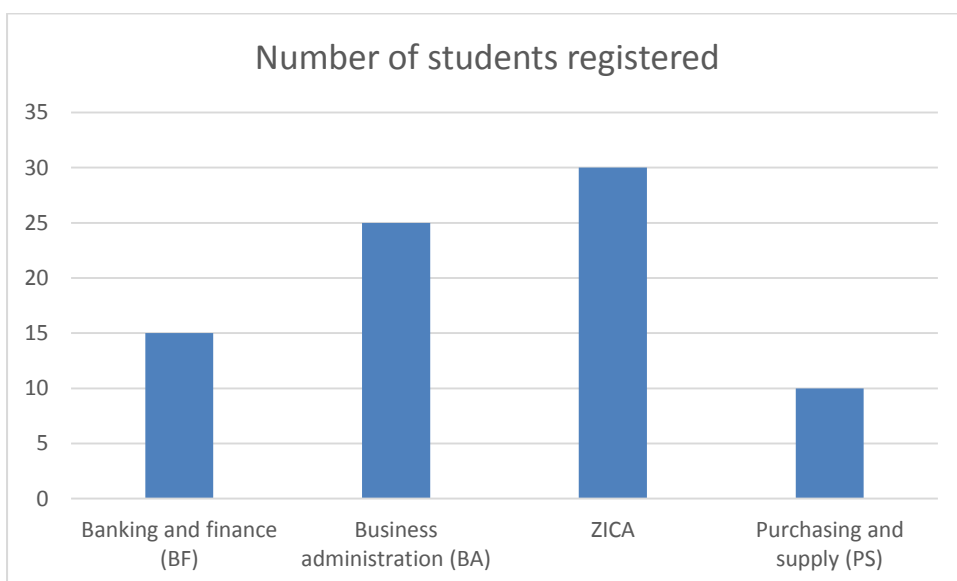
Business administration =  $25/80 * 360 = 112.5^\circ$

ZICA =  $30/80 * 360 = 135^\circ$

Purchasing and supply =  $10/80 * 360 = 45^\circ$



ii) BAR CHART





b)

i)  $P(460000 < X < 540000)$

$$= P\left(\frac{460000 - 500000}{50000} < Z < \frac{540000 - 500000}{50000}\right)$$

$$= P(-0.8 < Z < 0.8)$$

$$P(Z < 0.8) - P(Z < -0.8)$$

$$= 0.7881 - 0.2119$$

$$= 0.5762$$

ii)  $P(X < 600000)$

$$= P\left(Z < \frac{600000 - 500000}{50000}\right)$$

$$= P(Z < 2) = 0.9772$$

iii)  $P(Z < z) = 0.2$

$$z = 0.84$$

$$Z = \left(\frac{X - \mu}{\sigma}\right) \Rightarrow 0.84 = \frac{X - 500000}{50000}$$

$$X = 0.84(50000) + 500000$$

$$= 542000$$

## SOLUTION FIVE

a)

i)

	Income (X)	Expenditure (Y)	XY	X <sup>2</sup>	Y <sup>2</sup>
	55	14	770	3025	196
	80	24	1920	6400	576
	35	12	420	1225	144
	60	16	960	3600	256
	30	10	300	900	100
	50	15	750	2500	225
	70	20	1400	4900	400
	65	18	1170	4225	324
<b>Totals</b>	<b>445</b>	<b>129</b>	<b>7690</b>	<b>26775</b>	<b>2221</b>

$$\sum X = 445, \quad \sum Y = 129 \quad \sum XY = 7690 \quad \sum X^2 = 26775 \quad \sum Y^2 = 2221$$

$$\bar{X} = 55.625 \quad \bar{Y} = 16.125$$

$$b = \frac{\sum XY - n\bar{X}\bar{Y}}{\sum X^2 - n\bar{X}^2}$$

$$= \frac{7690 - (8)(55.625)(16.125)}{26775 - (8)(55.625)^2}$$

$$= \frac{514.375}{2021.875} = 0.2544$$

$$a = \bar{Y} - b\bar{X} = 16.125 - (0.2544)(55.625) = 1.974$$

$$\hat{Y} = 1.974 + 0.2544X$$

ii)  $\hat{Y} = 1.974 + 0.2544(500) = 129.14$

iii)  $r = \frac{n\sum XY - \sum X\sum Y}{\sqrt{[n\sum X^2 - (\sum X)^2][n\sum Y^2 - (\sum Y)^2]}}$

$$= \frac{(8)(7690) - (445)(129)}{\sqrt{[(8)(26775) - (445)^2][(8)(2221) - (129)^2]}}$$

$$= \frac{4115}{\sqrt{(16175)(1127)}}$$

$$= \frac{4115}{4269.5997}$$

$$= 0.9638$$

**b)**

i)  $S = X(1 + r)^n = 5000(1 + 0.08)^4 = 6802.44$

ii)  $S = X(1 + r)^n$

$$10000 = X(1 + 0.08)^4$$

$$X = \frac{10000}{1.08^4} = 7350.30$$

### **SOLUTION SIX**

(a) (i)  $P(\text{Lusaka supporter}) = \frac{3,200}{6,000} = 0.53$

(ii)  $P(\text{Kitwe/Power}) = \frac{1,200}{1,900} = 0.53$

(iii)  $P(\text{Zanaco/Lusaka}) = \frac{1,500}{3,200} = 0.47$

(b)	(i)	<u>Year</u>	<u>Cash flow</u>	<u>D.F</u>	<u>PV</u>
		0	(50,000)	1.0	(50,000)
		1	16,000	0.909	14,544
		2	25,600	0.826	21,145.6
		3	22,400	0.751	16,822.4
		4	12,800	0.683	<u>8,742.4</u>
				<b>NPV =</b>	<b><u>11,254.40</u></b>

(ii) Since the  $NPV \geq 0$ , the investment is profitable.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 3: BUSINESS ECONOMICS

---

TUESDAY 11 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## SECTION A

Attempt all ten (10) multiple choice questions

### QUESTION ONE

- 1.1 Which one of the following would cause the demand for a product to shift to the right?
- A. An increase in the wages of workers
  - B. A bumper harvest following good rains
  - C. A reduction in the cost of production
  - D. An increase in income of households
- (2 marks)
- 1.2 Profit maximization is achieved when the following condition is met.
- A.  $MR=TR$
  - B.  $TR=TC$
  - C.  $MR=MC$
  - D.  $MR=\frac{TR}{Q}$
- (2 marks)
- 1.3 Which one of the following is a feature of an oligopoly firm?
- A. A horizontal demand curve
  - B. A non-price competition
  - C. A homogeneous product
  - D. A perfect information
- (2 marks)
- 1.4 **Value added approach** to national income accounting is the same as...
- A. Expenditure approach
  - B. Input approach
  - C. Incremental approach
  - D. Output approach
- (2 marks)
- 1.5 If all the commercial banks in a national economy operated on a cash reserve ratio of 25%, how much cash would have to be deposited with the banks for the money supply to increase by a further K500m, in addition to the initial deposit?
- A. K625m
  - B. K667m
  - C. K167m
  - D. K125m
- (2 marks)

- 1.6 The economy in a country is a closed economy with no government sector.  
Consumer expenditure =  $20+0.6Y$
- $Y$ =national income  
 $I$ =investment=60
- What is the equilibrium level of national income in the country?
- A. 80
  - B. 160
  - C. 40
  - D. 20
- (2 marks)
- 1.7 International trade is based on the principle of ...
- A. Absolute advantage
  - B. Comparative advantage
  - C. Economic union
  - D. Balance of trade
- (2 marks)
- 1.8 One of the fiscal policy instruments for government macroeconomic objective is ...
- A. Quantitative directives
  - B. Bank rate
  - C. Taxes
  - D. Special deposits
- (2 marks)
- 1.9. Which of the following is a draw- back of economic growth?
- A. Promotes job and wealth creation
  - B. Causes environmental degradation
  - C. Results in improved quality of life
  - D. Promotes social infrastructure development
- (2 marks)
- 1.10 A company is satisficing when it is ...
- A. maximizing sales revenue
  - B. minimizing cost of production
  - C. Achieving a satisfactory level of profit
  - D. Achieving sufficient management incentives
- (2 marks)

**[Total: 20 Marks]**

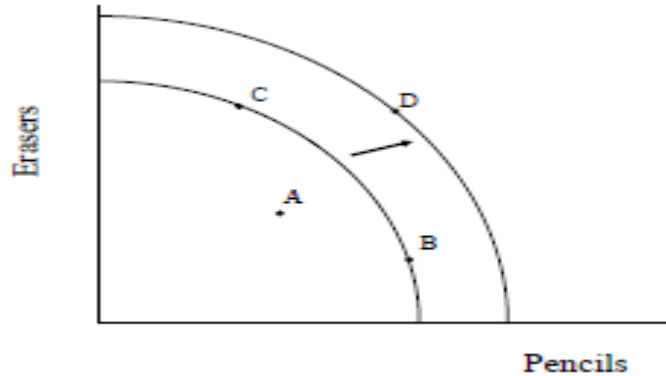
## SECTION B

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

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

### QUESTION TWO

(a) Given the Production Possibility Frontier below,



- (i) Explain the meaning of points A, B, C and D. (3 marks)
- (ii) Outline any three (3) factors that cause a shift to point D. (6 marks)
- (b) Explain why the Production Possibility Frontier slopes downward (3 marks)
- (c) By giving **two examples**, state two (2) key characteristics of public goods. (3 marks)
- (d) List any five (5) advantages of a market economy. (5 marks)

**[Total: 20 Marks]**



### **QUESTION THREE**

MAPAX Investments Limited is a company producing two products A and B. The finance manager has the following information for the products for the first quarter of 2017:

<b>PRODUCT</b>	<b>DEMAND (units)</b>		<b>PRICE (K'000)</b>	
	January	March	January	March
A	30	15	10	12
B	25	30	10	2

The Finance Manager wants to establish the Price Elasticity of Demand (PED) of the two products and strategize for increase in sales revenue.

#### **Required:**

- (a) Define Price Elasticity of Demand (PED) (3 marks)
- (b) Calculate PED for product A at price K5,000 per unit (7 marks)
- (c) Explain the significance of PED for the Finance Manager in a country like Zambia. (4 marks)
- (d) On the basis of PED for each product the Finance Manager wants to increase sales revenue for both products.
  - (i) Interpret the results and (3 marks)
  - (ii) Indicate the strategic option available for the manager as the projects increase in sales revenue. (3 marks)

**[Total: 20 marks]**

#### **QUESTION FOUR**

- (a) Marginal Propensity to Consume(MPC) and Marginal Propensity to Save (MPS) are two sides of national income (Y) given that in a closed economy, income that is not consumed must invariably be saved.

Outline **any five (5)** factors that influence the marginal propensity to consume of citizens in a country. (10 marks)

- (b) National Milling Company and Zambia Breweries are two examples of state-owned enterprises which have been privatised in Zambia. Based on your understanding:

(i) State any two (2) problems associated with state ownership of the means of production in an economy. (2 marks)

(ii) Explain any four (4) arguments in favour of privatisation. (8 marks)

**[Total: 20 Marks]**

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

**QUESTION FIVE**

Zambia and South Africa (SA) are discussing the possibility of trading at regional level. The following information is available:

	<b>PRODUCT A (tons)</b>	<b>PRODUCT B(tons)</b>
ZAMBIA	300	500
SOUTH AFRICA	600	900

- (a) Define the concept of absolute advantage in international trade (3 marks)
- (b) Is trade between Zambia and South Africa possible? Answer this question by evaluating this trade situation in computing the opportunity costs of the two countries? (7 marks)
- (c) Explain any four (3) arguments in favor of protectionism (6 marks)
- (d) Analyze any four (4) impacts of multinational enterprises and the Foreign Direct Investments (FDI) on national economies. (4 marks)

**[Total: 20 Marks]**

### **QUESTION SIX**

Zambia has been experiencing a balance of trade deficit with the volume of imports being more than the balance of exports.

- (a) List the three (3) parts of a balance of payments accounts (3 marks)
- (b) Analyze the main reasons Zambia might be suffering a current account deficit on the basis of increased import penetration (9 marks)
- (c) Explain how the Zambian government can rectify (correct) a current account deficit (6 marks)
- (d) Structurally the sum of the balance of payment accounts must always be zero. Justify this statement (2 marks)

**[Total: 20 Marks]**

### **QUESTION SEVEN**

- (a) Given that one important function of the Bank of Zambia is to ensure appropriate monetary policy formulation and implementation:
- (i) Briefly explain each of the (3) three monetary aggregates used by the Bank to measure money supply. (6 marks)
  - (ii) State any two (2) aims of monitoring these monetary aggregates. (2 marks)
- (b) Explain any four (4) macroeconomic policy objectives emphasizing how they are measured and their importance to an economy. (12 marks)

**[Total: 20 Marks]**

**END OF PAPER**

### DA 3: BUSINESS ECONOMICS SOLUTIONS

#### SOLUTION ONE

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

## Section B Micro economics

### SOLUTION TWO

a)

i)

- Combinations of output of erasers and pencils lying inside the PPF such as point **A** occur when there are **unemployed resources** or when the economy uses resources **inefficiently**.
- Combinations of output of the two goods lying on the production possibility frontier such as points **C** and **B** represent **full employment** or **efficient use** of resources.
- Point **D** is unattainable at the moment because it lies beyond the PPF

ii) The production possibility frontier will shift when:

- There are **improvements in productivity and efficiency** perhaps because of the introduction of **new technology** or **advances in the techniques of production**)
- **More factor resources are exploited** perhaps due to an increase a rise in the amount of capital equipment available for businesses
- An **increase in the size of the workforce** perhaps due to increase in population or more people being educated.
- Discovery of a **natural resource** that supports the production of the two goods.

b) The negative slope of the PPF illustrates the fact that larger quantities of erasers correspond to a smaller amount of pencils, and vice versa. This happens because all the economy's resources are already in use, and therefore obtaining more erasers would always require sacrificing some pencils. In economic terms, the negative slope is due to the presence of opportunity cost.

c) Two key 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.

d) **Advantages of market economy**

- Any individual or firm has the right to act on his/her/its own account to satisfy the needs of others
- Competition between different firms leads to increased efficiency
- There is more innovation as firms look for new products to sell and cheaper ways to produce goods and services
- The size, power and cost of the State bureaucracy is reduced, as various activities that are usually associated with the public sector are taken over by private enterprise
- Choice –no compulsion for any individual to buy a product
- Provides information about the preferences and beliefs of consumers.

### **SOLUTION THREE**

(a) Price Elasticity of Demand (PED) is the degree of responsiveness of demand for a product to changes in price.

(b) For product A :  $PED = \frac{\% \text{ change in demand for A}}{\% \text{ change in price for A}}$

At price K10,000

Change in quantity :

$$\frac{30-15}{30} = 0.5 = 50\%$$

Change in price :

$$\frac{10-12}{10} = 0.2 = 20\%$$

$PED = \frac{50\%}{20\%} = -2.5$  ignoring the negative sign the demand is elastic because PED value is greater than 1

PED for product B :  $\frac{\% \text{ change in demand for B}}{\% \text{ change in price for B}}$

At price K10,000

Change in quantity :  $\frac{30-25}{25} = 0.2 = 20\%$

Change in price :  $\frac{10-2}{10} = 0.8 = 80\%$

$PED = \frac{20\%}{80\%} = -0.25$  ignoring the negative sign the demand for product B is inelastic because PED value is less than 1

(c) It is important for the finance manager to know the PED for a product because then he will be able to increase the price if the demand for the product is inelastic so that the revenue obtainable is increased.

Similarly, he will be able to reduce the price if the demand is elastic so that the revenue obtainable is increased.

(d) **Product A** : the demand is elastic  $PED = -2.5$  so the manager should reduce the price in order to increase sales revenue.

**Product B** : the demand is inelastic  $PED = -0.25$  and the manager should increase the price from K10,000 in order to increase sales revenue



## **SOLUTION FOUR**

(a) Factors that affect marginal propensity to consume include:

- (i) **Changes in the distribution of national income:** Some sections of society may have a higher marginal propensity to consume than others, thus a redistribution of wealth may affect consumption. Redistribution of income may be accomplished by taxing the rich and giving to the poor in form of government cash transfer programs or allowances.
- (ii) **Government policy:** Government can influence consumption levels through taxation and/or public spending. For instance, an increase in direct taxation reduces disposable income and therefore reduces consumption (reduces aggregate demand)
- (iii) **Interest rates:** Changes in interest rates influence the amount of income that households decide to save and the amount they may be willing to borrow for spending. For instance, **high interest rates** make **savings attractive** and at the same time it makes **borrowing unattractive** because it becomes expensive to borrow.
- (iv) **Changes in disposable income:** Changes in disposable income such as pay rise, increase in wealth or expectations in increases of salaries and/or wealth of citizens may cause an increase in present marginal propensity to consume.
- (v) **Development of major new products:** development and introduction of new products and services on the market may result in significant increase in spending as citizens desire to consume new products/services. Consequently, MPC will rise.
- (vi) **Price expectations:** Expectations of price increases in future may cause an increase in consumption now to beat future price increases. Conversely, expectation of low prices in future may cause a decrease in consumption now. This may lower the current MPC.

(b)

- (i) The following are some of the problems of state ownership of means of production:
  - Less competition for consumers: less consumer choice due to existence of monopolies.
  - Political interference: appointments are made on partisan lines rather than professionalism.
  - Inefficiencies and ineffectiveness: parastatals are too bureaucratic and wasteful.
  - Pricing problems: monopolies find it easy to increase prices continually to cover inefficiencies.
  - Economic viability: many nationalised industries fail to even breakeven.
- (ii) Any five reasons in favour of privatisation:
  - To **improve efficiency**. Since state industries usually lack the profit motive, they tend to be wasteful and inefficient thus pushing up prices and harming competitiveness. On the other hand, private firms are aware of the need to get a return on their investment and are more predisposed to being efficient and ensuring that resources are put to good use.

- To **attract investment**. Private investors come with their own capital to invest into equipment, expansion, research, etc. as opposed to state owned firms which have to compete with other social needs and priorities for funding from government.
- **Private firms do not easily succumb to political influence**. Governments may be tempted to interfere with the operations of state companies for its own political gain at the expense of other firms that rely on such companies for products and services. But private firms are able to map out a long term strategy that is not easily influenced by state politics.
- To **encourage competition**. Parastatals tend to be monopolistic in nature and provide no alternatives to consumers who have to accept the prevailing prices, services, and output. A privatised firm strives to be competitive to remain viable and can therefore be broken down into smaller competing units or opened up to external competition. This means prices will be determined by the demand and supply forces.
- To **raise funds for the state**. Funds received from the sale or disposal of state firms can be used for other developmental objectives and projects as well as in the reduction of public debt.
- To **meet demands from international bodies**. International bodies which are proponents of free trade like the World Bank require privatisation as a condition for a country being permitted to access world markets and funding bodies like the International Monetary Fund may require privatisation as a condition to access development funding.

**SOLUTION FIVE**

(a) A country has an absolute advantage over another if it produces more than the other, if it is more efficient in the production of products. In this case South Africa has an absolute advantage over Zambia in the production of both goods A and B.

(b)

	Table 1		Table 2		Table 3	
	A	B	A	B	A	B
Zambia	3	5	1	1.7	0.6	1
SA	6	9	1	1.5	0.7	1

Table 1 absolute advantage

Table 2 opportunity cost: country SA has a lower opportunity cost ( $1.5 < 1.7$ ) than Zambia so SA has a comparative advantage over Zambia

Table 3 opportunity cost. : Country Zambia has a lower opportunity ( $0.6 < 0.7$ ) than SA so Zambia has a comparative advantage over SA.

Trade between Zambia and SA is possible because though SA has an absolute advantage in the production of both products A and B (table 1) SA has a comparative advantage in the production of good B because it has a lower opportunity cost 1.5 (table 2) in production of good B and Zambia has a comparative advantage in the production of good A because it has a lower opportunity cost (0.6) (table 3) in the production of good A. Therefore trade is possible on the basis of comparative advantage.

(c) Arguments in favor of protectionism

- (i) Measures might be necessary to counter dumping of surplus production by other countries at an economically low price, in other words preventing unfair competition.
- (ii) Protectionist measures by one country are often implemented in retaliation against measures taken by another country that are thought to be unfair.
- (iii) There is an argument that protectionism is necessary, at least in the short term, to protect a country's infant industry that have not yet developed to the size where they can compete in international market.
- (iv) Protection might also help a country in the short term to deal with the problems of declining industries without protection, the industry might quickly collapse and there would be severe problems of sudden mass unemployment.
- (v) Local producers establish direct linkages with Multinational countries and supply to them. Improve productivity of local producers.

(d) Impact of multinational enterprises and Foreign Direct Investments (FDIs) on national economies. This impact can be in favor or against the economy :

- (i) It can improve economic welfare by introducing new capital but inward investment may not create new investment, it will displace existing domestic investment.
- (ii) It can introduce new technologies (technology transfer) but technology transfer may only be at a low level.
- (iii) Multinational companies (MNCs) will provide direct employment, and may also create additive indirect employment through supplier firms. Possible multiplier effect resulting from new investment but this may not be new employment, may displace existing employment if MNCs displace existing firms.
- (iv) Government receives tax revenue from MNCs
- (v) Allows local producers to establish business linkages with MNCs
- (vi) Balance of payments supported through inflows of Foreign Direct Investment (FDI)

## **SOLUTION SIX**

- (a) The following are the 3 parts of a balance of payments accounts :
- Current account
  - Capital account
  - Financial account
- (b) The following are the 3 main reasons Zambia might be suffering a current account deficit on the basis of increased import penetration:
- (i) Lower production costs mean overseas competitors can produce goods more cheaply than domestic producers.
  - (ii) Over-valuation of domestic currency making imports relatively cheaper than domestic products.
  - (iii) High income elasticity of demand for imports increases demand for imports as national income grows.
  - (iv) Non-price features of imported goods (e.g. performance service care) better than domestic goods.
- (c) Zambia would rectify its current account deficit by taking the following measures :
- (i) A depreciation of the currency to make exports more attractive and imports less attractive. This is called a devaluation when deliberately instigated by the government.
  - (ii) Direct measures to restrict imports such as tariffs or imports quotas or exchange control regulations.
  - (iii) Domestic deflation to reduce aggregate demand in the domestic economy, and hence reduce the level of imports.
- (d) The sum of the balance of payments accounts must always be zero. Ignoring statistical errors in collecting the figures. This is for the same reason that a statement of financial position must always balance; for every debit there must be a credit. So if the current account is in deficit it must be matched by surplus on the capital or financial account.

## **SOLUTION SEVEN**

- (a)
- (i) M1, sometimes known as narrow money, is defined on the basis of the function of money as a medium of exchange. It includes **coins and notes in circulation** outside the monetary sector as well as all **demand deposits** of the domestic private sector with monetary institutions.

M2 is a broader definition of money which includes **M1 plus short-term and medium-term deposits** like time deposits, savings deposits, and demand deposits in foreign currency of the domestic private sector with the monetary institutions.

M3 is a more comprehensive measure of money and it includes **M2 plus all long-term deposits** like savings deposits and time deposits in foreign currency of the domestic private sector with monetary institutions.

(ii) Any two reasons why it is important for the Bank of Zambia to monitor these measures include:

- It is a good predictor of likely aggregate demand.
- It monitors the credit creating activity of banks.
- An indicator of potential inflation.

(b) Macroeconomic policy objectives include:

- To achieve **economic growth**, and growth in national income per head of the population. Growth implies an increase in national income in real terms. It is measured using the gross domestic product. Increases caused by price inflation are not real increases at all.
- To **control price inflation** (to achieve stable prices). Price stability does not mean that all prices should always stay constant. High and accelerating inflation is clearly undesirable. This can be seen by calculating the inflation rate. Inflation can reduce a country's international price competitiveness, reduce the real income of some groups, create uncertainty, make it difficult for firms to plan and thereby may discourage investment.
- To achieve **full employment**. Full employment does not mean that everyone who wants a job has one all the time, but it does mean that unemployment levels are low, and involuntary unemployment is short-term. The employment rate is used to measure this variable.
- To achieve a **balance between exports and imports** (on country's balance of payments accounts) over a period of years. The wealth of a country relative to others, a country's credit worthiness as a borrower, and the goodwill between countries in international relations might all depend on the achievement of an external balance over time. This is done by preparing the Balance of Payment Accounts.
- To **reduce income inequality**. Reducing levels of income inequality requires the benefits of economic growth to reach those in society who are economically poorest. One way of helping this process is the use of redistributive policies like social cash transfers. Measures of inequality include the Gini coefficient and the Lorenz curve.
- To **reduce poverty**. The World Bank define poverty as 'an unacceptable deprivation in human well-being that can comprise both physiological and social deprivation'. Many countries, particularly developing countries, have a significant proportion of their population living in poverty. The level of economic growth is an important influence on poverty and macroeconomic stability is essential to achieve sustainable economic growth. This is done by calculating the Human Development Index (HDI).

## END OF SOLUTIONS



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

---

WEDNESDAY 12 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## **SECTION A – (Compulsory)**

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

### **QUESTION ONE**

Each of the following questions has only one correct answer. Write the letter of the correct answer you have chosen

- 1.1 What law protects software developers from having their software copied?
- A. Non intellectual property law
  - B. Secrecy law
  - C. Copyright law
  - D. Personal law
- (2 marks)
- 1.2 What do you call an image of an abstract idea in a graphical user interface?
- A. An icon
  - B. A window
  - C. A menu
  - D. Pointer
- (2 marks)
- 1.3 Which of the following is not an input device?
- A. OMR
  - B. Mouse
  - C. Monitor
  - D. Plotter
- (2 marks)
- 1.4 The accountant of a leisure resort wishes to estimate the likely effect on profits of a decrease in entry price by examining the consequences of estimated increases in the number of people using it. What would be a suitable software package to aid him with the calculations?
- A. An expert system
  - B. A spreadsheet
  - C. A presentation graphics package
  - D. A Maths package
- (2 marks)



- 1.5 Which software packages are used in achieving mail merge?
- A. Spreadsheet and database
  - B. Word processor and graphics package
  - C. Electronic mail system
  - D. Word processor and database (2 marks)
- 1.6 Which direction of communication would be suitable for managers at the same level?
- A. vertical
  - B. Diagonal
  - C. Lateral
  - D. Upward and downward communication (2 marks)
- 1.7 What is a quorum?
- A. The maximum number of people for a meeting to start
  - B. The minimum number of people required to start a meeting
  - C. The minimum and maximum number of people required for a meeting to start.
  - D. The maximum number of people required to make deliberations (2 marks)
- 1.8 One of the 7C's of effective communication is concreteness. Which one of the following statements best defines the term concreteness?
- A. Being polite when communicating
  - B. Avoiding ambiguous words phrases and using plain language
  - C. Communicating using the fewest possible words
  - D. complete communication with all the facts required by the audience (2 marks)

1.9 Which one of the following is not a salient feature of graphical communication?

- A. High impact to the audience
- B. Can be memorable
- C. Can draw attention to changes and trends
- D. It is usually presented in an informal way

(2 marks)

1.10 Which of the following statements best describes a medium of communication?

- A. A path through which information is transmitted
- B. A path through which information is received
- C. A form in which messages are transmitted through oral, written and visual Communication
- D. A form in which messages are transmitted through Telephones, Fax machines or the internet.

(2 marks)

**[Total: 20 Marks]**

## SECTION B

This section has two parts: 1. INFORMATION TECHNOLOGY AND

### 2. COMMUNICATION

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

#### 1. INFORMATION TECHNOLOGY

##### QUESTION TWO

- (a) Explain the following general types of software:
- (i) Systems software (2 marks)
  - (ii) Utility software (2 marks)
  - (iii) Communication software (2 marks)
  - (iv) Database Management System (DBMS) (2 marks)
  - (v) Application software (2 marks)
- (b) List any four (4) tasks of an operating system. (4 marks)
- (c) List any three (3) dangers of email. (6 marks)

**[Total: 20 Marks]**

##### QUESTION THREE

- (a) Distinguish between a database and a data warehouse (4 marks)
- (b) Discuss the following functions of Spreadsheets:
- (i) *SumIF* (3 marks)
  - (ii) *Max* (2 marks)
  - (iii) *Count* (2 marks)
  - (iv) *CountIF* (3 marks)
- (c) Write down three (3) benefits of using a database in an accounting information system. (6 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

Networks are made up of a number of connected computers and other electronic devices.

Clearly explain each of the following (with examples where appropriate)

- (a) Cloud Storage (4 marks)
- (b) Local Area Network (LAN) *versus* Wide Area Networks (WAN) (5 marks)
- (c) Virtual Private Networks (VPN) (5 marks)
- (d) Accounting Information Systems (AIS) (6 marks)

**[Total: 20 Marks]**

## 2. COMMUNICATION

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

### **QUESTION FIVE**

Luka Mumba, the Director and Secretary at Nazaphi Company has just realised that the Annual General Meeting is approaching and needs to remind board members about the same meeting.

#### **Required:**

- (a) Prepare a notice for a meeting and include a standard agenda for an Annual General Meeting (AGM). (12 marks)
- (b) Briefly explain the following types of meetings.
  - (i) Project meeting
  - (ii) Investigations meeting
  - (iii) Decision making meeting
  - (iv) Problem solving meeting

(8 marks)

**[Total: 20 Marks]**

## **QUESTION SIX**

You are an Assistant Accountant for JMK supermarket. Plans are under way to open another branch at a new shopping mall in Lusaka. You wish to stock a number of assorted items for the super market, but you wish to enquire certain information on assorted items from suppliers.

### **Required:**

- (a) Write a letter to one of the suppliers enquiring on the cost of some assorted items which you wish to stock at your new supermarket outlet.

(15 marks)

- (b) State any five (5) types of letters that are commonly used in most organisations.

(5 marks)

**[Total: 20 Marks]**

### **QUESTION SEVEN**

Effective listening skill requires one to actively understand information provided by the speaker and display interest in the topic discussed. Questions on the other hand are also essential in a discussion.

#### **Required:**

- (i) State any five (5) guidelines to effective listening. (10 marks)
  
- (ii) Using a Memo, explain the five types of questions to some of the junior employees at your work place who may not know how to use them in different situations.

(10 marks)

**[Total: 20 Marks]**

**END OF PAPER**

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

### **SOLUTION ONE**

- 1.1 C Copyright law
- 1.2 A An icon
- 1.3 D Plotter
- 1.4 B A spreadsheet
- 1.5 D Word processor and database
  
- 1.6 C Lateral
- 1.7 B The minimum number of people required to start a meeting.
- 1.8 B Avoiding ambiguous words phrases and using plain language
- 1.9 D It is usually presented in an informal way
- 1.10 C A form in which messages are transmitted through oral, written and visual Communication



## **SOLUTION TWO**

### **a) General types of software**

- i) **Systems software** – which are also referred to as support software and are meant to carry out computer device management tasks. They also enable the effective and efficient use of computer system or hardware resources. It is also responsible for managing all other software running on the computer, which links the application software and the hardware.
- ii) **Utility software** – can also be referred to as specialised systems software. They mostly deal with data and file management tasks. These handle common file handling routines, data manipulation and housekeeping tasks that are undertaken by the computer.
- iii) **Communication software** – they are responsible for handling the communications that take place between computerized systems. They handle data traffic, transmission frequencies and any other tasks that facilitate the communication of data and information between systems.
- iv) **Database Management Systems (DBSM)** – DBMS is system software for creating and managing databases. It provides users and programmers with a systematic way to create, retrieve, update and manage the database.
- v) **Application software** – this software directly interacts with the user to carry out user defined or designed tasks. All activities of processing data are carried out in conjunction with application software. It is the actual interface between the user and the machine.

### **b) Tasks of an Operating System:**

- i) Initial setup of the computer once it has booted up via the BIOS
- ii) Checking that the hardware is functioning properly
- iii) Calling up of program files and data into memory
- iv) Opening and closing of files
- v) Maintenance of directories (folders) in disk storage
- vi) Controlling input and output devices
- vii) Interpreting and executing computer user commands
- viii) Controlling system security
- ix) Handling of interruptions
- x) Managing multitasking

### **c) List any three (3) dangers of email.**

Accept any 3 of the following answers:

- Confidentiality problems (passwords must be safeguarded)
- Sending to wrong people

- May end up replacing other communications that may be more appropriate
- Too much information going to people who may not need it
- Spam (unwanted advertising email)
- Using email for fraud
- Using email to spread computer viruses

### **SOLUTION THREE**

#### **a) Distinguish between a database and a data warehouse**

A database is an organized or collection of related data that is centrally stored and accessed by many users and application

while a data warehouse consists of databases containing historical data from various operational systems, reporting and Data analysis, which is a core component of business intelligence

#### **b) Discuss the following functions of Spreadsheets**

##### *(i) SumIF*

Shows the sum of the contents of a range of cells meeting a given criteria

OR

Allow a candidate who gives an example plus explanation such as =sumIF(B2:B4,">200")

##### *(ii) Max*

Shows the maximum or highest (biggest) value in a range of cells.

OR

Allow a candidate to give an example such as =Max(B2:B4) plus an explanation

##### *(iii) Count*

Shows the number of cells in a range that contain numbers

OR

Allow a candidate to give an example such as =Count(B2:B4) plus an explanation

##### *(iv) CountIF*

Is a count method which shows how many cells in a specified range meet a defined criteria

OR

Allow a candidate who shows an example formula such as =countIF(B2:B4,">130")

#### **c) Advantages of using databases**

- Less duplication
- Data consistency

- Easier updating
- Improving access to data
- Data security
- Multi user for different applications

## **SOLUTION FOUR**

### a) **Cloud Storage**

- This is a type of storage which happens online.
- There is no need for disks or tapes
- Storage space is bought (secured) online
- Data can be retrieved even when the office burns down completely ( remote access of data)
- This allows staff to work from any location, provided there is internet access

### b) **Local Area Network (LAN) vs. Wide Area Networks (WAN)**

- A local area network connects computers over a relatively short distance. A school or business would usually contain a LAN.
- A Wide Area Network on the other hand, is a computer network that spans a relatively large geographical area.
- Typically, a WAN consists of 2 or more LANs.

### c) **Virtual Private Networks (VPN)**

- A Virtual Private Network (VPN) is a computer network in which some or all of the links are part of a larger network (for example the internet). In short, they are built on a larger network.
- VPN is a technology that creates a safe and encrypted connection over less secure networks such as the internet.
- VPNs also facilitate remote and home working. Employees can access their office network from anywhere with suitable communication links and work as though they were in the office.

### d) **Accounting Information Systems (AIS)**

AIS are the system, computerised, that collects, records, stores and processes accounting data. It combines accounting principles with the benefits of information systems.

## **SOLUTION FIVE**

**(a)**

### **NAZAPHI COMPANY**

#### **Notice for an annual general meeting**

This notice serves to inform you that there will be a board meeting on (any date during the exam time) in the Board room at 09:00 hours .the agenda include the following:

- 1.0 The Directors Report( Financial statement and Independent auditors report)
- 2.0 The Directors remuneration Report
- 3.0 The remuneration policy
- 4.0 The election of officers
- 5.0 Authorisation of the Director to fix the remuneration of the auditors
- 6.0 Any other business

By the order of Director and secretary

Nazahi Company.            Date.....

**(b)**

- (i) **Project meetings** – basically deals with various work plans on projects undertaken by organizations taking into consideration aspects of time quality and cost of the whole project.
- (ii) **Investigations meetings** - For investigations that seek to establish causes of a particular case.
- (iii) **Decision making meeting** - which should generate workable and strategic decisions which can bring development in the organization.
- (iv) **Problem solving meetings** -which finds solution to problems and members should be endowed with a wide range of skills.

## **SOLUTION SIX**

**(a)**

JMK Supermarket

Head office

Po box 31372

Lusaka

Ref:

Date (any date during examination time)

The sales and marketing manager

Trade kings Zambia limited

31428

Lusaka

Dear Sir,

### **Enquiry and Supply of assorted selected items for retail services**

We are writing to enquire on selected items that we wish to order from your company. We will soon be opening another supermarket at the newly built shopping mall in Lusaka and therefore, we wish to enquire on the cost of these items and their availability on the market.

The details are as follows:

100 cases of different types of tooth pastes

200 cases of assorted fizzy drinks

300 cases of assorted washing pastes

150 cases of assorted washing soap

300 cases of samba crisps

We also wish that you send us samples of these items, brochures as well as an invoice so that we prepare the payment. For any further clarification you are free to contact the undersigned on 0977760675.

Looking forward to receiving feedback from you as soon as possible, your consideration this issue will highly be appreciated.

Yours faithfully

Mr. J. B. Likabu

**(b)**

Types of letters that are commonly used in organizations are:

- (a) Letters of enquiry
- (b) Letter of complaint
- (c) Letters of Job offers to employees
- (d) Letters of apology
- (e) Job application letters
- (f) Letters of recommendations
- (g) Letters making legal claims
  
- (h) letters of resignation
  
- (i) Letters of Promotion
  
- (j) Letters of dismissal
  
- (k) Letters of appointment
  
- (l) Letters of promotion
  
- (M) Letters of Authorisation/approval



## **SOLUTION SEVEN**

i)

The guidelines to effective listening are:

- (a) Prepare to listen. Give the speaker all your attention
- (b) Resist any form of distractions such as noise
- (c) Show an understanding of the other persons view points
- (d) Be sensitive to the speakers tone and body language
- (e) Ask for clarification when you are not sure
- (f) Maintain eye contact, this makes the speaker realize that you are paying attention, but also to observe body language.
- (g) Do not assume about the message, presumptions about the message will interfere with your understanding of what is being said.
- (h) Make notes where possible
- (i) Be able to read between lines

ii)

### **Malbry enterprise**

Memorandum

Ref:

Date: (any date during examination period)

To:

From:

Subject: Types of questions to use in different situations

It has been observed that many people including employees have a challenge to ask suitable questions depending on the situation. For example, some people may ask questions that require one word answer when they actually intend to get more information from the listener.

Therefore I wish to share the different types of questions that can be used in different situations. Some of questions include:

- **Open questions-** these require longer responses and tend to open up conversations and discussions. They usually start with why and how.
- **Closed questions** – These require a yes or no answer, correct or incorrect answer. They are usually straightforward and do close a conversation.
- **Leading questions-** these usually suggests the expected answer.
- **Funnelling questions/ follow up questions-** This consists of asking an open question, then probing to fill out more details. Often the questions progress from the general to the more detailed information.

- **Loaded question** – these require asking two or three questions in a roll before the listener answers any of them. More questions are asked at the same time which can be open ,closed and leading questions

I hope the above piece of advice would be very helpful to you. For any further clarification you are free to approach me.

Signature

Mr. Phiri

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA: 5 COST ACCOUNTING

---

TUESDAY 11 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## SECTION A – MULTIPLE CHOICE

Attempt ALL ten (10) multiple choice questions in this Section.

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.

### **QUESTION ONE**

- 1.1 Milk shop presented the following data relating to one (1) litre milk bottles normally sold to the surrounding community:-

Annual demand: 2,600 bottles

Fixed ordering cost: K250 per order

Cost per case: K100

Holding cost: 20% of value of inventory per year.

Assumption: (Constant demand, no lead/ lag time and no shortages)

What is the reorder quantity?

- A. 50 bottles
- B. 255 bottles
- C. 20 bottles
- D. 37 bottles

(2 marks)

- 1.2 Kabwe Block Limited pay their workers weekly wage of K200 and K0.40 per block produced in addition. Mr. John Bwalya works for this firm and produced 573 blocks in one particular week.

Using the Piecework rate remuneration method, calculate Mr. Bwalya's wages (to the nearest kwacha) for the week.

- A. K429
- B. K229
- C. K773
- D. K653

(2 marks)

- 1.3 Which statements best describes Prime costs?

- A. the costs incurred in manufacturing a product.
- B. all the direct costs of a product put together.
- C. the labour cost of a product.
- D. all the costs incurred in the manufacturing department.

(2 marks)

1.4 A school with classroom capacity of 500 pupils increases enrollment from 300 pupils to 450 pupils in a particular term. Indicate which of the following costs will remain the same:

- A. Fixed costs, Variable costs
  - B. Variable costs and Fixed costs per unit
  - C. Fixed costs per unit and Fixed costs
  - D. Variable costs per unit and Fixed costs
- (2 marks)

1.5 Which four costs are classified as fixed costs?

- A. depreciation of machinery, factory rental, advertising and factory manager's salary.
  - B. royalty payment, maintenance of machinery, advertising and factory rental
  - C. factory rental, supervisory personnel, royalty payment and direct labour
  - D. supplies and other indirect materials, direct labour, advertising and factory rental
- (2 marks)

1.6 The data below was extracted from the records of ABC Limited:

Budgeted labour hours	3,825 hours
Budgeted overheads	K66, 937.50
Actual labour hours	3,585 hours
Actual overheads	K65, 790

On the basis of data given above, what is the amount of overhead under-/over-absorbed?

- A. K3,403 Over absorbed
  - B. K1,147.50 Over absorbed
  - C. K3,403 Under absorbed
  - D. K3,052.50 Under absorbed
- (2 marks)

1.7 Which of the following costing method is most likely to be used by Zambia Institute of Chartered Accountants (ZICA)?

- A. Batch costing
  - B. Process costing
  - C. Service costing
  - D. Job costing
- (2 marks)

1.8 The Washing Basket (WB) Limited manufactures a soap. The production of the soap costs the following:

Direct material cost per unit K10  
Direct labour cost per unit K30  
Direct labour hours per unit 3 hours  
Production overhead absorption rate K6 per direct labour hour  
Mark-up for non-production overhead costs 5% of total production cost

Washing Basket Limited requires a 20% per cent return on sales revenue from all products.

What is the selling price for this soap?

- A. K186.00
- B. K76.13
- C. K155.00
- D. K60.90

(2 marks)

1.9 The standard cost of providing a meal in a fast food restaurant is as follows.

	K
Ingredient cost	2.88
Direct labour cost	0.48
Variable overhead cost	0.32

The standard price of the meal is K7.20 and the budgeted sales volume is 7,440 meals each period.

During a particular period a total of 7,552 meals were sold for K33,229. The actual total variable cost per meal was K3.68.

Calculate the sales price variance.

- A. K26,583.04 (Favourable)
- B. K26,583.04 (Adverse)
- C. K21,145.60 (Adverse)
- D. K21,145.60 (Favourable)

(2 marks)

1.10 Which of the following statements best describes the fixed cost per unit?

- A. Remains constant regardless the level of activity.
- B. Remains constant over a relevant range of activity.
- C. Increases as the level of activity reduces.
- D. Increases as the level of activity increases.

(2 marks)

**[Total: 20 Marks]**

## **SECTION B**

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

### **QUESTION TWO**

After the recent change of Government in the political landscape of the Republic of Zambia, there has been an unprecedented and massive investment in infrastructure development. Projects such as construction of roads, bridges, schools and hospitals in various districts have surfaced. With this background, Sinda Construction (SC) Limited was incorporated by a group of young entrepreneurs in order to pursue business opportunities in the construction industry. The company has been awarded a number of contracts by various Government ministries.

The following information relates to one of the contracts Sinda (SC) Limited undertook for the period under review in Vubwi District of Eastern Province.

Contract Vubwi

Commencement Date	1 <sup>st</sup> July 2016
Expected Completion Date	30 June 2017
Retention	4%
	K
Materials sent to site	853,490
Labour engaged on site	743,750
Plant installed at cost	150,000
Direct expenses	41,260
Site Charges	31,670
Materials Returned to stores	5,490
Work Certified	1,950,000
Cost of work not certified	45,000
Materials on hand, June 30	18,830
Wages accrued on 30 June	24,000
Direct expenses accrued on June 30	2,400
Value of plant, June 30	110,000
Contract Price	2,500,000
Cash Received	1,800,000

**Required:**

- (a) Prepare Contract Vubwi's Account as at June 30, 2017 and the Contractee Account as at that date. (16 marks)
- (b) Briefly explain four (4) features of contract costing. (4 marks)

**[Total: 20 Marks]**

**QUESTION THREE**

Puma Ltd operates a processing costing system. All direct materials are added at the beginning of the process and conversion costs are added evenly during the process. The Management Accountant of Puma Ltd, has provided you with the following summary data for December.

- Materials added were 10,000 units costing K1,360,000
- Labour cost was K1,284,000
- Overheads was K1,172,000
- 9,000 units were completed during the month
- It is company policy to allow 8% loss on input
- Scrap value of the normal loss is K55 per unit.
- There is no opening or closing inventory of work-in-progress recorded.

**Required:**

- (a) Prepare for the month of December:
- (i) Process account
  - (ii) Normal loss (scrap) account
  - (iii) Abnormal loss/abnormal gain account.

(12 marks)

- (b) Explain the following terms:
- (i) Normal loss
  - (ii) Abnormal loss
  - (iii) Abnormal gain
  - (iv) Equivalent units

(8 marks)

**[Total: 20 Marks]**



## **QUESTION FOUR**

The following information relates to the only product manufactured and sold by Wood Ltd.

	K per unit
Selling price	180
Direct material cost	55
Direct labour cost	45
Variable production overhead	10
Variable sales & marketing overhead	8

The following levels of activity took place over the first three months of the product's life:

	Sales Units	Production Units
January	5,800	7,000
February	6,500	8,000
March	7,800	8,500

### **Additional information is as follows:**

1. Budgeted fixed production overhead was K 500,000 per annum.
2. Actual fixed production overhead for the period was K 45,000 per month.
3. Sales and marketing overhead of K35,000 per month and administration overhead of K20,150 per month were in line with the budget for that period.
4. All fixed overhead costs are budgeted on the basis of a projected volume of 80,000 units per year and all costs are expected to be incurred at a constant rate throughout the year.
5. The business does not expect to have any inventory at 1 January.

### **Required:**

- (a) On the assumption that Wood Ltd. operates an absorption costing system, calculate the (under)/over absorbed fixed production overhead for each month. (3 marks)
- (b) Prepare a profit statement for each month using each of the following bases:
  - (i) Absorption costing
  - (ii) Marginal costing(14 marks)
- (c) Reconcile the difference in the reported profit under the two (2) bases for each month. (3 marks)

**[Total: 20 Marks]**

## **QUESTION FIVE**

KAKA Ltd. has provided you with the following production information for further analysis:

<b><u>Budgeted Costs (per unit)</u></b>		K
Direct Materials	(15kg at K2/kg)	30
Direct Labour	(2hours at K 10/hr)	20
Variable Overhead	(2 x K 5/hr)	10
Fixed Overhead	(2 x K 10)	<u>20</u>
Total Cost		<b><u>80</u></b>

Budgeted Variable Overhead	K150,000
Budgeted Fixed Overhead	K200,000

Fixed and Variable overhead are absorbed on the basis of direct labour hours which are estimated to be 20,000 per month.

<b><u>Actual Cost Results</u></b>		K
Direct Materials (140,000 kg)		210,000
Direct Labour (17,500 hours)		192,500
Variable Overhead		100,000
Fixed Overhead		190,000

KAKA had budgeted for sales of 10,000 units at a price of K 110 per unit, but reports that actual sales revenue was K 1,080,000 for 9,000 units. Production volume is the same as sales volume.

### **Required:**

(a) Calculate the following variances:

- (i) Sales Price Variance
- (ii) Sales Volume Profit Variance
- (iii) Material Price Variance
- (iv) Materials Usage Variance
- (v) Labour Rate Variance
- (vi) Labour Efficiency Variance
- (vii) Variable Overhead Efficiency Variance

(12 marks)

(b) Calculate the following fixed overhead variances:

- (i) Fixed Overhead Expenditure Variance
- (ii) Fixed Overhead Volume Variance
- (iii) Fixed Overhead Volume Efficiency Variance
- (iv) Fixed Overhead Volume Capacity Variance

(8 marks)

**[Total 20 Marks]**

### **QUESTION SIX**

Having completed your Diploma in Accountancy, you secured an internship position at LUPA Chartered Accountants. The Audit Senior requests you to undertake a review of the client's inventory systems by determining the critical inventory levels, economic order quantity, cost of issues and valuation of closing inventory. The client file contains the following schedules in relation to inventory.

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

#### **Required:**

- (a) Calculate the following:
- (i) Inventory Re-order level (4 marks)
  - (ii) Minimum Inventory level (4 marks)
  
  - (iii) Economic Order Quantity (4 marks)
  - (iv) Maximum Inventory level (4 marks)
- (b) State Four (4) assumptions of the EOQ. (4 marks)

**[Total: 20 marks]**

**END OF PAPER**

## DA: 5 COST ACCOUNTING – SOLUTIONS

### SOLUTION ONE

- 1.1. B  
EOQ = square root of  $(2 \times 2,600 \times 250)/20 = 255$
- 1.2. B  
 $K200 + (573 \times 0.4) = K429$
- 1.3. Answer B  
all the direct costs of a product put together.
- 1.4. D  
  
Variable costs per unit and Fixed costs
- 1.5. A  
Depreciation of machinery, factory rental, advertising and factory manager's salary.
- 1.6. D Under absorbed  
Standard rate =  $K66,937/3825$  hours =  $K17.50/$  hour  
Under absorption =  $(K65,790 - (3585 \times 17.50)) = K3,052.50$
- 1.7. A  
Fixed cost =  $K120,000$ , Contribution =  $40\% \times 9 = 3.6$ .  $120,000/3.6 = \text{BEP} = 33,333$  units
- 1.8. B, K155  
 $10 + 30 + (6 \times 3) = 58$ . Non production Overheads =  $(58 \times 5\%) = 2.9$ . Total Cost =  $K60.90$  Profit =  $K15.23$ . Selling Price =  $K76.13$
- 1.9. C. K21,145 Adverse  
Standard  $K7.2 \times 7,552 = K54,374.40$   
Actual =  $K33,229.00$
- 1.10 C

**SECTION B**

**SOLUTION TWO**

(a) Contract Vubwi Account

		K	K	
Materials sent to site		853,490	Materials returned to stores	5,490
Wages (743,750 – 24,000)		719,750	Materials on hand	18,830
Plant		150,000	Value of Plant	110,000
Direct expenses (41,260 – 2,400)		38,860	Work Certified	1,950,000
Site Charges		31,670		
Profit c/f		<u>335,550</u>	Cost of work not certified	45,000
		<u>2,129,320</u>		<u>2,129,320</u>
Profit & Loss		206,492	Profit b/f	335,550
WIP		<u>129,058</u>		<u>335,550</u>
		<b><u>335,550</u></b>		

Contractee Account

		K	K	
Contract Vubwi		<u>1,950,000</u>	Bank	1,800,000
		<u>1,950,000</u>	Balance c/f	<u>150,000</u>
				<u>1,950,000</u>

Working

Calculation of profit taken to the credit of profit & loss

$$\frac{2}{3} \times \text{Expected Profit} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= \frac{2}{3} \times 335,550 \times \frac{1,800,000}{1,950,000}$$

$$= \mathbf{K206,492.31}$$

(b) Four (4) Features of contract costing include:-

- Contract work mainly consists of construction activities.
- Contract work is done on the sites unlike manufacturing that is done under a roof and since the contract is site-based, most of the costs associated with specific contract are direct cost.
- Duration of contracts is relatively for a long period.
- Contracts are undertaken to special requirements of the customer.

**SOLUTION THREE**

(a)		<b>Units</b>	<b>Value (K)</b>
	Materials	10,000	1,360,000
	Normal loss (5%)	(800)	(44,000)
	Labour	-	1,284,000
	Overheads	-	1,172,000
		<b>9,200</b>	<b>3,772,000</b>
	Valuation:		
	Abnormal loss	200 x 410 =	82,000
	Scrap Value	200 x 55 =	11,000
	Output	9,000 x 410 =	3,690,000

(i) **Process Account**

	Unit	Value (K)		Unit	Value (K)
Add materials	10,000	1,360,000	Output	9,000	3,690,000
Labour		1,284,000	Normal loss	800	44,000
Overhead		1,172,000	Abnormal loss	200	82,000
	10,000	<b><u>3,816,000</u></b>		10,000	<b><u>3,816,000</u></b>

(ii) **Normal (Scrap) Account**

	K		K
Normal loss	44,000	Cash/Bank	55,000
Abnormal loss	11,000		<b><u>55,000</u></b>
	<b><u>55,000</u></b>		

(iii) **Abnormal Loss Account**

	K		K
Process Account	82,000	Scrap	11,000
		Profit/Loss	71,000
	<b><u>82,000</u></b>		<b><u>82,000</u></b>

(b)

- i) **Normal loss** – This is any loss which is incurred during the normal course of operation in the process and it is anticipated due to many factors.
- ii) **Abnormal loss** – This refers to a situation where a business or firm is making profits below the normal limits. In an abnormal loss situation the total revenue of a business does not cover total cost incurred for the business.
- iii) **Abnormal gain** – This occurs when the actual loss is lower than the normal loss. This could, for example, be due to greater efficiency from newly-purchased machinery.
- iv) **Equivalent units** – These are the units in production multiplied by the Percentages of those units that are complete (100 percent) or those that are in the process. That covers everything. If a unit is completed and transferred out, its 100 percent complete.



## **SOLUTION FOUR**

### (A) **Under/Over absorbed fixed Production Overhead**

	January	February	March
Production units	7,000	8,000	8,500
	K	K	K
Fixed production OAR per unit(WK 1)	6.25	6.25	6.25
Absorbed Fixed Production OH	43,750	50,000	53,125
Actual Fixed Production OH	45,000	45,000	45,000
Fixed production OH Under/Over	1,250 under absorbed	(5,000) over absorbed	(8,125) over absorbed

### (B) **Profit Statement using Absorption Costing**

	January	February	March
Sales revenue	1,044,000	1,170,000	1,404,000
Production Costs			
Opening inventory	-	139,500	313,875
Direct Materials	385,000	440,000	467,500
Direct Labour	315,000	360,000	382,500
variable Production Overhead	70,000	80,000	85,000
Fixed production Overhead	43,750	50,000	53,125
Closing Inventory ( WK 2)	(139,500)	(313,875)	(395,250)
	674,250	755,625	906,750
<b>Gross Profit</b>	<b>369,750</b>	<b>414,375</b>	<b>497,250</b>
<b>Non Production Costs</b>			
Variable Sales & Marketing Overhead	46,400	52,000	62,400
<b>Fixed Sales &amp; Marketing Overhead</b>	35,000	35,000	35,000
Fixed Administrative Overhead	20,150	20,150	20,150
<b>Under absorbed/over absorbed fixed</b>	1,250	(5,000)	(8,125)

Production Overhead	102,800	102,150	109,425
<b>Net profit</b>	<b>266,950</b>	<b>312,225</b>	<b>387,825</b>

(B) Profit Statement using Marginal Costing	January	February	March
Sales revenue	1,044,000	1,170,000	1,404,000
Production Costs			
Opening inventory	-	132,000	297,000
Direct Materials	385,000	440,000	467,500
Direct Labour	315,000	360,000	382,500
variable Production Overhead	70,000	80,000	85,000
Closing Inventory ( WK 2)	(132,000)	(297,000)	(374,000)
	638,000	715,000	858,000
Variable Sales & Marketing Overhead	46,400	52,000	62,400
	684,400	767,000	920,400
<b>Contribution</b>	<b>359,600</b>	<b>403,000</b>	<b>483,600</b>
Fixed Production Overhead	45,000	45,000	45,000
Fixed Sales & Marketing Overhead	35,000	35,000	35,000
Fixed Administrative Overhead	20,150	20,150	20,150
	100,150	100,150	100,150
<b>Net profit</b>	<b>259,450</b>	<b>302,850</b>	<b>383,450</b>

<b>C Differences between reported profits under the two bases used above</b>				
	<b>Janaury</b>	<b>February</b>	<b>March</b>	
Absorbed Costing profits	266,950	312,225	387,825	
Marginal Costing profit	259,450	302,850	383,450	
<b>Difference</b>	<b>7,500</b>	<b>9,375</b>	<b>4,375</b>	
<b>Analysis of the difference</b>				
<b>Opening Inventory</b>	-	1,200	2,700	
Closing Inventory	1,200	2,700	3,400	
<b>Difference( Increase In Inventory)</b>	1,200	1,500	700	
<b>OAR per unit</b>	6.25	6.25	6.25	
<b>Net profit</b>	<b>7,500</b>	<b>9,375</b>	<b>4,375</b>	
<b>WORKINGS</b>				
<b>WORKING 1</b>				
<b>FIXED PRODUCTION OH RATE PER UNIT</b>				
<b>BUDGETED FIXED PRODUCTION OH</b>		K	500,000.00	
<b>bUDGETED PRODUCTION</b>		UNITS	80,000.00	
<b>FIXED PRODUCTION OH RATE PER UNIT</b>	500,000/80'000=		6.25	Per unit
<b>working 2</b>				
<b>productionCost per Unit</b>				
Direct Material		K	55	
Direct labour		K	45	
Variable Production OH		k	10	
unit value for Marginal costing		k	110	per unit
Fixed production OH			6.25	
Unit value for Absorption costing			115.25	Variable and Fixed
<b>Working 3</b>				
<b>Inventory Valuation</b>				
	<b>Janaury</b>	<b>February</b>	<b>March</b>	
<b>Opening Inventory</b>	-	1,200	2,700	
<b>Production</b>	7,000	8,000	8,500	
<b>Sales</b>	(5,800.00)	(6,500.00)	(7,800.00)	
Closing Inventory	1,200	2,700	3,400	
Marginal Costing Valuations @ K110 per Unit	132,000	297,000	374,000	
Absorption Costing Valuations @ K110 per Unit	139,500	313,875	395,250	

## **SOLUTION FIVE**

### **(A) (i). Sale Price variance**

(Actual Sales Quantity actual Price)-(Actual Sales Quantity x Standard Price)  
 $(9000 \times 120) - (9000 \times 110) = 1,080,000 - 990,000 = \mathbf{K90,000 Fav}$

### **(ii). Sales Volume Profit Variance**

(Actual Sales Quantity standard profit per unit)-(Standard Sales Quantity standard Profit per unit)  
 $(9,000 \times 30) - (10,000 \times 30) = 270,000 - 300,000 = \mathbf{K30,000 Adv}$

### **(iii). Material Price Variance**

(Actual Qty of input x Actual Price)-(Actual Qty of input x standard Price)  
A. based on on actual direct materials of 140,000kg  
 $(140,000 \times 1.5) - (140,000 \times 2.00) = 210,000 - 280,000 = \mathbf{K 70,000 Fav}$

### **(iv). Material Usage Variance**

(Actual Qty of inputs x Standard Price)-(Flexible Qty x Standard price)  
A. Based on Actual Direct Materials of 140,000kg  
 $(140,000 \times 2.00) - (15 \times 9,000 \times 2.00) = 280,000 - 270,000 = \mathbf{K 10,000 Adv}$

### **(v). Labour Rate Variance**

(Actual hours of Input x Actual Rate)- (Actual Hours of input x Standard Rate)  
 $(17,500 \times 11.00) - (17,500 \times 10.00) = 192,500 - 175,000 = \mathbf{K 17,500 Adv}$

### **(vi). Labour efficiency Variance**

(Actual hours of Input x Standard Rate)- (Standard Hours required for actual output x Standard Rate)  
 $(17,500 \times 10.00) - (2 \times 9,000 \times 10.00) = 175,000 - 180,000 = \mathbf{K 5,000 Fav}$

### **(vii). Variable Overhead Expenditure Variance**

(Actual Variable Overhead)-(Actual Hours x Variable Overhead recovery rate)  
A. Based on variable OHAR of K 5/hour  
 $100,000 - (17,500 \times 5) = 100,000 - 87,500 = \mathbf{K 12,500 Adv}$

**(viii). Variable Overhead expenditure Variance**

(Actual hrs x Var. OH recovery rate)- ( Standard hrs x Vari. Recovery Rate)

A. Based on variable OHAR of K 5/hour

$$(17,500 \times 5) - (9,000 \times 2 \times 5) = 87,500 - 90,000 = \mathbf{K 2,500 Fav}$$

A. Based on Budgeted variable OH of K 150,000

$$(17,500 \times 7.5) - (9,000 \times 2 \times 7.5) = 131,250 - 135,000 = \mathbf{K 3,750 Fav}$$

**TOTAL VARIABLE OH VARIANCE**

**K10,000 ADV/K35,000 FAV**

**B (I) Fixed OH Expenditure variance**

Actual Fixed OH Expenditure-Budgeted fixed OH Expenditure

$$190,000 - 200,000 = \mathbf{K 10,000 Fav}$$

**(ii) Fixed OH Volume Variance**

(Standard Hours for Actual Output x Standard Rate)- (Budgeted hours x standard hours x Standard Rate)

$$(9,000 \times 2 \times 10) - (20,000 \times 10) = 180,000 - 200,000 = \mathbf{K 20,000 Adv}$$

**(iii) FOH Volume Efficiency Variance**

(Standard hours for actual output x standard rate)- (Budgeted hours x standard rate)

$$(9,000 \times 2 \times 10) - (17,500 \times 10) = (180,000 - 175,000) = \mathbf{K 5,000 Fav}$$

**(iv) FOH Volume Capacity Variance**

(Actual hours x standard Rate)- (Budgeted hours x Standard rate)

$$(17,500 \times 10) - (20,000 \times 10) = 175,000 - 200,000 = \mathbf{K25, 000 Adv}$$

## **SOLUTION SIX**

### Notes & Workings

1. Minimum usage per day

$$= 500 \text{ units per working week} / 5 \text{ working days} = 100 \text{ units per day}$$

2. Maximum usage per day

$$= 3,000 \text{ units per working week} / 5 \text{ working days} = 600 \text{ units per working week}$$

3. Average usage per day

$$= 2,500 \text{ units per working week} / 5 \text{ working days} = 500 \text{ units per working day}$$

4. Average usage per year

$$= 2,500 \text{ units per working week} \times 52 \text{ working weeks} = 130,000 \text{ units per year}$$

- (a) Inventory Re-order level

$$= \text{Maximum usage per day} \times \text{Maximum Lead Time (in days)}$$

$$= 600 \text{ units per day} \times 20 \text{ days}$$

$$= \mathbf{12,000 \text{ units}}$$

- (b) Minimum Inventory Level

$$= \text{Re-order level} - (\text{Average usage per day} \times \text{Average lead time in days})$$

$$= 12,000 \text{ units} - (500 \text{ units per day} \times 15 \text{ days})$$

$$= \mathbf{4,500 \text{ units}}$$

- (c) Economic Order Quantity

$$= \sqrt{2CD/H}; \quad \begin{array}{l} \text{Where C is Cost per order} \\ \text{D is annual demand} \\ \text{H is holding cost per annum} \end{array}$$

$$= \sqrt{2 \times K360 \times 130,000 / (K5 \times 8\%)}$$

$$= \sqrt{234,000,000}$$

$$= \mathbf{15,297 \text{ units}}$$

- (d) Maximum Inventory Level

$$= (\text{Reorder level} + \text{EOQ}) + (\text{Minimum Usage} \times \text{Minimum Lead Time})$$

$$= (12,000 \text{ units} + 15,297) - (100 \text{ units per day} \times 10 \text{ days})$$

$$= \mathbf{26,297 \text{ units}}$$

- (e) Four (4) assumptions on which the economic order quantity is based included:-  
Economic Order Quantity is an optimum order quantity for inventory items that may be used in the management of inventory by businesses that do not use Just In Time (JIT) inventory management systems.

The aim of the EOQ is to minimise the total cost of holding and ordering inventory. It is based on the following assumptions:

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

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 6: BUSINESS LAW

---

FRIDAY 14 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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



## **SECTION A – (COMPULSORY)**

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

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

#### **QUESTION ONE**

- 1.1 When referring to a system of law, common law refers to:
- A. The legal system in which laws are based on precedent, i.e., the recorded reasons given for their decisions, which are adopted by judges in later cases with similar facts.
  - B. The legal system derived from Roman law that focuses on the development of a comprehensive legislated code.
  - C. The rules of law administered by the courts of equity.
  - D. The rights and duties that each person has in society. (2 marks)
- 1.2 Which of the following needs to be proved by a customer who accuses a business institution of the tort of deceit:
- A. The defendant knew the statement was false or acted recklessly and without regard to the truth.
  - B. The defendant intended to mislead the plaintiff.
  - C. The plaintiff suffered a loss because he relied on the statement.
  - D. All of the above. (2 marks)
- 1.3 Professionals are liable for negligent misrepresentation when they make an incorrect statement.....
- A. Without due care for its accuracy, and someone relies on that statement.
  - B. And someone they could foresee would rely on the information does so.
  - C. Without due care for its accuracy, and a third party who they could foresee would rely on the information does so.
  - D. Without due care for its accuracy, and a limited class of persons with whom the professional has a special relationship relies on the information. (2 marks)

- 1.4 Which of these is not consideration or acceptable in lieu of consideration?
- A. Something a party did prior to contemplation of the contract.
  - B. A promise to perform a pre-existing contractual obligation to a third party.
  - C. Money.
  - D. A little red sticker.
- (2 marks)
- 1.5 Which of these is not a partnership rule implied by statute in case it is not expressly covered in the agreement?
- A. A partner is entitled to be paid a salary for engaging in a partnership basis.
  - B. A partner is not entitled to interest on capital contributions to the partnership but is entitled to interest on loans to it.
  - C. Unanimous consent is required to admit a new partner.
  - D. All of the above are implied terms.
- (2 marks)
- 1.6 The word law can be defined as:
- A. A set of rules used to regulate conduct of a given society.
  - B. A moral obligation that people owe towards society.
  - C. Principles that developed from Biblical principles.
  - D. Rules that dictate to people as to what they should do.
- (2 marks)
- 1.7 Alan obtained K1,000,000 from a bank by mortgaging a property that did not exist. Charles guaranteed the transaction. Alan made no payments to the bank before being arrested for fraud, and adjudged bankrupt as he had no cash. The bank sued Charles to enforce the guarantee. Charles claimed the contract was void for mistake since the non-existence of the property made the subject of the contract essentially different.

Will Charles succeed in his defense?

- A. Yes, the guarantee is void for mutual mistake
- B. Yes, the guarantee is void for common mistake
- C. No, the guarantee is separate from the fraudulent mortgage so can be enforced
- D. No, Charles should have checked that the property existed (2 marks)

1.8 Muriel entered into an unconditional contract for the sale of specific goods in a deliverable state. No agreement was reached as to when title passed to Muriel. When does the Sale of Goods Act 1893 provide that title shall pass?

- A. When the contract was made
- B. When Muriel takes possession of the goods
- C. When Muriel states that she accepts the goods
- D. When Muriel pays for the goods (2 marks)

1.9 Which of the following types of dismissal occurs when no notice is given to the employee?

- A. Constructive dismissal
- B. Summary dismissal
- C. Unfair dismissal
- D. Wrongful dismissal (2 marks)

1.10 In an emergency situation, a person may need to take control of another party's goods and deal with them appropriately.

Which of the following is the correct type of agency relationship?

- A. Agency by implied agreement
- B. Agency by estoppel
- C. Agency by ratification
- D. Agency by necessity (2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

- (a) Mr. and Mrs. Banda were married for five years before the wife conceived in January 2016. She was advised to drink a lot of water and her husband engaged Mustapha to supply the water to the family for 2 years. On 25 May 2016, a jug of water delivered by Mustapha contained a dead dragon fly, which the wife distasted since childhood. She upon seeing the fly in the jug, vomited and later complained of stomach-ache. Later that day, she was rushed to the hospital where she delivered a premature baby who later died. Her husband developed a serious mental disorder associated with fear of water (hydrophobia). It must be noted that neither of the two actually consumed the water.

The couple therefore wish to sue Mustapha for the misery he has caused them. They have approached you since you are knowledgeable in law. Citing relevant case law where necessary, identify:

- (i) The branch of law under which they may sue. (2 marks)
- (ii) The remedies available to them. (2 marks)
- (iii) Three (3) things they have to prove to court in order to succeed in their claim. (8 marks)
- (b) Mulenga's bicycle chain broke and he went with it to the Bike Auto-shop which stocked spare parts for bicycles. Mr. Patel looked at the chain once, and told Mulenga that it would cost him fifty kwacha. Mulenga paid and a packed chain was delivered to him. But when he tried to mount the chain on the bicycle, it could not fit because it was too short. He returned it to the shop where he was shown a disclaimer at the back of the receipt that 'goods once sold, are not returnable'.

#### **Required:**

- (i) State the nature of contract described in this transaction. (2 marks)
- (ii) State three (3) conditions that the seller may have breached. (6 marks)

**[Total: 20 Marks]**

### **QUESTION THREE**

Magonya and Champonda are partners in a business involved in buying cattle from Namwala and reselling to butcheries on the Copperbelt. Unknown to Magonya, Champonda is involved in a fatal accident on his way back from Mchenja Bush Camp – Norman Carr Safaris in South Luangwa where he sought a retreat after a successful first quarter of 2017 business year and dies on the spot. In the mean-time Magonya proceeds to Namwala not knowing that her partner Champonda has died and obtains cattle from Kakoma for a negotiated sum of K23,400.00 on credit. Magonya has failed to pay the outstanding amount to Kakoma who wants her money from Magonya and Champonda’s estate. He now pleads that there was a partnership subsisting.

#### **Required:**

- (a) (i) What are Kakoma’s chances of success against Magonya, the Partnership and Champonda’s estate? (4 marks)
- (ii) Explain the three (3) requisites for partnership formation. (12 marks)
- (b) Explain any two advantages of precedent. (4 marks)

**[Total: 20 Marks]**

### **QUESTION FOUR**

Proverb Kaboto is the only farmer in Chikankata who owned a maize mill, and most residents in the area grind their maize at his mill. This gave Proverb an advantage over the other farmers who solely depended on maize growing for their income. He made more money from milling than growing maize and was planning to stop maize farming all together. But shortly before the 2018 harvest season, the shaft for his mill broke down, and the nearest repairers were in Choma, 200 kilometers South of Chikankata. He therefore engaged Chimuka, a truck driver to deliver the sample of the shaft to Kafue Steel plant, 50 kilometers to the north of Chikankata where a new shaft could be made. He gave him a full tank of diesel as an appreciation for his service. Contrary to the instructions of Proverb, Chimuka did not drop the sample on his way to Lusaka. This was because Chimuka had loaded some goats from the Chirundu-Kafue junction which had to be delivered to ZAMBEEF before 17 hours. He hoped to deliver the shaft the following day, on his way back from the city. But when he returned, he was informed by the Production Manager of Kafue Steel plant that there was a critical shortage of scrap metal and that a new shaft would be ready in three days. Thus he had to wait three days before a new shaft was delivered to him, and he

rushed to Chikankata. He was shocked when Proverb handed him a bill of 20,000 kwacha for the loss of business during the three-day-closure of the mill. If Chimuka failed to pay, the matter would end up in court where Proverb was likely to enforce his claim. Chimuka insisted that he was just a Good Samaritan who was not even paid for transporting the shaft to Kafue. So, he was not obliged to pay.

**Required:**

- (a) Using your knowledge of discharge of contracts, explain the circumstances under which this contract was brought to an end. (10 marks)
- (b) Explain the legal meaning of damages and the rationale for 'measure of damages' using the facts of the case at hand. (10 marks)

**[Total: 20 Marks]**

**QUESTION FIVE**

Beauty, Kay and Pretty are very good friends. Their friendship is characterised by going out every weekend to luxurious restaurants as a way of relieving themselves of stress they get from work. One Saturday afternoon, they went on a Rendezvous to a very famous Restaurant on the outskirts of Lusaka at which each ordered a meal. However, after they had consumed three quarters of their meals, Beauty discovered that the food contained remains of a dead cockroach. She then informed her two friends, Kay and Pretty. They advised her to sue the owner of the restaurant and you have been approached.

**Required:**

- (a) With reference to the above scenario, advice Beauty on what action she should take against the owner of the restaurant, basing your argument on a cited case. (12 marks)
- (b) Vicarious liability is a principle which states that a person is liable for the wrong done by the other. This principle borders on the Law of Tort and Employment Law. There are three conditions that must be met for vicarious liability to be established. There has to be employer-employee relationship; the employee must be acting within the course of employment and the wrong must be done within the course of employment.

**Required:**

Explain the three (3) tests that have been developed to determine whether a person is an employee or independent contractor. (8 marks)

**[Total: 20 Marks]**

**QUESTION SIX**

(a) Agency of necessity is not created by the parties but declared by the courts: Identify the three (3) things that need to be satisfied for one to be declared an agent of necessity by the courts. (6 marks)

(b) Explain the following sources of law:

(i) Legislation (4 marks)

(ii) Judicial Precedent (4 marks)

(iii) Common Law (4 marks)

(c) Identify the two duties of the buyer under a sales of goods agreement.

(2 marks)

**[Total: 20 Marks]**

**END OF PAPER**

## **DA 6 – BUSINESS LAW SOLUTIONS**

### **Section A**

#### **SOLUTION ONE**

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



## Section B

### SOLUTION TWO

- a. i. The couple may sue under the Law of torts, under the tort of negligence
- ii. they may sue for damages (compensation)
- iii. Three things they have to prove are
- That Mustapha owed the family a duty of care
  - He breached this duty by supplying contaminated water
  - As a result of the breach, the wife and husband suffered injury: if there is no injury, the couple may not be compensated, as was the case in *Michael Chilufya Sata v Zambia Bottlers, 2001*: the plaintiff alleged that his children fell sick and were treated at private hospital, when they were bought a sprite drink from Mellisa Super Market which was found to contain a dead cockroach. The bottle was never opened and the children did not take the drink. It was held that the plaintiff's children did not suffer any injury and no compensation was payable.
- b. (i) This is a contract of sale by description/sample.
- (ii) The conditions that may have been breached by the seller are:
- Implied condition that bulk of the goods shall correspond with the sample
  - Implied condition that the buyer shall have reasonable opportunity to compare the bulk with the sample.
  - Implied condition that the goods shall be free from any defects which may render them unmerchantable.

### **SOLUTION THREE**

a)

I. Kakoma has got high chances of succeeding in her suit against Magonya, the partnership and Champonda's estate in that Magonya entered into an agreement with her on behalf of the partnership. Henceforth, Champonda is also liable. However since Champonda is dead, the money he was supposed to pay will be recovered from his estate.

II. There are three elements pre-requisite for a partnership to be formed being: (i) There **must be more than one person**. Therefore, **a sole trader** cannot be qualified as a partnership as the first pre-requisite is that there **must be more than one person** in the business for it to be considered a partnership.

(ii) There must be a **common agenda between** the intending partners. Where two or more **persons purport to form a partnership but with different business agendas**, such cannot be considered a partnership for purposes of section 1(1) Partnership Act. Therefore, it **would not be qualified to be a partnership where two persons** with different professions – one a lawyer and another a medical doctor or accountant – form a firm and call **it a partnership, as their trades are not in common**.

(iii) The last element for a partnership to exist is that it must be with a **view to profit**. Therefore, where a purported partnership is established and its main aim of that **of charity work or being an NGO or any non-profit-making organisation** then this would not qualify to be called a partnership. This does not however mean that when a partnership is not making a profit **it ceases to be a partnership**; it is **the intention of the partners as to whether they should** make a profit in the course of business that matters, not whether they are successful in doing so.

(b) Two duties of partners arising under an unlimited liability partnership include:

(i) Duty to render true account and full information: Partners must give a **true account and provide full information of all things** affecting the firm to any other partner or his legal representative.

**2b.** One of the advantages of Judicial Precedent is that there is certainty. This is because judges do not stray from their previous decisions. They apply the same principles in all the cases with similar facts.

Another advantage is that it is flexible. New principles can be established by judges while interpreting statutes. For instance, the 'Neighbour Principle' was established in the case of **Donoghue v Stevenson (1932) A.C.**

#### **SOLUTION FOUR**

- a. This contract was brought to an end by breach. The contract between Proverb and Chimuka, in which Chimuka was to transport a shaft are that the contract was breached by Chimuka when he fails or neglects to follow the instructions of Proverb to drop on time the sample at the Kafue steel plant so that a replacement maybe made. Chimuka does not drop the shaft on his way to Lusaka but on his way from Lusaka. As a result, the subsequent delay causes Proverb loss of business as the mill is closed for three days.
- b. Damages refers to monetary compensation which accrues as a right if breach of the contract is proved. Measure of damages refers to the estimation of loss that naturally arises from the breach during the usual course of events. Thus the plaintiff is expected to recover the actual loss that is fairly and reasonably foreseeable. In the present case, the transporter could not foresee that by first going to Lusaka and not dropping the shaft on the way to Lusaka, this would result in a three-day delay and cause more loss to Proverb.

#### **SOLUTION FIVE**

- a) Beauty should sue the owner of the restaurant under Tort of Negligence.

Negligence is not taking the degree of care as required in certain circumstances (carelessness). In doing so she should base her argument on the case of *Donoghue v Stevenson 1932*. The facts are that A purchased a bottle of ginger beer for consumption by B. B drank part of its contents which contained the remains of a decomposed dead snail, and became ill. The manufacturer argued that there was no contract between him and B. Held-the House of Lords held that every person owes a duty of care to his neighbor; the manufacture was found liable for negligence.

The three elements of negligence being duty of care; breach of duty and resultant damage.

Advise

**(Answers under this question can vary depending on candidates as long as the arguments is well supported).**

### **b) The control test**

Has the employer control the way in which the employee performs his duties?

'Used by the courts to determine whether a contract of employment exists by ascertaining whether the employer has control over the manner in which the work is done.' (*Mersey Docks & Harbor board v Coggins & Griffiths (Liverpool) 1947*) Stevedores hired a crane with its driver from the harbour under a contract, which provided that the driver (appointed and paid by the harbour board) should be the employee of the Stevedores. Owing to the driver's negligence a checker was injured. The case was concerned with whether the Stevedores or the harbour board were vicariously liable as employers. Held: in the House of Lords, that the issue must be settled on the facts and not on the terms of the contract. The Stevedores could only be treated as employers of the driver if they could control in detail how he did his work. But although they could instruct him what to do, they could not control in him how he operated the crane. The harbour board (as 'general employer') was therefore still the driver's employer.

### **b).The integration test**

If the employee is so skilled that he cannot be controlled in the performance of his duties, was he appointed and assigned to his duties by the employer – was he integrated into the employer's organisation. 'Used by the courts to determine whether a contract of employment exists, this will be so if worker is an integral part of the organisation but if this work remains outside it and is merely accessory to it.'

### ***Cassidy v Ministry of Health 1951***

The full-time assistant medical officer at a hospital carried out a surgical operation in a negligent fashion. The patient sued the Ministry of Health as employer. The Ministry resisted the claim arguing that it had no control over the doctor in his medical work. Held: in such circumstances the proper test was whether the employer appointed the employee, selected him for his task and so integrated him into the organisation. If the patient had chosen the doctor the Ministry would not have been liable as employer. But here the Ministry (the hospital management) made the choice and so it was liable.

### **c. The multiple tests**

This is an employee working on his own account. 'A test used by the courts to determine whether a contract of employment exists. As the name suggests, all relevant factors are considered including the extent of the employer's control, the right to engage and dismiss,

the basis upon which payment is made, whether deductions are made for income tax or national insurance, the hours of work and the provision of tools and equipment.'

***Ready Mixed Concrete (South East) v Ministry of Pensions & National Insurance 1968***

The driver of a special vehicle worked for one company only in the delivery of liquid concrete to building sites. He provided his own vehicle (obtained on hire purchase from the company) and was responsible for its maintenance and repair. He was free to provide a substitute driver. The vehicle was painted in the company colours and the driver wore its uniform. He was paid gross amounts (no tax etc deducted) on the basis of mileage and quantity delivered as a self-employed contractor. The Ministry of Pensions claimed that he was in fact an employee for whom the company should make the employer's insurance contributions. Held: in such cases the most important test is whether the worker is working on his own account (entrepreneurial test or multiple). On these facts the driver was a self-employed transport contractor and not an employee.

**Other factors**

Other significant factors are as follows:

- a) Does the employee use his own tools and equipment or does the employer provide them.
- b) Does the alleged employer have the power to select or appoint its employees and may it
- c) dismiss them?
- d) Payment of salary is, as mentioned above, a fair indication of there being a contract of
- e) employment. But there are exceptions. A person may still be an employee if he is paid no
- f) salary but derives his income solely from commission or tips.

## **SOLUTION SIX**

- a) I) There must be genuine necessity.  
ii) The agent must act bona fide (in the best interest of the principle).  
iii) There must be a commercial emergency.
- b) I) Legislation is the most important source of law in Zambia. There are two types of legislation namely; delegated and parliamentary legislation. Parliamentary legislation is legislation enacted by parliament itself. Delegated legislation occurs when parliament delegates its legislative powers to a body or an individual. These could either be minister or council. Legislation enacted by a minister is called a Statutory Instrument whereas legislation enacted by a council is known as By Law.
- ii) Judicial Precedent also known as case law or judge made law is law made by judges when interpreting statutes. It relies on the principle of stare decisis which means let the decision stand or standing by previous decisions. There are two types of precedents; these are binding precedents and persuasive precedents. Binding precedents are precedents of which the courts are obliged to follow. These include decisions made by a higher court and ratio decidendi. Persuasive precedents are precedents which the courts respect but are not obliged to follow. These include decisions made by inferior courts and obiter dicta.
- iii) Common Law is the law which was established in England after the Norman conquest of 1066. The common law was said to be harsh because it had a lot of defects. There was only one court which was a mobile court known as the Curia Regis. Matters could only be handled if when the court was in circuit. There was only one remedy. They believed in what they called the wager of law. The person with more witnesses won the case despite being wrong. This led to corruption because people were paying others so that they stand for them as witnesses.
- c) **I)** Accept the goods.  
ii) Make payments for the goods.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL ONE

---

DA 7: PRINCIPLES OF MANAGEMENT

---

MONDAY 10 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## SECTION A – COMPULSORY

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

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

#### **QUESTION ONE**

1.1 Which one of the following is an intrinsic form of reward?

- A. Promotion
- B. Achievement
- C. Pay
- D. Bonus ( 2 marks)

1.2 Which of the following is **NOT** a motivating factor of job design as suggested by Herzberg?

- A. Job entrenchment
- B. Job rotation
- C. Job enrichment
- D. Job satisfaction (2 marks)

1.3 Kurt Lewin argued that after change has been made, there is a risk that people will eventually return to the 'old way of doing things'. According to Lewin's three (3) stage change process, what should management do to prevent this?

- A. Explicit and implicit coercion
- B. Reward individuals within the new change system such as paying a higher salary
- C. Move from the old way of doing things to the new way
- D. Make individuals recognise that change is not only necessary but also desirable. (2 marks)

1.4 A mission is generally best defined as the ...

- A. desired future state of an organisation
- B. statement of general aim



C. reason for an organisation's existence

D. Specific performance target of an organization (2 marks)

1.5 The Research Unit at Ashridge Management College distinguished four different management styles. Which of the following management style is least desired where quick decision is required.

A. Sells

B. Tells

C. Consults

D. Joins (2 marks)

1.6 ..... is making employees set their own work targets with the freedom on how they will achieve the targets.

A. Empowerment

B. Authority

C. Delegation

D. Responsibility (2 marks)

1.7 The skill that enables the supervisor to relate and interact with employees so that the tasks given are achieved is called:

A. Communication skills

B. Technical skill

C. Problem- solving skill

D. Interpersonal skill (2 marks)

1.8 Which one of the following is the correct strategic planning process?

A. Mission, corporate appraisal, strategic options, strategic choice, strategy implementation

B. Vision, objectives, strategic option, strategic choice, strategy implementation

C. Mission, strategy option, strategy choice, strategy implementation

D. Vision, strategic option, objective, strategic choice, strategy implementation

(2 marks)

1.9 The chairman of the board of a statutory organization such as Zambia Development Agency is appointed by the .....

- A. Government Minister
- B. Parliament
- C. Board of Directors
- D. President

(2 marks)

1.10 Which of the following is a feature of Sole Proprietorship?

- A. It has no limited liability
- B. Its books are subject to Auditing
- C. The business should be registered
- D. Its shares are floated on the stock market

(2 marks)

**[Total: 20 Marks]**

## SECTION B

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

### QUESTION TWO

- (a) Human resource management can be described as a cycle consisting of four key activities.

**Required:**

List and explain the importance of the **four (4)** key activities of human resource management cycle. (8 marks)

- (b) Explain the following terms relating to disadvantages of interviews:

(i) Halo effect (3 marks)

(ii) Stereotyping (3 marks)

- (c) Define the following relating to public sector operations

(i) Commercialisation (2 marks)

(ii) Non-governmental organisations (2 marks)

(iii) Parastatal organisations (2 marks)

**[Total: 20 Marks]**

### QUESTION THREE

- (a) According to Mintzberg, managers fulfill three (3) types of roles which are interpersonal, informational and decisional roles on a daily basis.

**Required:**

Identify and briefly explain **four (4)** decisional roles as suggested by Mintzberg. (12 marks)

- (b) Describe the following **two (2)** formal relationships, giving one (1) relevant example for each relationship.

(i) Line relationship (4 marks)

(ii) Lateral relationship (4 marks)

**[Total: 20 Marks]**

#### **QUESTION FOUR**

(a) Discuss the theory of motivation according to Stacey Adams (12 marks)

(b) State four (4) reasons employees resist change in organizations. (8 marks)

**[Total: 20 Marks]**

#### **QUESTION FIVE**

(a) Your friend is not sure of the objectives of Human Resources Management (HRM) in Organizations.

**Required:**

Explain four (4) main objectives of Human Resources Management in organizations.

(10 marks)

(b) Companies today are faced with the effects of globalisation and other challenges in the rapidly changing world. Describe the change management process that may help companies to cope with change. (10 marks)

**[Total: 20 Marks]**

#### **QUESTION SIX**

(a) A fellow ZiCA student is not sure about the differences that are there between other types of plans and a strategic plan.

**Required:**

Explain to him the Six (6) areas argued by Johnson and Whittington that make a strategic plan different from other types of plans. (12 marks)

(b) Company X has been reminded about the importance of involving stakeholders in its strategic decisions, but the manager argues that their company does not need any body or any interference to run its affairs.

**Required:**

(i) Define the term "**stakeholder**" to the manager of company X to help him understand what the term mean. (2 marks)

(iii) Explain to the manager the importance of stakeholder expectations to the company. Give examples in your answer where applicable. (6 marks)

**[Total: 20 Marks]**

**END OF PAPER**

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

### **SOLUTIONS SECTION A**

#### **SOLUTION ONE**

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

## **SOLUTION TWO**

### a) Human resource management activities and their importance

- Recruitment and selection- ensures that the organization obtains people with the skills and qualities required.
- Appraisal- identifies skills and performance gaps, and provides information for relevant reward level.
- Training and development- ensure skills remain up to date, relevant and compatible with the best in the industry.
- Reward- motivates and ensures valued staff are retained

b) i. Halo effect- the tendency for interviewers to make an initial general judgment about a person based on a single obvious attribute. That is, a single initial attribute affect later perceptions about a person.

ii. Stereotyping –The putting of people together based on certain general common characteristic

c) i. Commercialization- Adopting the strict commercial principles in the operations of a state owned by providing goods and services at a profit.

ii. Non- governmental organization –An independent voluntary association of people acting together for some common purpose.

iii. Parastatal organization- public corporations partly owned by the state with a motive of making profit within reasonable limit

## **SOLUTION THREE**

### **a) DECISIONAL ROLES**

1. **Entrepreneurship role**- a manager initiates projects to improve the department/organisation or help it react to a changed environment. He takes risks in the process of identifying and evaluating business opportunities and allocating resources thereto in order to make profit.
2. **Disturbance handler**- moves quickly to take corrective action to deal with unexpected problems facing the organization. A manager has to respond to unexpected pressure, taking decisions when there is deviation.
3. **Resource allocator** – A manager takes decisions relating to the mobilization and distribution of limited resources to achieve the objectives. A manager allocates limited resources among competing activities and functional areas within the organization.
4. **Negotiator**- A manager negotiates both internal and external with trade unions, suppliers, distributors etc. in order to reach an agreement. Both inside and outside the organization, negotiation takes up a great deal of management time.

### **b) i. Line relationship**

This is a formal relationship that exists when there is a direct line of authority in the chain of command between a manager and a subordinate. For instance, there is a line relationship between a Director and general manager or Head of accounts and the accountant.

### **ii. Lateral relationship**

This is the relationship that exists between individuals in different departments or sections but usually the same level in the organization's hierarchy hence there is no line of authority. This relationship is mainly for consultation and co-ordination. For example, there is a lateral relationship between a sales manager and a marketing manager.

## **SOLUTION FOUR**

(a) Stacey Adams developed the motivation theory called Equity theory. Equity theory states that people's motivation depends on their subjective evaluation of the relationships between their efforts/rewards ratio and effort/reward ratio of others. The motivation theory is based on an individual's evaluation of equity or fairness of the rewards received. Employees compare their inputs such as skills, hard work against outputs such as pay, promotion and make a perception of either fairly treated or not. Mostly workers compare what they are paid for their effort with what others in similar situations receive.

Generally people expect a fair balance of inputs and output. Therefore, employees who perceive the balance to be fair are motivated and continue working hard. However, those who perceive that the rewards received is less in relation to their inputs in comparison to another worker, feel a sense of inequity. Inequity results in negative adjustment in behaviour in order to balance the ratio of input/output by:

- Expending less effort to work
- Reporting late for work
- Absenteeism

This results into an employee getting demotivated.

(b) Employees resist change for the following reasons:

- i. Fear of losing job position with their associated privileges.
- ii. Fear of being declared redundant due to use of new technology
- iii. Resist change because of fear that the social work groups will be broken.
- iv. Fear that the work conditions may become worse
- v. Fear of unknown due to lack of information on change.



## **SOLUTION FIVE**

a). The **4 main objectives of** HRM are:

- To develop an effective human component for the organization that will respond positively to change
- To obtain and develop the human resources required by the organization and to use and motivate them
- To create and maintain a cooperative climate of relationships within the organization and to perform 'fire fighting' role in dealing with disputes as they arise
- To meet the organization's social and legal responsibilities relating to its human resources

b) The following are the change requirements that will help management cope with change:

- i. Identification of the changes that should be made
- ii. Recognising the need to change systems and organisation structures to make the changes work.
- iii. Recognising the effect of change on employees: this aspect of change management is often overlooked, but is probably the most common reason why attempts to make major changes are unsuccessful.
- iv. Careful planning and implementation of the change
- v. Making sure that changes stick and remain in place, after they have been made.

## **SOLUTION SIX**

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

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

Company X has been reminded about the importance of involving stakeholders in its strategic decisions but the manager argues that their company does not need any body or any interference to run its affairs.

B . The following are the importance of the stakeholder to the organisation:

- (j) Stakeholders are individual or groups who have interest in and influence on the affair of the organisation.
- (ii) The organisation cannot operate in isolation since it depends on other organisations or individuals for its survival. For example the company will get inputs from suppliers, and will interact with other companies for its growth and will need to observe certain regulation in order to run its affairs, the banks and other funding agencies.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL TWO

---

DA 8: FINANCIAL REPORTING

---

MONDAY 10 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## SECTION A-TWO COMPULSORY QUESTIONS

Both Questions in this Section are compulsory and must be attempted.

### QUESTION ONE

House Plc purchased 70% of the issued ordinary share capital of Home Plc for K10,000, 000, four years ago on 1 January 2014, when the retained earnings of Home Plc were K1, 000,000. It is the group's policy to value the non-controlling interest at fair value. The market price of the shares of the non-controlling shareholders just before the acquisition was K1.50.

The following are the statements of financial position for House and Home.

#### STATEMENTS OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

	House Plc		Home Plc	
	K' 000	K' 000	K' 000	K' 000
<b>Non-current assets</b>				
Property, Plant and Equipment	26, 250		6, 000	
Investments				
Home	10, 000		-	
Sofa	<u>2, 000</u>		<u>-</u>	
		38, 250		6, 000
<b>Current assets</b>				
Inventory	11, 000		3, 500	
Receivables	7, 250		5, 250	
Bank	<u>5, 000</u>		<u>-</u>	
		<u>23, 250</u>		<u>8, 750</u>
		<u>61, 500</u>		<u>14, 750</u>
<b>Equity</b>				
K1 Equity share capital	37, 000		8, 500	
Retained earnings	<u>10, 750</u>		<u>2, 500</u>	
		47, 750		11, 000
<b>Current liabilities</b>				
Payables		<u>13, 750</u>		<u>3, 750</u>
		<b><u>61, 500</u></b>		<b><u>14, 750</u></b>

**The following information is also available.**

- (i) On the date of acquisition, the plant of Home Plc with a carrying amount of K2,500,000 was revalued to its fair value of K3, 000,000. The revaluation was not recorded in the financial statements of Home. The plant had 5 years useful life at that date.
- (ii) House Plc sold goods to Home Plc at a mark up of 25%. At 31 December 2017, the inventories of Home Plc included K2,250,000 of goods purchased from House Plc. Home Plc owes House Plc K1,750,000 in respect of goods purchased from House Plc and House Plc's accounts reported the same amount as a receivable. On the other hand House Plc owes Home Plc K750, 000 for services rendered by Home Plc. The same amount has been reported by Home as a receivable.
- (iii) House Plc purchased 40% of the issued ordinary share capital of Sofa Plc on 1 July 2017 for K2,000,000, when the retained earnings of Sofa Plc were K600,000. Sofa Plc's profit for the year to 31 December 2017 was K400, 000. House Plc exercises significant influence in all financial and operating policies of Sofa Plc.
- (iv) The impairment reviews revealed that goodwill and investment in associate were not impaired.
- (v) Assume profits and losses accrue evenly throughout the year.

**Required:**

- (a) Prepare the consolidated statement of financial position of House group as at 31 December 2017. (20 marks)
- (b) The new Finance Director of House Plc group has written a memo to you stating that there is no need to prepare consolidated financial statements since individual companies within the group prepare financial statements that comply with International financial reporting standards (IFRS's).

**Required:**

Explain when House Plc may be exempted from preparing consolidated financial statements according to IFRS 10. (5 marks)

**[Total: 25 Marks]**

## **QUESTION TWO**

ZamCell operates in the ICT sector in Zambia and sells cellphones and ICT machines to various customers throughout the country.

The following trial balance relates to ZamCell as at 31 December 2017.

	K' 000	K' 000
Sales revenues (iv)		854, 000
Cost of sales	547,200	
Distribution costs	50, 000	
Administrative expenses	76, 000	
Loan interest and dividends paid	82, 800	
Investment income		1, 600
Equity share capital of K0.25		240, 000
6% Loan note (v)		100, 000
Retained earnings at 1 January 2017		74, 000
Land and building at cost (land element 40, 000) (i)	200, 000	
Plant and equipment at cost (ii)	334, 800	
Accumulated Depreciation at 1 January 2017:		
Buildings		32, 000
Plant and equipment		134, 800
Investment property (iii)	68, 000	
Inventory at 31 December 2017	99, 200	
Trade receivables	114, 000	
Bank	11, 600	
Current tax (iv)	4, 400	
Deferred tax (iv)		4, 800
Trade payables		146, 800
	<b><u>1, 588, 000</u></b>	<b><u>1, 588, 000</u></b>

The following additional information is relevant:

- (i) ZamCell had been carrying Land and buildings at depreciated historic cost, but due to a recent rise in property prices, it decided to revalue its land and buildings on 1 January 2017 to market value. An independent valuer confirmed the value of Land and building at K240, 000, 000 (land element K48, 000, 000 as at that date) and the directors accepted this valuation. The building had a remaining life of 16 years at the date of its revaluation. ZamCell will make a transfer from the revaluation reserve to retained earnings in respect of the realisation of the revaluation reserve. Ignore deferred tax on the revaluation.

- (ii) Plant and equipment is depreciated at 15% per annum using the reducing balance method.

Note: All depreciation is charged to cost of sales.

- (iii) The investment property had a fair value of K62, 800, 000 as at 31 December 2017 and there were no acquisitions or disposals of investment property during the year ended 31 December 2017. ZamCell uses the IAS 40 fair value model in accounting for investment property.

- (iv) On 1 January 2017, ZamCell sold an ICT machine for K40, 000, 000 which was recorded on that date (included in sales revenue in the trial balance). The sale agreement requires ZamCell to be servicing the machine until 31 December 2019. The service fee has been included in the selling price of K40, 000, 000. The estimated servicing cost to ZamCell is K2, 400,000 per annum and ZamCell's gross profit margin on this type of servicing is 25%. Ignore discounting.
- (v) ZamCell issued a K100, 000, 000 6% loan note on 1 January 2017. Issue costs were K4, 000, 000 and these have been charged to administrative expenses. The loan will be redeemed on 31 December 2019 at a premium which gives an effective interest rate on the loan of 8%. The loan note pays interest on 31 December each year over its term to maturity.
- (vi) The balance on current tax represents the under/over provision of the tax liability for the year ended 31 December 2016. A provision for income tax for the year ended 31 December 2017 of K29, 600, 000 is required. At 31 December 2017, ZamCell had taxable temporary differences of K20, 000, 000, requiring a provision for deferred tax. Any deferred tax adjustment should be reported in the statement of profit or loss. The income tax rate of ZamCell is 30%.

**Required:**

- (a) Prepare the statement of comprehensive income for ZamCell for the year ended 31 December 2017.

(13 marks)

- (b) Prepare the statement of financial position for ZamCell as at 31 December 2017.

(12 marks)

**[Total: 25 Marks]**

## SECTION B

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

### QUESTION THREE

You are a financial accountant for Maiba Plc. Your entity intends to pursue a growth strategy by acquisition and the Directors have identified two potential acquisitions that are listed on the Lusaka Stock of Exchange namely Alpha Plc and Omega Plc. You have been presented with the already calculated ratios for the two and your Directors have asked you to interpret the two companies' performance through a report addressed to The Board of Directors of the company.

Below are the calculated ratios:

	Alpha		Omega	
	2018	2017	2018	2017
Gross profit margin	42%	44%	39%	33%
Operating Profit Margin	48%	43%	43%	46%
Operating cost: sales ratio	30%	37%	41%	32%
ROCE	64%	60%	52%	63%
Gearing	58%	62%	72%	70%
Interest cover	3 times	2.5 times	1.5 times	2 times
Dividends cover	4 times	3 times	3.5 times	5 times
Receivables days	75 days	50 days	42 days	61 days
Payables days	80 days	45 days	58 days	66 days
Inventory days	30 days	38 days	39 days	32 days

Gearing was calculated using the following formula:

$$\text{Interest bearing debt} / (\text{Interest bearing debt} + \text{equity}) \times 100$$

In addition to the above ratios, the following information is relevant as extracted from the financial statements of the two companies:

- (i) Alpha made revaluations to its non-current assets in the year ending 31 December 2018. No disposals took place between the two years.
- (ii) Alpha had switched to manufacturing own goods in 2018 as opposed to sourcing goods from external suppliers.



- (iii) Omega carried out main repairs to its non-current assets in the year to 31 December 2018, which its directors said did not meet capitalization criteria in IAS 16 and was done every two years.
- (iv) The two companies operate from different business environments. Omega operates in a more thriving economy than Alpha.
- (v) Omega has a negative bank balance whereas Alpha has a positive bank balance.

**Required:**

Using the ratios provided above, write a report to the Board of Directors of Maiba Plc. that compares and interprets the financial performance and position of Alpha and Omega. In addition, the report should recommend which company would be the best buy for Maiba Plc, giving reasons for your recommendation.

**[Total: 25 Marks]**

#### **QUESTION FOUR**

- (a) Manda Construction Ltd. (MCL) specializes in the construction of Office buildings for various customers. The company has a right to regular payments as work progresses. One of its contracts with Luxury Offices Ltd involves construction of three (3) different Office buildings whose construction commenced on 1 January 2017. The following details relate to the three (3) buildings on 31 December 2017:

	<b>Building 1</b>	<b>Building 2</b>	<b>Building 3</b>
	K'000	K'000	K'000
Costs incurred to date	10,800	72,000	15,400
Work certified to date	12,000	62,900	10,800
Contract price	30,000	74,000	18,000
Estimated costs to complete	13,200	10,000	6,600
Progress billing	10,000	65,000	8,600
Cash received	8,500	65,000	7,400

Manda Construction Ltd has a policy of measuring progress using an output method based on the work certified to date as a percentage of contract price.

**Required:**

What amounts would be shown in the financial statements of MCL regarding the above contract for the year ending 31 December 2017? (11 marks)

- (b) IAS 12 Income taxes gives guidance on the recognition and presentation of current and deferred taxes in the financial statements.

**Required:**

Distinguish between temporary differences and permanent differences.

(5 marks)

- (c) A trial balance of Gumbo as at 31 March 2019 shows the following balances:

	Dr	Cr
	K'000	K'000
Current tax	5,000	
Deferred tax		12,000

On 1 April 2018, Gumbo had buildings revalued at K48,000,000 for the first time by a professional valuer. The building had been bought for K50m on 1 April 2014 and at that time was estimated to have useful life of 20 years which has not changed. The revaluation gain creates a deferred tax liability and income tax rate applicable to Gumbo is 30%.

In addition to above tax effect, Gumbo estimates its provision for income tax for the year ended 31 March 2019 at K24m. On the same date, the tax base of Gumbo's net assets was K14m less than the carrying amounts. Gumbo makes an annual transfer to retained earnings of excess depreciation.

**Required:**

Prepare statement of profit or loss and other comprehensive income extract for the year ended 31 March 2019 and a statement of financial position extract as at that date to reflect the above transactions.

(9 marks)

**[Total: 25 Marks]**

## **QUESTION FIVE**

- (a) *IAS 21 effects of changes in foreign currency*, was produced following increasing globalization of businesses that meant, more and more transactions entered into were denominated in foreign currency and hence the demand in the approach to accounting for such transactions.

### **Required:**

Distinguish between monetary and non-monetary items giving appropriate examples and explain the IAS 21 translation rules relating to them. (8 marks)

- (b) ABC Ltd leased a machine on 1 January 2017 through a four year lease agreement. The machine has a fair value of K260,000 and ABC Ltd is responsible for its maintenance. Lease rentals of K80,000 per annum are payable in arrears commencing 31 December 2017.

The rate of interest implicit in the lease is 10% and the present value of the minimum lease payments is K253,520. The machine has a useful life of 5 years.

### **Required:**

Show the effect of the lease agreement on the financial statements of ABC Ltd for the year ended 31 December 2018. (8 marks)

- (c) Mwiiya Ltd. is a company that operates two divisions each of which form a major line of business namely division East and division West.

Mid way through the current year, division East was shut down after incurring losses of K150,000 on the sale of its non-current assets and redundancy costs of K300,000.

Division West was restructured and incurred losses of K255,000.

Mwiiya Ltd has an accounting year ending 31 December each year. Results in the current period ending 31 December 2017 include the following:

	East Division	West Division
Revenue	3,000	6,000
Cost of sales	(2,250)	(3,750)
Distribution costs	(750)	(900)
Administration	(300)	(200)

The finance costs and tax charge for the business were K100,000 and K95,000 respectively.

**Required:**

- (i) Prepare a note to show the results of the discontinued operation and the statement of profit or loss for Mwiya Ltd in accordance with *IFRS 5 Non-Current Assets Held for Sale and Discontinued Operation*.  
(6 marks)
- (ii) Outline three of the requirements for a sale to be 'highly probable' in accordance with IFRS 5.  
(3 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 8: FINANCIAL REPORTING – SOLUTIONS

### SOLUTION ONE

#### (a) House group consolidated SOFP as at 31.12.2017

	K' 000	K' 000
ASSETS		
Non-current assets		
Property, plant and equipment	26,250+6,000+100w4	32,350
Goodwill w2		3,825
Associate w8		<u>2,080</u>
		38,255
Current assets		
Inventory	11,000+3,500-450 w3	14,050
Receivables	7,250+5,250-1,750-750	10,000
Bank		<u>5,000</u>
		<u>29,050</u>
Total assets		<u>67,305</u>
Equity		
K1 Share capital	37,000	
Retained earnings w6	<u>11,150</u>	
	48,150	
NCI w7	<u>4,155</u>	
		52,305
Payables	13,750+3,750-1,750-750	<u>15,000</u>
Total equity and liabilities		<u>67,305</u>

(b) **IFRS 10 Consolidated financial statements** requires the parent company to prepare consolidated financial statements

#### **Exemptions:**

- 1) Parent is a wholly-owned or partially-owned subsidiary and owners do not object to it not preparing consolidated FS.
- 2) Its securities are not publicly traded.
- 3) It is not in the process of issuing securities.
- 4) Ultimate parent publishes consolidated FS in accordance with IFRSs.
- 5) Immediate parent publishes consolidated FS in accordance with IFRSs.

### WORKINGS

W1: Group structure

Home: House 70%, NCI 30%

W2: Goodwill on acquisition	000	000
FV of purchase consideration:		
House		10,000
NCI 8,500 x 30% x 1.50		3,825
-FV of Net assets acquired:		

Share capital	8,500	
Retained earnings	1,000	
Fair value adjustment	500	
		<u>(10,000)</u>
Goodwill		<u>3,825</u>

W3: URP  $2,250 \times 25/125 = 450$

W4: Fair value Dep  $500 \times 4/5 = 400$ . N.B.V = 100

W5: Home Retained earnings	000
SOFP fig	2,500
-Pre-acquisition R. Earnings	<u>(1,000)</u>
Post-acquisition R. Earnings	1,500
-Fair value Depreciation	<u>(400)</u>
	<u>1,100</u>
House $1,100 \times 70\%$	770
NCI $1,100 \times 30\%$	330

W6: House/Group Retained earnings	000
SOFP fig	10,750
-URP w3	<u>(450)</u>
+Share from Home w5	770
+Share from Sofa w8	<u>80</u>
	<u>11,150</u>

Alternative solution for Group retained earnings is as follows:

	House K'000	Home K'000	Sofa K'000
Per question	10,750	2,500	800
Less pre acq. Retained earnings		(1,000)	(600)
Fair value additional depreciation		<u>400</u>	<u>---</u>
Post acquisition adj. retained earning		1,100	200
URP	(450)		
House share of home(70% x 1,100)	770		
House share of Sofa (40% x 200)	<u>80</u>		
			<u>11,150</u>

W7: NCI	000
Fair value at acquisition	3,825
+Share from Home w5	<u>330</u>
	<u>4,155</u>

W8: Investment in associate	000
Value at acquisition	2,000
+Share from Sofa $400 \times 40\% \times 6/12$	<u>80</u>
	<u>2,080</u>

Consolidation process  
Total

## **SOLUTION TWO**

### **ZamCell SOCI for the year ended 31 December 2017**

		K' 000
Sales revenue	854,000-6400 w4	847,600
Cost of sales	547,200+12,000 w1+30,000 w2	<u>(589,200)</u>
Gross profit		258,400
Distribution costs		(50,000)
Admin expenses	76,000-4,000	(72,000)
Investment property fair value loss w3		(5,200)
Investment income		1,600
Finance cost w5		<u>(7,680)</u>
Profit before tax		125,120
Tax w6		<u>(35,200)</u>
Profit for the year		<u>89,920</u>
<b>Other comprehensive income</b>		
Revaluation surplus		<u>72,000</u>
Total comprehensive income		<u>161,920</u>

### **ZamCell SOFP as at 31 December 2017**

	K' 000	K' 000
<b>Assets</b>		
Investment properties		62,800
Property, plant and equipment w1 and w2		398,000
<b>Current assets</b>		
Inventory	99,200	
Trade receivables	114,000	
Bank	11,600	
		<u>224,800</u>
Total assets		<u>685,600</u>
<b>Equity</b>		
Share capital of K0.25	240,000	
Retained earnings 74,000+89,920+4,000 w7 -76,800	91,120	
Revaluation surplus 72,000-4,000 w7	<u>68,000</u>	
		399,120
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
6% loan note w5	97,680	
Deferred tax w6	6,000	
Deferred income w4	<u>3,200</u>	
		106,880
<b>Current liabilities</b>		
Trade payables	146,800	
Tax payables	29,600	
Deferred income w4	3,200	
		<u>179,600</u>
		<u>685,600</u>

## **WORKINGS**



W1: Land and buildings	Land	Buildings
Revalued amounts 1.1.2017	48,000	192,000
Carrying amount 1.1.2017	<u>(40,000)</u>	<u>(128,000)</u>
Revaluation surplus	<u>8,000</u>	<u>64,000</u>
Dep charge 192,000/16years		12,000
Carrying amount	48,000	180,000 (192,000-12,000)

W2: Plant and equipment	
Carrying amount 334,800-134800	200,000
Dep charge 200,000 x 15%	30,000
Carrying amount (200,000-30,000)	170,000

Property, plant and equipment 48,000+180,000+170,000 = 398,000

W3: Investment property	
Fair value 31.12.2017	62,800
Carrying amount 31.12.2017	<u>(68,000)</u>
Fair value loss	<u>5,200</u>

W4: Deferred revenue/income	
Profit 2,400 x 25/75	800
Cost	<u>2,400</u>
Selling price	<u>3,200</u>
3,200 x 2 years	6,400

W5: Loan note	
Principal amount	100,000
Issue costs	<u>(4,000)</u>
	96,000
Effective rate 96,000 x 8%	7,680
Coupon rate 100,000 x 6%	<u>(6,000)</u>
Liability	<u>97,680</u>

W6: Tax	
Deferred tax 20,000 x 30%	6,000
Trial Balance fig	<u>(4,800)</u>
Increase by	1,200
Income tax in trial balance	4,400
Tax estimate	<u>29,600</u>
	<u>35,200</u>

W7: Transfer of revaluation surplus	
Transfer 64,000/16years	4,000

Preparation of SOCI  
Preparation of SOFP

## **SOLUTION THREE**

### **REPORT**

To: The Board of Directors of Maiba Ltd

From: Financial accountant

Date: Date of examination

### **Subject: Interpretation of financial performance and position of Alpha and Omega**

I write this report in response to your request to comment and interpret the performance of the two potential acquiree companies of our company.

#### **Profitability**

Alpha has gross profit margin in 2018 of 42%, higher than Omega with 39%. Though this is positive for Alpha, its trend over the two years 2017/2018 shows a decline of 4.5% while that of Omega shows an increase of 18%. The reason for Alpha trend could be attributed to its resolve to manufacture goods it sells in 2018 unlike using external suppliers. This may have pushed up Alpha's cost of making goods available through most startup costs and hence declining gross profit margin.

Alpha's operating profit margin is higher in 2018 at 48% than Omega at 43%. Additionally, Alpha's year on year operating profit margin increased by 12% while that of Omega decreased by 6%. Alpha's improvement can be attributed to good control of its operating expenses as shown by the reduction in operating cost to sales ratio by 19%. On the other hand, the deteriorating operating profit margin for Omega can be attributed to the higher operating expenses incurred in 2018, due to the main repairs to its non-current assets. This is evidenced by the increase in operating expenses to sales ratio by 28%.

Return on capital employed (ROCE) is a primary ratio and is higher in 2018 for Alpha at 64% than Omega at 52%. Alpha is a better performer than Omega by 23%. Again, it is more likely that the better performance for Alpha could be due to the better operating profit margin through reduction in operating expenses and hence improvement in profits than the efficient utilization of assets. This is so because asset turnover barely changed between 2017 and 2018 at 1.39 times and 1.33 times respectively, an insignificant movement of 4% downwards.

Omega's operating profit margin decreased together with ROCE and asset turnover. This indicates that the company neither kept control of its operating expenses nor utilized its Noncurrent assets efficiently therefore achieving poor profitability overall.

2 marks per valid well explained profitability ratio (x 4 points) include asset turnover, gp margin, Operating margin and ROCE =8 marks

### **Liquidity ratios**

Alpha's inventory days is less than that of Omega in 2018 and is less than its 2017 figure signifying Alpha has efficient sales team and so its inventory is not kept too long before being sold. However, its receivable days have declined on the 2017 figure in comparison to Omega. This may be due to poor management of working capital through poor credit control team or giving customers extended credit that increases too high their receivables as a strategy to increase sales. Alpha appears to compensate for this by delaying to pay its suppliers as its payables days increased from 45 to 80 days. This response has the potential to destroy supplier goodwill that could jeopardize future supplies.

Omega, on the other, hand appears to manage its liquidity pretty well with customers paying within 42 days in 2018 compared to 61 days in 2017. As a result, Omega is able to meet its obligations with suppliers early enough and achieve supplier goodwill with guaranteed future supplies. This is despite Omega's inventory being held longer than Alpha's in the warehouse. It is possible that Omega could be using its long term finance to meet its working capital needs. The long term finance for Omega increased between the two years by 25% and is higher than that for Alpha by 17% on the 2018 figures. This is evidenced by the fact that Omega has a negative bank balance in 2018 despite absence of any investment in non-current assets.

### **Gearing**

Alpha's gearing is lower than Omega in 2018 and has decreased on 2017 figure by 4% points while Omega's increased on 2017 figure by 4% points. The lower gearing for alpha is however above the required threshold of 50% and the company is likely not to get favour from its shareholders with the levels of gearing that may impact negatively on dividends payments. The consolation however is that its dividend cover is higher than that of Omega. High gearing could lead to more interest costs incurred but as Alpha has higher cover for interest in 2018 than in 2017 at 3 and 2,5 times respectively, which is also higher than that

of Omega, it seems to be in safety zone in this area. Alpha could still increase its borrowing in 2018 by 20% of its 2017 borrowing and still manage to pay its finance costs.

Omega's interest cover reduced by 25% in 2018. This entails any increase in borrowing beyond 2018 levels could lead to negative profits after finance costs.

It is however important to note that the cost of borrowing for Alpha in 2018 is 58%. This is lower than the return on capital employed at 64%. This indicates that the company still benefits from its gearing level as resources yield returns in excess of the cost of borrowing. Omega's cost of borrowing in 2018 is 70% and is higher than its ROCE hence a loss on its invested resources. This confirms the assertion that Omega could be using borrowed funds to meet its working capital needs.

### **Conclusion and recommendations**

Overall, Alpha's performance looks better than Omega's. The only area where Omega appears to have surpassed Alpha is on liquidity (working capital management). However, the management does not appear good exclusively when we consider the purported use of long term finance to manage working capital. Omega's profitability is generally poor and lack of profit leads to lack of cash eventually. It could be suspected that the management team behind Omega is likely to be poor in terms of skill and experience compared to the management at the heart of Alpha co.

As Omega operates from a more thriving economy, it should have been the best performer of the two companies.

I wish to therefore recommend to Maiba's directors to consider Alpha as a best potential acquisition on grounds that it is an established and well-managed company with a thriving performance. Unless management of Maiba Ltd. is sure of turning around the performance of Omega in its thriving economy, which could come at a very high cost of turning things round.

For any further information, feel free to contact me.

Financial accountant

Sign -----

Any comment on investor ratio

## **SOLUTION FOUR**

a) Total estimated profitability

	Building 1 K'000	Building 2 K'000	Building 3 K'000
Contract price	30,000	74,000	18,000
Less costs to date	(10,800)	(72,000)	(15,400)
Less costs to complete	<u>(13,200)</u>	<u>(10,000)</u>	<u>(6,600)</u>
Total estimated profit (loss)	<u>6,000</u>	<u>(8,000)</u>	<u>(4,000)</u>

% completion = work certified/contract price x 100

Building 1	$12,000/30,000 \times 100 = 40\%$
Building 2	$62,900/74,000 \times 100 = 85\%$
Building 3	$10,800/18,000 \times 100 = 60\%$

### **MC Ltd statement of profit and loss extracts for the year ended 31 December 2017**

	Building 1 K'000	Building 2 K'000	Building 3 K'000
Revenue	12,000	62,900	10,800
Cost of sales	<u>(9,600)</u>	<u>(70,900)</u>	<u>(14,800)</u>
Gross profit	<u>2,400</u>	<u>(8,000)</u>	<u>(4,000)</u>

### **MC Ltd. statement of financial position as at 31 December 2017**

	Building 1 K'000	Building 2 K'000	Building 3 K'000
<u>Current assets</u>			
Contract asset	3,200		2,800
Receivable	1,500		1,200
<u>Current liabilities</u>			
Contract liability		1,000	

Statement of financial position working

	Building 1	Building 2	Building 3
	K'000	K'000	K'000
Costs to date	10,800	72,000	15,400
Recognized profit or loss	<u>2,400</u>	<u>(8,000)</u>	<u>(4,000)</u>
	13,200	64,000	11,400
Less amounts invoiced	<u>(10,000)</u>	<u>(65,000)</u>	<u>(8,600)</u>
Contract asset/(liabilities)	<u>3,200</u>	<u>(1,000)</u>	<u>2,800</u>

b) i) it is usual that profit for tax purposes differ from the accounting profit hence the reason why we recognize deferred tax. The two profits' differences are generally caused by temporary and permanent factors hence the names of the differences.

A temporary difference arises when an expense is allowed for both accounting and tax purposes, but the timing of the allowance differs.

This leads to the tax base of an asset or liability being different from their carrying amounts.

**Examples of temporary differences include:**

- the difference between depreciation charged on non-current assets that qualify for tax allowance and the actual allowance
- The difference between carrying amount of revalued asset and tax base is a temporary difference and gives rise to a deferred tax liability or asset.
- Accounting depreciation of an asset is not deductible for tax purposes, but tax depreciation.
- Current investments or financial instruments are carried at fair value. This exceeds cost but no equivalent adjustment is made for tax purposes.
- Some expenses are taxed on cash basis rather than on accruals basis.

Temporary differences can be deductible or taxable. Deductible temporary differences arise when the tax base of an asset exceeds its carrying amount and this leads to a deferred tax asset.

Taxable temporary differences arise when the tax base of an asset is less than its carrying amount and this leads to a deferred tax liability.

A permanent difference arises as a one off difference between accounting and taxable profits, for example, if an expense in the profit and loss is not allowed for tax purposes, a permanent difference arises. Such difference only impact on the tax computation of one period and hence has no deferred tax consequence. An example of such allowable expense is client entertaining costs, political donations, etc.

ii) Profit and loss

	<b>K'000</b>
Depreciation of building	3, 000
Income tax expense (W2)	21,200
<b>Other comprehensive income</b>	
Revaluation surplus (8000-2400-500)	5, 000
<b>Non-current assets</b>	
Property plant and equipment	45,000
<b>Equity and liabilities</b>	
Revaluation reserve	5, 000
<b>Non current liabilities</b>	
Deferred tax (2,400 + 4,200)	6,600
<b>Current liabilities</b>	
Current tax payable	24,000

**Working** K'000

W1

Building cost at 1. April 2014	
50,000	
Accumulated depreciation up to 1. April 2018 (k50,000/20 years x 4 years	<u>(10,000)</u>
Building Carrying Amount at date of revaluation	40,000
Revaluation surplus	<u>8,000</u>
Revaluation on 1 April 2018	48,000
Depreciation expense post revaluation 48,000/16 years	<u>(3,000)</u>
Carrying Amount at 31 March 2019	<u>45,000</u>
Deferred tax on revaluation surplus 30% x 8,000	<u>2,400</u>
Annual transfer to Retained Earnings of revaluation surplus 8000/16 years	<u>500</u>

W2

Current tax c/f	24,000
Plus Deferred tax c/f	6,600
Plus current tax b/f	5,000
Less deferred b/f	(12,000)
Less deferred tax on revaluation surplus	<u>(2,400)</u>
Profit and loss charge	<u>21,200</u>



## **SOLUTION FIVE**

a)

### **monetary balances**

- Monetary balances are those assets and liabilities appearing on the statement of financial position that are cash or readily converted into cash.
- They require retranslation either on the date of settlement or the statement of financial position date whichever comes earlier.
- Profits or losses arise on their retranslation due to exchange rate differences between the date of the transaction and the date of settlement or statement of financial position
- Examples of monetary items include: trade payables, trade receivables, payables for non-current assets, payables for loans, cash etc.

### **Non monetary balances**

- Non monetary balances include all other balances that cannot be readily converted into cash.
- They do not require retranslation on statement of financial position date but are recognized at their historic cost.
- No exchange profit or loss arises.
- Examples include: inventories, investments, non-current assets etc.

## **b) Profit or loss extract for the year ended 31 December 2017**

	K'
Finance cost (w)	19,887 2
Depreciation expense (253,520/4 years)	63,380 2

## **Statement of financial position extract as at 31 December 2017**

### Non-current assets

Property, plant and equipment (253,520-126,760)	126,760 2
---	-----------

### Non-current liabilities

Finance lease obligation (w)	72,635 1
------------------------------	----------

### Current liabilities

Finance lease obligation (w)	66,124
------------------------------	--------

## Working

Finance lease obligations table

Date	opening balance	interest 10%	lease rental	closing balance
2017	253,520	25,352	(80,000)	198,872
2018	198,872	19,887	(80,000)	138,759
2019	138,759	13,876	(80,000)	72,635

c)

**i) Discontinued operation note (2 marks)**

	K'000
Revenue	3,000
Cost of sales	<u>(2,250)</u>
Gross profit	750
Administrative costs	(300)
Distribution costs	(750)
Loss on disposal of NCA	(150)
Redundancy costs	<u>(300)</u>
Pre-tax loss on discontinued opera.	<u>(750)</u>

### **Mwiya Ltd's Statement of profit or loss for the year ended 31 December 2017**

Continuing operations:	K'000
Revenue	6,000
Cost of sales	<u>(3,750)</u>
Gross profit	2,250
Administrative expenses (200 + 255)	(455)
Distribution costs	<u>(900)</u>
Operating profit	895

Finance costs	<u>(100)</u>
Profit before tax	795
Income tax	<u>(95)</u>
Profit from continuing operations	700
Loss from discontinued operation	<u>(750)</u>
Net loss for Mwiya for the year	<u>(50)</u>

ii) A sale is highly probable if:

- Management is committed to a plan to sale the asset
- There is an active program to locate a buyer
- Asset being marketed at reasonable price compared to its fair value
- The sale is expected to take place within a year and it is unlikely that the plan to sale will change significantly.

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

---

**LEVEL TWO**

---

DA 9: MANAGEMENT ACCOUNTING

---

TUESDAY 11 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## **SECTION A – TWO COMPULSORY QUESTIONS**

**Attempt both questions**

### **QUESTION ONE**

Mulenga Mutale has just negotiated a contract to supply 8,160 desks to all the primary schools in Muchinga Province. This is the break he has been waiting for and he has decided to start the business he has been planning for months now – The Top Desk Company Limited.

The Ministry of General Education, which is responsible of ensuring good, learning conditions in all schools including primary schools, has agreed to pay K255 for each desk and wants them all delivered next year. Mulenga wishes to supply all the desks within the first six months of 2018 starting January 2018. His projection is to supply and deliver the desks evenly over the six months period. With no inventory at the start of January 2018 and at the end of the six month period as these desks are specifically for the schools in Muchinga. Mulenga has opted to maintain closing inventory of finished goods over the period equal to the following monthly supply;

	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
Inventory level	100%	50%	50%	30%	5%	0%

The Ministry has advised that payment will be made the month following delivery as the procurement officers' at the schools have to thoroughly inspect the desks.

Mulenga, has sourced a supplier who will supply the materials required to produce the desks at a price of K15 per unit of material. He is hopeful that the Ministry will ask for more desks in the near future. As he is a new customer the supplier is unwilling to give him long credit and he will be required to pay for the materials when they are delivered which is the same month production takes place. His buying pattern is to buy as much materials as is needed for production in that month. He will not keep any inventory of materials due to limited space of storage and also wastages. On average, he uses 10 units of material to make a desk, and this is unlikely to change over the period.

He will need machinery to allow him to make the desks. He has seen a new machine at a recent trade show at a cost of K80,000. He will need to pay for this machine when it is delivered in January 2018.

The business plan shows that the monthly overheads of the new business will be K20,000 payable in the same month they are incurred. In additional, delivery costs have been estimated at 12% of revenue payable in the same month revenue is earned.

To make sure he and his family have enough to live on, Mulenga will pay himself a monthly salary of K9,000.

He has K30,000 saved up that he will pay into the business bank account in January to get the business started.

Mulenga has heard that you are studying for your Diploma in Accounting and has asked for some help in budgeting for the business.

**Required:**

- (a) Prepare the following functional budgets for the six months to 30 June 2018.
- (i) Sales budget in quantity and value (2 marks)
  - (ii) Production budget in quantity (4 marks)
  - (iii) Materials budget in quantity and value (3 marks)
  - (iv) Cash budget (10 marks)
- (b) Management accounting is normally said to help in planning and decision making. With the help of the budgets prepared, explain three (3) decisions that Mulenga Mutale could consider for his business to do well.

(6 marks)

**[Total: 25 Marks]**

**QUESTION TWO**

Super Electronic (SE) Co, an electronic company produces Basic, Scientific and Financial Calculators.

The Basic and Scientific Calculators are produced at its Ndola factory while the Financial Calculators at the company's Lusaka factory.

The following information relates to the planned activities at the Ndola factory for the next month:-

	<b>Calculator Model</b>	
	<b>Basic</b>	<b>Scientific</b>
Selling price	K50.00	K75.00
Direct material cost	K12.50	K16.30
Direct labour hours	2.5 hours	3.75 hours
Production and sales volume (Calculators)	8,000	4,000
Fixed production overheads per month	K240,000	

Labour which is paid at a rate of K6 per hour is currently very scarce, while demand for the company's calculators is readily available.

A customer from Congo DR has offered the Ndola factory a contract worth K350,000 for a number of calculators made to the customer's requirement. The estimating team has ascertained the following facts in respect of the work:-

- Labour time for the contract would be 12,000 hours
- Material cost would be K90,000.00. This includes the cost of a particular component not normally used in the company's models.

The components could be purchased from a supplier for K25,000.00 or alternatively, they could be made internally for a material cost of K10,000.00 and additional labour time of 1,500 hours.

**Required:**

(a) Explain the importance of opportunity cost in decision making (3 marks)

(b) Advise management purely on financial grounds as to whether;

(i) Make or buy the component (7 marks)

(ii) Accept or reject the contract (5 marks)

(c) The budgeted and standard cost details for next year at the Lusaka factory include:

Selling price per calculator	K120.00
Variables production cost per calculator	K43.00
Fixed production costs	K3,250,000.00
Fixed selling and distribution costs	K1,152,000.00
Sales commission	5% of selling price
Sales	90,000 calculators

**Required:**

(i) Calculate the breakeven sales volume and value  
Calculate the percentage by which the budgeted sales can fall before the company begins to make a loss.

(5 marks)

The Marketing Manager has suggested that the selling price per calculator can be increased to K125 if the sales commission is increased to 8% of selling price and a further K50,000 is spent on advertising.

(ii) Calculate the revised breakeven sales volume based on the Marketing Manager's suggestion and advise management accordingly. (5 marks)

**[Total: 25 Marks]**

## SECTION B

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

### **QUESTION THREE**

Comp-Tech Co. produces a range of specialized components, supplying a wide range of customers, all on credit terms. Having used generous credit policies to encourage past sales growth, Cop-Tech Co. has to finance a substantial overdraft and is concerned about its liquidity.

Comp-Tech Co. borrows from its bank at 15% interest per annum. The company has no plan to further grow sales volume or sales value next year.

Extracts from Comp-Tech Co's most recent accounts are given below:-

	K'000
Sales (all on credit)	40,000
Cost of sales	<u>(34,000)</u>
Operating profit	6,000
Current assets	
Inventory	5,000
Receivables	9,000
Cash	<u>-</u>

In order to speed up collection from customers, Comp-Tech Co. is considering two alternative policies:-

#### **Option One**

Seek factoring services. The factor will administer and collect payments from Comp-Tech Co's customers.

This will generate administrative savings of K400,000 p.a. and a reduction of average receivable collection period by 20 days. The factor will make a service charge of 1.25% of Comp-Tech Co's revenue and also provide credit insurance facilities for an annual premium of K160,000.

#### **Option Two**

Offer early settlement discounts of 1.35% to customers settling accounts within 10 days dispatch of invoices.

It is estimated that only 50% of the customers will take up the offer with the remainder continuing to take their present credit period.

#### **Required:**

- (a) Evaluate the effect on the company's profitability of each option and make appropriate recommendation. (13 marks)
- (b) Discuss three working capital funding policies a company like Comp-Tech can adopt. (6 marks)
- (c) Explain four methods of reducing the length of the operating cycle. (6 marks)

**[Total: 25 Marks]**



#### **QUESTION FOUR**

A small company is engaged in the production of plastic tools for the garden.

Subtotals on the spreadsheet of budgeted overheads for a year reveal the following.

	<b>Moulding department</b>	<b>Finishing department</b>	<b>General factory overhead</b>
Variable overhead (K'000)	1,600	500	1,050
Fixed overhead (K'000)	2,500	850	1,750
Budgeted activity			
Machine hours (000)	800	600	
Practical capacity			
Machine hours (000)	1,200	800	

For the purposes of re-allocation of general factory overhead it is agreed that the variable overheads accrue in line with the machine hours worked in each department. General factory fixed overhead is to be reallocated on the basis of the practical machine hour capacity of the two departments.

It has been a long-standing company practice to establish selling prices by applying a mark-up on full manufacturing cost of between 25% and 35%.

A possible price is sought for one new product which is in a final development stage. The total market for this product is estimated at 200,000 units per annum. Market research indicates that the company could expect to obtain and hold about 10% of the market. It is hoped the product will offer some improvement over competitors' products, which are currently marketed at between K90 and K100 each. The product development department has determined that the direct material content is K9 per unit.

Each unit of the product will take two labour hours (four machine hours) in the moulding department and three labour hours (three machine hours) in the finishing department. Hourly labour rates are K5.00 and K5.50 respectively.

Management estimates that the annual fixed costs which would be specifically incurred in relation to the product are supervision K20,000, depreciation of a recently acquired machine K120,000 and advertising K27,000. It may be assumed that these costs are included in the budget given above.

Given the state of development of this new product, management do not consider it necessary to make revisions to the budgeted activity levels given above for any possible extra machine hours involved in its manufacture.

#### **Required:**

- (a) Prepare full cost and marginal cost information which may help with the pricing decision.

(10 marks)

- (b) Comment on the cost information in part (a) above and suggest a price range which should be considered. (5 marks)
- (c) Explain the role of costs in pricing. (5 marks)
- (d) Explain one (1) advantage and one (1) disadvantage of using fixed budgets and one (1) advantage and one disadvantage of using flexible budgets as part of a budgetary control system. (5 marks)

**[Total: 25 Marks]**

### **QUESTION FIVE**

Chibombebombe Services of Zambia is a manufacturer of specialist engineering components for the electric industry. The company's largest customer has offered them the choice of making component C or component D for the next period, but not both. Both components use the same materials of which only 25,000 kilograms are available at a price of K16 per kilogram. The components will make use of the two computer lines, line Y which has 6,500 hours available at a variable cost of K100 per hour and line Z which has 5,000 hours available at a variable cost of K60 per hour. Other details are as follows:

	Component C	Component D
Maximum components required	14,000	16,000
Materials per component	1.5 kg	1.6 kg
Computer lines per component		
Line Y	0.5 hours	0.3 hours
Line Z	0.4 hours	0.45 hours
Selling price per component	K170	K155

#### **Required:**

- (a) Indicate which component should be made by Chibombebombe Services of Zambia and the total contribution they would make bearing in mind the limitations in resources available. (10 marks)
- (b) As an alternative the customer has indicated that if Chibombebombe Services of Zambia would reduce their selling price by 5% they would pay K70 for each unused computer line hour.

State whether your recommendation on which sub-assembly to make would change and new contribution. (10 marks)

(c) Define backflush costing and state four (4) advantages of backflush costing.

(5 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## DA 9: MANAGEMENT ACCOUNTING – SOLUTIONS

### SOLUTION ONE

Question 1						
<b>Part (a) (i) Sales Budget</b>						
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>
Sales unit	1,360	1,360	1,360	1,360	1,360	1,360
Price (K)	255	255	255	255	255	255
Total	346,800	346,800	346,800	346,800	346,800	346,800
<b>(ii) Production Budget</b>						
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>
Sales	1,360	1,360	1,360	1,360	1,360	1,360
Opening	-	1,360	680	680	408	68
Closing	1,360	680	680	408	68	-
Production	<b>2,720</b>	<b>680</b>	<b>1,360</b>	<b>1,088</b>	<b>1,020</b>	<b>1,292</b>
<b>(iii) Material budget and Value</b>						
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>
Production	2,720	680	1,360	1,088	1,020	1,292
Usage	10	10	10	10	10	10
Total Material	<b>27,200</b>	<b>6,800</b>	<b>13,600</b>	<b>10,880</b>	<b>10,200</b>	<b>12,920</b>
Price (K)	15	15	15	15	15	15
Total Value	<b>408,000</b>	<b>102,000</b>	<b>204,000</b>	<b>163,200</b>	<b>153,000</b>	<b>193,800</b>
<b>(iv) Cash Budget</b>						
	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>
Sales/Receipts		346,800	346,800	346,800	346,800	346,800
<b>Payments</b>						
Material	408,000	102,000	204,000	163,200	153,000	193,800
Machine	80,000					
Salary	9,000	9,000	9,000	9,000	9,000	9,000
Overheads	20,000	20,000	20,000	20,000	20,000	20,000
Delivery Costs	41,616	41,616	41,616	41,616	41,616	41,616
Total payments	558,616	172,616	274,616	233,816	223,616	264,416
Balance	- 558,616	174,184	72,184	112,984	123,184	82,384
Opening balance	30,000	- 528,616	- 354,432	- 282,248	- 169,264	- 46,080
Closing balance	<b>-528,616</b>	<b>-354,432</b>	<b>-282,248</b>	<b>-169,264</b>	<b>- 46,080</b>	<b>36,304</b>

Part b)

Management accounting is seen to provide information that is useful for planning, controlling and supporting decision making in the organisation. Considering the information revealed by John Banda's plans (Budgets), the following could be considered;

1. Obtain an overdraft to help with the operation of the business, especially the first few months when the cashflows are negative. In that case, the interest cost of the overdraft would have to be factored in the budget.
2. The sustainability of the business as the cash flow generated over the period is only K36,304 and the fact that the future orders have not guaranteed.
3. The procurement of the machine could be done under a lease as there may be no use of the machinery if future orders are not given

## **SOLUTION TWO**

- (a) An opportunity cost is the value which represents the cost of the next best alternative or the benefit forgone by accepting one course of action in preference to others when allocating scarce resources.

If there is only one scarce resource, decisions can be made by ranking alternatives according to their contributions per unit of the scarce resource.

However, in reality, there will be many scarce resources and different alternatives will use alternative combinations of those scarce resources. In these situations, opportunity costs are used to identify the optimum use of those resources.

- (b) (i) Since labour is scarce, there is an opportunity cost of labour if the component was made using internal resources as follows:-

<b>Normal Calculator Models</b>	<b>K</b>	<b>Basic</b>	<b>Scientific</b>
	<b>K</b>		<b>K</b>
Selling price	50.00		75.00
Direct material	(12.50)		(16.30)
Direct labour	(15.00)		(22.50)
Contribution per calculator	22.50		36.20
Labour hours per calculator	<u>2.5 hours</u>		<u>3.75 hours</u>
Contribution for direct labour hours	<u><u>K 9.00</u></u>		<u><u>K9.65</u></u>

Hence making the component will entail reducing the production of the basic model in order to accommodate the special order resulting in an opportunity cost of K9.00 per direct labour hour.

### Relevant Cost of Making the Component

	K
Direct material	10,000
Direct labour (K6 x 1,500 hours)	9,000
Opportunity cost (K9 x 1,500 hours)	<u>13,500</u>
	<u><u>32,500</u></u>

It is cheaper to buy the component at K25,000.00 than make it at K32,500. Therefore the company should buy and not make the component.

- (ii) Contribution from the Contract per Direct Labour Hour

	K	K
Sales revenue		350,000
Direct material	90,000	
Direct labour (12,000 hrs x K6)	72,000	
Component	<u>25,000</u>	
Variable cost		<u>(187,000)</u>

Total contribution	163,000
Total direct labour hours	12,000
Contribution per labour hour	<u>K 13.58</u>

The company should accept the contract since it has a higher contribution per labour hour than the normal calculation model.

(c) Contribution per Unit

	K
Selling price	120.00
Variable production cost	( 43.00)
Sales commission (5% of K120)	( 6.00)
	<u>71.00</u>

Total Fixed Cost

	K
Product cost	3,250,000
Selling and distribution cost	<u>1,152,000</u>
	<u>4,402,000</u>

(i) Breakeven Sales Volume =  $\frac{\text{Fixed Cost}}{\text{Contribution per Unit}}$

=  $\frac{\text{K4,402,000}}{\text{K 71}}$

= 62,000 calculators

Breakeven sales value = 62,000 calculators x K120/calculator

= K7,440,000

(ii) Margin of Safety

MoS =  $\frac{(90,000 - 62,000) \times 100\%}{90,000}$

= 31.11%

(iii) Revised Contribution per Calculator

	K
Selling price	125.00
Revised variable cost (43+8%of 125)	( 53.00)
	<u>72.00</u>
Revised total fixed cost (4,402,000 + 50,000)	= <u>K4,452,000</u>

$$\begin{aligned} \text{Revised breakeven sales volume} &= \frac{\text{K4,452,000}}{\text{K72/calculator}} \\ &= \underline{\underline{61,833 \text{ calculators}}} \end{aligned}$$



### **SOLUTION THREE**

#### **(a) Option One**

Reduction in receivable days	20 days
	K
Reduction in receivables ( $20 \times \frac{K40m}{365}$ )	2,191,780.82
<u>Effect on the Company's Profitability</u>	
Finance cost savings ( $15\% \times K2,191,780.82$ )	328,767.12
Administrative cost savings	400,000.00
Service charge ( $1.25\% \times K40m$ )	(500,000.00)
Insurance premium	<u>(160,000.00)</u>
Net profit benefit	<u>68,767.12</u>

#### **Option Two**

A K9 million year-end receivables, represents a receivable collection period ( $\frac{K9m \times 365}{K40m}$ ) = 82.1125 days.

Given an early settlement discount of K2.5%

Average receivable days become:  $(50\% \times 10) + (50\% \times 82.125) = 46$  days

Average receivables would reduce from the present K9m to:

$$\left(\frac{46 \times K40m}{365}\right) = K5,041,095.89$$

Reduction in receivables  $(K9,000,000 - K5,041,095.89) = K3,958,904.11$

Effect on the Company's profitability

	K
Finance cost savings: $15\% \times K3,958,904.11$	593,835.62
Cost of the discount: $1.35\% \times K40m$	<u>540,000.00</u>
Net profit benefit	<u>53,835.62</u>

- (b) Assets should be divided into non-current assets, permanent current assets and fluctuating current assets when considering working capital financing. Permanent current assets represent the level of working capital investment needed to support a given level of trading activity while fluctuating current assets represent the current assets which vary according to business activity such as slow inventory movement due to seasonal variations.

The following are the possible working capital financing policies:-

## **Matching Principle**

Long term finance is used to fund long-term assets such as non-current assets and permanent current assets. Fluctuating current assets are financed by short-term finance.

Generally, long-term debt is more expensive than short-term debt because lenders require extra reward for lending longer periods and default risk increases due to increasing uncertainty over time. Long-term finance is however, more secure than short-term finance as it has a fixed maturity provided interest payment are met and loan covenants are not breached, While short-term debt such as an overdraft is repayable as demand.

## **Conservative Working Capital Funding Policy**

A higher proportion of long-term finance will be used than matching policy. Some fluctuating current assets in addition to non-current assets and permanent current assets are financed from long-term finance. It is both less risk and profitable compared to the matching policy.

## **Aggressive Working Capital Financing Policy**

A lower proportion of long-term finance than a matching policy is used. This implies that some of the long-term assets will be funded from short-term finance such as an overdraft making it riskier despite potentially being more profitable than a matching policy.

The approach to financing working capital will be to a great extent be a function of attitude of management to risk and the size of the organization e.g. a small company will be forced to adopt an aggressive policy due to its inability to secure further long-term funding.

- (c) Cash operating is the length between the entity's outlay on raw materials, wages and other expenditures and the inflow of cash from the sales of the goods.

The cash operating cycle should not be too long because the longer it becomes the more the financial resources the company needs.

A number of steps can be taken to shorten the operating cycle.

Reduce raw materials inventory holding. This could be achieved by reviewing slow moving lines and re-order levels. Establish inventory control levels and efficient links with suppliers.

Obtain more finance from suppliers by increasing credit purchases and negotiating or renegotiating credit periods.

Reduce work in progress by reducing production volume or improving production techniques and efficiency.

Reduce finished goods possibly by re-organising the production schedule and distribution methods.

Reduce credit given to customers. This involves engaging and following up outstanding amounts more quickly or where possible by offering early settlement discounts.

## **SOLUTION FOUR**

### **(a) Calculation of overhead absorption rates**

	<i>Moulding dept</i>	<i>Finishing dept</i>	<i>General factory overhead</i>
	K'000	K'000	K'000
<i>Variable overhead</i>			
Initial allocation	1,600	500	1,050
Reapportion general overhead (800:600)	600	450	(1,050)
Total variable overhead	2,200	950	–
÷ Budgeted machine hours	÷ 800	÷ 600	
Variable overhead rate per hour	K2.75	K1.58	
<i>Fixed overhead</i>			
Initial allocation	2,500	850	1,750
Reapportion general overhead (1,200:800)	1,050	700	(1,750)
Total fixed overhead	3,550	1,550	–
÷ Budgeted machine hours	÷ 800	÷ 600	
Fixed overhead rate per hour	K4.44	K2.58	

### *Information to assist with the pricing decision*

	<i>K per unit</i>	<i>K per unit</i>
Direct material	9.00	
Direct labour: moulding dept finishing dept (3 ··K5.50)	(2 ··K5) 16.50	10.00
Variable overhead: moulding dept (4 ··K2.75) finishing dept (3 ··K1.58)	11.00 4.74	
		15.74
Variable manufacturing cost		51.24
Fixed overhead: moulding dept (4 ··K4.44)	17.76	

finishing dept (3 × K2.58)	7.74	
		25.50
Full manufacturing cost		76.74

A **full cost plus price** will be **based on this cost** of K76.74 **plus a mark-up** of between 25% and 35%. Taking a high, low and average mark-up, the potential prices are as follows.

	<i>25% mark-up</i>	<i>30% mark-up</i>	<i>35% mark-up</i>
	K per unit	K per unit	K per unit
Full manufacturing cost	76.74	76.74	76.74
Mark-up	19.19	23.02	26.86
Full cost plus price	95.93	99.76	103.60

Certain incremental or specific fixed costs have been identified, however, and these should be borne in mind for a well-informed pricing decision.

#### **Product cost based on incremental fixed costs**

	K'000	K per unit
Variable manufacturing cost		51.24
Incremental fixed costs: supervision	20	
depreciation	120	
advertising	27	
	167	
Incremental fixed cost per unit (••20,000 (W))		8.35
Incremental total cost per unit		59.59

#### *Working*

Total market = 200,000 units per annum

10% market share = 20,000 units per annum

(b) The cost information provides a range of bases for a pricing decision.

#### Variable manufacturing cost

The variable manufacturing cost is K51.24 per unit. At a price below this level there would be no contribution to fixed overheads. Since the prevailing market price is between K90 and K100 each, such a low price might suggest that the product is of inferior quality.

#### Incremental total cost

The incremental total cost per unit is K59.59. Management must select a price above this level to be sure of covering all costs associated with this product. This unit rate depends on achieving an annual volume of 20,000 units.

#### Full manufacturing cost

The full manufacturing cost per unit is K76.74. A price based on this cost will ensure that all costs are covered in the long run, if the annual volume of 20,000 units is achieved. Since competitors' prices range between K90 and K100 it seems possible that the company can compete with a price calculated on a full cost plus basis.

The range of prices suggested, using the company's usual mark-up of between 25% and 35%, is K95.93 to K103.60 per unit.

Given the current price range of the competitors' products and the fact that the product is expected to offer some improvement over competitors' products, a price towards the upper end of the suggested range would be appropriate.

(c) In general, the price charged for a product should exceed its cost. There are a number of different cost-based approaches to pricing, however, and each is appropriate in different circumstances.

Full cost plus pricing involves adding a profit margin to the fully absorbed total cost of a product.

In certain situations, for example if an organisation has spare capacity, it may be appropriate to use marginal cost as the basis for pricing. Alternatively if the lowest possible price is sought, perhaps for strategic reasons, a minimum price based on relevant costs may be used as the basis for a pricing decision. Management must not lose sight of the need to cover fixed costs in the long run, however.

Whichever cost basis is used, it is important to appreciate that a cost-based price merely provides a starting point for informed management decisions and pricing negotiations.

Cost is only one of the factors to bear in mind when making a price-setting decision. Other factors to consider will include the organisation's objectives, the market in which the organization operates and the effect which price has on the volume of demand for its goods.

#### (i) Fixed budgets

The advantages of fixed budgets are as follows.

Preparing a fixed budget at one level will be simpler and less time-consuming than preparing flexible budgets at a number of levels.

A number of costs will not vary if actual output is different from expected output.

These include plant costs and basic wage costs which are a significant proportion of our costs.

A fixed budget can provide a focus for planning and co-ordination of activities.

Note. Only one advantage was required.

However fixed budgets have the following disadvantages.

Preparing fixed budgets based on one activity level gives no indication of what may happen if actual sales and production do differ from expected levels. For example, a fixed budget may not indicate at what level of activity cash flow or capacity problems might occur.

Fixed budgets will often fail to provide a realistic target against which performance can be judged. Certain costs will vary with production. It will be misleading to call managers to account for costs being greater than budgeted, if the reason for the difference is greater than expected activity levels, and not failure to control costs.

If managers know that they are being judged against a single pre-set standard, they will be more inclined to build unnecessary expenditure – budgeting slack – into their budgets to provide a cushion against unforeseen circumstances.

Managers may spend up to budgetary limits even if the expenditure is unnecessary, in order to justify the original allocation or to guard against the possibility of having a reduced budget in a future period.

Note. Only one disadvantage was required.

(ii) The advantages of flexible budgets are as follows.

Preparing flexible budgets at the planning stage may serve a number of purposes.

- Managers can assess what will be the effect of activity falling short of target.

As a result they may want to make plans for alternative uses of capacity.

- If activity might exceed expectations, managers can assess the costs of extra resources including overtime, sub-contracting work or extra machine hire.

••Flexible budgets are helpful in decision-making. Managers can set up 'what if' scenarios and assess the effects of various changes in the assumptions made.

Flexible budgets provide an appropriate yardstick for assessing how costs have been controlled. They enable comparisons to be made of results at the actual level of activity with results that would have been expected at that level of activity.

Note. Only one advantage was required.

The disadvantages of flexible budgets are as follows.

The assumptions on which flexible budgets are based may be over-simplistic.

- Variable costs per unit are assumed to be constant. In practice, the availability for example of bulk discounts may mean that variable costs per unit vary at different levels of activity.

– A number of fixed costs may be stepped fixed costs, increasing at a number of levels of activity.

– Variable costs are often all assumed to alter with the same measure of activity. This may not be true in practice. For example, selling and distribution costs may vary with sales, but power, machine usage etc. may vary with production.

Managers may not have the time available to prepare flexible budgets to cover all possible scenarios.

Managers will have to make certain decisions at the start of the period for instance labour requirements, based on the most likely activity level. Hence this level has to be identified and highlighted.

Use of budgets generally may mean too much emphasis is placed on judging managers on how they control cost, and not enough on market performance.

Note. Only one disadvantage was required.

## **SOLUTION FIVE**

### a) **Identification of constraints and maximum output**

	<b>C</b>	<b>D</b>
MAXIMUM DEMAND	14,000	16,000
MATERIAL $\frac{25,000 \text{ kg}}{1.5 \text{ kg}} =$	16,667	$\frac{25,000 \text{ kg}}{1.6 \text{ kg}} = 15,625$
LINE Y $\frac{6,500 \text{ hrs}}{0.5 \text{ hrs}} =$	13,000	$\frac{6,500 \text{ hrs}}{0.3 \text{ hrs}} = 21,667$
LINE Z $\frac{5,000 \text{ hrs}}{0.4 \text{ hrs}} =$	12,500	$\frac{5,000 \text{ hrs}}{0.45 \text{ hrs}} = 11,111$
MAXIMUM DEMAND OF EACH MATERIAL	<b>12,500</b>	<b>11,111</b>

### **TOTAL CONTRIBUTION**

	<b>C</b>	<b>D</b>
	K	K
Selling price	170	155
Materials (1.5 x K16) =	(24)	(1.6 x K16) = (25.6)
Computer time:		
LY (0.5 x K100) =	(50)	(0.3 x K100) = (30)
LZ (0.4 X K160) =	(64)	(0.45 x K160) = (720)
Contribution per unit	32	27.4
Maximum demand of each Component units	12,500 units	11,111
<b>Total contribution</b>	<b><u>K400, 000</u></b>	<b><u>K304, 441</u></b>



**Decision**

From a financial perspective, Chibombebombe Services of Zambia should make 12,500 units of component **C** because more contribution will be generated. The resulting contribution will be K400, 000.

b)

	<b>C</b>		<b>D</b>
	K		K
Existing contribution (see part (a) above)	32		27.4
Less: 5% of sell price (K170 x 5%) =	(8.5)	(K155 x 5%)	(7.75)
Revised contribution	<u>23.5</u>		<u>19.65</u>
	X12,500=K293,750		

X11,111=K221,669

Add: contribution from spare capital

LINE Y:

C: (6,500 hrs – 12,500 x 0.5) = 250 hrs x K70 = K17, 500

-

D: 6,500 - (11,111 x 0.3) = 3,166.7 x K70 = -

K221,

669

LINE Z:

C: (5,000 hrs- 12,500 x 0.4) = 0hrs x K70 = K0

-

D: (5,000- 911,111 x 0.45) = 0 x K70 = -

K0

---

**Revised grand contribution**

**K311, 250**

**K440, 000**

**Decision:** it is now worthwhile to make 11,111 components of **D** instead of component **C** because more contribution will be realized. i.e. K440, 000 compared to K311, 250.

c) Backflush costing is a method of costing associated with a JIT production system which applies cost to the output of a process.

**Advantages**

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

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

**LEVEL TWO**

---

DA: 10 TAXATION

---

THURSDAY 13 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

**Taxation table for paper DA10 – Taxation (June and December 2018 Examinations)**

**Income Tax**

**Standard personal income tax rates**

<b>Income band</b>	<b>Taxable amount</b>	<b>Rate</b>
K1 to K39,600	first K39,600	0%
K39,601 to 49,200	next K9,600	25%
K49,201 to K74,400	next K25,200	30%
Over K74,400		37.5%

**Income from farming for individuals**

K1 to K39,600	first K39,600	0%
Over K39,600		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%

**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%
-------------------------	-----

**Industrial Buildings:**

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

**Low Cost Housing (Cost up to K20,000)**

Wear and Tear Allowance	10%
Initial Allowance	10%

## Commercial Buildings

Wear and Tear Allowance 2%

## Farming Allowances

Development Allowance 10%

Farm Works Allowance 100%

Farm Improvement Allowance 100%

## Presumptive Taxes

### Turnover Tax

#### Monthly turnover

K1to K4,200

K4,200.01to K8,300

K8,300.01 to K12,500

K12,500.01 to K16,500

K16,500.01 to K20,800

Above K20,800

#### Turnover Tax per month

3% of monthly turnover above K3,000

K225 per month+3% of monthly turnover above K4,200

K400 per month+3% of monthly turnover above K8,300

K575 per month+3% of monthly turnover above K12,500

K800 per month+3% of monthly turnover above K16,500

K1,025 per month+3% monthly of turnover above K20,800

#### Annual turnover

K1to K50,400

K50,400.01to K99,600

K99,600.01 to K150,000

K150,000.01 to K198,000

K198,000.01 to K249,600

Above K249,600

#### Turnover Tax per annum

3% of annual turnover above K36,000

K2,700 per annum+3% of annual turnover above K50,400

K4,800 per annum +3% of annual turnover above K99,600

K6,900 per annum+3% of annual turnover above K150,000

K9,600 per annum+3% of annual turnover above K198,000

K12,300 per annum +3% of annual of turnover above K249,600

### Presumptive Tax for Transporters

#### Seating capacity

From 64 passengers and over

From 50 to 63 passengers

From 36 to 49 passengers

From 22 to 35 passengers

From 18 to 21 passengers

From 12 to 17 passengers

Less than 12 passengers and taxis

#### Tax per annum

K

10,800

9,000

7,200

5,400

3,600

1,800

900

#### Tax per day

K

29.60

24.70

19.70

14.80

10

5.0

2.50

## 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

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

**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):**

<b>Customs duty</b>	<b>Excise duty</b>	<b>Customs duty</b>	<b>Excise duty</b>
<b>K</b>	<b>K</b>	<b>K</b>	<b>K</b>

**Single cab**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	21,926	9,501	8,770	3,801
GVW exceeding 1.5 tonnes but not exceeding 3.0 tonnes	26,311	11,402	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	30,697	13,302	17,541	7,601
Double cabs GVW exceeding 3 tonnes but not exceeding 5 tonnes	30,274	0	24,119	10,452
Double cabs GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes, <b>with spark ignition internal combustion piston engine</b>	30,697	13,302	24,119	10,452

**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 tonnes but not exceeding 3.0 tonnes	17,541	7,601	15,348	6,651
GVW exceeding 3.0 tonnes but not exceeding 5.0 tonnes	21,926	9,501	17,541	7,601

## Trucks

GVW up to 2 tonnes	21,926	9,501	10,963	4,751
GVW exceeding 2.0 tonnes but not exceeding 5.0 tonnes	28,504	12,352	13,156	5,701
GVW exceeding 5.0 tonnes but not exceeding 10.0 tonnes	24,724	18,955	10,817	8,293
GVW exceeding 10.0 tonnes but not exceeding 20.0 tonnes	30,905	23,694	11,744	9,004
GVW exceeding 20 tonnes	51,898	0	19,461	0
GVW exceeding 20 tonnes, <b>with spark ignition internal combustion piston engine</b>	37,086	28,432	13,907	10,662

## Customs and excise duty on new vehicles

- Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver:
  - Customs duty: 30%
  - Excise duty:
    - Cylinder capacity of 1500 cc and less 20%
    - Cylinder capacity of more than 1500 cc 30%
- Pick-ups and trucks/lorries with gross weight not exceeding 20 tonnes:
  - Customs duty 15%
  - Excise duty 10%
- Buses/coaches for the transport of more than ten persons
  - Customs duty: 15%
  - Excise duty:
    - Seating capacity of 16 persons and less 25%
    - Seating capacity of 16 persons and more 0%
- Trucks/lorries with gross weight exceeding 20 tonnes
  - Customs duty: 15%
  - Excise duty: 0%
- The minimum amount of customs duty on motor vehicles is K6,000.
- Import VAT is added to the sum of VDP, customs duty and excise duty. It is determined at the standard rate of 16%



## SECTION A

### Attempt BOTH questions in this section

#### QUESTION ONE

Mailess, Dailess and Agness are in partnership preparing partnership accounts each year to 31 December. Taxable profits for the year ended 31 December 2018 were K900,000.

On 31 March 2018, Agness retired from the partnership while Mailess and Dailess continued to trade. A new partner, Eneless, was admitted to the partnership on 31 August 2018.

The partnership agreement has been as follows:

	Mailess	Dailess	Agness	Eneless
Period up to 31.3.2018				
Annual salaries (K)	264,000	216,000	180,000	–
Profit/Loss sharing ratio	3	2	1	–
Period from 1.4.2017 to 31.8.2018				
Annual salaries (K)	276,000	246,000	–	–
Profit/loss sharing ratio	1	1	–	–
Period from 1.9.2017 to 31.12.2018				
Annual salaries (K)	300,000	240,000	–	228,000
Profit/ loss sharing ratio	5	3	–	2

#### **Additional information:**

(1) **Mailess, Dailess and Agness**

Dailess, Mailess and Agness did not have any other income in the tax year 2018.

(2) **Eneless**

The only other income earned by Eneless in the tax year 2018 was employment income arising from her employment with HF Co where she had been employed as an accounts assistant for many years. She resigned from her position on 31 August 2018.

Her contract of employment in the tax year 2018 provided for an annual basic salary of K108,000, transport allowance of K500 per month, lunch allowance of K600 per month and an annual housing allowance of 5% of her basic salary. The company also paid life insurance premiums of K700 per month and medical scheme contributions of K200 per month on her behalf. In January 2018, the company paid professional subscriptions of K800 on her behalf. The company had always deducted 5% of her employment earnings as employees' NAPSA contributions and had additionally, always paid employer's NAPSA contributions of 5% of her earnings as employer's NAPSA contributions.

In February 2018, the company reimbursed her the cost of medical treatment she incurred for her sick son amounting to K16,000.

On her resignation on 31 August 2018, she received the following benefits from her employer:

	K
Accrued service bonus	216,000
Leave pay	4,500
Severance pay	54,000
Pension refunds	90,000

Eneless made the following payments from her employment earnings in the tax year 2018:

Monthly accommodation rentals	K2,500
Donation to an approved public benefit organisation	K3,000
Professional subscription	K3,060

**Required:**

- (a) Prepare a computation of the allocation of the taxable profit to each partner in the tax year 2018. (10 marks)
- (b) Calculate each partner's income tax payable for the tax year 2018. (15 marks)

**[Total: 25 marks]**

## **QUESTION TWO**

Energetic plc is a Zambian resident company engaged in manufacturing. The company listed its shares on the Lusaka Stock Exchange on 1 June 2018, and 40% of the shares were taken up by indigenous Zambians. The company's summarised statement of profit or loss for the year ended 31 December 2018 is as follows:

	K
Sales revenue	1,426,600
Cost of sales (note 1)	<u>(784,630)</u>
Gross profit	641,970
Distribution and selling costs (note 2)	(122,500)
Administration expenses (note 3)	<u>(250,420)</u>
Profit from operations	269,050
Investment income (note 4)	250,000
Finance costs (note 5)	<u>(62,740)</u>
Profit before tax	456,310
Income tax expense (note 6)	<u>(159,709)</u>
Profit for the year	<u>296,601</u>

The following information is also available:

### **Note 1: Cost of sales comprise of:**

	K
Opening inventory	220,380
Purchases	500,000
Depreciation	224,700
Loss on sale of plant	12,350
Closing inventory	<u>(172,800)</u>
	<u>784,630</u>

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

	K
Gifts of energetic plc calendars each costing K98 each	19,600
Advertising expenses (newspaper & TV)	30,450
Entertaining customers	62,780
Repairs of delivery vans	<u>9,670</u>
	<u>122,500</u>

### **Note 3: Administration expenses comprise of:**

	K
Wages & salaries	160,000
Share issue costs	30,000
Penalty for late payment of provisional income tax	20,400
Trade debts written off	17,400
Increase in general provision for bad debts	11,780
Accountancy and audit fees	32,700
Loan to former employee previously written off now recovered	<u>(21,860)</u>

250,420

**Note 4: Investment income**

Investment income comprise rental income K72,000 (gross), royalties K76,500 (gross), dividends K51,500 (gross) and bank interest K50,000 (gross). Withholding tax has already been deducted at source.

**Note 5: Finance costs comprise of:**

	K
Interest on debentures	25,000
Interest on loan notes	31,300
Interest on bank overdrafts	<u>6,440</u>
	<u>62,740</u>

The debentures and loan notes were issued in order to fund the purchase of non-current assets.

**Note 6: Income tax expense**

Provisional income tax paid by the company during the tax year 2018 amounted to K38,128.

**Note 7: Implements, plant & machinery**

The company had the following implements, plant & machinery on 1 January 2018:

	Income tax value	Original cost
	K	K
Manufacturing plant	25,000	50,000
General machinery	90,000	180,000
Toyota Allion car (2000 cc)	54,000	90,000

During the tax year 2018, the following transactions took place in implements, plant & machinery:

	Cost/(proceeds)
	K
Disposal of manufacturing plant	(30,000)
Purchase of manufacturing equipment	250,000
Purchase of Light truck	140,000
Purchase of Toyota prado car (cylinder capacity 3000 cc)	125,000

The Toyota Allion car and Toyota Prado car are used as personal-to-holder cars by the Chief Finance Officer and Managing Director respectively.

**Note 8: Buildings**

On 1 August 2018, Energetic plc completed the construction of a factory building at a cost of K1,480,000 comprising of Land at a cost of K250,000, a factory at a cost of K1,150,000 and

administration offices at a cost of K80,000. The building was brought into use on 1 September 2018.

**Required:**

- (a) Calculate the maximum capital allowances claimable by the company for the tax year 2018. (10 marks)
- (b) Calculate the taxable business profit for the tax year 2018. (9 marks)
- (c) Calculate the income tax payable for the tax year 2018. (6 marks)

**[Total: 25 marks]**

## SECTION B

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

### **QUESTION THREE**

- (a) Explain four (4) main sources of tax law and regulation in Zambia. (4 marks)
- (b) The following information relates to three companies:

#### **EXP Ltd**

EXP Ltd was incorporated and has its registered office in South Africa, but it undertakes the majority of its operations in Zambia where it has ten branches. Its annual general meetings of the company are also held in Zambia. Management is planning to incorporate a subsidiary in Zambia next year.

#### **RCL Ltd**

RCL Ltd was incorporated in Zambia in 2010. It has six branches in Nigeria, where board meetings are held on a quarterly basis.

#### **DRG Ltd**

DRG Ltd, was incorporated in Malawi, however its effective management and control is exercised from Zambia where it has the majority of its operations.

#### **Required:**

Explain, giving reasons, whether each one of the above companies would be regarded as being resident in Zambia for taxation purposes. (6 marks)

- (b) Karen started running a retail business making standard rated supplies on 1 January 2018. She made sales of K51,000 in the month of January 2018. Her sales increased by K30,000 each month from February 2018 to July 2018. From August 2018, she expects sales to be constant at K250,000 per month. Her standard rated expenses were K35,000 per month and are expected to remain at this level in future. Karen is not sure whether she is required to register her business for Value Added Tax.

#### **Required:**

- (i) Explain the Value Added Tax registration requirements to Karen. (3 marks)
- (ii) State, giving reasons, when Karen will be required to register for VAT and explain the consequences of registering for VAT late. (6 marks)
- (iii) Explain four (4) obligations Karen will have once she registers her business for VAT. (4 marks)
- (iv) State any two (2) conditions that will need to be met for Karen to be able to recover any input VAT she will incur on her expenditure. (2 marks)

**[Total: 25 marks]**

## **QUESTION FOUR**

- (a) In February 2018, Kalenda imported the following two motor vehicles to be used in his public passenger transportation business which he commenced running on 1 March 2018.

### **Rosa Bus**

A brand new twenty-six passenger seater Rosa bus, at a purchase price of \$10,000. Insurance cost in transit to the port of Durban South Africa was \$1,200 and Freight charges were \$2,200. A further amount of \$600 was paid to a clearing and forwarding agent to transport the bus from the port of Durban to the Chirundu border post. Incidental costs from the Chirundu border post to Lusaka were \$300.

### **Toyota Corolla**

A brand new four passenger seater Toyota corolla car (1500cc) at a purchase price of \$2,000. Insurance cost in transit to the port of Durban South Africa was \$200 and Freight charges were \$500. \$300 was paid to a clearing and forwarding agent to transport the port of Durban to the Chirundu border post. Incidental costs from the Chirundu border post to Lusaka were \$150.

The exchange rate provided by the Commissioner General at that time was K9.50/US\$ in each cases.

### **Other information**

The bus will earn K800 per day starting from 1 March 2018, for six working days per week, for four weeks per month. The salary for the bus driver will be K3,000 per month. The bus running expenses will average K2,000 per month.

The Toyota corolla will earn K300 per day starting from 1 March 2018, for six working days per week, for four weeks per month. The salary for the driver of the Toyota car will be K1,500 per month. Motor car running expenses will average K1,000 per month.

He will incur other expenses wholly and exclusively for the purposes of the transportation business of K2,000 per month.

Kalenda will not have any other income in the tax year 2018.

### **Required:**

- (i) Calculate the value for duty purposes and the total import taxes paid on the importation of the Rosa bus. (5 marks)
- (ii) Calculate the value for duty purposes and the total import taxes paid on the importation of the Toyota corolla. (5 marks)
- (iii) Explain how Kalenda will be assessed to income tax on the income from the transportation business in the tax year 2018. Your answer should include an explanation of the tax treatment of the expenses he will incur wholly and

exclusively for the purposes of running the business and a computation of the total tax that will be paid on the income he will generate in the tax year 2018. (6 marks)

- (b) Assume today's date is 15 December 2017. XLT Ltd plans to commence business on 1 January 2018, making supplies which are exempt for Value Added Tax purposes. The expected turnover of the business is K60,000 per month.

The company expects expenditure to be incurred wholly and exclusively for business purposes to include the following:

	K
Wages and Salaries for employees per month	16,000
Business rent per month	5,500
Business insurance per month	1,200
Advertising and marketing per month	1,800
Entertainment expenditure for customers per month	1,400
Motor car running expenses per month	900

On 1 January 2018, the company will purchase office equipment at a cost of K70,000 and furniture and fittings at a cost of K35,000 to be used wholly and exclusively for business purposes. The company will also purchase a Toyota Allion motor car with a cylinder capacity of 2000cc at a cost of K130,000 to be used on a personal to holder basis by the Managing Director. Private use of the motor car by the Managing Director will be 60%.

Depreciation on all capital assets will be charged at the rate of 20% per annum on a reducing balance basis.

**Required:**

Explain how the company will be assessed to tax on the income it will generate in the tax year 2018. Your answer should include:

- (i) An explanation of the tax treatment of the expenses it will incur wholly and exclusively for the purposes of running the business. (2 marks)
- (ii) An explanation, supported by relevant computations, of the income tax treatment of the expenditure that will be incurred on the purchase of the office equipment, furniture & fittings and the motor car to be used for business purposes. (4 marks)
- (iii) A computation of the total tax that will be paid on the income the company will generate in the tax year 2018 explaining how the tax will be paid. (3 marks)

**[Total: 25 marks]**



## **QUESTION FIVE**

- (a) The **IFAC Ethical Code** provides guidance for professional accountants providing taxation services.

### **Required:**

- (i) Explain why professional codes of ethics exist for the accountancy profession. (3 marks)
- (ii) Explain how the principles of integrity and objectivity apply to professional accountants providing taxation services. (4 marks)
- (b) In the tax year 2018, Kaonga had the following transactions:
- (1) In February 2018, he sold a commercial plot for K150,000. He paid an estate agent K15,000 for arranging the sale and incurred an additional K5,000 in connection with legal fees of transferring title to the plot. He acquired the plot in June 2009 at a cost K75,000. The open market value of the commercial plot as determined by government valuation officers was K160,000 on the date of the transfer.
- (2) In March 2018, he gifted his house in Lusaka to his nephew Dabwiso as a wedding present. The open market value of the plot on that date was K250,000. He acquired the house 2 years ago at cost of K140,000. Dabwiso gave his uncle K10,000 cash as a token of appreciation.
- (3) In May 2018, he let out his house in Kitwe charging gross monthly rentals of K3,000. The house had an open market value of K500,000 on that date. He acquired the house in May 2009 at cost of K300,000.
- (4) In July 2018, he sold 100,000 shares, each with a nominal value K2 he held in FTK plc a listed company at K10 per share, being the price at which the shares were quoted. He acquired the shares six years ago at K6 per share.
- (5) In September 2018, he sold 60 000, K1 shares he held in Serena Ltd, a private limited company for K90,000. He acquired the shares in May 2010 at a total cost of K50,000. The market value of the shares determined using approved valuation methods was K120,000.
- (6) In October 2018, he acquired 100 acres of farm land in Mkushi at a price K130,000. The open market value of the land on that date was determined by government valuation officers to be K160,000.

### **Required:**

Calculate, giving reasons, the amount of any property transfer tax arising on each of the above transactions for the tax year 2018. (6 marks)

- (c) Satela has been in business for many years, preparing accounts annually to 31 December. He runs a retail business and a farming business. Satela also owns property which is let out on a commercial basis.

For the tax year 2018, the trading results from his businesses were as follows:

	K
Profit from retail business (Note 1)	920,000
Profit from farming operations (Note 2)	830,000
Loss from letting of property (Note 3)	(26,000)

The following additional information is available:

**Note 1: Profit from retail business**

The figure of profit from the retail business is the final taxable results after capital allowances.

**Note 2: Profit from farming operations**

The profit from the farming operations of K830,000 is the taxable profit before capital allowances. During the year ended 31 December 2018, he incurred the following expenditure:

	K
Purchase of Tractor	80,000
Purchase of Delivery van	120,000
Construction of storage shade for farm produce	160,000
Development expenditure of banana plantation	40,000
Construction of 2 dwelling houses for farm workers at a cost of K60,000 each	120,000

There were no other assets qualifying for capital allowances in the tax year 2018.

**Note 3: loss from letting of property:**

The gross rentals arising in respect of the tax year 2018 were K124,000, however Satela incurred expenditure wholly and exclusively for letting purposes of K150,000 during the year resulting in the loss from letting shown above.

**Note 4: Provisional Income Tax**

Provisional income tax paid in respect of the tax year 2018 is K303,810.

**Required**

- (i) Compute the final taxable profit from farming operations for the tax year 2018. (4 marks)
- (ii) Explain the income tax treatment of the results from letting of property. (3 marks)
- (iii) Prepare a computation of the final amount of income tax payable by Satela for the tax year 2018. (5 marks)

**[Total: 25 Marks]**

**END OF PAPER**

## D10: TAXATION - SOLUTIONS

### SOLUTION ONE

#### (a) ALLOCATION OF PROFIT

	<i>Total</i> K	<i>Mailess</i> K	<i>Dailess</i> K	<i>Agness</i> K	<i>Eneless</i> K
Period 1					
Salaries	165,000	66,000	54,000	45,000	–
Balance (3:2:1)	<u>60,000</u>	<u>30,000</u>	<u>20,000</u>	<u>10,000</u>	–
	<u>225,000</u>	<u>96,000</u>	<u>74,000</u>	<u>55,000</u>	
Period 2					
Salaries	217,500	115,000	102,500	–	–
Balance (1:1)	<u>157,500</u>	<u>78,750</u>	<u>78,750</u>	–	–
	<u>375,000</u>	<u>193,750</u>	<u>181,250</u>		
Period 3					
Salaries	256,000	100,000	80,000	–	76,000
Balance (5:3:2)	<u>44,000</u>	<u>22,000</u>	<u>13,200</u>	–	<u>8,800</u>
	<u>300,000</u>	<u>122,000</u>	<u>93,200</u>	–	<u>84,800</u>
<b>Total</b>	<b><u>900,000</u></b>	<b><u>411,750</u></b>	<b><u>348,450</u></b>	<b><u>55,000</u></b>	<b><u>84,800</u></b>

#### (b) COMPUTATION OF INCOME TAX PAYABLE

	<i>Mailess</i> K	<i>Dailess</i> K	<i>Agness</i> K	<i>Eneless</i> K	
Allocated profits	411,750	348,450	55,000	84,800	
Employment income (W)				<u>306,040</u>	(W)
				390,840	
Less tax-free income	<u>(39,600)</u>	<u>(39,600)</u>	<u>(39,600)</u>	<u>(39,600)</u>	<u>52 22</u>
Taxable income	<u>372,150</u>	<u>308,850</u>	<u>15,400</u>	<u>351,240</u>	
Tax liability					
Next K9,600 @ 25%	2,400	2,400	2,400	2,400	
Next K25,200 @ 30%	7,560	7,560		7,560	
K5,800 x30%			1,740		
K337,350/274,050 × 37.5%	126,506	102,769	–	–	
K316,440 @ 37.5%	–	–	–	<u>118,665</u>	
Total tax liability/payable	<u>136,466</u>	<u>112,729</u>	<u>4,140</u>	<u>128,625</u>	

## WORKING

	K	K
Salary (K108,000 x 8/12)		72,000
Transport allowance(K500 x 8)		4,000
Lunch allowance (K600 x 8)		4,800
Housing allowance (5% x 72,000)		3,600
Life insurance(K700 x 8)		5,600
Medical scheme (K200 x 8)		1,600
Accrued service bonus		216,000
Accrued leave pay		<u>4,500</u>
Total income		312,100
Less allowable deductions		
Professional subscription	3,060	
Donation to approved public benefit organisation	<u>3,000</u>	
		<u>(6,060)</u>
Taxable emoluments		<u>306,040</u>

## **SOLUTION TWO**

### **(a) ENERGETIC PLC**

#### **CAPITAL ALLOWANCES FOR THE TAX YEAR 2018.**

	<b>Cost/ITV</b>	<b>Capital allowances</b>
	K	K
<b><u>Factory</u></b>		
Cost	1,230,000	
Initial allowance @10%	(123,000)	123,000
Investment allowance @10%	-	123,000
Wear & Tear allowance @5%	<u>(61,500)</u>	61,500
ITV c/f	<u>1,045,000</u>	
<b><u>Manufacturing plant</u></b>		
ITV b/f	25,000	
Disposal proceeds	<u>(30,000)</u>	
Balancing charge	<u>(5,000)</u>	(5,000)
<b><u>General machinery</u></b>		
ITV b/f	90,000	
Wear & Tear allowance @25%	<u>(45,000)</u>	45,000
ITV c/f	<u>45,000</u>	
<b><u>Toyota Allion Car</u></b>		
ITV b/f	54,000	
Wear & Tear allowance @20%	<u>(18,000)</u>	18,000
ITV c/f	<u>36,000</u>	
<b><u>Manufacturing Equipment</u></b>		
Cost	250,000	
Wear & Tear allowance @50%	<u>(125,000)</u>	125,000
ITV c/f	<u>125,000</u>	
<b><u>Light Truck</u></b>		
Cost	140,000	
Wear & Tear allowance @25%	<u>(35,000)</u>	35,000
ITV c/f	<u>105,000</u>	
<b><u>Toyota Prado</u></b>		
Cost	125,000	
Wear & Tear allowance @20%	<u>(25,000)</u>	25,000
ITV c/f	<u>100,000</u>	
Total capital allowances		<u>550,500</u>

The cost of the administrative offices is less than 10% of the qualifying expenditure; therefore it should be classified as an industrial building.

### **(b) ENERGETIC PLC**

#### **ADJUSTED BUSINESS PROFIT FOR THE TAX YEAR 2018**

	K	K
Net profit before tax		456,310
Add:		
Depreciation	224,700	
Loss on sale of plant	12,350	
Entertaining customers	62,780	
Penalty for late payment of provisional tax	20,400	
Increase in general provision	11,780	
Interest on debentures	25,000	
Interest on loan notes	31,300	
Share issue costs	30,000	
Personal-to-holder cars:		
Toyota Allion	30,000	
Toyota Prado	<u>40,000</u>	
		<u>488,310</u>
		944,620
Less:		
Rental income	72,000	
Royalties	76,500	
Dividends	51,500	
Bank interest	50,000	
Loan to former employee previously written off now recovered	21,860	
Capital allowances (a)	<u>550,500</u>	
		<u>(822,360)</u>
Adjusted business profit		<u><u>122,260</u></u>

**(c) ENERGETIC PLC**

**INCOME TAX PAYABLE FOR THE TAX YEAR 2018**

	K
Adjusted business profit	122,260
Investment income	
Royalties	76,500
Bank interest	<u>50,000</u>
Total taxable income	<u>248,760</u>
Income tax @28%	69,653
Less	
Provision income tax	(38,128)
WHT- Royalties: K76,500 x 15%	(11,475)
Bank interest: K50,000 x15%	<u>(7,500)</u>
Income tax payable	<u><u>12,550</u></u>

Energetic plc will be entitled to a 2% discount for listing its shares on the Lusaka Stock Exchange and a further 5% for issuing more than 1/3 of its shares to indigenous Zambians.

### **SOLUTION THREE**

- (a) The sources of tax law include:
- (1) **Statutes or Acts of parliament** - Statutes are laws enacted by parliament. Statutes make it legal for taxes to be levied.
  - (2) **Statutory instruments** - These are form of delegated registration issued by a government minister. They have the same effect as statutes.
  - (3) **Case Law** – Judges use past decided cases in taxation in the interpretation of particular statutes which relates to the specific circumstances of a case.
  - (4) **Practice notes** – These are issued by the Zambia Revenue Authority to indicate the ZRA's interpretation of statute. They have no legal effect.
- (b) A company is resident in Zambia if either it was incorporated or formed in Zambia; or the effective control and management of the person's business or affairs are exercised in Zambia.

#### **EXP LTD**

EXP Ltd is resident in the South Africa, where it was incorporated. The place where the Annual General Meeting is held is irrelevant. Effective management and control in another country only exists if the board of directors meets in a place for the purposes of decision making.

#### **RCL LTD**

RCL is resident in Zambia as this is where the company was incorporated. This is in spite of the fact that the board of directors holds quarterly meetings in Nigeria, where the company has branches.

#### **DRG Ltd**

DRG Ltd is resident in Zambia as effective management and control is exercised from Zambia.

- (c) (i) **VAT REGISTRATION REQUIREMENTS**

VAT registration is required when a business makes taxable supplies in the following circumstances:

VAT registration is compulsory once the VAT exclusive turnover from taxable supplies of a business exceed K800,000 for any period of twelve months, or K200,000 for any period of three months.

Once this happens, a business has an obligation to inform ZRA within 30 days of the end of the month in which the registration limit is exceeded. Registration will become effective on the first day of the following month.

A business which expects the turnover of taxable supplies, excluding VAT, for the following twelve months to exceed K800,000 or for the following three months to exceed K200,000 must register for VAT immediately under this

same rule. In such cases, notification is required by the end of that 30 day period with registration being effective from the start of that period.

A trader who makes taxable supplies whose VAT exclusive taxable turnover is below the registration threshold can also register for VAT voluntarily.

- (ii) The sales will exceed the annual VAT registration limit of K800,000 in July 2018, when the cumulative sales from January 2018 will be K987,000 (K51,000 + K81,000 + K111,000 + K141,000 + K171,000 + K201,000 +231,000)

She will therefore have to inform ZRA by the end of August 2018 and her VAT registration will be effective as of 1 September 2018, or from an earlier agreed date.

Alternatively, the quarterly registration threshold of K200,000 will be exceeded in March 2018, when cumulative sales for a period of 3 months will be K243,000 (K51,000 + K111,000 + K141,000). In this case the ZRA will have to be informed by the end of April 2018.

Late registration for VAT attracts automatic penalties consisting of 10,000 fee units for each standard tax period the supplier remains unregistered after meeting the registration threshold.

- (iii) Karen will have the following obligations in relation to VAT once registered:
  - (1) She will be required to display the VAT registration certificates at her business premises.
  - (2) She will be required to issue tax invoices in respect of the supplies she makes.
  - (3) She will be required to complete and submit VAT returns, and pay VAT on the due dates.
  - (4) Karen must maintain VAT records for a minimum period of at least six years and allow VAT inspectors access to the VAT records at any time.
  - (5) Karen will have to inform the Zambia Revenue Authority of any change in the legal circumstances of her business that will warrant a cancellation of the VAT registration.
  
- (iv) 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 FOUR**

(a) (i) COMPUTATION OF VDP

Cost	\$10,000
Insurance	\$1,200
Freight	\$2,200
Clearing & Forwarding	<u>\$600</u>
	\$14,000
	X K9.50
VDP	<u>K133,000</u>

COMPUTATION OF IMPORT TAXES

	K	K
VDP	133,000	
Customs Duty @15%	<u>19,950</u>	19,950
	152,950	
Excise Duty @0%	<u>0</u>	0
	152,950	
Import VAT @ 16%	<u>24,472</u>	<u>24,472</u>
Total Cost	<u>177,422</u>	
Total import duties		<u>44,422</u>

(ii) COMPUTATION OF VDP

	K
Cost	\$2,000
Insurance	\$200
Freight	\$500
Clearing & Forwarding	<u>\$300</u>
	\$3,000
	X K9.50
VDP	<u>K28,500</u>

COMPUTATION OF IMPORT TAXES

	K	K
VDP	28,500	
Customs Duty @30%	<u>8,550</u>	8,550
	37,050	
Excise duty @ 20%	<u>7,410</u>	7,410
	44,460	
Import VAT @ 16%	<u>7,114</u>	<u>7,114</u>
Total Cost	<u>51,574</u>	
Total import duties		<u>23,074</u>

- (iii) Kalenda is an individual carrying on businesses for the transportation of passengers for a reward and as such will be required to pay presumptive taxes for transporters.

Kalenda will not be required to pay income tax on the profit generated by the transportation business and therefore, there will be no tax implications in relation to the drivers' salaries, bus running expenses, and other expenses he will incur wholly and exclusively for purposes of the transportation business, because it will not be necessary to compute taxable profits for the purposes of determining the amount of presumptive tax payable. Neither will capital allowances be claimable on the cost of the Rosa bus and the Toyota corolla.

The amount of presumptive taxes payable will be fixed amounts based on the seating capacity of each motor vehicle used in the transportation business and will be computed as follows:

#### **Rosa bus**

The seating capacity of the bus is 26 passengers and the daily tax payable for each bus is K10. The bus will operate for 6 days per week for 4 weeks per month giving 24 days per month starting in March. The total presumptive tax payable on the bus in the tax year 2018 will therefore be:

$$K14.80 \times 24 \text{ days} \times 10 \text{ months} = K3,552.$$

#### **Toyota Corolla**

The seating capacity of the car is 4 passengers and the daily tax payable for the car is K1.60. The car will also operate for 6 days per week for 4 weeks per month giving 24 days per month starting in March 2018. The total presumptive tax payable on the car in the tax year 2018 will therefore be:

$$K2.50 \times 24 \text{ days} \times 10 \text{ months} = K600.$$

- (b) (i) The annual turnover of the business will be K720,000 ( K60,000 × 12) which is below K800,000. Therefore, XLT Ltd will be assessed under the turnover tax system as opposed to normal income tax on the business profits.

The expenditure to be incurred wholly and exclusively for business purposes will not be deductible from the monthly turnover for the purposes of computing the monthly turnover tax.

This means that the employees' salaries, rental for business premises, insurance and advertising expenses will not be deductible and neither will a personal to holder motor car benefit be assessed on the company with

respect to the motor car which will be provided to the managing director on a personal to holder basis.

- (ii) Capital allowances on the office equipment, fixtures & fittings and the motor car will not be deductible from turnover when computing turnover tax. However, these assets will notionally be written down for the purposes of calculating their income tax values to carry forward to the following year.

The amount of notional allowances and the income tax values of the assets at the end of the tax year 2018 will be as follows:

Asset	<i>Value</i>	<i>Notional allowance</i>
	K	K
<u>Office equipment</u>		
Cost	70,000	
Wear & tear allowance (K70,000 x 25%)	<u>(17,500)</u>	17,500
ITV c/f	<u>52,500</u>	
<u>Fixtures and fittings</u>		
Cost	35,000	
Wear & tear allowance (K35,000 x 25%)	<u>(8,750)</u>	8,750
ITV c/f	<u>26,250</u>	
<u>Toyota Allion</u>		
Cost	130,000	
Wear and tear allowance	<u>(26,000)</u>	<u>26,000</u>
	<u>104,000</u>	
Total notional allowances		<u><u>52,250</u></u>

- (iii) COMPUTATION OF MONTHLY TURNOVER TAX PAYABLE

Since monthly turnover is expected to be K60,000, the turnover tax payable each month will be calculated as follows:

	K
Fixed Presumptive amount	1,025
Tax on turnover exceeding K20,800 (K60,000 – K20,800) x 3%	<u>1,176</u>
Monthly turnover tax payable	<u><u>2,201</u></u>

The total amount of turnover tax the company will pay in the tax year 2018 will therefore amount to K26,412 (K2,201 x 12)

The amount of turnover tax will be payable by the 14<sup>th</sup> day following the end of each month throughout the tax year 2018

## **SOLUTION FIVE**

(a) (i) Importance of ethics

1. Professional codes of ethics for the accountancy profession are designed to guide the individual behaviour of professional accountants.
2. Accountants require such an ethical code because they hold positions of trust, and people rely on them and their expertise.
3. The public interest is the key reason why accountancy bodies produce ethical guidance. A professional accountant must accept the responsibility to act in the public interest.

The public interest is considered to be the collective wellbeing of the community of people and institutions the professional accountant serves, including clients, lenders, governments, employers, employees, investors, the business and financial community and others who rely on the work of professional accountants.

(ii) **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 that 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.

(b) **Sale of commercial plot**

The realised value of land is the higher of its open market valuation and the agreed contract price. The realised value of the commercial plot will therefore be K160,000 as this is higher than the agreed contract price. Incidental costs of sale such as estate agents fees are not deductible for the purposes of determining the realised value.

Property transfer tax arising was:

$$K160,000 \times 5\% = K8,000$$

**Transfer of house**

Property transfer tax will arise on transfer of the residential plot to Dabwiso who is not Kaonga's immediate family member. The realised value of the house will be taken as its open market value and property transfer tax arising is:

$$K250,000 \times 5\% = K12,500$$

**Letting of house**

Letting out of property does not qualify as a transfer of property for property transfer tax purposes and therefore no property tax will arise on this transaction.

**Shares in FTK plc**

Shares in a company that is listed on the Lusaka Stock Exchange is not chargeable property under the Property Transfer Act and therefore, no property transfer tax will arise on the transfer of the shares in FTK plc.

**Shares in Serena Ltd**

Property transfer tax will arise on the sale of shares in Serena Ltd because the company is not listed on the Lusaka Stock Exchange, the realised value of the shares being the higher of the nominal value of the shares and their open market valuation. The amount of PTT arising is:

$$K120,000 \times 5\% = K6,000$$

**Farm land**

Property transfer tax is payable by the transferor of the property and not the transferee. Therefore, no property transfer will arise the acquisition of the farm land being the transferee.

(c) (i) **COMPUTATION OF FINAL TAXABLE PROFIT FROM FARMING**

	K	K
Taxable profit before capital allowances		830,000
<i>Less capital allowances:</i>		
Tractor (K80,000 x 100%)	80,000	
Delivery van (K120,000 x 25%)	30,000	
Banana Plantation (K40,000 x 10%)	4,000	
Dwelling house (restricted to K20,000 each)	40,000	

Storage buildings (K160,000 x 100%)	<u>160,000</u>	
		<u>(314,000)</u>
Taxable profit before loss relief		<u>516,000</u>

(ii) INCOME TAX TREATMENT OF RESULTS FROM LETTING OF PROPERTY

The gross rental income arising in respect of the tax year 2018 of K124,000, will be subjected to withholding tax at the rate of 10% before deducting expenditure incurred wholly and exclusively for letting purposes of K150,000.

The amount of the withholding tax will be K12,400 (K124,000 x 10%). This WHT will be a final tax and as such Satela will not be assessed to any further tax in respect of this income.

Consequently, no loss relief will be available in respect of the loss incurred by Satela from letting of the property because there is no income tax on such income. Withholding Tax deducted at source is the final tax.

(iii) SATELA  
PERSONAL INCOME TAX COMPUTATION FOR THE TAX YEAR 2018

	Total K	Income from Retail K	Farming income K
Business profits from retail	920,000	920,000	Nil
Farming profits (b)	<u>516,000</u>	<u>Nil</u>	<u>516,000</u>
	1,436,000	920,000	516,000
Less tax free income	<u>(39,600)</u>	<u>(39,600)</u>	<u>Nil</u>
	<u>1,396,400</u>	<u>880,400</u>	<u>516,000</u>
<u>Income tax on non- farming income</u>			
K9,600 x 25%		2,400	
K25,200 x 30%		7,560	
K845,600 x 37.5%		<u>317,100</u>	
		327,060	
<u>Tax on farming profits</u> (K516,000 x 10%)		<u>51,600</u>	
		378,660	
Provisional income tax		<u>(303,810)</u>	
Final income tax payable		<u>74,850</u>	

**END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL TWO

---

DA: 11 PRINCIPLES OF AUDITING

---

THURSDAY 13 DECEMBER 2018

---

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

---

**INSTRUCTIONS TO CANDIDATES**

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

## **SECTION A- TWO COMPULSORY QUESTIONS**

**Both Questions in this Section are compulsory and must be attempted.**

### **QUESTION ONE**

You are employed at Milambo Chartered Accountants and you have been assigned to audit the financial statements of FMG Ltd, a new audit client of the firm.

FMG Ltd is a Zambian resident company engaged in the manufacturing industry. The company produces high quality detergents (liquid, pastes and powders), soaps, sweets, confectionery and processed foods. The audit is for the financial statements for the year ended 31 March 2018. You attended a planning meeting together with the engagement partner with the management of FMG Ltd and are now reviewing the meeting notes in order to produce the audit strategy and the audit plan.

Revenue for the year is forecast to be K45 million. During the year ended 31 March 2018, the company spent K15.5 million on developing a range of new products. These include a new brand of liquid soaps and detergent pastes designed to have a superior washing power and a new line of energy drinks. The liquid soaps and detergent pastes are in the early stages of development and have cost K10 million of the total expenditure. The development of the new energy drink has reached an advanced stage and is now nearing completion and accounts for the remaining K5.5 million of the total expenditure. The directors have confirmed that all projects are likely to be successful and so have capitalised the whole expenditure incurred of K15.5 million in the financial statements. Commercial production of the products will commence as soon as development of the products is completed.

To increase its manufacturing capacity, the company refurbished and expanded its main manufacturing plant at a cost of K75 million. The expenditure involved updating, repairing and replacing a significant amount of the machinery used in the production process and was completed in December 2017. The refurbishment was financed by a bank loan which is repayable in monthly instalments over a period of 5 years. The bank loan has covenants attached to it which are largely profit related measures and the breach of which gives the bank the option to make the remaining loan balance repayable immediately.

Following the expansion of the company's manufacturing capacity, production volumes have increased. Consequently the company has high volumes of work in progress at the year end. The Chief Executive Officer informed the audit team that there was a problem earlier during the year in the mixing of ingredients used in the production of its popular lolly pop sweets known as "Sweet Lollies" within the production process. This resulted in a large quantity of the sweets tasting different. A number of customers who bought the sweets complained of food poisoning. These customers have commenced legal action against FMG Ltd demanding a total of K2.5m in compensation. No further sales of these sweets have been made since July 2017, when the problem came to light. The unsold sweets have been valued at their production cost of K1.5m at the year end.

FMG has a policy of revaluing its land and buildings and has accordingly updated the valuations of all land and buildings to a valuation of K12 million at the year end, with K4 million of this amount attributed to land and the remaining K8 million to the buildings.



In December 2017, the Finance Director resigned from his position and has since been replaced by the CEO's son who is a recent graduate of the ZiCA professional qualification.

**Required:**

- (a) Explain the purpose of the :
  - (i) Overall audit strategy (2 marks)
  - (ii) Audit plan (2 marks)
- (b) Explain why it will be important for Milambo Chartered Accountants to assess risks at the planning stage of the audit of FMG Ltd. (4 marks)
- (c) Using the information provided:
  - (i) Identify and explain six (6) audit risks in the audit of the financial statements of FMG Ltd. (6 marks)
  - (ii) Explain your audit response to each of the six (6) audit risks you have identified in (c) (i) above. (6 marks)
- (d) Describe the substantive procedures your firm should perform in relation to the valuation of land and buildings in the financial statements of FMG Ltd at the year-end. (5 marks)

**[Total: 25 Marks]**

## **QUESTION TWO**

Your firm is the auditor of Mukamba Trading Ltd. Mukamba Trading Ltd imports electrical equipment and furniture, from China, Dubai and South Africa and sells them to the general public through its outlets in Lusaka, Livingstone and on the Copperbelt. You have obtained the following information relating to the sales system and inventory valuation in relation to the audit of the company's financial statements for the year ended 31 March 2018.

### **The Sales system**

Mukamba Trading Ltd uses an integrated Electronic Point of Sale (EPOS) system for the recording of all sales of goods in all the retail outlets. The EPOS system of each retail outlet is linked to the central database system at the company's central warehouse and head office in Lusaka through a wide area network. The system is fully integrated with the purchase and inventory systems.

All merchandise is bar-coded. At the till point, sales are conducted by scanning the barcode or entering the product codes. At the end of each sale, a sales receipt is generated and given to the customer. As sales are made, inventory records are updated. Re-order recommendations are produced when the stock level falls below a pre-set minimum threshold.

Sales are both on cash and credit. Credits sales are by means of hire purchase agreements signed with customers and allow customers to pay for the goods bought in a period of up to thirty six months. The company provides free delivery services to customers for big items of furniture where necessary.

### **Inventory Valuation**

A physical inventory count was carried out at the year-end at all the retail outlets of the company, and your firm is satisfied that the inventory was counted correctly and there were no cut-off errors.

The inventory has been divided into the following categories:

- (1) Electrical equipment comprising televisions, digital satellite decoders, mobile phones, video cameras and audio equipment, washing machines and refrigerators.
- (2) Furniture comprising household and office furniture.

The directors of Mukamba Ltd are aware that IAS 2 *Inventories* requires inventory to be valued at the lower of cost and net realisable value (NRV). They have established that the cost of all the inventory lines is lower than the net realisable value and have therefore valued the inventory at cost. The cost of each inventory line was determined by deducting the company's normal gross profit margin for that line from the selling price of the items.

### **Required:**

- (a) Describe four (4) controls you would expect to find over credit sales at Mukamba Trading Ltd. (4 marks)

- (b) State five (5) general controls you would expect to find over cash sales designed to help prevent theft of cash by employees. (5 marks)
- (c) Explain three (3) tests of control you will perform over credit sales and three (3) tests of control you will perform over cash sales. (6 marks)
- (d) In relation to the audit of inventory in financial statements of Mukamba Trading for the year ended 31 March 2018:
- (i) Define net realisable value and describe the audit procedures your firm should perform to confirm the appropriateness of the valuation of the net realisable value of the inventory lines at Mukamba Trading Ltd. (5 marks)
- (ii) Describe the audit procedures your firm should perform to confirm the appropriateness of the valuation of the cost of the inventory lines at Mukamba Trading Ltd (5 marks)

**[Total: 25 Marks]**

## **SECTION B**

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

### **QUESTION THREE**

You are employed at KMC Chartered Accountants. Your firm is planning the audit of More Money Credit Finance (MMCF) Ltd a new audit client of your firm. MMCF Ltd is a financial institution engaged in the provision of loans and financial advice to individuals and companies. The audit partner has informed you that in agreeing the terms of an audit engagement with an audit client such as MMCF Ltd, it is important for the auditor to establish whether the preconditions for an audit are present in accordance with ISA 210 *Agreeing the terms of audit engagements*.

You have obtained the following information relating:

MMCF Ltd is planning to list its shares on the stock exchange in the near future. Company management has been advised that it will be important for the company to comply with corporate governance provisions as it plans for the stock exchange listing.

The Chief Executive Officer of MMCF Ltd is Derrick Mukosha who is also the chairman of the board. The board of directors comprises five members consisting of four executive directors and one non-executive director. Mukosha is responsible for identifying and recruiting directors of the right calibre and expertise and sets the remuneration of each of the directors which he negotiates personally with each director. All the directors were specifically head hunted by Mukosha because they are self-motivated and innovative, high flyers. The directors have made significant contributions to the success of the company which has seen the company rapidly expand within a few years to establish branches in all the ten provinces of Zambia.

In view of the company's success in the recent past, no formal targets are set for the board and no review of its policies is carried out as the success of company's current strategies and policies is clearly evident to the shareholders of the company. The company has an internal audit department which reports to the Finance Director. The board of MMCF Ltd does not have an audit committee. Mukosha believes that such sub-committees of the board bring inertia to board decision making, interferes with the work of executive directors and increases overall business costs and are therefore, clearly not in the interest of the shareholders of the company.

In an initial meeting held by your firm with the directors of MMCF Ltd, Mukosha proposed that your firm's audit fee for this assignment should be based on a percentage of the company's final audited pre-tax profit. Your firm's partners are excited about this proposal as they believe it will increase the overall audit fee for the firm. Mukosha additionally offered to extend loan facilities to all of the employees of the audit firm at very minimal interest rates and wishes your firm to enter into an agreement with the company to help advertise MMCF Ltd.'s services to all of KMC Chartered Accountants' existing and future clients for which the firm will be paid a commission based on the income generated from the additional business generated for MMCF Ltd.

Your firm has appointed Penjani Tembo as the engagement partner for this assignment because he owns 10% of the ordinary shares in MMCF Ltd and therefore already has some knowledge about the company's business strategies and prospects which will be valuable in performing the audit. Dalitso Mwale has been appointed the audit manager. Dalitso was employed as a financial accountant at MMCF Ltd and resigned his position from the company three months ago to join the audit firm.

Mary Mphande, the audit senior on this assignment is engaged to marry Joseph Mulenga the Finance Director of MMCF Ltd in three months' time.

**Required:**

- (a) In relation to ISA 210 *Agreeing the terms of audit engagements*:
- (i) Explain what is meant by *'Preconditions for an audit'*. (2 marks)
  - (ii) Describe the process the auditor should undertake to assess whether the *Preconditions for an audit* are present. (3 marks)
- (b) In respect of the corporate governance of MMCF Ltd:
- (i) Identify and explain five (5) corporate governance weaknesses. (5 marks)
  - (ii) Explain how to address each of the five (5) weaknesses you have identified. (5 marks)
- (c) (i) Explain five (5) ethical threats which may affect the independence of KMC Chartered Accountants in the audit of MMCF Ltd and; (5 marks)
- (ii) For each of the five (5) threats explain how it might be reduced to an acceptable level. (5 marks)

**[Total: 25 Marks]**

## **QUESTION FOUR**

Home Clothing Stores (HCS) Ltd operates a chain of retail shops selling clothing, textile footwear, homeware and communication products through its retail outlets which are located across the country. Each store is managed by stores staff comprising sales assistants and till operators (cashiers). The company uses an integrated computerised accounting system which links the IT systems at each outlet to head office. Senior management of HCS Ltd has noticed a marked increase in levels of cash and inventory discrepancies, and they suspect that employees have been stealing cash and stock from the retail outlets. They are keen to prevent this from reoccurring and are considering establishing an internal audit department to undertake fraud investigations.

Your firm is the auditor of HCS Ltd for the financial year ended 31 March 2018. During a planning meeting with the audit team, the engagement partner emphasised the importance of exercising professional scepticism throughout the audit given the high risk of misstatement due to the suspected fraud and the need to prepare appropriate audit documentation to record the audit work that will be undertaken during the audit of the financial statements of the company.

### **Required:**

- (a) Explain the factors to be taken into account by an organisation when assessing the need for internal audit. (5 marks)
- (b) Explain how the proposed internal audit department of HCS Ltd could assist in the prevention and detection of fraud and error. (3 marks)
- (c) Describe any additional five (5) functions, other than fraud investigations, the directors of HCS Ltd could ask the internal audit department to undertake. (5 marks)
- (d) Explain the reasons why it will be important for your firm to prepare appropriate audit documentation for the audit work that will be performed on the financial statements of HCS Ltd. (6 marks)
- (e) Explain the purpose of six (6) items that should be included on every working paper that your firm would prepare during the audit of the financial statements of HSC Ltd for it to meet the criteria of a good working paper. (6 marks)

**[Total: 25 Marks]**

## **QUESTION FIVE**

- (a) Explain the meaning of the following terms in the context of audit reporting.
- (i) Misstatement (2 marks)
  - (ii) Pervasive (3 marks)
- (b) Your firm is the auditor of Dexel Plc. The firm is finalising the audit of Dexel Plc for the year ended 31 March 2018. Your firm plans to complete the audit within April 2018 and sign the report on 30 April 2018. The company's financial reporting timetable shows that the financial statements will be issued to the shareholders on 31 May 2018.
- (i) State your firm's responsibilities for events occurring up to the 30 April 2018 and describe any three (3) audit procedures your firm should perform in relation to these events. (4 marks)
  - (ii) Describe the nature of your firm's responsibilities for any facts discovered between 1 May 2018 and 31 May 2018 and for those discovered after 31 May 2018. (8 marks)
- (c) You are finalising the audit of Yuka plc for the year ended 31 December 2017. The audit is almost complete and the financial statements are due to be signed shortly.
- (i) In January 2018, the company's computerised sales ledger and all available back up files were corrupted. The financial statements for the year ended 31 December 2017 were prepared and finalised before this happened and show revenue of K27.9 million, receivables of K5.2 million and profit before tax of K3.1m. Your firm has not been able to access the sales ledger to undertake detailed testing of the above revenue and year-end receivables figures. (4 marks)
  - (ii) A major supplier has filed a lawsuit alleging a breach of contract by Yuka plc. This case is ongoing and will not be resolved prior to the audit report being signed. The matter is fully explained in the notes to the financial statements, but no provision has been made for the legal costs or compensation payable, as it is not possible to determine with reasonable accuracy the amounts, if any, which may become payable. The directors have received legal advice which reliably indicates that the claim can be successfully defended. (4 marks)

### **Required:**

Discuss each of the above issues and describe the impact on the audit report if the issues remain unresolved. **[Total: 25 Marks]**

**END OF PAPER**

## **DA 11: PRINCIPLES OF AUDITING – SOLUTIONS**

### **SOLUTION ONE**

(a) (i) **The overall audit strategy**

The overall audit strategy sets the scope, timing and direction of the audit. It includes the characteristics of the engagement, reporting objectives, results of preliminary engagement activities, and enables the auditor to determine the nature, timing and extent of any resources necessary to perform the audit.

The audit strategy is used to guide the development of the audit plan.

(ii) **The Audit plan**

The audit plan contains specific descriptions of:

- (1) The nature, timing and extent of risk assessment procedures.
- (2) the nature, timing and extent of further audit procedures, including:

- what audit procedures are to be carried out
- who should do them
- how much work should be done (sample sizes, etc.)
- when the work should be done (interim vs. final).

- (3) any other procedures necessary to conform to ISA's.

(b) **Importance for Milambo Chartered Accountants of assessing risks at the planning stage**

It will be important for Milambo Chartered Accountants to carry out this risk assessment at the planning stage of the audit is required in ISA 315 for the following reasons:

- (1) It will help the firm gain an understanding of the FMG Ltd for audit purposes
- (2) It helps the firm focus on the most important areas of the financial statements of FMG Ltd (where material misstatements are more likely), therefore increasing efficiency in the performance of the audit.
- (3) The risk assessment will form the basis of the firm developing audit strategy and the more detailed audit plan
- (4) Once the risks have been assessed, audit team members of sufficient skill and experience can be allocated to maximise the chance of those risks being addressed.



(c) **Audit Risks and responses**

<b>(i) Audit Risk</b>	<b>(ii) Audit response</b>
<p>(1) FMG Ltd new client</p> <ul style="list-style-type: none"> <li>➤ There is increased detection risk due to the fact that FMG Ltd is a new client.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ensure that the audit team is made up of suitably experienced staff.</li> <li>➤ Ensure that sufficient time is allocated to obtain an understanding of FMG Ltd's business and assess the entity's risks of material misstatement</li> </ul>
<p>(2) Capitalised Development Expenditure</p> <ul style="list-style-type: none"> <li>➤ The directors have capitalised K15.5 million of development expenditure incurred.</li> <li>➤ This amount should only be capitalised if the related product can generate future profits as set out in IAS 38 <i>Intangible Assets</i>.</li> <li>➤ There is a risk that some of this expenditure does not meet the criteria. This will mean assets and profits are overstated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ An analysis showing developments costs in relation to each product should be obtained and reviewed.</li> <li>➤ Testing should be carried out to ensure the technical and commercial feasibility of each product and where it cannot be proven that future economic benefits will result from the product developed, the related costs should be expensed.</li> </ul>
<p>(3) Refurbishment of manufacturing plant.</p> <ul style="list-style-type: none"> <li>➤ There is a risk that the K75m spent on refurbishments may have been incorrectly analysed between non-current assets and repairs and therefore non-current assets and expenses misstated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Obtain and review an analysis of the costs, tracing the expenditure to invoices and other supporting documents to establish the nature of the expenditure.</li> <li>➤ Then accounting entries should be reviewed to ensure revenue expenditure has been charged to the statement of profit or loss and capital expenditure is included in non-current assets</li> </ul>

<p>(4) Bank loan</p> <ul style="list-style-type: none"> <li>➤ This loan needs to be correctly split between current and non-current liabilities at the year-end in order to ensure correct disclosure.</li> <li>➤ Additionally the level of debt has increased, therefore there should be additional finance costs. There is a risk that this has been omitted from the statement of profit or loss, leading to understated finance costs and overstated profit.</li> <li>➤ The loan has covenants attached to the level of reported profits. If this is breached, then the loan would be instantly repayable and would be classified as a current liability.</li> <li>➤ If the company does not have sufficient cash flow to meet this loan repayment, then there could be going concern implications.</li> <li>➤ In addition, there is a risk of manipulation of profit to ensure that covenants are met. Use professional scepticism throughout the audit and look out for window dressing and amounts involving management judgement</li> </ul>	<ul style="list-style-type: none"> <li>➤ During the audit, the audit team will need to confirm that the loan finance was received. In addition, the split between current and non-current liabilities and the disclosures for this loan should be reviewed in detail to ensure compliance with relevant accounting standards.</li> <li>➤ The finance costs should be recalculated and any increase agreed to the loan documentation for confirmation of interest rates and cashbook and bank statements to confirm the amount was paid and is not therefore a year-end payable.</li> <li>➤ Review the covenant calculations prepared by FMG Ltd and identify whether any defaults have occurred; if so, determine the effect on the company.</li> <li>➤ The audit team should maintain professional scepticism and be alert to the risk that profit has been overstated to ensure compliance with the covenant.</li> </ul>
<p>(5) Significant levels of WIP at year end</p> <ul style="list-style-type: none"> <li>➤ The company has significant levels of work in progress, at the yearend as result of the increase in production volumes which is likely to constitute a material balance.</li> <li>➤ There is a risk that audit team may not be sufficiently qualified to assess and confirm the quantity and valuation of work in</li> </ul>	<ul style="list-style-type: none"> <li>➤ The audit firm should assess its ability to gain the required level of evidence and if it is not sufficient, the firm should approach an independent expert to value the work in progress.</li> <li>➤ This should be arranged after obtaining consent from the client's management and in time for the year-end inventory count</li> </ul>

<p>progress at the year end. Therefore they may be unable to gain sufficient evidence over a material area of the financial statements.</p>	
<p>(6) Defective inventory of sweets</p> <ul style="list-style-type: none"> <li>➤ A large quantity of sweets held in inventory at the year-end has been damaged in the production process and no adjustment has been made by management for these.</li> <li>➤ Hence the risk is that this inventory is overvalued and not valued at the lower of cost and net realisable value as per IAS 2</li> </ul>	<ul style="list-style-type: none"> <li>➤ Detailed cost and net realisable value testing to be performed to assess how much of the inventory requires writing down.</li> </ul>
<p>(7) Legal Proceedings</p> <ul style="list-style-type: none"> <li>➤ Provisions or contingent liability disclosures may not be complete, in respect of the legal action brought against the company.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Enquire of the lawyers of FMG Ltd of the assessment of the likely amounts payable of the likely hood of the amounts being payable.</li> <li>➤ With permission of FMG Ltd seek independent legal advise</li> </ul>
<p>(8) Revaluation of land &amp; buildings</p> <ul style="list-style-type: none"> <li>➤ Land and buildings have been revalued as at the year end. The revaluation surplus or deficit is likely to be material. Financial statements may be misstated if this has not properly been computed and consequently, if the revaluation is not carried out and accounted for in accordance with IAS 16 <i>Property, Plant and Equipment</i>, non-current assets may be under or over-valued.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Review the reasonableness of the valuation and assess the competence, experience and independence of the individual performing the valuation.</li> <li>➤ The surplus/deficit should be recalculated to ensure that land and buildings are included at a reasonable amount in the statement of financial position.</li> <li>➤ Review the disclosures of the revaluation in the financial statements for compliance with IAS 16.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Sample sizes and the level of substantive procedures may need to</li> </ul>

<p>(9) Recruitment of a recent ZiCA CA graduate as Finance Director</p> <ul style="list-style-type: none"> <li>➤ The new financial may not possess sufficient experience of in managing, financial systems and preparation of financial statements given that he is a recent graduate and he lacks experience on FMG Ltd's systems and accounting records</li> <li>➤ This means that he is more likely to produce financial statements with misstatements or incorrect disclosures.</li> </ul>	<p>be increased in light of the newly recruited inexperienced finance director.</p> <ul style="list-style-type: none"> <li>➤ The audit team should remain alert to the possibility of errors throughout the audit.</li> </ul>
--	---

(d) **Substantive procedures for land and buildings**

- (1) Obtain a schedule of land and buildings revalued this year and cast to confirm completeness and accuracy of the revaluation adjustment.
- (2) On a sample basis, agree the revalued amounts to the valuation statement provided by the valuer.
- (3) Agree the revalued amounts for these assets are included correctly in the non-current assets register.
- (4) Recalculate the total revaluation adjustment and agree correctly recorded in the revaluation surplus.
- (5) Agree the initial cost for the warehouse addition to supporting documentation such as invoices to confirm cost.
- (6) Confirm through a review of the title deeds that the warehouse is owned by FMG Ltd.
- (7) Recalculate the depreciation charge for the year to ensure that the depreciation was based on the correct valuation
- (8) Review the financial statements disclosures of the revaluation to ensure they comply with IAS

## **SOLUTION TWO**

### **(a) Controls over credit sales**

- (1) Authorisation of credit policy and credit terms for all credit sales to customers by senior personnel
- (2) Credit checks and credit references are obtained for all new customers.
- (3) Credit limits are assigned to all credit customers
- (4) Orders for sales on credit must be approved by appropriately senior personnel.
- (5) Credit limits are regularly reviewed and orders from existing customers are not accepted unless credit limits reviewed first.
- (6) Customer accounts promptly updated and accounts statements regularly sent to customers.
- (7) Regular review of customers balances and formal procedures should exist for following up overdue debts which should be highlighted either by the preparation of an aged list of balances or by the preparation of regular customer statements.
- (8) Letters should be sent to customers for collection of overdue debts. A policy should be in place for the institution of legal proceeding where appropriate.
- (9) Controls to ensure accuracy of standing data about customers and to ensure no unauthorised changes are made to the data.

### **(b) Controls over cash sales**

- (1) Cash tills should be arranged such that operators are visible at all times, reinforced by use of CCTV.
- (2) Cash tills should require individual operator identification in order to assist in monitoring operator activity and discrepancies.
- (3) Till operators should not have purses or wallets with them when operating tills.
- (4) Operator lockers should be subject to spot-checks
- (5) Customers should be able to see the price as items are scanned
- (6) All customers should be given a receipt with the till operator's ID

- (7) There must be an end-of-day routine whereby the cashing-up summaries for each till are matched to the cash in the till, unders/overs are logged, and operator performance and accuracy is reviewed.
- (8) There should be appropriate segregation of duties between cash till operation, start-of-day float, refunds, end-of-day totalling and banking.
- (9) Procedures to ensure that the physical cash collected from the tills at the end of the day is kept safe for the next day and banked promptly.
- (10) Cash at the close of each system should be controlled by an independent person in the presence of the cashier

(c) **Tests of controls over credit sales**

- (1) Review a sample of the customer files for processed credit applications to ensure the credit limits are assigned to customers and appear in the sales system.
- (2) With the client's permission enter an order for a fictitious customer account number to confirm that the system does not accept it.
- (3) With the client's permission, attempt to enter a sales order which will take a customer over the agreed credit limit and ensure the order is rejected as expected.
- (4) Review entity's procedures for sending out monthly statements and dealing with Customer queries and complaints.
- (5) Inspect a sample of customer's files for evidence of credit checks and credit references.
- (6) Request for company's authorised credit policy and review authorised credit terms

**Tests of controls over cash sales**

- (1) Observe cash sales procedures in particular that cash tills operators are visible at all times, till operators do not have purses or wallets with them when operating tills, customers are able to see the price as it is rung up, each customer is provided with a till receipt etc.
- (2) Observe the application of segregation of duties over cash till operation, start-of-day float, refunds, end-of-day totalling and banking.
- (3) Confirm prompt banking of daily takings by inspecting a sample of bank deposit slips.
- (4) Test the accuracy of price look up facility in the system, and confirm that it's up to date comparing a sample of the prices of items on the system with the latest authorised price list.

(5) Observe end-of-day cashing for till operators to confirm that cashing-up summaries for each till are matched to the cash in the till, unders/overs are logged, and operator performance and accuracy is reviewed.

- (d) (i) Net realisable value defined as the estimated selling price in the ordinary course of business, less the estimated cost of completion and the estimated costs necessary to make the sale.

In the case of Mukamba trading this will be the actual or estimated selling price less any marketing, selling and distribution expenses. Determining the NRV of inventory involves management judging how much inventory can be sold and at what price, together with determining any costs the company may incur in selling the inventories.

Consequently, the following tests can be performed:

- (1) Confirm the actual selling prices from the latest sales invoice. For items still selling, invoices will be very recent, but for slow-moving and obsolete items the invoiced prices will be out of date and allowance will have to be made for this.
  - (2) Estimate the value of any marketing, selling and distribution expenses using past figures for any expenditure incurred in selling the different line of inventories. Update and review for reasonableness against the most recent accounting records.
  - (3) Discuss with management what selling prices are likely to be where there is little past evidence. Costs incurred in selling will be questioned where these are difficult to estimate and where there are any unusual selling or distribution problems.
- (ii) The method of valuation use by Mukamba L. Trading to determine the cost of the inventory at is permitted by IAS 2, but it is usually applied to large retail businesses which hold high volumes of inventories of low value items, for example supermarket chains. IAS 2 permits the use of this method provided it can be shown that it gives a reasonable approximation of the actual cost of the inventory

The following tests should be performed to ensure that the inventory is the valuation of cost is appropriate:

- (1) Obtain a schedule of the client's calculations of the gross profit margins. Review the mathematical accuracy and consider the reliability of all sources of information used in the calculation.
- (2) Where the normal overall gross margin has been used, check the reasonableness of the figure by comparing it to the monthly management accounts for the year and last year's published accounts.

- (3) Test a sample of items to make sure that gross profit does not vary too much across all items of inventory. This test will compare selling price to purchase price.
- (4) If a weighted average gross margin has been used, check that the weighting is correct in terms of the proportion of each type of product in closing inventory.
- (5) Select a sample of high value lines and check the reasonableness of the gross profit estimate by calculating the gross profit for each of those lines.
  - Sales price will be compared to inventory sheets and to sales prices in the shop at the year end.
  - Cost will be checked by examining a sample of purchase invoices.
  - The weighted average profit margin for the selected lines can then be calculated and compared to the gross margin applied to the whole inventory.
- (6) Overvaluation of slow-moving inventory is possible when the prices of those items are affected by inflation. To confirm this, examine the inventory sheets for any slow-moving items (or ask the management of the company or use own observation).

Compare the value of the inventory at the end of the accounting period to cost according to purchase invoices. If an overvaluation has occurred it should be quantified.

- (7) Check whether any goods were being offered for sale at reduced prices at the year end. If the reduced price is greater than cost, the use of an average gross profit percentage will cause inventory to be undervalued. This undervaluation must be quantified.

If full selling price was used in the calculation then the problem will not arise. Check a sample of inventory items to sales invoices issued around the year end to make sure that the correct price was used in the costing calculation



### **SOLUTION THREE**

(a) (i) **Preconditions for an Audit**

The preconditions for an audit are the use by management of an acceptable financial reporting framework in the preparation of the financial statements and the agreement of management and, where appropriate, those charged with governance to the premise on which an audit is conducted.

(ii) **Process to determine whether Preconditions for an audit are present**

To determine whether the preconditions for an audit are present, the auditor shall do the following:

(1) Determine whether the financial reporting framework is acceptable.

Factors to consider include the nature of the entity, the purpose of the financial statements, the nature of the financial statements, and whether law or regulation prescribes the applicable financial reporting framework.

(2) Obtain management's agreement that it acknowledges and understands its responsibilities for the following.

- Preparing the financial statements in accordance with the applicable financial reporting framework
- Internal control that is necessary to enable the preparation of financial statements which are free from material misstatement
- Providing the auditor with access to all information of which management is aware that is relevant to the preparation of the financial statements, with additional information that the auditor may request, and with unrestricted access to entity staff from whom the auditor determines it necessary to obtain audit evidence

(3) If these preconditions are not present, the auditor shall discuss the matter with management. Unless required by law or regulation to do so, the auditor shall not accept the proposed audit engagement:

- If the auditor has determined that the financial reporting framework to be applied in the preparation of the financial statements is unacceptable; or
- If management agreement of their responsibilities has not been obtained.

(b) **Corporate governance weaknesses and recommendations**

<b>(i) Weaknesses</b>	<b>(ii) Recommendations</b>
<p>(1) Mukosha is both the CEO and the Chairman of the Board of Directors. Corporate governance provisions recommend that there should be a clear division of responsibilities between running the board of directors and running the company's business so that no individual has unfettered powers of decision making</p>	<ul style="list-style-type: none"> <li>➤ The role of CEO should be split from that of the Chairman of the board. An independent non-executive director should be recruited to fill the role of chairman.</li> </ul>
<p>(2) The board is comprised of five executives and only one non-executive directors.</p> <p>This clearly is not an appropriate balance to ensure that board decisions are questioned and ultimately taken in the interests of the shareholders.</p> <p>Corporate governance provision recommends that half of the board should consist of independent NEDs excluding the chair.</p>	<ul style="list-style-type: none"> <li>➤ The company should appoint more non-executive directors so that there is an equal number of executive and non-executive directors to comply with corporate governance provisions which recommends that there should be an appropriate balance of executive and non-executive, to ensure that the board makes the correct objective decisions, which are in the best interest of the stakeholders of the company, and no individual or group of individuals dominates the board's decision-making.</li> </ul>
<p>(3) No formal targets or reviews of board policies and performance carried out. This means that MMCF does not have any means by which to appraise directors' performance and to identify training needs of directors.</p>	<ul style="list-style-type: none"> <li>➤ The board should set performance targets for each director and undertake a formal and rigorous review of its own performance and that of individual directors on an annual basis. The performance evaluation of the chairman should be undertaken by the non-executive directors.</li> <li>➤ The fact that the review takes place should also be stated in the annual report.</li> </ul>
<p>(4) The company does not have a transparent remuneration policy and does not have a remunerations</p>	<ul style="list-style-type: none"> <li>➤ A remuneration committee comprising at least three non-executive directors should be</li> </ul>

<p>committee.</p> <p>Mukosha decides the remuneration for all directors which he personally negotiates with each director. It is not clear if each directors remuneration is performance based.</p> <p>No director should be involved in setting their own remuneration as this may result in excessive levels of pay being set. Additionally a major component of executive pay should be performance based</p>	<p>set up to determine the level of directors' remuneration.</p> <ul style="list-style-type: none"> <li>➤ The remuneration of non-executive directors should be determined by the board itself (or the shareholders if required by the articles of association of the company).</li> <li>➤ The remuneration policy should be fair and transparent.</li> </ul>
<p>(5) The company does not have a formal, rigorous and transparent procedure for the appointment of new directors to the board. There is no nominations committee in place. Mukosha is responsible for identifying and recruiting directors.</p>	<ul style="list-style-type: none"> <li>➤ There should be a formal, rigorous and transparent procedure for the appointment of new directors to the board. A nominations committee should be set up to perform this role.</li> </ul>
<p>(6) The Internal audit department reports to the Finance Director and therefore lacks independence</p>	<ul style="list-style-type: none"> <li>➤ To enhance its independence internal audit should report to an independent sub-committee of the board such as an audit committee.</li> </ul>
<p>(7) The company does not have an audit committee. Audit committees undertake an important role in that they help the directors to satisfy their responsibility of accountability with regards to maintaining an appropriate relationship with the company's auditor, as well as enhancing the independence of internal audit as explained above.</p>	<p>An audit committee should be set up he comprising of at least three independent nonexecutives, one of whom should have relevant financial experience.</p>

(c) Ethical threats and safeguards

(1) Audit fee based on audited pre-tax profit

(i) Explanation of threat

Fees based on the outcome or results of work performed are known as contingent fees. The CEO of has proposal that the audit fee should be a percentage of the client's final pre-tax profit amounts to a contingent fee arrangement. A contingent fee is prohibited as it creates a self-interest threat which cannot be reduced to an adequate level.

(ii) Safeguard

The audit firm should decline the proposed contingent fee arrangement as it would be a breach of IFAC Code of Ethics for professional accountants.

Instead, they should inform the client that the fees will be based on the level of work and time required to obtain sufficient and appropriate audit evidence on the assignment

(2) Loan facilities to audit firm's employees at minimal interest rates

(i) Explanation of threat

MMCF Ltd has offered all employees of the audit firm loan facilities at minimal interest rates. Whilst the company does provide loans and hence the provision of a loan is within the normal course of its business, the proposed loan facilities are on preferential rates which will create a self-interest threat. This is so because the generous credit terms on the loans may effect or influence decisions made by members of the audit team in carrying out the assignment.

(ii) Safeguard

The loan facilities must not be accepted by the audit firm due to the preferential terms.

However, if the terms of the loan are amended so that the interest rate charged is in line with MMFC Ltd's normal commercial lending rates, then the provision of the loan facilities will be acceptable.

(3) Tembo holds a 10% shareholding in MMCF

(i) Explanation of Threat

Tembo the engagement partner hold a 10% shareholding in MMCF Ltd which gives rise to a self-interest threat, and his independence and objectivity with regards the audit will be impaired on account of this interest as he may overlook issues that arise on the audit to protect his investment

(ii) Safeguards

The holding shares in an audit client are prohibited in the code of ethics for professional accountants.

There must be a policy within the audit firm which prohibits partners and employees from holding shares in assurance client.

The engagement partner should be removed from the audit. As an alternative he can dispose of the shares.

- (4) Dalitso Mwale recently resigned his position
- (i) Explanation of threat  
Including Mwale on the team will create a self-review threat because of his recent service with the client. As a financial accountant at FMG Ltd for part of the financial year under audit he was involved and had some influence in the preparation of the accounting records/financial statements, which he will be required to audit.
  - (ii) Safeguards  
Mwale should be removed from the audit assignment. Alternatively any work performed by him on the assignment can be independently reviewed.
- (5) (i) Mary engaged to marry the Financial Director of MMCF Ltd
- The fact that Mary Mphande, the audit senior is engaged to marry Joseph Mulenga the Financial Director of MMCF Ltd in three months' time means that Mary will soon have an immediate family member able to exert influence over the information she will be auditing. This will give rise to familiarity threats thereby compromising her independence.
- (ii) Safeguards  
Mary Mphande should be removed from the assignment. The firm should have in place procedures and procedures within the firm which specifically monitor the independence of the firm's employees.
- (6) Marketing of MMCF Ltd's services
- (i) Explanation of threat  
Marketing the services of MMCF Ltd under the arrangement proposed by Mukosha will create both self-interest and advocacy threat for the audit firm. The IFAC code of ethics for professional accountants prohibits an audit firm to enter such distribution or marketing arrangements under which the firm acts as distributor or marketer of the audit client's products or services.
  - (ii) Safeguards  
The audit firm should politely decline the proposed marketing arrangement as it would be a breach of IFAC Code of Ethics for professional accountants.

## **SOLUTION FOUR**

### (a) Need for Internal Audit

Having an internal audit department is generally considered to be 'best practice, 'rather than being required by law. This allows flexibility in the way internal audit is established to suit the needs of a business.

In small, or owner managed businesses there is unlikely to be a need for internal audit because the owners are able to exercise more direct control over operations, and are accountable to fewer stakeholders.

The need for internal audit will therefore depend on:

- (1) Scale, diversity and complexity of activities.
- (2) Number of employees.
- (3) Cost/benefit considerations.
- (4) The desire of senior management to have assurance and advice on risk and control.
- (5) The desire to be seen to be adopting best practice voluntarily to increase confidence of shareholders and other stakeholders.

### (b) Internal audit department and preventing and detecting fraud and error

- (1) The internal audit department could assist in preventing and detecting fraud and error by acting as a deterrent in the first instance. The mere fact that an internal audit department has been established in the company will be a deterrent to fraud.
- (2) Internal audit could undertake a risk assessment to identify the risk areas over cash and inventory and then review the existing controls in place over inventory and cash handling and recommend improvements to those controls if deficiencies are identified.
- (3) Internal audit will also need to test that the controls are working by carrying out compliance tests. All findings from their work would be reported in writing to senior management for review and further action if necessary.

### (c) Additional functions that can be performed by internal audit at HCS may include:

#### (1) **Value for money audits**

The internal audit team could undertake value for money reviews, looking at the economy, effectiveness and efficiency of activities and processes within the company.

(2) **Financial and operational audits**

The internal auditors could carry out financial audits, using substantive procedures and tests of controls in different areas such as cash and inventory and purchasing for example.

(3) **Operational audits**

The department could also perform operational audits, looking at the operational processes in place. The department could undertake reviews of controls at head office, as well as individual retail outlets and make recommendations to management over such areas as the purchasing process as well as the payroll cycle etc.

(4) **Monitoring inventory levels**

The internal audit department could undertake inventory counts at the retail outlets. There is likely to be a significant level of inventory held at each outlet. Internal audit could count actual levels of goods held and compare them to the company's computerised accounting system. If consistent negative differences occur for a retail outlet, then this may be an early indicator of fraud. If positive differences are highlighted, then it could be because employees have not been adequately trained on how to record inventory.

(5) **Cash controls at retail outlets**

Internal audit could undertake controls testing over cash receipts and cash counts. It is likely that cash at each outlet will be significant. Each retail shop should have tight controls over the cash receipts. These controls should be tested at each location as well as performance of a cash count to reduce the level of errors.

(6) **IT audits**

HCS is likely to have a relatively complex computer system linking all the various outlets to the company's head office. The internal audit department could be asked to perform a review over the computer environment and controls.

(7) **Regulatory compliance**

There will be various laws and regulations such as labour, Tax, fire and safety regulations that impact the company. The internal audit department could help to monitor compliance with these regulations.

(8) **Customer satisfaction levels**

The internal auditors could carry out customer service reviews. This would most likely be in the form of analysing the results of customer service surveys

In order to improve the customer experience, an internal audit department could undertake 'mystery shopper' reviews, where they pose as a customer and rate the overall shopping experience. This is then fed back to improve customer service and can provide the basis for further training if necessary.

(d) Importance of preparing appropriate audit documentation

- (1) It will provide evidence of the firm's basis for a conclusion about the achievement of the overall objective of the audit.
- (2) It will provide evidence that the firm planned and performed the audit in accordance with ISAs and applicable legal and regulatory requirements.
- (3) It will assist the engagement team to plan and perform the audit.
- (4) It will assist members of the engagement team responsible for supervision to direct, supervise and review the audit work.
- (5) It will enable the engagement team to be accountable for its work.
- (6) It will enable the firm to retain a record of matters of continuing significance to future audits.

(e) The purpose of items that should be included on every working paper

- (1) Name of client – identifies the client being audited.
- (2) Year-end date – identifies the year end to which the audit working papers relate.
- (3) Subject – identifies the area of the financial statements that is being audited, the topic area of the working paper, such as receivables circularisation.
- (4) Working paper reference – provides a clear reference to identify the number of the working paper, for example, R12 being the 12th working paper in the audit of receivables.
- (5) Preparer – identifies the name of the audit team member who prepared the working paper, so that any queries can be directed to the relevant person.
- (6) Date prepared – the date that the audit work was performed by the team member; this helps to identify what was known at the time and what issues may have occurred subsequently.
- (7) Reviewer – the name of the audit team member who reviewed the working paper; this provides evidence that the audit work was reviewed by an appropriate member of the team.
- (8) Date of review – the date the audit work was reviewed by the senior member of the team; this should be prior to the date that the audit report was signed.
- (9) Objective of work/test – the aim of the work being performed, could be the related financial statement assertion; this provides the context why the audit procedure is being performed.
- (10) Details of work performed – the audit tests performed along with sufficient detail of items selected for testing.
- (11) Results of work performed – whether any exceptions arose in the audit work and if any further work is required.
- (12) Conclusion – the overall conclusion on the audit work performed.



## **SOLUTION FIVE**

(a) (i) Meaning of misstatement

A misstatement is defined in ISA 450 *Evaluation of Misstatements Identified During the Audit* as a difference between the amount, classification, presentation, or disclosure of a reported financial statement item and the amount, classification, presentation, or disclosure that is required for the item to be in accordance with the applicable financial reporting framework. Misstatements can arise from error or fraud.

(ii) **Meaning of Pervasive**

Pervasive in the context of audit reporting means the financial statements are materially misstated to such an extent that they are unreliable as a whole.

This may be where there are multiple material misstatements and is therefore not isolated to just one area of the financial statements.

Material misstatements may be isolated to one balance but they represent a substantial proportion of the financial statements that the effect is pervasive.

In relation to disclosures, the effect will be pervasive if a disclosure is fundamental to the users understanding of the financial statements.

(b) (i) Audit firm's responsibilities for events occurring up to the 30 April 2018

The firm has a responsibility to perform procedures designed to obtain sufficient appropriate audit evidence that all events up to the date of the auditor's report on 30 April 2018, that may require adjustment of, or disclosure in, the financial statements have been identified and appropriately dealt with by the management.

### Audit Procedures

- (1) The audit firm should make enquiries of management about matters such as:
  - the status of items involving subjective judgement
  - the status of items accounted for using preliminary or inconclusive data
  - Whether there are any new commitments, borrowings or guarantees
  - Whether there have been any sales or destruction of assets, issues of shares/debentures or changes in business structure, developments involving risk areas, provisions and contingencies, Unusual accounting adjustments etc.
- (2) Review management procedures for identifying subsequent events to ensure that such events are identified.
- (3) Read minutes of general board/committee meetings and enquire about unusual items.
- (4) Review latest available interim financial statements and budgets, cash flow forecasts and other management reports.

- (5) Obtain evidence concerning any litigation or claims from the company's solicitors (only with client permission).
- (6) Obtain written representation that all events occurring subsequent to the period end which need adjustment or disclosure have been adjusted or disclosed.

(ii) **Facts discovered after the date of the auditor's between 1 May and 31 May 2018**

The auditor does not have any obligation to perform procedures, or make enquiries regarding the financial statements, after the date of signing the report on 30 April 2018. The financial statements are the management's responsibility. They should therefore inform the auditors of any material subsequent events between the date of the auditor's report and the date the financial statements are issued.

However, if the auditor becomes aware of a fact that, had it been known to the auditor at the date of the auditor's report, may have caused the auditor to amend the auditor's report, the auditor shall discuss the matter with management of Dixel Ltd, determine whether the financial statements need amendment and If so enquire how management will address the matter in the financial statements.

If amendment is required to the financial statements and management makes the necessary changes, the auditor must carry out appropriate audit procedure on the amendments, extend audit procedures for identifying subsequent events to the date of the new auditor's report and provide a new auditor's report on the amended financial statements.

If management does not amend the financial statements, the auditor shall modify the opinion and then provide the auditor's report if it has not yet been provided to the entity. If however the report has already been provided to the entity, the auditor shall notify management not to issue the financial statements before the amendments are made and if the financial statements are issued anyway, the auditor shall take action to seek to prevent reliance on the auditor's report.

**Facts discovered after 31 May 2018**

The auditor does not have any obligation to perform procedures, or make enquiries regarding the financial statements, after 31 May 2018. The financial statements are the management's responsibility. They should therefore inform the auditors of any material subsequent events between the date of the auditor's report and the date the financial statements are issued.

However, if the auditor becomes aware of a fact that, had it been known to the auditor at the date of the auditor's report, may have caused the auditor to amend the auditor's report, the auditor shall discuss the matter with management of Dixel Ltd, determine whether the financial statements need amendment and If so enquire how management will address the matter in the financial statements.

If amendment is required to the financial statements and management makes the necessary changes, the auditor must carry out appropriate audit procedure on the amendments, and review the steps taken by management to ensure that anyone in receipt of the previously issued financial statements is informed.

The auditor shall also issue a new or amended auditor's report, which will include an emphasis of matter paragraph or other matter as appropriate, discusses the reason for the amendment. Audit procedures will be extended up to the date of the new report.

If management does not take the necessary steps, the auditor shall notify management and those charged with governance that the auditor will seek to prevent future reliance on the report. If management still does not act, the auditor shall take appropriate action to seek to prevent reliance on the auditor's report.

(c) (i) **Corruption of Sales ledger**

The company's sales ledger has been corrupted; hence no detailed testing has been performed on revenue and receivables. The audit team will need to determine if they can confirm revenue and receivables in an alternative manner. If they are unable to do this, then two significant balances in the financial statements will not have been confirmed. Revenue and receivables are both higher than the total profit before tax (PBT) of K3.1m; receivables are 168% of PBT and revenue is nearly nine times the PBT; hence this is a very material issue.

The auditors will need to modify the audit report as they are unable to obtain sufficient appropriate evidence in relation to two material and pervasive areas, being receivables and revenue. Therefore a disclaimer of opinion will be issued.

A basis for disclaimer of opinion paragraph will be required to explain the limitation in relation to the lack of evidence over revenue and receivables. The opinion paragraph will be a disclaimer of opinion and will state that we are unable to form an opinion on the financial statements.

(ii) Lawsuit by supplier

It appears that the disclosure in the financial statements is adequate and there appears to be no basis on which to make a provision in the financial statements.

However, the auditor's report will be affected by the fact that there is an uncertainty affecting the business. The auditor will have to decide whether the matter is fundamental to users' understanding. If so, the auditor's report should include an emphasis of matter paragraph beneath the opinion paragraph describing this matter. It should also state that the auditor's opinion on the financial statements is not modified in relation to this matter.

If the auditor does not consider the matter to be fundamental, the substantial nature of the claim may still warrant its inclusion as a 'matter of most significance' within the Key Audit Matters section.

The auditor may also need to consider the effect of the claim on the company's ability to continue as a going concern. For example, an adverse outcome could mean that the going concern assumption may no longer be appropriate. If this is the case, the auditor should include a separate 'Material uncertainty related to going concern' paragraph.

## **END OF SOLUTIONS**



## DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

---

LEVEL TWO

---

DA: 12 GOVERNANCE AND COMPANY LAW

---

FRIDAY 14 DECEMBER 2018

---

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

---

### **INSTRUCTIONS TO CANDIDATES**

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

## SECTION A – TWO COMPULSORY QUESTIONS

### Attempt both questions

#### **QUESTION ONE**

Gaminji Ltd and Gasparoe Seeds Ltd Company are in a joint venture of buying and supplying printers. They decided to further their business expeditions by investing in video games hardware and software. The business proves to be extremely successful, and they open up a number of branches in Kitwe, Lusaka, Chipata and Livingstone. In order to limit their liability, they instruct their advocate Kuendanamendo to incorporate the business, calling their new company "Go digital Exploits Countrywide Ltd". Around the same time, Zoony their supplier of hardware and software are about to release a new games console for Games Station 4. The two employees of Go digital Exploits Countrywide Ltd, Bambazonke and Mutale are eager to acquire as many of these consoles as possible as they are likely to be highly profitable. Bambazonke goes, in his accord as a director and shareholder to (Zoony Console Suppliers Ltd), and is offered 50 consoles. Eager to purchase the consoles, Bambazonke does not wait until the company is incorporated and enters into a contract 'for and on behalf of Go digital Exploits Countrywide Ltd' with Zoony Console Suppliers Ltd.

Mutale is also offered a number of consoles and, prior to incorporation, enters into an agreement with Gaming Hardware Ltd to purchase 140 consoles to supplement their new adventure. Mutale signs the agreement on behalf of Go digital Exploits Countrywide Ltd 'as director.'

The certificate of incorporation is issued two months later, after they have entered into such agreements and, at the first board meeting of the new company, Bambazonke and Mutale as shareholders ratify both agreements but the majority of the Directors object to this for lack of consultation. Shortly after, Zoony Console Suppliers Ltd and Gaming Hardware Ltd delivers the consoles and demand payment. The majority of the shareholders reject the order and now Bambazonke and Mutale argues that these goods were procured by the company as they were just agents (directors) and did all in good faith and are liable.

#### **Required:**

- (a) Advise Bambazonke and Mutale on the liability of a promoter under the common law and statute. (7 marks)
- (b) Advise them further on "agency" in the context of the director shareholder relationship in corporate governance. (8 marks)
- (c) Suppose they decide to wind up their company, advise them on various modes of winding up a company. (10 marks)

**[Total: 25 marks]**

## **QUESTION TWO**

- (a) Distinguish issued capital from unissued Capital. (5 marks)
- (b) Describe the five businesses to be transacted at an Annual General Meeting. (15 marks)
- (c) One way a company may be dissolved is by striking it off the register by the Registrar of companies. Explain the **two** procedures for dissolution by striking off the register. (5 marks)

**[Total: 25 Marks]**

## SECTION B

There are Three (3) questions in this section. Attempt any TWO (2) questions.

### QUESTION THREE

- (i) Explain what a Debenture is. (5 marks)
- (ii) What is the difference between a fixed charge and a floating charge? (8 marks)
- (iii) Discuss the concept of *transferability of shares*. (4 marks)
- (iv) Briefly explain the following two theories:
  - (a) The Stockholder theory. (4 marks)
  - (b) The Stakeholder theory. (4 marks)

**[Total: 25 Marks]**

### QUESTION FOUR

Phiri Kalimukwa has been in the business of selling bicycles and bicycle spare parts as a sole trader for the past two years. She has not done any formal registration of her business all this time and now wants to register her business as 'Kalimukwa Flying Bicycles' under the Registration of Business Names Act Chapter 389 of the Laws of Zambia.

#### **Required:**

- (a) State four (4) particulars she will need to provide in the application form for business name registration. (4 marks)
- (b) Her friend Rhoda Chilangi wants to join her in the business so that they run it as a partnership. Give three (3) distinctions between a sole proprietorship and a partnership. (6 marks)
- (c) The bicycle business is now doing very fine. Phiri and Rhoda are planning to form a limited liability company. Explain to them the meaning of the following legal principles associated with limited liability companies:
  - (i) Promoters' liability in relation to pre-incorporation contracts. (5 marks)
  - (ii) Compulsory winding up (5 marks)
  - (iii) Lifting the veil of incorporation (5 marks)

**[Total: 25 Marks]**



### **QUESTION FIVE**

Lukamantano Women's Cooperative is based in Chilanga. It provides catering services and training of women in home crafts such as sewing, home maintenance and family care. Despite most of the members not having any basic education, the cooperative has really been doing fine and they would like to convert it into a limited liability company. They have organized a one day at which they want you to explain some terms.

#### **Required:**

Explain the following terms:

- |                          |           |
|--------------------------|-----------|
| (a) Limited liability    | (5 marks) |
| (b) Voluntary disclosure | (5 marks) |
| (c) Active stakeholders  | (5 marks) |
| (d) Power of directors   | (5 marks) |
| (e) Prospectus           | (5 marks) |

**[Total: 25 Marks]**

**END OF PAPER**

## DA 12 GOVERNANCE AND COMPANY LAW SOLUTIONS

### SOLUTION ONE

Before a company is formed someone would have conceived the idea alone or in association with others. These are the promoters although the term promoter is one of commerce and not law. It is not defined in the Companies Act and is a term of business that sums up in one word a number of business operations familiar to the commercial world by which a company is brought into existence. Note: A promoter is not an agent of the company as an agency relationship cannot be formed before a principal is formed. **This means that Bambazonke and Mutale are personally liable as the company was not yet formed .**

The promoters will decide such matters as (a) the company name, (b) the kind of business the company will engage in, (c) if the company will be public or private (d) if the company will be limited by shares or guarantee etc. After deciding on these issues the promoter(s) will take steps to actualize his/their intention.

Promoters play an important role e.g. they decide on the scope of the business of the company and if necessary can negotiate the purchase of existing businesses or property. They instruct lawyers, accountants etc. to prepare the necessary incorporation documents and they provide the necessary pre-incorporation expenses.

Although promoters are very important in the life of a company, the Act is unfortunately silent as to their legal position. However, as far as the legal position of promoters *vis a vis* the company is concerned, the common law has developed considerably. The position is that the promoter stands in a fiduciary relationship with the company he floats. He is neither an agent nor a trustee but the old familiar principles of the law of agency and trusteeship are applied. [He is not an agent because there is no principal - see Kelner v Baxter, [1866], there is no trustee as there is no trust in existence. Erlanger v New Sombrero Phosphate Co.]

#### **Status of a Promoter**

May not be defined in legal terms but many of the principles of the law of agency and trusteeship are extended to the promoter/company relationship. It is therefore well settled that the promoter of a company is accountable to it for all monies secretly received by the promoter, just as an agent is liable to his principal for any secret profits. The same principles apply in relation to a trustee and the beneficiaries (*cestui que trust*). This fiduciary relationship between the promoter and the company he floats imposes on the promoter the following specific duties.

- (a) The promoter may not directly or indirectly make any profit at the expense of the company without the knowledge of the company. If he does so, he will be compelled to account for it. I.e. the company is entitled to any profit that the promoter makes during formation.

Gluckstein v Barnes [1900] AC 240. A syndicate bought property for 140,000 pounds and resold it to the company for 180,000 pounds. Previously, the syndicate had bought charges on the property at a discount and after they bought the property, the vendor paid these charges in full. He prospectus issued for the new company showed only the 40,000 pounds the syndicate made on the sale of the property to the company but no

disclosure of the 20,000 pounds it made on the charges. However, the 40,000 pounds was disclosed in a way that "excluded profits made on interim investments". The House of Lords held that the promoters were liable to account to the company for the 20,000 pounds made on the charges as well as the 40,000 pounds.

- (b) Promoters should never be allowed to derive gain from the sale of their own property to the company they float unless all material facts are disclosed (no conflict of interest). Where the promoter contracts to sell his own property to the company without disclosing fully, then the company can either repudiate the sale or affirm the contract and recover the profit made by the promoter. [Erlanger v New Sombrero Phosphate Co. [1878] Note: it is not the making of a profit that the law seeks to forbid but any non-disclosure of this profit - see Salomon v Salomon - the profit was disclosed. The law only requires that the promoter make a full disclosure.
- (c) The promoter must not make any unfair/unreasonable use of his position. He is under a duty to avoid anything that may suggest undue influence/fraud. This is a cross cutting issue.
- (d) The promoter has a duty not only to be honest to the company and its shareholders but also to be careful towards them as well. The standard of duty - Hedley Byrne & Co v Heller & Partners Ltd [1964]. The promoters' liability is imposed by both the common law and the Companies Act.

### **Promoters Liability**

The liability of the promoter is imposed by both the Common Law and the Companies Act. It is important to note that the rules under which a promoter will be liable for any secret profit made and for failure to disclose are identical to the rules of the Common Law which impose liability on agents and trustees. The Companies Act makes reference to the liability of a promoter in numerous sections, e.g. S.129(1) - liability of promoter for misstatements or omissions in the prospectus issued to the public.

b) Agency is a significant issue in corporate governance because of the dominance of the Company limited by shares as a form of business organization. This has led to separation of ownership of the company from its management. The owners of the company can be seen as the principal, the management of the company as agents. The actual powers of shareholders is restricted. They have no right to inspect books of accounts, and their forecast of future prospects are gleaned from the annual reports and accounts, stockbrokers, journals and daily newspapers. The Shareholders are the owners of the Company to whom the board of directors is accountable to. The day to day running of the business is the responsibility of the directors and other managers to whom the directors delegate, not the shareholders. For these reasons, therefore, there is the potential for conflict of interest between management and shareholders. The agency problem derives

from the principal (owners) not being able to run the business themselves and having to rely on agents to do so for them.

C) A company is an artificial person, it cannot die but can cease to exist. There are various forms of winding up a company and these include the following; Compulsory winding up (section 270-312 of the Companies Act, CAP 388, Members voluntary winding Up ( Section 304- 312, Companies Act, Chapter 388 of the Laws of Zambia and Creditors Voluntary Winding Up, Section 313- Section 317 of the Companies Act, CAP 388 of the laws of Zambia.

In compulsory liquidation, the liquidator must assume control of all property to which the company appears to be entitled. Dissolution is the last stage of liquidation, the process by which the assets and property of the company redistributed. The companies that have the capacity to engage in this activity are listed here.

**The law classifies liquidations into two types: voluntary (which is by a shareholders' resolution) or compulsory (by a court order).**

Liquidations are also classified according to whether the company is solvent or insolvent.

### **Solvent and insolvent liquidations**

If the company is insolvent, this means it is unable to pay its debts as they fall due. In this situation there is potential conflict between creditors (those to whom money is owed), as there will be insufficient assets for all creditors to be paid in full.

### **Voluntary liquidation (by shareholders' resolution)**

Voluntary liquidation refers to the process whereby the shareholders appoint a liquidator, who is then answerable to the creditors or shareholders. It is not necessary to make any application to the court for this; however, the liquidator may apply to the court for directions and the court has power to remove a liquidator.

A voluntary liquidation may also be commenced by the board of directors if an event specified in the company's constitution has occurred.

Voluntary liquidation may be in one of two forms, depending on whether or not the company is solvent. If the company is solvent the shareholders can supervise the liquidation. However, if the company is insolvent, the creditors may take control of the liquidation process by applying to the court. The court will require proof of solvency or insolvency to determine this matter.

### **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.

## **SOLUTION TWO**

i.

Authorized capital, also known as the nominal capital of a company is the amount of capital that a company is allowed to issue. Put simply, this is the maximum amount of capital fixed by the company's Articles that a company is permitted to issue at any given point.

ii.

An annual general meeting is a statutory meeting required to be held by the company, by law, the said meeting must be held within three months of the end of each and every financial year. A variety of business is to be transacted at an annual general meeting amongst the business to be transacted are five of the following types of business:

**1. Appointment of Auditors and fixing of their remuneration**

Upon the convening of an annual general meeting, top of the agenda will in most cases be the appointment of Auditors and the fixing of their remunerations for the purposes of compensating them for the services rendered by themselves.

**2. The election of Directors**

The election and subsequent appointment of Directors to replace those retiring and/or those whose contracts the shareholders have resolved not to renew forms part of the business to be transacted an annual general meeting. Once all the desired Directors have been appointed, the question of their remuneration will then too be considered at the same meeting.

**3. The consideration of the company's books of accounts**

The company's books of accounts will also be considered at the annual general meeting e.g. the company's balance sheets, income statements etc. Further, the gathering will also consider the reports tendered in by both the Directors and the Auditors.

**4. The declaration of dividends**

Where a company has made a profit, and a declaration thereof is to be made, the same will be made at the annual general meeting of the company and will be followed by any discussions incidental thereto, if any.

## 5. **Special and/or any other business**

The gathering may also consider *any other* business not covered by, and/or scheduled to be discussed at an extra ordinary general meeting.

**iii.** The two procedures for dissolution of a company by striking off:

- Option 1: The Registrar of Companies, if he has any reasonable grounds to believe that the company is not carrying on business or is not in operation or is not complying with the law (e.g. members below two, not preparing annual reports, etc) will send a post requesting confirmation. If no response, he will give notice in the government gazette requesting the company to prove that it is in operation within three months from the date of notice or else, it will be dissolved.

- Option 2: Alternatively, a company may, by ordinary resolution, request the Registrar to strike it off the register upon lodging with the Registrar a copy of the resolution, summary accounts, and a statutory declaration showing that it has no debts outstanding/unpaid. The Registrar will publish that notice in the gazette and the company will be dissolved after three months from the day of the notice.

### **SOLUTION THREE**

i. **A Debenture**

A Debenture is an instrument or a written document in the form of a Deed acknowledging a debt owed by a company. It is a document in which a company charges, in favour of a lender all, or part of its assets and undertakings.

ii. **The difference between a fixed charge and a floating charge**

A fixed charge is a charge that attaches to particular and specific assets of a company, whereas a floating charge is one that hovers over the assets of the borrowing company and only crystallises and/or attaches to particular assets upon the occurrence of a particular event.

iii. **Transferability of shares**

Shares in terms of section 57 of the Act are property capable of being transferred from one person to another, this simply means that the holder of a certain number of shares can transfer his/or shares to another person.

Shares are personal and movable property thus transferable as such. Whereas shares can be freely transferred, the law, in order to guard against fraudulent transfers of shares, has through Act No. 24 of 2011 made it a mandatory requirement that the holder of shares must, before transferring such shares notify the Registrar of companies.

iv. The two theories are discussed below as follows:

a. **Stockholder theory**

The Stockholder theory is one that illuminates and shines the light on the shareholders of a company. The theory argues that only the shareholders of a company have the sole and genuine claim over the company.

The theory adopts the dictates of the law of Agency and holds that the shareholders are the principals, whereas the Directors are the Agents and as such must focus on serving the interests of the shareholders.

b. **The Stakeholder theory**

A stakeholder is, by definition any entity that stands to be affected by the achievements of the objectives of an organisation.

The stakeholder theory brings out the view that companies may in most instances be big corporates and as such must not only be seen to be serving the interests of the shareholders but also those that stand to be affected by the decisions of the company, the theory therefore presses for the consultation of stakeholders before decision making.

## **SOLUTION FOUR**

The particulars she will need to provide are:

- Business name, Nature of business, Names of the applicant(s), Age of applicant(s), Commencement date of the operations, etc.

(b) Distinctions between a sole proprietorship and a partnership include:

- Sole proprietorship is owned by one person who contributes the capital, does not share profits/losses with anyone, decision making is independent, etc
- Partnership – owned by two or more, share in its management, share profits/losses, decision making is consultative, etc.

(c) Explanation of terms:

(i) *Promoters' Liability in relation to pre-incorporation contracts* – These are contracts made by promoters of a company before it is incorporated. The promoters (those incorporating a company) are generally liable as the company is not yet incorporated. However, they can put a clause in the articles to transfer the rights/liability in the contract to a company when it is finally incorporated.

(ii) *Compulsory Winding Up* – This is winding up of a company through the court which happens when directors are not able to make a statutory declaration that the company will be able to pay its debts within 12 months. The court makes an order to have it wound up. The grounds for compulsory winding up include inability to pay debts, failure to hold statutory meetings, reduction of members below the legal minimum, or when it is just and equitable to do so.

(iii) *Lifting the veil of incorporation* – This is the removal of the veil separating the company from its owners or those who control it. This is the veil referred to as the veil of incorporation. Thus the company will be identified with its owners, therefore making the concept of limited liability inapplicable. This means the owners of the company become directly liable to the sins of the company. This can be done by the judiciary (courts) or statute. The grounds for lifting the veil include: Public interest, evasion of liabilities, evasion of taxation, to counter fraud, etc. see the *Zambian case of AM motors*.



## **SOLUTION FIVE**

The explanations are below:

(a) *Limited Liability* – This means that the liability of members is limited to the amount of unpaid, if any, on the shares they hold or amount guaranteed. The liability is limited either by way of shares or guarantee. Where it is limited by guarantee, the member must sign a declaration of guarantee specifying the amount he undertakes to pay. Therefore, the members of the cooperative once turned into a company will have limited liability.

(b) *Voluntary disclosure* – This is disclosure above the mandated minimum. It is disclosing information voluntarily, going beyond what is required by law or listing rules. This is good in that it provides wider information, different focus of information, assurance about management, consultation with equity investors.

(c) *Active stakeholders* – Stakeholders are people or entities that can affect or are affected by the business' activities. Active stakeholders are those stakeholders who seek to participate in the organisation's activities. Active stakeholders include managers, employees and institutional shareholders, etc.

(d) *Powers of directors* – Directors have the duty to manage the business and exercise all powers that are not required by the Companies Act 388. They have the power to borrow money, appoint an attorney and sign cheques, etc. They must exercise their powers in what they honestly believe to be the interests of the company and the power must be exercised for proper purposes for which it was given.

(e) *Prospectus* – A prospectus is any notice, circular, advertisement or any other document inviting or offering to the public for subscription or purchase of any shares or debentures of a company. It is an invitation to the public by the company, offering them an opportunity to subscribe or purchase shares or debentures of the company. This is done by a public limited company.

**END OF SOLUTIONS**