

DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL ONE

DA 1: FINANCIAL ACCOUNTING

MONDAY 14 SEPTEMBER 2020

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

# **INSTRUCTIONS TO CANDIDATES**

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

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

## **SECTION A** – (Compulsory)

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

#### **QUESTION ONE**

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

1.1. B. Banda is a sole trader who had opening capital of K160,000. The net asset position at the year-end increased by K46,000. During the year, the owner withdrew K48,000 for his personal use.

His profit during the year was

- A. K2,000
- B. K94,000
- C. K158,000
- D. K66,000

(2 marks)

- 1.2. Which of the following is most useful for managers?
  - A. Financial statement for the last financial year.
  - B. Tax records for the past five (5) years.
  - C. Budgets for the coming financial year.
  - D. Bank statements for the past year.

(2 marks)

1.3. Chanda purchases K1,000 worth of goods from Chiko. Chanda agrees to pay Chiko in 60 days time.

What is the double entry to record the transaction in Chiko's books?

- A. Debit sales with K1,000, credit trade receivables with K1,000.
- B. Debit purchases with K1,000, credit trade payables with K1,000.
- C. Debit payables with K1,000, credit purchases with K1,000.
- D. Debit trade receivables with K1,000, credit sales with K1,000.

(2 marks)

1.4. A VAT Registered business in its first period of trading charges K16,000 of VAT on its sales and suffers K13,500 of VAT on its purchases which includes K2,500 irrecoverable VAT on business entertaining.

How much VAT is due to or receivable from the tax authorities at the end of the first of trading?

- A. K5,000 due to the tax authorities
- B. K5,000 receivable from the tax authorities
- C. K2,500 due to the tax authorities
- D. Nil due to or receivable from the tax authorities.

1.5. The subscriptions income account had the following balances:

	1 Jan. 2019	31 Dec. 2019
	К	К
Subscriptions in arrears	3,000	1,500
Subscriptions in advance	6,000	4,500

During the year ended 31 December 2019, total subscriptions received were K150,000.

Calculate the amount to be taken to the income and expenditure account for the year ended 31 December 2019.

A. K150,000
B. K144,000
C. K156,000
D. K157,500

(2 marks)

1.6. In the year to 31 December 2019, Jere recorded some capital expenditure as revenue expenditure.

What is the effect on his profit for the year to 31 December 2019 and his net assets at that date?

Pre	ofit	Net assets
Α.	Overstated	Overstated
Β.	Overstated	Understated
C.	Understated	Overstated
D.	Understated	Understated

(2 marks)

1.7. Joe prepared his draft year-end of year accounts. However, he has now realized that he did not adjust these for a prepayment of K4,200 and an accrual of K1,600. How will Joe's profit and net assets be affected by including the prepayment and accrual?

	Profit for the year will	Net assets will
A.	Increase by K5,800	Reduce by K5,800
Β.	Increase by K2,600	Increase by K2,600
C.	Reduce by K2,600	Increase by K2,600
D.	Reduce by K5,800	Reduce by K5,800

(2 marks)

- 1.8. Which of the following is the correct format for the accounting equation?
  - A. Capital liabilities = Assets
  - B. Assets Liabilities = Capital
  - C. Assets + Capital = Liabilities
  - D. Asset + Liabilities = Capital

(2 marks)

1.9. Your firm's cash book at 31 December 2019 shows a balance at the bank of K12,450. Comparison with the bank statement at the same date reveals the following differences:

	K
Unpresented cheques	4,200
Bank charges not in cash book	250
Receipts not yet credited by the bank	2,350
Dishonoured cheque not in cash book	700
The correct balance on the cash book at 31 [	December 2019 is

A. K7,300

- B. K11,500
- C. K12,900
- D. K15,700

(2 marks)

1.10. During May 2019 your organization had sales of K296,000, which made a gross profit of K80,000. Purchase amounted to K200,000 and opening inventory was K68,000.

The value of closing inventory was

- A. K48,000
- B. K52,000
- C. 84,000
- D. K108,000

(2 marks) [Total: 20 Marks]

# SECTION B

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

## **QUESTION TWO**

The following Trial Balance was extracted from the books of Nacha Investment Plc at 31 December 2019:

	Dr	Cr
	<u>K'000</u>	<u>K'000</u>
Sales revenue		1,285
10% debentures 2023		125
Payables		159
Bank Overdraft		62
Land at valuation	248	
Plant and machinery at cost	175	
- Depreciation to 1 January 2018		10
Motor vans at cost	110	
- Depreciation to 1 January 2018		15
Patents and trademarks	100	
Inventory at 1 January 2018	105	
Receivables	438	
Cash in hand	1	
Administration expenses	132	
Selling and distribution expenses	146	
Dividends paid	41	
Debenture interest	6	

Purchases	873	
Ordinary shares of K1 each		400
5% preference shares		100
Share premium		50
Revaluation reserve		68
Retained earnings at 1 January 2018		95
Provision for doubtful debts		6
- 	<u>2,375 2</u>	, <u>375</u>

#### The following additional information at 31 December 2019 is available:

1. The allowance for receivables is to be adjusted to 2% of the receivables figure.

- 2. Income tax on the current year profits is estimated at K10,000.
- 3. Depreciation at 5% reducing balance method of plant and machinery is to be provided.
- 4. The Motor vans are to be depreciated at 10% per annum straight line.
- 5. Debenture interest amounting to K6,000 was paid by 28 November, 2019. No accrual has been made.
- 6. Closing inventory at cost of K97,000 was recorded.
- 7. Prepaid selling and delivery expenses amount to K7,000.
- 8. Accrued administration expenses amount to K8,500, while K6,000 was prepaid.
- 9. The land is to be revalued at K275,000.

#### **Required:**

- (a) Prepare an income statement for the year ended 31 December 2019. (10 marks)
- (b) Prepare a statement of financial position as at 31 December 2019. (10 marks) [Total: 20 Marks]

## **QUESTION THREE**

The treasurer of Taonga Club, a society of music lovers, has prepared the following receipts and payments account for the year ended 30 November 2019.

	TAONG	A CLUB	
Receipts and payments a	ccount for the	year ended 30 November, 201	.9
	К		К
Cash and bank balances b/f Members subscriptions Donations Sales of concert tickets Grants from GRZ Sales of music books	3,850 41,650 11,250 44,035 15,800 12,750	Rent of premises Fees and expenses Secretarial expenses Purchases of Music books Stationery and Printing Traveling expenses Insurance Heating and Lighting Sunday expenses Cash and bank balances	7,500 58,500 15,500 10,200 5,500 8,900 4,800 5,850 1,600 <u>10,985</u> 129 335
	129,335		129,333

The following valuations are also available:

As at	1 December 30 Novemb	
	2018	2019
	K	К
Subscriptions in the advance	1,650	2,900
subscription in arrears	850	950
Owing to suppliers for music books	1,050	1,650
Inventory of music books	2,200	3,000
Grants receivable from GRZ	5,000	7,000
Fees and expenses- accrued	3,750	2,300
Insurance prepaid	300	-
Sundry expenses accrued	-	100

#### **Required:**

- (a) Prepare a calculation of the accumulated fund of the Taonga Club as at 1 December 2018. (4 marks)
- (b) Calculate the amount to be included in the club's Income and Expenditure account for the year ended 30 November 2019 in respect of:

(i) Subscriptions	(4 marks)
(ii) Grants from GRZ	(2 marks)
(iii) The surplus on sales of music books	(3 marks)

(c) Prepare the income and expenditure account of the club for the year ended 30 November 2019. (7 marks)

[Total: 20 Marks]

## **QUESTION FOUR**

The financial year end of Men Drop Ltd has the following balances at 30 June 2018

	К
Freehold land and buildings at cost	429,000
Plant & machinery at cost	315,000
accumulated dep'n plant & machinery	69,000
Purchase of raw materials	390,000
Sales	952,500
Factory rates	9,000
Factory heat and light	19,500
Accounts receivables	111,600
Payables	92,700
Wages (K47,100 for supervision)	189,000
Direct expenses	27,300
Selling expenses	33,000
Office salaries & general expenses	129,000
Bank	73,500
General reserves	90,000
Retained profits	54,000
Inventory 1 July 2017: raw materials	60,000
Finished goods	114,000
Dividends paid: prepared shares	2,520
Ordinary shares:	40,000

- (i) The inventory at 30 June 2018 were raw materials K66,000 and finished goods K106,800.
- (ii) Salaries include K20,100 for directors fees.
- (iii) Depreciation is to be charged at 10% on cost of plant and machinery.

## **Required:**

- (a) Prepare a manufacturing account and statement of profit or loss for the year ended 30 June 2018. (10 marks)
- (b) What are six (6) barriers to international harmonization of global accounting standards?
- (c) Explain the difference between:

(i) Personal and impersonal accounts.	
(ii) Input VAT and output VAT.	

(2 marks) (2 marks)

(6 marks)

[Total: 20 Marks]

## **QUESTION FIVE**

In 2018, the Zambian government made a pronouncement that as part of its public financial management reform program, International Public Sector Accounting Standards (IPSAS) would be adopted as its reporting framework by 2022.

- (a) Briefly describe what a Public Sector is. (3 marks)
- (b) Identify and briefly explain the five (5) major benefits of IPSAS for Zambia's public sector accounting. (10 marks)
- (c) With the aid of relevant examples, briefly distinguish between public sector cash basis reporting and accruals basis reporting. (7 marks)

## **QUESTION SIX**

One role accountants perform is to provide financial information. For this information to have value, the following qualitative characteristics must be present.

(i)	Relevance	(4 marks)
(ii)	Faithful representation	(4 marks)
(iii)	Comparability	(4 marks)
(iv)	Verifiability	(4 marks)
(v)	Understandability	(4 marks)

## **Required:**

For each of the above terms, briefly explain each term?	[Total: 20 Marks]
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**END OF PAPER** 

## SUGGUSETED SOLUTIONS

## SOLUTION ONE

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

# SOLUTION TWO

(a) Nacha Investment Plc: Income statement for the year ended to 31 December 2019

		<u>K′000</u>	<u>K′000</u>
Sales			1,285
Cost of sales			
Opening inventory	105		
Purchases	873		
Closing inventory	<u>(97)</u>		
			<u>(881)</u>
Gross profit			404
Less: Expenses			
Administration (132 – 6 + 8.5)	134.5		
Selling and distribution (146 – 7)	139		
Debenture interest (W2)	12.5		
Depreciation (W1)			
-Plant& Machinery:	8.25		
-Motor Van:	11		
Increase in allowance for doubtful debts	2.76		
			(308.01)
Net profit before tax			95.99
Income tax expense			<u>(10)</u>
Net profit for the year			85.99
Dividends			<u>(41)</u>
Retained Profit for the year			44.99
Retained earnings b/d			<u>95</u>
Retained earnings b/c			<u>139.99</u>

Nacha Investment Plc

# (b) Statement of financial position at 31 December 2019

	<u>Cost</u>	Accum depreciation	<u>Net book value</u>
	K′000	K′000	K′000
Non-current assets:			
Land (248 + 27)	275	-	275
Plant & equipment (8.25 + 10 w1)	175	18.25	156.75
Motor Van (11 +15 w1)	110	26	84
Patents and trademarks	<u>100</u>		_100
	660	44.25	615.75
Current assets			
Inventory		97	
Receivables (438-8.76)		429.24	
Prepayment (6 + 7)		13	
Cash		<u>1</u>	
			540.24
Total Assets			<u>1,155.99</u>
Equity and Liabilities			
Equity			
400,000 Ordinary K1 shares		400	
100,000 5% K1 Preference shares		<u>100</u>	
		500	
Share premium		50	
Revaluation reserve (68 +27 rev. gai	n)	95	
Retained earnings			<u>139.99</u>
			784.99

Non-current liabilities

10% debentures 2023

Current liabilities		
Payables	159	
Bank overdraft	62	
Accruals (8.5 + 6.5 w2)	15	
Income tax	<u>10</u>	
		246
Total equity and liabilities		1,155.99

125

## <u>Workings</u>

(W1) Depreciation	Cost	Dep	NBV
	K′000	К′000	K′000
Plant and machinery [(K175 -10) X 5% +10]	175	(18.25)	156.75
Motor Van [10 % x K110 + 15]	<u>110</u>	<u>(26)</u>	<u>84</u>
	<u>285</u>	<u>(44.25)</u>	<u>240.75</u>

## (W2) Debenture interest

K125, 000 @ 10% = K12, 500 K6, 000 was paid <u>K6, 500</u> is owed <u>K12,500</u>

#### **SOLUTION THREE**

# (a)

Opening Journal Entry	К	К
Cash at bank	3,850	
Subscription in arrears	850	
Inventory of music books	2,200	
Grants receivable from GRZ	5,000	
Insurance prepaid	300	
Subscriptions in advance		1,650
Suppliers of music books		1,050
Fees and expenses		3,750
Accumulated fund		5,750
	12,200	12,200

# b (i) Subscriptions A/C

Balance b/c	850	Balance b/f	1,650
Income and expenditure	40,500	Bank	41,650
Balance c/d	2,900	Balance c/d	950
	44,250		44,250

Answer: subscription to income and expenditure is K40500

## B (ii)

#### **Grant from GRZ Account**

Balance b/f	5,000	Bank	15,800
Income and expenditure	17,800	Balance c/d	7,000
	22800		22800

#### **Music Books Account**

Balance - inventory	2,200	Balance - payables	1,050
Balance purchase	10,200	Bank — sales	12,750
Balance payable	1,650	Balance – inventory	3,000
∴ Surplus	2,750		
	16,800		16,800

# Taonga club's

Income and Expenditure account for the year ended 30 November, n2019

С.

	К	Κ
Income		
Subscription (b(i))	40,500	
Grants from GRZ (b(ii)	17,800	
Surplus on sale of books (b(iii))	2,750	
Donations	11,250	
Concert ticket	44,035	
		116,335
<u>Expenditure</u>		·
Rent of premises	7,500	
Fees and expenses (58500 – 3750 + 2300)	57,050	
Secretarial expenses	15,500	
Stationery and printing	5,500	
Travelling expenses	8,900	
Insurance expenses (4800 + 300)	5,100	
Heating and lighting	5,850	
Sundry expenses $(1600 + 100)$	1,700	
	,	(107,100)
Excess of income over expenditure		9235

#### **SOLUTION FOUR**

# (a) Men drop Ltd manufacturing A/C and statement of profit or loss for the year ended 30June2018

	К	К
Raw material:		
Opening inventory		60,000.00
Purchases		390,300.00
		450,300.00
Less: Closing inventory		(66,000.00)
Cost of material consumed		384,300.00
Direct wages (189,000.00 – 47,100.00		141,900.00
Direct factory expenses		27,300.00
Prime cost of production		553,500.00
Factory overheads:		
Rates	9,000.00	
Heat and lighting	19,500.00	
Supervision	47,100.00	
Depreciation: Plant and machinery	<u>31,500.00</u>	<u>107,100.00</u>
		<u>660,600.00</u>
Statement of profit or loss for the year ended 30		
June 2019		
Sales		952,500.00
Less: Cost of goods sold:		
Opening inventory of finished goods	114,000.00	
Production cost of finished goods	<u>660,600.00</u>	
	774,600.00	
Less: closing inventory of finished goods	<u>(106,800.00)</u>	
Gross profit		<u>667,800.00</u>
		284,700.00
Less : Office salaries	108,900.00	
Directors fees	20,100.00	
Selling expenses	33,000.00	/ · · · · · · · · · · · · · · · · · · ·
Net profit		(162,000.00)
		<u>122,700</u>

b (i) **Different purposes of financial reporting.** In some countries the purpose of is solely for tax assessment, while in others it is for investor decision making.

(ii) **<u>Different legal system</u>**. These prevent the development of certain accounting practices

and restrict the options available.

(iii) **<u>Different user groups</u>**. Countries have different ideas about who the relevant user group are and their respective importance.

- (i) <u>Needs of developing country</u>. Developing countries are obviously behind in the standard setting process and they need to develop the basic standard and principles like for developed countries.
- (ii) **<u>Cultural differences</u>** result in objectives for accounting systems differing from country to country.
- (iii) <u>Unique circumstances.</u> Some countries may be experiencing unusual circumstances which affect aspects of the everyday life.
- (iv) **Lack of strong accountancy bodies.** Many countries do not have strong independent accountancy or business bodies, pressing for better standards and greater harmonization.
- C (i) Personal accounts are those that deal with people and firms e.g. receivables and payable while impersonal are accounts not of a personal nature in which items are recorded e.g. asset, expenses, income and capital.
- (ii) Input VAT is paid on goods and services bought by a business while output VAT is charged on goods and services sold by a business.

#### SOLUTION FIVE

#### (a) What Public Sector is

In a mixed economy, public sector is that part of the economy that is owned and operated by government authorities and public corporations.' Public sector includes the following: (a) State owned enterprises - Also called public enterprises. This is a publicly owned commercial or industrial organization that performs some essential service such as ZESCO and ZNBC, or produces some essential commodity such a lime; (b) Local government or local authorities - this is an elected local government organization and employees who have legal power and duty to provide and administer many local services for which rates are paid to run it. The rates are a form of revenue to the government. Areas falling in this category of revenue source are markets, schools, roads and public health centers. Public sector organizations are funded mainly by the central government and also raise funds on their own through taxes, rates, borrowing etc, and as such they keep records of sources and application of funds.

## (b) Five (5) major benefits of IPSAS for Zambia's public sector accounting

Governments and public sector entities are adopting IPSAS due to the following benefits: Greater accountability and transparency; Better decision making arising from increased information; Improved efficiency in financial reporting and auditing processes; Data consistency and application resulting from standardisation; Enhanced accounting professionalism in the public sector; Broader economic and social advantages e.g increase in direct investments which translate to more jobs; International Comparability between Governments and Public sector entities; Government stability through reforms brought about by IPSAS adoption

## (c) (c)Financial reporting under the cash basis

This accounting system recognizes only cash inflows and cash outflows. The resulting final accounts are summarized cash books. There are no balance sheets under this system because there are no other assets (apart from cash) and liabilities in the books other than cash balances.

- Sales are recognized only when cash is recorded. So, there are no receivables.
- Purchases are only recognized when cash is paid. So, there are no payables.
- There is no inventory adjustment because the accounts are not concerned with recording usage. There is no opening or closing inventory except that cash has been paid for it.
- There are no non-current assets.
- There are no current and non-current liabilities.

#### Financial reporting under the accrual basis

Revenue and costs are accrued (i.e. recognized when they are earned or incurred, and not when money is received or paid), matched with one another so far as their relationship can be established or justifiably assumed, and dealt with in the income statement of the period to which they relate.

- The earning of revenue is generally taken to mean that invoices have been issued.
- Costs are incurred when services are received. Therefore, recognition of income and costs is not when cash is received or paid.

#### SOLUTION SIX

#### i. **RELEVANCE**

Relevance is guided as per the IASB Framework in terms of information becoming relevant when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming or correcting their past evaluations. The relevance of information can be affected by its nature and materiality. Some items maybe relevant to users simply because of their nature whereas some items may only become relevant once they are material.

#### ii. FAITHFUL REPRESENTATION

In accordance with the IASB Framework information is to represent faithfully in the transactions and other events that it purports to represent, they must be accounted for and presented in accordance with their substance and economic reality and not merely their legal form.

Financial information should possess the following characteristics if it is to faithfully represent the performance and position of a business entity.

- Completeness
- Neutrality
- Free from material errors

#### iii. COMPARABILITY

Users must be able to compare financial statements over a period of time in order to identify trends in financial position and performance. Users must also be able to compare financial statements of different entities to be able to assess their relative financial position and performance.

In order to achieve comparability, similar items should be treated in a consistent manner from one accounting period to the next and from one entity to another.

Disclosures of accounting policies should also be made so that users can identify any changes in these policies or differences between the accounting policies of different entities.

#### iv. VERIFIABILITY

Verification can be direct or indirect. Direct verification means verifying an amount e.g. counting cash in the till at a specific date or other representation through direct observation. Indirect verification means checking the inputs to a model, formula or

other technique and recalculating the output using the same methodology i.e. recalculating inventory amounts using the same cost-flow assumption such as First-In-First-Out method.

## v. UNDERSTANDABILITY

Accounting information needs to be readily understandable by users. Information that may be relevant for decision making should not be excluded on the grounds that it may be too difficult for certain users to understand.

- > Understandability depends on:-
  - The way in which information is presented, and
  - The capabilities of users
- > It is assumed that users:
  - Have a reasonable knowledge of business and economic activities; and
  - Are willing to study the information provided with reasonable diligence.

For information to be understandable, users need to be able to perceive its significance.

## **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL ONE

# DA 2: QUANTITATIVE ANALYSIS

WEDNESDAY 16 SEPTEMBER 2020

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

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#### . . . . . . . .

**SECTION A – (Compulsory)** 

## Attempt all ten (10) multiple choice questions

#### **QUESTION ONE**

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

- 1.1 The diagram that displays data values with constant gap among bars is:
  - A. Histogram
  - B. Pie Chart
  - C. Pictogram
  - D. Bar Chart
- 1.2 An event which does not affect the outcome of another event is:
  - A. Conditional event
  - B. Independent event
  - C. Dependent event
  - D. Mutual exclusive event

(2 marks)

(2 marks)

1.3 The table below is for data Y depends on X.

X	20	10	30
Y	15	30	20

The rank correlation coefficient is:

- A. +1.0
- B. + 0.5
- C. 1.0
- D. -0.5

(2 marks)

- 1.4 A 5 year ordinary annuity has a present value of K1,000. If the interest rate is 8%, the amount of each annuity payment is closest to which of the following?
  - A. K250.46
  - B. K231.91
  - C. K181.62
  - D. K184.08

- 1.5 If the total sum of squares  $\sum (x \overline{x})^2$  is 20 and the sample variance is 5 then the total number of observations are:
  - A. 25
  - B. 5
  - C. 4
  - D. 35
- 1.6 Risk of two securities with different expected return can be compared with:
  - A. Coefficient of variation
  - B. Standard deviation of securities
  - C. Variance of securities
  - D. Range
- 1.7 Which of the following is not a measure of dispersion?
  - A. Range
  - B. 50<sup>th</sup> percentile
  - C. The standard deviation
  - D. The interquartile range
- 1.8 In statistical terms, a parameter is:
  - A. A random variable
  - B. A sample value
  - C. A population value
  - D. The solution to a statistical problem

(2 marks)

(2 marks)

(2 marks)

(2 marks)

- 1.9 A project requiring an initial outlay of K25 000 is guaranteed to produce a return of K30 000 in 2 years' time. If the prevailing market rate is 5% compounded annually, compute the net present value.
  - A. K27210.88
  - B. K2210.88
  - C. K2789.12
  - D. K2211.84

(2 marks)

- 1.10 If the probability that a ZiCA student will pass the examination in a quantitative course is 0.6, and it happens that the student has two such courses, what is the probability that the student will pass the examination in at least one of the courses?
  - A. 0.84
  - B. 0.81
  - C. 0.60
  - D. 0.36

(2 marks) [Total: 20 Marks]

## **SECTION B**

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

#### **QUESTION TWO**

(a) It has been observed that two (2) bulbs break in an hour in a given factory.

#### **Required:**

Calculate the probability that at most 1 bulb breaks in an hour. (4 marks)

(b) Dickson cooperative rears cows (X) and bulls (Y) which are fed on grass and cake. Each cow consumes 2kg of cake and each bull consumes 3kg of cake daily. Then each cow consumes 5kg of grass and each bull consumes 4kg grass. The maximum amount of grass available is 155kg and cake is 90 kg. The expected profit on a cow is K170 and bull is 250.

#### **Required:**

(i)	Write down the objective function.	(2 marks)
(ii)	Construct constraints functions to maximize objective function.	(4 marks)
(iii)	Draw the Graph of the constraints.	(4 marks)
(iv)	Determine the maximum profit	(2 marks)

(c) Mr. Ananias Tembo deposited K800 to get an amount of 883.6 for two (2) years in a bank offering interest compounded quarterly.

#### **Required:**

Calculate the interest rate.

(4 marks) [Total: 20 Marks]

## **QUESTION THREE**

(a) An accounting professor at ZICA is interested in the relationship between hours spent studying and total points earned in a course. Data collected on 10 students who took the course last year is shown in the table below.

Hours spent studying	Total points earned
20	21
20	19
40	15
30	16
60	14
40	17

### **Required:**

- (i) Develop an estimated regression equation showing how total points earned are related to hours spent studying. (3 marks)
- (ii) Predict the total points earned for 90 hours spent studying. (2 marks)
- (iii) Find the coefficient of correlation for the data. (5 marks)
- (b) A vendor at a local football stadium must determine whether to sell ice cream or soft drinks at today's game. The vendor believes that the profit made will depend on the weather. The payoff table (in kwacha) is as shown below.

		ACTION		
EVENT	Sell Soft Drinks	Sell Ice Cream		
Cool weather	500	1000		
Warm weather	2000	1250		

Based on his past experience at this time of the year, the vendor estimates the probability of warm weather as 0.8.

#### **Required:**

(i) Compute the expected monetary value (EMV) for selling:

1.	Soft drinks	(2 marks)

2. Ice cream (2 marks)

#### (ii) Compute the expected opportunity loss (EOL) for selling:

1. Soft drinks(2 marks)2. Ice cream(2 marks)

(iii) Based on the results of (i) and (ii), which would you choose to sell soft drinks or ice cream? Explain your answer. (2 marks)

[Total: 20 Marks]

## **QUESTION FOUR**

(a) The table is for Y depends on X.

X	1	3	2	3
Y	1	2	3	4

#### **Required:**

Determine the regression equation.

(10 marks)

(b) The probability distribution of sales (K000) is given below:

SALES	30	40	50	60
PROBABILITY	0.05	0.15	0.56	0.24

The random numbers are given as follows:

40, 35, 81, 92 and 07

#### **Required:**

Simulate the sales for five days using the random numbers given above. (7 marks)

(c) Mr. James deposited K770 in a Foster Bank offering 3% simple interest for 8 years.

## **Required:**

Calculate the simple interest.

(3 marks) [Total: 20 Marks]

## **QUESTION FIVE**

(a) A home security system is designed to have a 99% reliability rate. Suppose that nine homes equipped with this system experience an attempted burglary. Find the probabilities of these events:

(i)	At least one (1) of the alarms is triggered.	(3 marks)
(ii)	More than seven (7) of the alarms are triggered.	(3 marks)
(iii)	At most eight (8) alarms are triggered.	(3 marks)

- (b) Avon Corporation is planning to market a new makeup product. According to the analysis made by the financial department of the company, it will earn an annual profit of K4.5 million if this product has high sales, it will earn an annual profit of K3.3 million if the product has moderate sales, it will earn an annual profit of K1.2 million if the sales are mediocre, and it will lose K2.3 million a year if the sales are low. The probabilities of these three scenarios are 0.30, 0.24, 0.29 and 0.17, respectively. Let x be the profits (in millions of Kwacha) earned per annum from this product by the company.
  - (i) Write the probability distribution of *x*.(3 marks)Hint: The loss is written as a "negative profit" in the distribution table.
  - (ii) Calculate the mean and standard deviation of *x*. Interpret these measures.

(8 marks)

# [Total: 20 Marks]

## **QUESTION SIX**

- (a) Calculate the amount owed on a loan of K10000 over four years at an interest rate of 9% compounded annually.
   (3 marks)
- (b) For a period of three (3) years a company monitors the number of units of output produced per quarter and the total cost of producing the units. The table below shows their results:

Unit of Output (X) (K'000)	14	29	55	74	11	23	47	69
Total Cost (Y) (K'000)	35	50	73	93	31	42	65	86

(i) Draw the scatter diagram of these data. (5 marks)
(ii) Calculate the coefficient of correlation *r* and interpret the result. (12 marks)

[Total: 20 Marks]

#### **END OF PAPER**

## SUGGESTED SOLUTIONS

#### SOLUTION ONE

1.3

1.1	Bar chart	(D)
1.2	Independent event	(B)

Х	$R_{x}$	Y	Ry	$R_x - R_y$	= d	d <sup>2</sup>
20	2	15	3	2 – 3	= -1	1
10	3	30	1	3 – 1	= 2	4
3	0 1	20	2	1 – 2	= -1	1
						$\sum d^2 = 6$

$$r = 1 - \frac{\frac{6(6)}{3(3^2 - 1)}}{= 1 - \frac{36}{3}(9 - 1)}$$
  
= 1 - \frac{36}{3}(8)  
= 1 - \frac{36}{24}  
$$r = 1 - \frac{1.5}{2} = -0.5$$
 (D)

1.4 The amount of each annuity payment is given by

$$R = P\left[\frac{r}{1-(1+r)^{-n}}\right]$$
$$= 1000\left[\frac{0.08}{1-(1+0.08)^{-5}}\right]$$
$$= 1000\left[\frac{0.08}{1-(1.08)^{-5}}\right]$$
$$= K250.46$$

The correct answer is A

1.5 The correct answer is D

$$S^{2} = \frac{\sum (x - \overline{x})^{2}}{n - 1}$$
$$5 = \frac{20}{n - 1}$$
$$5n - 5 = 20$$

$$5n = 25$$
  
$$\therefore n = 5 \tag{B}$$

1.6 The correct answer is A

1.7 (B)

1.8 (C)

1.9 Amount of K30000 in 2 years' time, based on a discount rate of 5%, is found by setting S = 30000, t = 2 and r = 5 in the formula

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

$$P = K30000(1.05)^{-2} = K27210.88$$
The NPV is therefore K27210.88 - K25000 = 2210.88
(A)

$$P(X \ge 1) = P(1) + P(2) = (0.6 \times 0.4 + 0.4 \times 0.6) + (0.6 \times 0.6) = 0.84$$

1.10 The correct answer is A.

# SOLUTION TWO

(a) m = 2/h  
p(x) = 
$$\frac{m^{x}e^{-m}}{x!}$$
  
P(x ≤ 1) = p(x=0) + p(x=1)  
=  $\frac{2^{0}e^{-2}}{0!} + \frac{2^{1}e^{-2}}{1!}$   
=  $\frac{(1)(0.1353)}{1} + \frac{2(0.1353)}{1}$   
= 0.1353 + 0.2706  
= 0.4059

(b) Let X = Cows Y = Bull  
(i) Z = 170x + 250y  
(ii) 2x + 3y 
$$\le 90$$
  
 $5x + 4y \le 155$   
 $x \ge 0$  (1) and  $y \ge 0$  (1)  
(iii) 2x + 3y = 90  
 $(x,0): 2x + 0 = 90$   
 $2x = 90$   
 $X = {}^{90}/_2 = 45$  (45,0)  
(0,y): 0 + 3y = 90  
 $y = {}^{90}/_3 = 30$  (0,30)  
 $5x + 4y = 155$   
 $(x,0): 5x + 0 = 155$   
 $5x = 155$   
 $X = {}^{155}/_5 = 31j$  (31,0)  
(0,y): 0 + 4y = 155  
 $4y = 155$   
 $Y = {}^{155}/_4 = 38.75 = 39j$  (0,39)  
(iv)  $x = 15$   $y = 20$  See graph .  
 $Z = 170x + 250y$   
 $= 170(15) + 250(20)$ 

(c) P = k800 A = K883.6 m=4 n=2  
P 
$$(1 + i/m)^{mn} = A$$
  
 $800(1 + i/4)^{4(2)} = 883.6$   
 $800(1 + i/4)^8 = 883.6$   
 $(1 + i/4)^8 = \frac{883.6}{800}$   
 $(1 + i/4)^8 = 1.1045$ 

$$1 + \frac{i}{4} = \sqrt[8]{1.1045}$$

$$1 + \frac{i}{4} = 1.0125$$

$$\frac{i}{4} = 1.0125 - 1$$

$$\frac{i}{4} = 0.0125$$

$$i = 0.0125(4)$$

$$i = 0.05$$

$$\frac{R}{100} = 0.05$$

$$R = 0.05 \times 100 = 5\%$$



## **SOLUTION THREE**

(a) i.					
x	у	$x^2$	ху	$y^2$	
20	21	400	420	441	
20	19	400	380	361	
40	15	1600	600	225	
30	16	900	480	256	
60	14	3600	840	196	
40	17	1600	680	289	
$\sum x = 210$	$\sum y = 102$	$\sum x^2 = 8500$	$\sum xy = 3400$	$\sum y^2 = 1768$	

$$\overline{x} = \frac{\sum x}{n} = \frac{210}{6} = 35; \quad \overline{y} = \frac{\sum y}{n} = \frac{102}{6} = 17$$

$$SS_{xx} = \sum x^2 - \frac{\left(\sum x\right)^2}{n} = 8500 - \frac{210^2}{6} = 1150$$

$$SS_{xy} = \sum xy - \frac{\left(\sum x\right)\left(\sum y\right)}{n} = 3400 - \frac{(210)(102)}{6} = -170$$

$$SS_{yy} = \sum y^2 - \frac{\left(\sum y\right)^2}{n} = 1768 - \frac{102^2}{6} = 34$$

$$\hat{\beta}_1 = \frac{SS_{xy}}{SS_{xx}} = \frac{-170}{1150} = -0.15$$

$$\hat{\beta}_0 = \overline{y} - \hat{\beta}_1 \overline{x} = 17 - (-0.15)(35) = 17 + 5.25 = 22.25$$
The general estimated regression equation is given by

The general estimated regression equation is given by  $\hat{y} = \hat{\beta}_0 + \hat{\beta}_1 x$ 

 $\therefore \hat{y} = 22.25 - 0.15x$ 

ii.  $\hat{y} = 22.25 - 0.15x$  $\hat{y} = 22.25 - 0.15(90)$  $\hat{y} = 8.75 \text{ points}$ 

iii. The coefficient of correlation is given by

$$r = \frac{SS_{xy}}{\sqrt{SS_{xx}SS_{yy}}} = \frac{-170}{\sqrt{1150 \times 34}} = -0.86$$

iv. The coefficient of determination is given by  $r^2$  where

$$r^2 = (-0.86)^2 = 0.74$$

The percentage of the variation in total points earned which can be explained by hours spent studying is 74%.

(b) i.

- a. P(warm weather) = 0.8, P(cool weather) = 0.2Let A=selling soft drinks
  - $\mathbf{B} =$ selling ice cream

$$EMV_{A} = \sum_{x} xP(X = x)$$
  
= (0.2×500)+(0.8×2000)  
= 100+1600 = K1700

b. 
$$EMV_{\rm B} = \sum_{y} y P(Y = y)$$
  
=  $(0.2 \times 1000) + (0.8 \times 1250)$   
=  $200 + 1000 = K1200$ 

ii. 
$$EOL = \sum_{x} Lij P(X = x)$$

	ACTION			
EVENT	Sell Soft Drinks	Sell Ice Cream		
Cool weather	500	0		
Warm weather	0	750		

a.  $EOL_A = 0.2 \times 500 + 0 \times 0.8 = 100 + 0 = K100$ 

 $EOL_B + 0.2 \times 0 + 750 \times 0.8 = 0 + 600 = K600.$ 

iii. Based on the results of i., I would sell soft drinks because it has a higher EMV.

Based on the results of ii., I would sell soft drinks because it has a lower EOL (Expected Opportunity Loss).

# SOLUTION FOUR

(a) 
$$Y = a + bx$$
  
 $X \quad X^2 \quad Y \quad XY$   
 $1 \quad 1 \quad 1 \quad 1 \quad 1$   
 $3 \quad 9 \quad 2 \quad 6$   
 $2 \quad 4 \quad 3 \quad 6$   
 $3 \quad 9 \quad 4 \quad 12$   
 $\sum x = 9(1) \sum x^2 = 23 (1) \sum y = 10 (1) \quad \sum xy = 25$   
 $b = \frac{n \sum xy - (\sum x)(\sum y)}{n \sum x^2 - (\sum x)^2} = \frac{4(25) - (9)(10)}{4(23) - (9)^2}$   
 $= \frac{100 - 90}{92 - 81} = \frac{10}{11} = 0.91$   
 $a = \frac{\sum y}{n} - (b) \left(\frac{\sum x}{n}\right) = \frac{10}{4} - (0.91)(\frac{9}{4})$   
 $= 2.5 - (0.91)(2.25)$   
 $= 2.5 - 2.05 = 0.45$   
 $Y = 0.45 + 0.91x$ 

(b)	SALES	PROB	UNITS	CUM	RANDOM NUMBER
I	NTERVAL				
	30	0.05	5	5	00 - 04
	40	0.15	15	20	05 – 19
	50	0.56	56	76	20 – 75
	60	0.24	24	100	76 – 99
DAY		RAN	IDOM NUMBI	SIMULATED SALE	
1	L		40		50
2	2		35		50
3	3		81		60
2	ł		92		60
5			07		40
(C)	$\mathbf{I} = \frac{PRT}{100} = \frac{T}{2}$	$\frac{770 X 3 X 8}{100} = \frac{184}{100}$	$\frac{480}{10} = K184.8$		

## **SOLUTION FIVE**

(a)

Let X denote the event that an alarm is triggered.

Therefore, we have that;

n = 9, P(success) = p = 0.99 (q = 1 - p = 0.01), So that  $X \sim B(9, 0.01)$ .

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

(i) 
$$P(X \ge 1) = 1 - P(X < 1) = 1 - P(0) = 1 - {9 \choose 0} (0.99)^0 (1 - 0.99)^{9-0} \approx 1$$
  
(ii)  $P(X > 7) = P(8) + P(9) = {9 \choose 8} (0.99)^8 (1 - 0.99)^{9-8} + {9 \choose 9} (0.99)^9 (1 - 0.99)^{9-9} = 0.997$   
(iii)  $P(X \le 8) = 1 - P(X > 8) = 1 - P(9) = 1 - {9 \choose 9} (0.99)^9 (1 - 0.99)^{9-9} = 0.08$ 

- (b) probability distribution
  - i.

Х	-2.3	1.2	3.3	4.5
P(X=x)	0.17	0.29	0.24	0.30

ii.  $E(X) = \sum X \cdot P(X = x) = (-2.3 \times 0.17) + (1.2 \times 0.29) + (3.3 \times 0.24) + (4.5 \times 0.30)$ = K2.099 Million

$$E(X^2) = \sum X \cdot P(X = x) = ((-2.3)^2 \times 0.17) + ((1.2)^2 \times 0.29) + (3.3^2 \times 0.24) + (4.5^2 \times 0.30)$$
$$= 10.0055$$

Therefore,  $= E(X^2) - [E(X)]^2 = 10.0055 - 2.099^2 = 5.6$ .

Standard deviation =  $\sqrt{5.6}$  = K2.366 Million
#### SOLUTION SIX

(a)  $P_t = P_0(1 + i)^t$ 

Substitute  $P_0 = 10000, i = \frac{9}{100} = 0.09, t = 4$  years into the formula above,  $P_4 = P_0(1 + i)^t = 10000(1 + 0.09)^4 = 10000(1.09)^4$ = 10000(1.41158161) = 14115.816

(b)

i.



ii.

Х	Y	X2	XY	Y2
14	35	196	490	1225
29	50	841	1450	2500
55	73	3025	4015	5329
74	93	5476	6882	8649
11	31	121	341	961
23	42	529	966	1764
47	65	2209	3055	4225
69	86	4761	5934	7396
322	475	17158	23133	32049

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

 $=\frac{8(23133)-(322)(475)}{\sqrt{[8(17158)-322^2][8(32049)-475^2]}}$ 

r = 0.999

r = 0.999 which is approximately equal to one, therefore there is a very strong positive relationship between the unit of output produced and the total cost.

## **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

## LEVEL ONE

DA 3: BUSINESS ECONOMICS

TUESDAY 15 SEPTEMBER 2020

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

#### **INSTRUCTIONS TO CANDIDATES**

- 1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
- 2. This paper is divided into TWO (2) sections:

Section A: Ten (10) compulsory multiple choice questions.

Section B: Any two (2) of three (3) optional questions on Microeconomics.

Any two (2) of three (3) optional questions on Macroeconomics.

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

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

## **SECTION A – (Compulsory)**

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

#### **QUESTION ONE**

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

- 1.1 Following an increase in the price of fuel there is a 20% increase in the price of air travel tickets which results in a 20% decrease in total revenue. Which of following statements is TRUE about the demand for air travel?
  - A. The demand for air travel is price inelastic.
  - B. The demand for air travel is price elastic.
  - C. The demand for air travel is infinitely price elastic.
  - D. The demand for air travel has zero price inelasticity.

(2 marks)

- 1.2 Which of the following is a predictable, secondary effect of a sharp increase in gasoline prices?
  - A. Producers will increase the production of gas guzzling vehicles.
  - B. Producers will increase the production of fuel-efficient cars.
  - C. The termination of research on the cost-effectiveness of alternative fuels to power automobiles.
  - D. The government will place a quota on the number of fuel-efficient cars for sale, thus "forcing" consumers to purchase the gas guzzling vehicles

(2 marks)

- 1.3 The formula for average fixed costs is:
  - A. TC-TVC.
  - B. TFC/q.
  - C. TC/q.
  - D. q/TFC.

(2 marks)

- 1.4 A firm will begin to experience diminishing returns at the point where:
  - A. Marginal cost increases.
  - B. Marginal cost decreases.
  - C. Marginal product increases.
  - D. Both B and C

(2 marks)

- 1.5 Specialization in goods and services one can produce at a low cost makes it possible for trading partners to produce a larger joint output. This is called:
  - A. The law of comparative advantage.
  - B. The law of absolute advantage.
  - C. The law of production possibilities.
  - D. The law of demand.

(2 marks)

- 1.6 Which of the following is true about the circular flow model?
  - A. Firms are sellers in the factors market
  - B. Households are sellers in the product market
  - C. Firms are buyers in the factors market
  - D. Householders are buyers in the factors market

(2 marks)

- 1.7 If, between 1983 and 1985, nominal GDP rose by 20% and prices rose by 13%, actual output rose by approximately:
  - A. 33%
  - B. 2.6%
  - C. 20%
  - D. 7%

1.8 The precautionary demand for money:

- A. Varies inversely with the level of income.
- B. Is positively and strongly related to the interest rate.
- C. Arises from the possibilities of uncertain expenditures and/or uncertain income.
- D. Varies inversely with the price level.

(2 marks)

(2 marks)

- 1.9 If Aggregate Demand exceeds Aggregate Supply at a full employment level of output, there will be:
  - A. Unemployment.
  - B. Inflation.
  - C. A federal budget deficit.
  - D. Stagflation.

(2 marks)

- 1.10 If the central bank has to intervene in the foreign exchange markets to prevent the home currency from appreciating, then its foreign exchange reserves will:
  - A. Decrease and the domestic money supply will rise.
  - B. Decrease and the domestic money supply will fall.
  - C. Increase and the domestic money supply will rise.
  - D. Increase and the domestic money supply will fall.

(2 marks) [Total: 20 Marks]

#### **SECTION B**

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

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

#### **QUESTION TWO**

(a) State any five (5) advantages of the partnership type of business organisation.

(5 marks)

- (b) State any five (5) disadvantages of the partnership type of business organisation. (5 marks)
- (c) Suppose Manyozo Constituency, one of the rural parliamentary constituencies in Zambia has been allocated K700,000 as Constituency Development Fund (CDF) in the year 2020. The Constituency Development Committee has identified three projects which can help uplift the standards living of the local people. These projects are either to build a community school, a clinic or a dam. However, this money can only fund one project. As an Economist, explain how this scenario depicts the concepts of:

(ii)	Choice	(2 marks)
(iii)	Opportunity Cost	(4 marks)
		[Total: 20 Marks]

#### **QUESTION THREE**

- (a) Outline any four (4) characteristics of a market economy. (4 marks)
- (b) Suppose that wages for fruit and vegetable workers decrease. Draw a graph showing equilibrium in the market for fruits and vegetables.
  - (i) Use your graph to illustrate the impact of this change upon the equilibrium price and quantity of fruits and vegetables. (5 marks)
  - (ii) Use your graph to illustrate what happens to the equilibrium position in the labour market as a result of this change. (5 marks)
- (c) Explain with the use of an appropriate formula the term cross price elasticity of Good X and Good Y. (2 marks)
- (d) Given two goods X and Y, assume that the price of X falls by 50%, and that the cross-price elasticity of demand for good Y is -1.5. Calculate the change in demand for good Y as a result of the fall in the price of X. (2 marks)

(e) A firm has the following price elasticities of demand for two goods, Good X and Good Y:

Good X = 2.0 Good Y = 0.5

What changes, if any, should the firm make in the selling price of each of the goods<br/>to increase overall revenue? Explain your answer.(2 marks)

[Total: 20 Marks]

## **QUESTION FOUR**

Zambia Electricity Supply Corporation (ZESCO) is one of the parastatal companies enjoying a monopoly in the production and distribution of hydro power energy. Other companies are coming into this energy sector with differentiated products such as solar energy.

There are many features for and against monopolies, oligopolies like petrol stations and other forms of market structures in a country like Zambia. In the light of the above background:

- (a) Distinguish any three (3) features between a monopoly and an oligopoly markets?
  - (6 marks)
- (b) Explain any four (4) responsibilities of the Competition and Consumer Protection Commission in Zambia? (4 marks)
- (c) Define monopsony and explain any two (2) conditions for monopsonistic purchasing? (4 marks)
- (d) Using a diagram, explain the long-run equilibrium conditions for a perfectly competitive firm. (6 marks)

## [Total: 20 Marks]

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

## **QUESTION FIVE**

(a)	Distinguish between stagflation and hyperinflation.						
(b)	Describe Cost push inflation						
(c)	Descril	be the following types of unemployment;					
	(i)	Minimum wage unemployment	(3 marks)				
	(iii)	Demand deficient unemployment	(3 marks)				

(d) Explain the solutions that have been advocated by Keynesian economists to solve. demand deficient unemployment (4 marks)

[Total: 20 Marks]

## **QUESTION SIX**

(a)	Define the term Gross Domestic Product (GDP).	(2 marks)

- (b) Describe the four-sector circular flow model of a closed economy. (8 marks)
- (c) Outline any two (2) uses and any three (3) problems of using GDP dat (5 marks)
- (d) Suppose that in the economy under consideration has the following consumption function C = 200 + .8(Y T). Furthermore, you know that taxes are autonomous and equal to K10, government spending is constant and equal to K100, investment spending is constant and equal to K20
  - (i) Calculate the equilibrium level of output for this economy. (3 marks)
  - Suppose that government spending is decreased from its initial level by K50.
     Holding everything else constant, what will be the change in the equilibrium level of output given this spending change?
     (2 marks)

[Total: 20 Marks]

## **QUESTION SEVEN**

Globalization is used as the unquestionable model for economic growth and stability. However, there are now many critics of this phenomena.

- (a) Explain any three (3) criticisms of globalization? (6 marks)
- (b) Explain any three (3) objectives that the global financial institutions [World Bank(WB), the International Monetary Fund(IMF), the Group of Twenty(G-20)] seek to provide? (6 marks)
- (c) State four (4) macroeconomic objectives of a country like Zambia? (8 marks) [Total: 20 Marks]

#### END OF PAPER

## SUGGESTED SOLUTIONS

#### SOLUTION ONE

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

## **SOLUTION TWO**

- a) The following are the advantages of a partnership business:
  - It commands large resources
  - It is possible to establish wider personal contacts
  - Business can be run on a larger scale enjoying the various economies of scale
  - The union of ownership and management is a spur to efficient and economical working.
  - Partnership responds promptly to changes in business conditions and is very highly adaptable. There is no red-tapism.
  - The existence of unlimited liability curbs the speculative tendencies of the partners, and prevents the launching of rash and risky enterprises.
- b) Disadvantages of partnership business include:
  - In a standard type of partnership, partners similarly have unlimited liability, they can lose their personal assets as well as the money they originally put into the business.
  - Continuity can be even more awkward in a partnership than in a sole proprietorship.
  - There is a problem of financing growth.
  - In actual practice, partners behave in a selfish manner, doing the minimum and trying to get the maximum out of the business.
  - Further, the partnership resources are too limited to enable the concern to do big business.
  - Possible Conflict of interest: Where there are two people, it is very possible that disagreements are bound to occur. If a partnership cannot diplomatically sort out these differences, it may be its undoing as has happened to many.
  - On the whole, this form of organization cannot meet the requirements of modern trade and industry.
- c) The key economic concepts from the scenario are:
  - (i) **Scarcity** is the condition in which human wants are forever greater than the available resources required to meet them. In the Scenario, scarcity is shown by the fact that K700, 000.00 is not enough to fund all the three projects identified.
  - (ii) **Choice** requires that the human wants are ranked in order of priorities and then select that which is ranked number one. This is shown by the selecting of one of the projects since resources cannot allow them to undertake all at once.
  - (iii) **Opportunity cost** is the best alternative sacrificed for the chosen alternative. If the K700,000.00 is spent on building a Community School, the opportunity cost is the clinic and a dam that will have been sacrificed.

#### SOLUTION THREE

a) Characteristics of market economy

**Private property**: Most goods, services, and means of production are privately owned although they can be collectively owned in worker cooperatives or as state property that provides a service e.g. museums.

**Freedom of choice**: A market, usually, offers you lots of goods and services you can buy as a consumer because producers are free to produce whatever they want, or whatever they think will sell the best. the only limitation to this is the price of the product/ service and the amount of capital at either the consumer's or producer's disposal.

**Competition**: Competition between producers helps to keep prices low and quality high as consumers will want. Producers who can meet that demand best by keeping prices low and quality high to the best of their ability will outperform their competitors who now have an incentive to either lower their price or increase their quality of their product/ service or offer deals to entice customers.

**Supply and Demand**: This is what makes a market economy so effective and efficient. This is the system that determines the price of a product/ service on the basis of how abundant it is and how large the demand for it is. However it is also dependent on both the consumers and producers having access to the same information.

**Limited Government**: In a market economy the government can interfere with the market for various reasons and influence how things function but most economic decisions ae made by producers producing goods and services as well as producers choosing what to buy without the government telling them what to do.

b) Change in equilibrium point



i) Fruits and vegetable market

The graph shows initial equilibrium at price (P1) where quantity demanded (Q1) equals quantity supplied (Q1). That is the point where D intersects with S1.

A decrease in the wages for workers producing fruits and vegetables will also lower the costs of production. Reduced costs of production will increase the willingness of firms in the

market to supply fruits and vegetables at the same price, shifting the supply curve to the right, that is from S1 to S2.

The new equilibrium point will now be at the intersection of the demand curve D, and the new supply curve S2 at new lower price P2.

ii) Labour market

The graph shows initial equilibrium at wage rate (W1) where quantity demanded for workers (Dw) equals quantity supplied (Sw). That is at Qw1.

However, when the wage rate reduces to W2, the quantity supplied of labour will decrease to Sw2 while the quantity demanded will increase Dw2. The new wage rate will cause excess demand (or labour shortage) because it is below the equilibrium point.



#### c) Definition of cross-price elasticity of demand

This is a measure of the responsiveness of the demand for one product to a change in the price of another (i.e. a substitute or complement). It is used to estimate how much the demand for one product will change in response to a change in price of the other good.

 $CED = \frac{\% \text{ change in } qtydY}{\% \text{ change in priceX}}$ 

d)

$$Ced = \frac{\% \text{ change in qtydY}}{\% \text{ change in priceX}}$$

$$1.5 = \frac{\% \text{ change in } qtydY}{50\%}$$

%change in qtydY =  $1.5 \times \frac{50}{100} = 75\%$ 

A fall in the price of X by 50% will lead to a 75% increase in the demand for Y.

e)

For good X, Ped of 2 indicates that demand is elastic. A change in the price will lead to a big change in quantity demanded. The firm should therefore reduce the price in order to increase total revenue.

For good Y, Ped of 0.5 indicates that demand is inelastic. A change in the price will lead to a small change in quantity demanded. The firm should therefore increase the price in order to increase total revenue.

#### SOLUTION FOUR

(a)

	monopoly	oligopoly
size	One firm, many buyers	Few firms, many buyers
Demand curve	Downward sloping	Kinked demand curve
Price competition	Price competition	Non price competition

(b) The responsibilities of the competition and consumer protection commission include:

(i) to review, investigate and assess possible cartels

(ii) to review, investigate and assess mergers

(iii) to review, investigate and assess possible abuse of a dominant position in the market (dominance conduct)

(iv) To protect consumers from unfair trading practice.

(c) Monopsony refers to a sole buyer rather than a sole seller.

The conditions for monopsonistic purchasing :

- One sole buyer of the product : hence they are able to affect the price by their purchasing
- Many sellers of the product: hence no individual seller can influence price
- Absence of alternative uses for the product
- Barriers of entry and exit to and from the market: hence producers cannot cease supply by making something else and alternative buyers cannot enter to eliminate supernormal profits of the buyer.

(d)



At T the firm will be making normal profit which is the long-run equilibrium condition for a firm in this market where TR=TC and MR=MC=AC=AR=p with output Q profit maximizing output in the long run. This position earns the entrepreneur the desired returns on their

capital. (Normal profit), which ensures allocative efficiency, and means that firms operate their most cost-effective point.

## SOLUTION FIVE

## a) Stagflation and Hyperinflation

Stagflation: Refers to a condition of stagnation of economic growth and high rates of inflation which occurs when a country experiences high inflation, a slowing economic growth rate and high unemployment. When stagflation takes place it becomes difficult to design a policy that deals with it.

Hyperinflation: Occurs when there is an extremely high and rapid increase in price levels of more than 50% per month. This is caused by a sustained increase in the printing of money by government to pay for its expenditures. There is then 'far too much money chasing too few goods'. When the price levels are rising so rapidly that people lose confidence in the value of money, it can be difficult for the economy to operate. People resort to goods as a medium of exchange to make payment. Barter makes a comeback with people exchanging goods for goods.

## b) Cost push inflation

Cost push inflation has to do with an increase in costs of production. In order to stay in the business, producers are compelled to pass these higher production costs on to consumers in the form of higher prices. These are the factors that lead to cost push inflation:

- Increases in wages and salaries: If increases in wages and salaries are not accompanied by an increase production then the cost of production increases and prices in the economy increase.
- A decline in productivity: This means that it costs more to produce the same amount of goods and services, which results to an increase in price of goods and services.
- Increase in the price of imported goods/key inputs, i.e. intermediate goods and capital goods, this therefore results to an increase in costs of production.
- Increase in profit margins by firms: This causes an increase in costs of production, because profits are part of costs of production.
- Exchange rate depreciation leads to expensive imports.
- Natural disasters such as droughts, floods and even global warming, this has a great on costs of production for farmers.

## c) Types of unemployment

**Minimum wage unemployment** is caused when governments intervene in the labour market. I occurs when the government sets a minimum wage which employers are legally obligated to pay their employees. If the minimum wage is higher than what employers are willing to pay, it will result in a fall in demand for labour. This results in unemployment.

**Demand deficient unemployment** occurs when an economy is in a decline or recession period. During recession, the demand for goods and services falls, this in turn leads to a fall in the demand for labour. This results in unemployment. Therefore, unemployment is as a result of insufficient aggregate demand in the economy.

## d) Solution for demand deficient unemployment

The main solution for demand deficient unemployment advocated by Keynesian economists is an expansionary fiscal policy.

- The expansionary fiscal policy is usually associated with an increase in government expenditure which it is believed will then have a multiplier effect on aggregate demand.
- An alternative to increasing government expenditure is cutting the tax rate which should in turn lead to increased demand in the form of higher consumption and investment, although Keynesians regard this as a less effective means of stimulating aggregate demand.

### SOLUTION SIX

- a) **Gross domestic product** refers to the total value of income/production from economic activity within the boundaries of a nation.
- b) The circular flow model

In the circular flow model, the two basic sectors are the producer and consumer and are referred to as "<u>firms</u>" and "households" respectively and provide each other with factors in order to facilitate the flow of income. Firms provide consumers with goods and services in exchange for consumer expenditure and "<u>factors of production</u>" from households.

The third is the Financial Sector that consists of banks and non-bank intermediaries who engage in the borrowing (savings from households) and lending of money. In terms of the circular flow of income model the leakage that financial institutions provide in the economy is the option for households to save their money. This is a leakage because the saved money cannot be spent in the economy and thus is an idle asset that means not all output will be purchased. The injection that the financial sector provides into the economy is investment (I) into the business/firms sector.

The fourth sector is the Government Sector that consists of the economic activities of governments. The leakage that the Government sector provides is through the collection of revenue through Taxes (T) that is provided by households and firms to the government. For this reason they are a leakage because it is a leakage out of the current income thus reducing the expenditure on current goods and services. The injection provided by the government sector is Government spending (G) that provides collective services and welfare payments to the community.

c)

#### Uses of GDP data

- To assess the state of the economy for purposes of constructing economic policy.
- To monitor the impact of government economic policies.
- To enable business and government compare the progress and prospects of different economies.
- To establish the material standard of living in an economy.

#### Problems with the use of GDP

- Non-market production: work done where no charge is made will not be included in GDP. This includes, housework, gardening etc...
- The underground economy: transactions in the underground economy are not reported, because they are illegal or for tax evasion purposes. This understates the GDP.
- Leisure and human costs: increased leisure time and improved safety conditions at work are not reflected in GDP.
- Quality variation and new goods: improvement in the quality of goods and new goods, not previously available are not taken into account.
- Economic 'bads': harmful side effects, such as pollution, are ignored in GDP.
- d) Equilibrium level of output

i) 
$$Y = AE$$
  
 $Y = C + I + G + (X - M)$   
 $Y = 200 + .8(Y - T) + 50 + 100 + 20$   
 $.2Y = 200 - .8(10) + 170$   
 $.2Y = 370 - 8$   
 $.2Y = 362$   
 $Y = 1810$   
ii)  
 $Y' = 200 + .8(Y' - 10) + 50 + 50 + 20$   
 $.2Y' = 312$   
 $Y' = K1560$   
The change in real GDP = Y'- Y = K1560 - K1810 = -K250

#### SOLUTION SEVEN

#### a) Criticisms of globalization

(i)The main institutions of globalization follow the collective will of the most powerful countries and are more concerned about aiding the economic wealth of countries which are already relatively wealthy and powerful.

(ii)IMF,WB and G-20 along with powerful multinational organizations dictate economic policy in countries but do not include real representation of these countries within their organizations.

(iii)World poverty is still an issue and many fear that the policies adopted by WB,IMF and others, for example in restricting subsidy in Africa and opening up their markets for Western imports that are produced under subsidy, actually makes some nations poorer.

(iv)There is no enduring political and economic stability in the world and the collapse of one part of the economy, for example in South America, could have disastrous knock on effects for the rest of the world.

(v)Not all countries are included in global activity. Instead there is an increasing tendency for groups of countries, usually located in the same region to become involved in each other's economies.

#### b) Objectives of the global financial institutions

(i)Short-term stabilization measures for particular countries or the world economy as a whole

(ii)Medium and long-term financial help to countries seeking to restructure and invest in their economies

(iii)Co-ordination of policies of member countries on financial regulation and economic policies to avert crises and stimulate world economic growth.

#### c) Macroeconomic objectives

(i)To achieve economic growth, and growth in national income per head of the population. Growth implies an increase in national income in real terms. Increases caused by price inflation are not real increases at all.

(ii)To control price inflation(to achieve stable prices). This has become a central objective of many counties.

(iii)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

(iv)To achieve a balance between exports and imports over a period of years. The volume of exports should be equal to the volume of imports.

#### END OF SOLUTIONS



### DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

## LEVEL ONE

## DA 4: INFORMATION TECHNOLOGY AND COMMUNICATION

#### WEDNESDAY 16 SEPTEMBER 2020

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

## **INSTRUCTIONS TO CANDIDATES**

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

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

## **SECTION A – COMPULSORY**

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

#### **QUESTION ONE**

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

- 1.1 What is information?
  - A. Processed data
  - B. Detail analysis
  - C. Prepared data
  - D. Unprocessed input

(2 marks)

- 1.2 Which of the statements accomplishes one of the following operations in Microsoft Word?
  - 1. Moving files
  - 2. Copying files
  - 3. Deleting files Given that:
    - i. Dragging and dropping
    - ii. Copy and paste
  - A. i achieves 1
  - B. i achieves 2
  - C. ii achieves 1
  - D. ii achieves 3

(2 marks)

- 1.3 Among the following, one sentence is **true**. Which one is it?
  - A. Without hardware, a Computer can still work.
  - B. Without software, a computer can still operate but not effectively.
  - C. Without an Operating system, a Computer cannot give us Information.
  - D. Without a hard disk, a Computer can still boot and switch on.

(2 marks)

- 1.4 Which one of the following statements is correct?
  - A. A mouse and a printer are output devices.
  - B. Old type of mouse contains a ball that rotates on smooth flat surface.
  - C. The least common type of keyboard is the QWERTY keyboard.
  - D. A mouse is no longer required in recent days because of new Bar-code readers in use.

(2 marks)

- 1.5 Sometimes a Company cannot find packaged software that meet its unique requirements. In this case, the alternative will be:
  - A. Open-source software
  - B. Packaged Software
  - C. Shareware Software
  - D. Tailor(custom)-made Custom Software

(2 marks)

- 1.6 What is the role of the acknowledgement part found in the preliminary pages of a report?
  - A. To provide recommendations
  - B. To recognize people who offered help in the production of a report
  - C. To recognize people who offered help in typing the report
  - D. To recognize people who offered help in data collection in the field.

(2 marks)

- 1.7 State one (1) reason a memo has no salutation and complementary close.
  - A. It is a document used within the organisation
  - B. The sender can easily contact the recipient
  - C. The recipient can easily contact the sender
  - D. To and From takes the position of the salutation and complementary close.

(2 marks)

- 1.8 Which one of the following would allow you to express yourself fully and be sensitive to others when communicating?
  - A. Telephone conversation
  - B. Face to face communication
  - C. Writing a letter
  - D. Writing an email

(2 marks)

- 1.9 State one (1) example of a channel of communication.
  - A. Verbal Communication
  - B. Non-verbal Communication
  - C. Visual Communication
  - D. Vertical Communication

(2 marks)

- 1.10 Which of the following is an example of a closed question.
  - A. Why do you like Information Technology and communication?
  - B. How can I get to your place?
  - C. What is your favorite subject?
  - D. Is it possible to show me the directions to your place?, how do I get there?

(2 marks)

[Total 20 Marks]

#### **SECTION B**

#### This Section has two (2) parts: 1. INFORMATION TECHNOLOGY

#### 2. COMMUNICATION

#### **1. INFORMATION TECHNOLOGY**

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

#### **QUESTION TWO**

In a job interview, you are required to answer a few questions in Information and Communications Technology. With the advent of computerised accounting, you need to show that you have not only basic but broad understanding of computer networks, spread sheet formulae and information systems.

#### **Required:**

(a) Using suitable example explain the use of the following spread sheet functions.

(i) =IF() (ii) =TODAY() (iii) =SUM() (iv) = COUNT()

(8 marks)

- (b) List any three (3) contributions of an accounting information systems to the value chain. (3 marks)
- (c) Explain briefly on any two (2) of the following types of networks.

(i) Local Area Network (LAN)(ii) Wide Area Network (WAN)

(iii) Virtual Private Network (VPN)

(6 marks)

(d) List any three (3) health problems associated with using computers. (3 marks) [Total: 20 Marks]

#### **QUESTION THREE**

In your department at a vehicle import company, data is collected automatically from various documents and uploaded on the computer system through a network. As the finance officer, you need to be fully aware of the packages used as well as all the security requirements.

Below is a spreadsheet calculating financial data.

	Α	В	С	D	E	F	G	Н		J
1									К	US \$
2							exchange rate		15	1
3							VAT		15%	
4			Vehicle Make	Purchase Price in dollars US \$	Amount in Kwacha K	VATK	Total	Remarks		
5			Toyota	5,400.00						
6			Nissan	2,600.00						
7			Benz	13,000.00						
8			Suzuki	2,200.00						
9										

#### **Required:**

- (a) Write down the following Spreadsheet formulas as required with reference to figure 1 above. Use cell references in you formulae.
  - (i) In cell E7, write down the excel formula which calculates the kwacha amount for the **Benz** vehicle given that the exchange rate is K15 to a dollar, as given above. (1 mark)
  - (ii) In cell F7, write down the excel formula to compute the VAT amount for the Benz. VAT is 15% of the cost of the vehicle in kwacha as given above.

(1 mark)

- (iii) In cell G7, write down the formula to get the total cost of the vehicle by adding VAT to kwacha amount. (1 mark)
- (iv) In the Remarks column, in cell H7, write down the Excel formula to check the total cost in cell G7 so that if the amount is less than K50,000, it should indicate "check manufacture date" otherwise it should indicate "no issue".

(3 marks)

(b) Explain any three (3) methods you would use to ensure security and safety on your computer system. (6 marks)

(c) Describe the following IT concepts.

(i) Cache memory	(3 marks)
(ii) Internet Service Provider (ISP)	(3 marks)

(d) Explain Magnetic Ink Character Recognition (MICR) as a document reading method.
 (2 marks)
 [Total: 20 Marks]

#### **QUESTION FOUR**

Some facilities cannot be avoided in the day-to-day running of modern business operations.

#### **Required:**

For each of the following facilities, briefly explain four (4) key business benefits of using them in business:

(iv)	Multi-Media applications	(5 marks) <b>[Total: 20 Marks]</b>
(iii)	A Computerized Payroll System	(5 marks)
(ii)	Check-digit and Sequence Validation Checks	(5 marks)
(i)	Email	(5 marks)

#### 2. COMMUNICATION

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

#### **QUESTION FIVE**

You are a secretary of Makumba Enterprises. You have been given the responsibility of arranging the annual general meeting that will be issued to all stakeholders.

#### **Required:**

- (a) Produce a notice for an annual general meeting that will be issued to all stakeholders. In your notice include an agenda relevant for that particular meeting. (12 marks)
- (b) Briefly Explain four (4) Techniques that you need to consider in order to effectively write notes in a meeting (8 marks)

[Total 20 Marks]

#### **QUESTION SIX**

A co-worker who has been denied leave to go and nurse his/her spouse who is unwell wants advice from you. He or she wants to write a complaint letter to his/her supervisor but you are against it. You instead advise him/her to speak to the supervisor in person.

#### **Required:**

(a) Explain any five (5) reasons oral communication can be preferred to written communication. (10 marks)

(b) Explain five (5) types of non-verbal communication. (10 marks)

## [Total: 20 Marks]

#### **QUESTION SEVEN**

You have been requested to prepare a checklist of items that would help with good communication for a presentation that will take place in a couple of weeks. The contents of the presentation include the 7C's and the KISS concept.

#### **Required:**

- (a) Briefly explain the 7C's of communication as part of the main body of your presentation. (14 marks)
- (b) Briefly explain what the concept Keep it short and simple mean. (6 marks)

[Total: 20 Marks]

#### END OF PAPER

## SUGGESTED SOLUTIONS

## SOLUTION ONE

- 1.11 A
- 1.12 A
- 1.13 C
- 1.14 B
- 1.15 D
- 1.16 B
- 1.17 D
- 1.18 B
- 1.19 D
- 1.20 C

## SOLUTION TWO

a) Explain the use of the following spreadsheets functions, with an example

(i) =IF()

It tests the value or expression that can be evaluated to YES or NO

=IF() is a logical function that returns one value if it is true and another if false

(ii) =TODAY()

=TODAY() returns the system current date

It returns the current date, updated continuously when a worksheet is changed or opened

(iii) =SUM()

=SUM() is used to add a range of cell

It shows the sum of the contents, which have to be added together in the range of

cells given

(iv) = COUNT()

=COUNT() counts cells that contain numbers

It shows how many cells in the specified range contain numbers to be counted

- b) List any five(5) contributions of an accounting information systems to the value chain
  - Improving the quality and reducing the cost of product and services

The system is interfaced to the machine and able to provide information to the operators about machines productivity including its performance. In the process it reduces on the wastage of materials and improves quality

- Improving the efficiency and effectiveness of the organisation's supply chain

The organisation can, using AIS, allow customers to directly access inventory and sales information thereby reducing costs on sales and marketing.

- Sharing knowledge
   The system provide interfaces so that knowledge is being shared among other stakeholders in the process it promotes competitive advantage
- -
- Improve internal control structure It enhances internal controls as the AIS can be embedded with routines which protect the information from fraud, errors, and equipment and software failures.

- Improving decision making the system can provide user friendly interfaces for management to use for decision making.
- c) Explain any two (2) of the following internet services (iv) Local Area Network (LAN)

This network spans a relatively short distance, a building, school, home, etc. It can be done with a few computers or other network enabled electronic devices to serve a small area.

(v) Wide Area Network (WAN)

This network spans a large geographical area or 2 or more LANs. Sometimes it's a group of public networks, an example is the internet

(vi) Virtual Private Network (VPN)

This is a computer network in which some or all of the links are part of a larger network. VPNs are largely used as replacements for WANs. They facilitate remote and homeworking. Employees can access office work from anywhere.

- d) List any three (3) health problems associated with using computers
  - Back pain
  - Eye strain
  - Headache
  - Neckache

### SOLUTION THREE

	А	В	С	D	E	F	G	Н	- I	J	K
1									K	US \$	
2							exchange rate		15	1	
3							VAT		15%		
4			Vehicle Make	Purchase Price in dollars US \$	Amount in Kwacha K	VAT K	Total	Remarks			
5			Toyota	5,400.00							
6			Nissan	2,600.00							
7			Benz	13,000.00							
8			Suzuki	2,200.00							
0											

#### Figure 1

#### **Required:**

- a) Write down the following Spreadsheet formulas as required with reference to figure 1 above
  - i) In cell E7, write down the excel formula which calculates the kwacha amount for the **Benz** vehicle given that the exchange rate is K15 to a dollar.

=D7\*I2

ii) In cell F7, write down the excel formula to compute the VAT amount for the Benz. VAT is 15% of the cost of the vehicle in kwacha as given above

=E7\*I3

iii) In cell G7, write down the formula to get the total cost of the vehicle by adding VAT to kwacha amount

=SUM(E7,F7) or =SUM(E7+F7) or =E7+F7

iv) In the Remarks column, in cell H7, write down the Excel formula to check the total cost in cell G7 so that if the amount is less than K50,000, it should indicate "check manufacture date" otherwise it should indicate "no issue".

=IF(G7<50000,"check manufacture date","no issue")

- b) Explain any three (3) methods you would use to ensure security and safety on your computer system
  - Antivirus against viruses and other malware
  - Password against unauthorized access to the computer
  - Physical security secure room, proper air ventilation against damage
  - Cabling ensure no tripping cables
- c) Describe the following IT concepts(v) Cache memory

This is a very fast memory chip which saves a second piece of data for recently visited places or applications. It is used for quick access.

## (vi) Internet Service Provider (ISP)

Connection to the internet is done through an Internet Service Provider (ISP). These ISPs are usually telecom companies. This connection is done at a fee and the relevant network devices and software are provided.

d) Explain Magnetic Ink Character Recognition (MICR) as a document reading method.

MICR involves the recognition by a machine of special formatted characters printed in magnetic ink. The characters are read using a special reading device. The main advantage of MICR is its speed and accuracy, but MICR documents are expensive to produce. The main commercial application of MICR is in the banking industry on cheques and deposit slips.

## SOLUTION FOUR

- i) Email
  - It's free! Once you're online, there is no further expense.
  - Easy to reference. Sent and received messages and attachments can be stored safely, logically and reliably. It's a lot easier to organize
  - Easy to use. Once you're set up, sending and receiving messages is simple. That goes for a host of other email functions. Data storage and ...
  - Easy to prioritize. Incoming messages have subject lines that mean you can delete without opening.
- ii) Check-digit and Sequence Validation Checks
  - CHECK DIGITS
    - A check digit is a form of redundancy check used for error detection on identification numbers, such as bank account numbers, which are used in an application where they will at least sometimes be input manually. It is analogous to a binary parity bit used to check for errors in computer-generated data. It consists of one or more digits computed by an algorithm from the other digits (or letters) in the sequence input. Its purpose is to spot human errors on data entry

## • SEQUENCE VALIDATION CHECK

This involves testing a list of items or file of records for correct ascending or descending sequence based on the item or key fields in the records. It also basically checks the validation rules starting from the 1 st rule to the last one in the sequence. If the system found the match during the sequential check, it will stop the checking process and flag the transaction based on the action defined. Its purpose is to make sure any given set of data is logical, rational, complete and within acceptable limits

iii) A Computerized Payroll System

- A computerized payroll system is comprised of a set of **software programs**. The programs have various screens into which managers and clerks enter employee data and time sheets; other programs calculate check amounts and produce reports.
- An integrated payroll system is one that allows both human resources and payroll staff to access the same information without duplicate paperwork or files, creating efficiencies that save time and money and reduce liability.

iv) Multi-Media applications

- Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content.
- Multimedia applications include presentation software like Microsoft Presentation, animation software such as Motion Studio 3D or packages with multiple presentation possibilities like **Adobe Go Live**. Multimedia applications are computer programs

that use a variety of media such as video, sound, still images and animated graphics for pre-recorded or live communications, especially mass communication.

## SOLUTION FIVE (a)

### **Notice of Annual General Meeting**

Notice is hereby given that there will be an annual general meeting of Makumba Enterprises on Saturday (any date during exam time). The venue for the meeting is Taj Pamodzi, specifically Mukuyu conference room 3 at 09:00 hours.

The items for discussions include the following:

- Chairperson's general performance
- Financial reports
- Election of new executive members

A typical example of items for discussion is as follows:

- 1 The Directors report The financial statements and the independent auditor report for the year ended 31 March 2020
- 2 The Directors remuneration report
- 3 The Directors remuneration policy as set out on pages 45 to 55 of the annual report for the year ended 31 march 2020
- 4 Election of other members each to be proposed as a separate resolution
- Authorization of the director to fix remuneration of the auditors
   By order of the board, Natasha & company secretary
   31 Febuary 2020

## SOLUTION FIVE (b)

Note-taking tips:

- Be an active listener
- Use symbols and abbreviations
- Only write what is important
- Do not mind about the spellings
- Do not spend so long writing that you miss what is being said
- Be brief as much as possible
- When taking notes, be as fast as possible
- Take note of main or important points only.
## SOLUTION SIX

(a) Advantages of oral communication include:

- There is immediate feedback/ clarification of information
- It is cheaper where there are no costs such as phone airtime compared to written communication where there are extra costs of stationery, pens, ink and posting fees
- Saves a lot of time
- Useful in matters that should be kept confidential
- It is ideal for most type of audiences including illiterate people.
- It is very fast.
- It accommodates nonverbal communication which can aid in understanding the messages.
- (b) Types of non-verbal communication
  - Facial expression: the human face is incredibly expressive, capable of communicating countless feelings without saying a word. Moreover, facial expressions are universal, unlike other forms of nonverbal communication and they can express fear, joy, sorrow surprise and rage. (e.g. smiling, frowning, puzzlement, wide-amazement)
  - Gestures: when you are speaking or arguing, you may wave, point, beckon or simply use hands, heads and any other part of your body to express yourself. It is important to note that gestures differ across culture and region.
  - Voice: this is the tone of pitch when speaking. One can speak very loud, low, fast, slow or mild depending on the message they are conveying either intentionally or unintentionally. (pitch, speed tremors)
  - Eye-contact: because visual sense is dominant for most people, eye contact is a form of nonverbal communication that is particularly important. Several things like curiosity, love, animosity or desire can be conveyed by looking at someone.
  - Physiological changes: brushing, faster breathing, perspiring)
  - Body movement and posture: the way one sits, walks, stands or holds their head affects the perception of other people. When speaking, the stance, weight, location and subtle movements one makes provides the world with a wealth of information. (Changing posture, nodding and folded arms, etc.)

## SOLUTION SEVEN (a)

The 7Cs

- Completeness: The communication must contain all facts required by the audience. Complete communication should also include relevant information.
- Conciseness: conciseness means communicating what you want to convey in the fewest possible words. Conciseness saves time because information is usually presented in brief form.
- Consideration: effective communication must take the audience into account of factors such as education, age, technical background, emotions or feelings of the audience. For example, care is needed when breaking bad news to an employee.
- Clear: emphasize on a very few points at a time without any ambiguity in the message.
- Concreteness: avoid ambiguous words and phrases, communicate using plain language indicating specific information
- Courtesy: Being politeness and friendly when communicating.
- Correctness: presenting accurate information that is free from errors. Facts must be presented. Information must be verified in some cases, by checking the accuracy of the source or cross checking with other sources to ensure accuracy.

## SOLUTION SEVEN (b)

- 1. Keep it short and simple (KISS) may mean the following:
  - Well-structured message (e.g in clear topic paragraphs)
  - Information must be easy to read (e.g legible and well-spaced on the page and written in reasonably short sentences)
  - Being unambiguous (without potential misunderstandings of information from double meaning of words or vague phrases)
  - Avoiding the use of jargon / technical Language
  - Eliminating unnecessary words and phrases
  - Avoiding too detailed information. Too much detail interrupts the flow of the main information or argument. Details can be replaced in appendices or attachments or summerised in tables or diagrams.

## **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

## LEVEL ONE

## DA: 5 COST ACCOUNTING

TUESDAY 15 SEPTEMBER 2020

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

## **INSTRUCTIONS TO CANDIDATES**

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

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

## **SECTION A – MULTIPLE CHOICE**

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

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

## **QUESTION ONE**

- 1.1 Haambulo, a baker is paid K3.00 per loaf of bread baked up to 200 loaves. The rate increases to K3.90 for each loaf of bread produced in excess of 200 units. If Haambulo produces 350 loaves of bread, what would be his earnings?
  - A. K1,965
  - B. K1,485
  - C. K1,185
  - D. K1,225

(2 marks)

1.2 A company in Mkushi district had 80 direct production workers at the beginning of the year and 60 at the end of the year. During the year a total of 45 workers had left the company.

What is the labour turnover rate?

- A. 75.0%
- B. 64.3%
- C. 35.7%
- D. 21.4%

(2 marks)

1.3 Information relating to two processes (A and B) is as follows:

Process	Normal loss	Input	Output	
	As % of input	(litres)	(litres)	
А	8	65,000	58,900	
В	5	37,500	35,700	

For each process, is there an abnormal loss or an abnormal gain?

	Process A	Process B
A.	Abnormal loss	Abnormal loss
В.	Abnormal gain	Abnormal gain
C.	Abnormal loss	Abnormal gain
D.	Abnormal gain	Abnormal loss

(2 marks)

- 1.4 The production overhead of department J is absorbed using a machine hour rate. Budgeted production overheads for the department were K280,000 and the actual machine hours were 70,000. Production overheads were under absorbed by K9, 400. If actual production overheads were K295,000, what was the overhead absorption rate per machine hour?
  - A. K4.08
  - B. K4.21
  - C. K4.00
  - D. K4.35

(2 marks)

1.5 A company makes 17,500 units at a total cost of K16 each. Three quarters of the costs were variable and one quarter fixed. 15,000 units were sold at K25 each. There were no opening inventories.

By how much will the profits calculated using absorption costing principles differ from the profit if marginal costing principles had been used?

- A. The absorption costing profit would be K30,000 greater
- B. The absorption costing profit would be K10,000 greater
- C. The absorption costing profit would be K30,000 lower
- D. The absorption costing profit would be K10,000 lower

(2 marks)

1.6 An organisation has the following costs at two activity levels:

	Units	K(Kwacha)
Activity levels	16,000	22,000
Total costs	135,000	170,000

The variable cost per unit is constant within this range of activity but there is a step up of K5,000 in the total fixed costs when the activity exceeds 17,500 units.

What is the total cost at an activity of 20,000 units?

A. K160,000

- B. K163,000
- C. K158,000
- D. K155,000

(2 marks)

- 1.7 Which one of the following is NOT classified as direct labour?
  - A. Assembly workers on a car production line
  - B. Machinists in a factory producing clothes
  - C. Bricklayers in a house building company
  - D. Truck drivers in the stores of an engineering company

(2 marks)

- 1.8 Which one of the following statements about Activity Based Costing is/are true?
  - (i) Traditional absorption costing tends to under-allocate overhead costs to low volume products
  - (ii) A cost drive is any factor that cause a change in the cost of an activity
  - A. Statement 2 only
  - B. Statement 1 only
  - C. Neither statement
  - D. Statements 1 and 2

(2 marks)

- 1.9 The following documents are used in accounting for raw materials:
  - (i) Goods received note
  - (ii) Materials returned note
  - (iii) Materials requisition note
  - (iv) Delivery note

Which of the documents may be used to update stores ledger cards for inventory?

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

(2 marks)

- 1.10 Costs associated with storage of finished goods such as spoilage, obsolescence and insurance of goods are classified as:
  - A. Carrying costs
  - B. Purchasing costs
  - C. Stock-out costs
  - D. Ordering costs

(2 marks) [Total: 20 Marks]

## **SECTION B**

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

## Attempt any FOUR (4) questions.

## **QUESTION TWO**

The following information relates to inventory holding and materials handling for a particular material in a business warehouse.

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

The business works 5 days each week for 50 weeks each year.

#### **Required:**

- (a) Calculate the following inventory management ratios:
  - (i) Inventory Re-Order Level
  - (ii) Minimum Inventory Level
  - (iii) Economic order Quantity
  - (iv) Maximum Inventory Level

(16 marks)

(b) Outline the limitations of the economic order quantity model (EOQ).

(4 marks) [Total: 20 Marks]

## **QUESTION THREE**

Shimpundu Ltd, based in Luanshya, commenced operations five (5) years ago and produces a range of health snack bars for retail market. The company uses a process costing system based on the weighted average method to value production and inventory. Manufacturing comprises two (2) simple processes: Mixing and Finishing. In the mixing process, the various ingredients are combined thoroughly and then transferred to the finishing process. In the finishing process the mixed ingredients are moulded into bars and cooked to create the finished product. All ingredients are added at the start of the mixing process and no additional ingredients are added in the finishing process. Labour and production overheads, also called conversion costs, are incurred evenly throughout both processes. Details relating to the company's most popular product, Nut crunch bar, for the most recent financial period are shown below:

	Mixing	Finishing
Opening inventory	60,000kg	25,000 kg
Degree of completion	40%	30%
Previous process cost		K11,500
Materials	K15,000	
Conversion costs	K10,625	K2,750
Input during the period to the process	160,000	
Materials	K38,400	
Conversion costs	K30,220	K20,650
Completed and transferred	175,000kgs	185,000kgs
Closing inventory	35,000kgs	10,000kgs
Degree of completion	50%	50%

Note: A normal loss of 5% of the materials input (during the period) to the mixing process is expected. Any waste material from the mixing process can be sold to a local farmer for K0.05 per kg.

#### **Required:**

Prepare the following accounts, where applicable, for the most recent financial period. You should ensure that all workings are shown clearly:

		[Total: 20 Marks]
(iv)	Abnormal loss/Abnormal gain account	(4 marks)
(iii)	Normal loss account	(2 marks)
(ii)	Finishing process account	(7 marks)
(i)	Mixing process account	(7 marks)

## **QUESTION FOUR**

Resol Ltd commenced trading on 1 April 2019 making the product Resol. The standard cost card for Resol is as follows:

	К
Direct materials	8.00
Direct labour	5.00
Variable production overhead	2.00
Fixed production overhead	5.00
Total standard cost	20.00
Standard profit	15.00
Standard selling price	35.00

The fixed production overhead figure has been calculated on the basis of a budgeted normal output of 24,000 units per annum. Fixed sales and administration costs are estimated at K24,000 per annum. You may assume that all budgeted fixed expenses are incurred evenly over the year.

The sales price is K35.00 and the actual number of units produced and sold was as follows:

	April	Мау
Production units	2,000	2,500
Sales units	1,500	3,000

#### **Required:**

(b)

(a) Prepare a profit statement for each of the months April and May using;

(ii) Absorption costing	(8 marks)
Identify five (5) disadvantages of a standard costing system.	(5 marks)

[Total: 20 Marks]

## **QUESTION FIVE**

Kumwesu Ltd produces and sells one (1) product only. The standard cost and selling prices for one unit is as follows:

Direct material	12 kgs @ K8 per kg
Direct labour	7 hours @ K9 per hour
Variable production overheads	7 hours @ K6 per hour
Selling price	K385

The budgeted fixed production overhead cost is K60,000. Production and sales of 1,000 units were budgeted.

During May 2019 the actual results were as follows:

	K
Production/ Sales – 900 units @ K365	328,500
Direct materials – 8,800 kgs	82, 400
Direct labour – 4,100 hours	40,000
Variable production overheads	20,600
Fixed production overheads	42,000

Note: Kumwesu Ltd does not hold any inventories.

#### **Required:**

(a) Calculate each of the following variances:

- (i) Material price and usage variances
- (ii) Labour rate and efficiency variances
- (iii) Variable overhead expenditure and efficiency variances
- (iv) Fixed overhead expenditure and volume variances Note: All parts carry equal marks

(16 marks)

(b) Prepare a reconciliation statement to reconcile budgeted cost with actual cost.

(4 marks) [TOTAL: 20 Marks]

## **QUESTION SIX**

Bolts and Nuts Limited, an engineering company which uses job costing to attribute costs to individual products and services provided to its customers has begun the preparation of its fixed production overhead cost budget for 2020.

Costs have been identified as follows:-

	Machining	Assembly	Finishing	Stores	Maintenance
	K′000	K'000	K'000	K′000	K′000
Apportioned cost	6,000	2,500	1,500	1,000	800

The stores and maintenance departments are production service departments and provide services as follows:

	Machining	Assembly	Finishing	Stores	Maintenance
Stores	40%	30%	20%	-	10%
Maintenance	55%	20%	20%	5%	-

The number of machine and labour hours budgeted for 2020 is:

	Machine	Assembly	Finishing
Machine hours	50,000	4,000	5,000
Labour hours	10,000	30,000	20,000

#### **Required:**

- (a) Calculate appropriate overhead absorption rates for each production department for 2020. (12 marks)
- (b) The following data relates to Job QZ1 to be commenced early in 2020:

Direct materials	K24,000
Direct labour	K15,000

The job requires the following resources:

	Machine	Labour
	Hours	hours
Machining department	45	10
Assembly department	5	15
Finishing department	4	12

It is company policy to add 20% of selling price as profit.

#### **Required:**

Prepare a quotation for Job QZ1

(8 marks) [Total: 20 Marks]

#### **END OF PAPER**

## SUGGESTED SOLUTIONS

## SOLUTION ONE

1.1 C

1.2 C

If no workers had been replaced, then at the end of the year there would be 80 - 45 = 35 workers. Since there were actually 60 workers at the end of the year, it must mean that 60 -35 = 25 workers were replaced. The average number of workers for the year = (80 + 60)/2 = 70

. : Labour Turnover Rate = 25/70 = **35.7%** 

## 1.3 C

## **Process A**

Expected (Normal) loss =  $65,000 \times 8\% = 5,200$ Actual loss = 65,000 - 58,900 = 6,100Abnormal loss = 900 litres

## **Process B**

Expected (Normal) loss =  $37,50 \times 5\% = 1,875$ Actual loss = 37,500 - 37,700 = 1,800Abnormal gain = 75 litres

#### 1.4 A

Since overheads were under-absorbed, then the amount absorbed must have been 295,000 - 9,400 = 285,600

: . Overhead Absorption Rate (OAR) = K285,000/70,000 = K4.08 per hour

#### 1.5 B

The fixed overhead cost per unit =  $16 \times 0.25 = K4$  per unit Inventories will have increased by 17,500 - 15,000 = 2,500 units : . Difference between marginal and absorption profits will be 2,500 units X K4 = K10,000 higher

1.6 A

The difference in costs is K35,000. However, K5,000 is due to the increase in fixed costs, and so the increase in variable costs is K30,000.

: . Variable costs per unit = K30,000/(22,000 - 16,000)= K5 per unit Actual units of 20,000 is 2,000 less than 22,000 units Total costs = K170,000 - (2,000 K50)= K160,000

- 1.7 D
- 1.8 D
- 1.9 A
- 1.10 A

## SOLUTION TWO

a)

# **Inventory Re-Order Level** Re-Order level = Maximum usage x Maximum lead time(in days) = 600 units per day x 20 days = **12,000 units**

## ii. Minimum inventory Level

- = ROL (Average usage per day x average lead time in days)
- = 12,000 (500 units per day x 15 days)

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

## iii. Economic Order Quantity

$$EOQ = \sqrt{\frac{2 \text{ Co D}}{Ch}}$$
$$= \sqrt{\frac{2 \text{ x K360 X 125,000 units}}{(K5 X 8\%)}}$$

## = <u>15,000 units</u>

## iv. Maximum inventory Level

- = ROL + EOQ (Minimum usage x Minimum lead time)
- = 12,000 units + 15,000 units (100 units per day x 10 days)

## WORKINGS

## Minimum usage per day

500 units per working week / 5 working days = 100 per working days

## Maximum usage per day

3,000 units per working week / 5 working days = 600 units per working day

#### Average usage per day

2,500 units per working week x 50 working days = 500 units per working day

#### Average usage per year

2,500 units per working week x 50 working weeks = 125,000 units per year

## b)

# Advantages and disadvantages of calculating inventory management ratios to manageinventory levels

## Advantages of using inventory management ratios include:

- 1. On average, lower inventory levels resulting in cost savings;
- 2. Efficiency savings due to economic order quantities;
- 3. More responsive to inventory demand fluctuations;
- 4. Avoid costs and losses associated with running out of inventory;
- 5. Applicable for a wide rage of inventory.

## Disadvantages of such a system include:

- 1. As there is no sequence to re- ordering, the system can involve variations with many orders at one time and few at other times;
- 2. Economic order quantity assumptions may not always be valid and may not suit all circumstances;
- 3. Resources are required to collect data and perform calculations.

## SOLUTION THREE

\_

i)			Mixing process account			
К		Kgs	К	Kgs		
Opening inve 400	ntory	60,000	25,625	Normal loss 8,000		
Inputs		160,000	38,40	0 Transferred to		
175,000	80,500			Finished process		
Labour and o 920	verhead		30,220	Abnornal loss 2,000		
				Closing WIP		
35,000	12,425					
220,00094,2	245 220,0	00094,245				

ii)		Finishing process account			
Kgs	К	Kgs		к	
Opening i 185,000	inventory 107,300	25,000	0		Completed & transferred
-Prior proce 5,000	ess costs 2,900		11,50	00	Abnormal loss
-Conversion 10,000	n costs 5,200		2,75	0	Closing WIP
Transferred	d in from mixir	ng 175,000	80,500		
Conversion	costs		20,65	0	
200,0001	15,400200,0	00115,400			

iii)				
Kas	К	Kgs	К	
			14	

Mixing process account	8,000	400	Cash for units Crapped	8,000
400				

## 8,000 4008,000400

Total costs incurred

Less scrap value (K0.05 per kg)

Total costs to be allocated

Cost per equivalent units

K30,220

K40,845

K0.21

iv)			Abnormal loss ad	count	
	kgs		к		kgs
К	-				-
Mixing process account 100	2,000	920	Cash for un	its scrappe	d 2,000
Finishing process account 5,0	000 2,90	00	Income statement		3,720
7,0003,8202,0003,820 _					
<u>WORKINGS</u> <u>Mixing process</u> <u>Inputs</u> TotalEquivalent un Physical UnitsMaterialsCo	iits nversion	ı costs			
kas			Kgs	kgs	
Nys Opening WIP		60	000		
Materials input		160	0.000		
220,000			<u>,</u>		
Outputs					
Closing WIP		35,0	000	35,000	
17,500					
Normal loss (5% x materials	input)	8,000	)	0	
0					
Abnormal loss		2,0	00	2,000	
Transferred to finished proces 220,000212,000 194,500	SS	<u>175,00</u>	0175,000175,000		
COSTS Closing inventory K10,625				K15,000	)

K93,845

K0.46

K38,400

(K400)

K53,000

K0.25

## Allocation of costs

Valuation of output transferred to fi Valuation of abnormal loss 2,000 kg Valuation of closing (WIP 35,000 kg Materials: 35,000 kgs x K0.25 K8,750 Conversion costs: 17,500 kgs x K0.2 K3,675 K12,425 K93,845 Finishing process InputsTotalEquivalent units	nished process 175,0 js x K0.46 per kg js 50% complete) 21	00 kgs x K0.46 per k <u>o</u>	g K80,500 K920
Physical unitsmixing processlabour &	& OHs		
	Kgs	Kgs	Kgs
Opening WIP	25,000		
Material transferred from mixing	<u>175,000</u>		
200,000			
<u>Outputs</u>			
Completed and transferred	185,000	185,000	)
185,000			
Closing WIP	10,000	10,00	00
5,000			
Abnormal loss	<u> </u>	<u>100 5,000</u>	
200,000200,000195,000			
<u>Costs</u>			0
		K11,50	0
NZ,/JU Prior process costs transforred from	miving	K80 200	
	i mixing	100,500	
Costs incurred		_	K20 650
Total costs to be allocated	K115 400	K92 000	K23 400
Cost per equivalent unit	K0.58	K0.46	125,100
K0.12			
Valuation of finished transferred: 18	35.000kas @K0.58 pe	er ka	
K107.300			
Allocation of costs			
Valuation of abnormal loss: 5,000 k	as x K0.58 per ka		
К2,900	5 1 5		
Valuation of closing WIP(10,000 kg	s 50% complete):		
Prior process costs: 10,000kgs x K0	.46		
K4,600			
Conversion costs: 5,000 kgs x K0.12	2		
<u>K600</u>			
<u>K5,200</u>			
K115.400			

## SOLUTION FOUR

## a) i) Marginal costing profit statement

	Apr	il 2019	May 2019
	K		К
	К		К
Sales Revenue			
	52,500		105,000
Cost of sales	-		
Opening stock	-		7,500
Variable production cost	30,000		37,500
Closing stock	7,500	22,500	0
			45,000
Contribution	30,000		60,000
Fixed production overhead	10,000		10,000
Sales and Administration	2,000		2,000
overheads			
	12,000		12,000
Profit for the period	18,000		48,000

## ii) Absorption costing profit statement

	April	Мау
	К	K
	К	К
Sales revenue		
	52,500	105,000
Cost of sales		
Opening stock	0	10,000
Production costs	40,000	50,000
Closing stock	(10,000)	0
	30,000	60,000
Gross profit	22,500	45,000
Sales and administration OHs		
Over absorbed fixed prod	2,000	2,000
OHs		
	-	(2,500)
Profit for period	20,500	45,500

Working:

April

Closing stock calculations

Marginal costing 500 units @ K15.00 per unit = K7,500

Absorption costing 500 units @ K20.00 = K10,000

Fixed production overheads

24,000 @ K5.00 =K 120,000 per annum /12 months = K10,000

Over absorption of fixed overheads

May production = 2,500 X K5 = 12,500 - 10,000 = K2,500 Over absorption

Fixed sales and administration

K24,000/12 = K2,000 per month

## b) Disadvantages of standard costing system

- Reports and information are prepared after the event on a historical basis
- Standards used inappropriately, with a focus on negative impacts, can have a demotivational impact.
- No consideration of qualitative factors
- Favourable and adverse variance can be difficult to understand
- Calculation of efficiency variances assume labour is always variable and that normally production is a factor of labour.

## SOLUTION FIVE

## a) (i) material price variance

K 8,800kg should have Cost X K8/kg 70,400 But did cost 82,400 **12,000(A) Material usage variance** 900 units should have used X12kgs 10,800kg But did use 8,800kg

2,000kg

## <u>K16,000 (F)</u>

(ii) Labour rate variance

K 4,100 hrs should have cost X K9/hr 36,900 But did cost

<u>40,000</u>

## <u>3,100 (A)</u>

**Labour efficiency Variance** 900 units should have taken X 7 hours 6,300 hrs But did take

<u>4,100 hrs</u>

2,200 hrs <u>X K9</u> **K19,800 (F)** 

## (iii) Variable production overhead expenditure variance

K 4,100 hrs should have cost XK6/hr 24,600 But did cost <u>20,600</u> **4,000 (F)** 

## Variable production overhead efficiency variance

2,200 hrs (F) X K6/hr K13,200 F (iv) Fixed overhead expenditure variance
K
1,000 units should have cost X K60
60,000
But did cost
42,000
18,000 (F)
Fixed overhead volume variance
Budgeted production volume
1,000 units
Actual production volume
900 units

100 units

## X<u>K60</u> **K6,000 (A)**

## b) Reconciliation statement K

Budgeted cost (900 units X K261) 234,900

F	A
К	К
	12,000
16,000	
	3,100
19,800	
4,000	
13,200	
18,000	
	6,000
	F K 16,000 19,800 4,000 13,200 18,000

#### Workings

W1: Fixed production cost per unit = K16,000 1,000 units = K60/unit

## W2: **Total standard cost per unit** K Material (12 x K8)

96

Labour(7 x K9) 63Variable production overheads(7 x K6) 42Fixed production overheads60Total standard production cost per unit261

## SOLUTION SIX

(a)

Apportioned cost	Basis of appointment	Machining 6,000	Assembly 2,500	Finishing 1,500
Stores Maintenance Budgeted overhead	Percentages Percentages	418 498 6,916	314 181 2,995	209 181 1,890

## Workings:

Re Apportionment

O/H	Machine	Assembly	Finish	Stores	
Maintenance					
	K′000	K′000	K′000	K′000	K′000
O/H	6,000	2,500	1,500	1,000	800
Stores	<u>400</u>	300	200	(1000)	100
	6,400	2,800	1,700	0	900
Maintenance	<u>495</u>	180	180	45	(900)
	6,895	2,980	1,880	45	0
Stores	18	13.50	9	<u>(45)</u>	4.5
	6,913	2,993.5	1,889	0	4.5
Maintenance	2.48	0.90	0.90	0.23	(4.5)
	6,915.48	2,994.4	1,889.9	0.23	0
Stores	0.09	0.07	0.05	(0.23)	0.02
	6,915.57	2,994.47	1,889.95	0	0.02

Overhead Absorption Rates

Machining

OAR	=	K6,916,000/50,000 machine hours
	=	K138.32/ machine hour
	=	<u>K138</u>

Assembly

OAR	=	K2,995,000/30,000 labour hours
	=	K99.83/labour hour
	=	<u>K100</u>

Finishing

OAR	=	K1,890,000/20,000/labour hour
	=	K94.5 per labour hour
	=	<u>K95</u>

## (b) Quotation for Job QZ1

	К	К
Direct material		24,000
Direct labour		15,000
Production overheads:		
Machine department	6,224.40	
Assembly department	1,497.45	
Finish department	<u>1,134.00</u>	
Job cost		<u>8,855.85</u>
Total cost		47,855.85
Profit (20 X 47,855.85/80		<u>11,963.96</u>
Price		<u>59,819.81</u>

## **END OF SOLUTION**



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

## LEVEL ONE

DA 6: BUSINESS LAW

FRIDAY 18 SEPTEMBER 2020

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

## **INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A – (COMPULSORY)

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

## **QUESTION ONE**

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

- 1.1. Society's ethical and moral guidance is an example of .....
  - A. Law and Rules
  - B. Formal control mechanisms
  - C. Informal control mechanisms
  - D. Social Order

(2 marks)

- 1.2. Civil servants belong to the ..... arm of the Government
  - A. Civil Service
  - B. Parliament
  - C. Judiciary
  - D. Executive

(2 marks)

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

- A. Recoverable
- B. Irrecoverable
- C. Voidable
- D. Void

(2 marks)

- 1.4. Which of the following is an example off a common mistake?
  - A. Unknowingly buying something that belongs to you.
  - B. Each party believes that there is an understanding with the other and does not realize that there is a misunderstanding.
  - C. One party is mistaken and the other is aware of it.
  - D. Innocent misrepresentation when the contract is made.

(2 marks)

- 1.5. In ..... ownership is transferred immediately.
  - A. A contractual agreement
  - B. An agreement to sale
  - C. A contract of sale
  - D. A conditional sale

(2 marks)

- 1.6. Which of the following is not a duty of an employer?
  - A. Pay remuneration
  - B. Reasonable competence
  - C. Provide work
  - D. Healthy and Safety at work

(2 marks)

- 1.7. Where the agent and the principal agree that their relationship should come to an end. Such termination is by .....
  - A. End of time period
  - B. Unilateral withdraw of consent
  - C. Mutual consent
  - D. Operation of Law

(2 marks)

1.8. .... is **not** an example of a tort?

- A. Trespass to land and negligence
- B. Civil defamation
- C. Trespass to a person
- D. Criminal defamation

- (2 marks)
- 1.9. In a partnership business, a dormant partner.....
  - A. Does not take part in a profit sharing of the business.
  - B. Does not take part in the management of the business.
  - C. Does not contribute any capital into the business.
  - D. Is also known as a nominal partner.

(2 marks)

- 1.10. Dismissing an employee on the grounds of economic necessity is known as.....
  - A. Retrenchment
  - B. Redundancy
  - C. Wrongful dismissal
  - D. Unfair dismissal

(2 marks) [Total: 20 Marks]

#### **SECTION B**

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

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

#### **Required:**

(a) Explain whether or not Doreen Chanda will succeed if she follows the advice to sue.

(12 marks)

Mongu Eaters Café is an agent for Hungry Lion, a multinational fast food restaurant.
 Describe **four** (4) duties of Hungry Lion to Mongu Eaters Café. (8 marks)

[Total: 20 Marks]

#### **QUESTION THREE**

Jonny is a builder by profession and is engaged by the Ministry of Health to construct three toilets at Chibolya Clinic for K10,000. The parties agree that the task would take three months, and that Jonny would initially be paid half of the contract price, the remainder to be paid in two equal instalments upon completion. The Ministry does not pay Jonny the initial deposit, and Jonny uses his resources to start the work. He however suffers from a bout of cerebral malaria having done 2/3 of the works and is permanently incapacitated. His wife takes over the contract and requests the Ministry for the payment for the work Jonny had done, and that she would finish the work. She is however turned away by the Minister, arguing that the contract was not made with her. The Minister insists that the contractual relationship came to an end with the incapacitation of Jonny. Jonny's wife has approached you for advice since you are knowledgeable in Business Law.

#### **Required:**

- (a) With reference to the above scenario, advise Mrs. Jonny on the two (2) methods through which a contract may be discharged above. (10 marks)
- (b) Identify four (4) ways through which an agency relationship may be established.

(4 marks)

(c) State any three (3) implied warranties under the Sale of Goods Act of 1893.

(3 marks) (3 marks)

(d) Define redundancy.

## [Total: 20 Marks]

## **QUESTION FOUR**

Kaluba Mutale a taxi driver for Musonda also known as One Muzo, works from 08:00hrs to 19:00hrs daily. One Friday evening Kaluba requested to use the taxi vehicle after hours of work for purposes of taking his girlfriend to the famous cinema" Fresh View Homes" in Lusaka. One Muzo agreed but he instead gave Kaluba Mutale his private vehicle and not the usual taxi. As Kaluba Mutale was driving his girl to the cinema he negligently hit into a Zesco pole line near Manda Hill Shopping Mall. The girl friend sustained several injuries on her face and legs, she now intends to sue One Muzo vicariously.

## **Required:**

(a)	Explain to Kaluba's girlfriend why she may not be successful.	(7 marks)
(b)	List any three (3) contents of a written contract of employment.	(3 marks)
(c)	With reference to an example of each, differentiate between a contract of	f sale and to
	sell under the Sales of Goods Act 1893	(5 marks)
(d)	Explain any three (3) ways in which an agency relationship may be created	1.
		(3 marks)
(e)	Define the term partnership.	(2 marks)

## [Total: 20 Marks]

## **QUESTION FIVE**

Mr. Guy Mainza was a sole director and shareholder of Gorrila Maize Farm situated in Lusaka West. He always sold his maize to Bosco Mwiya who was also the sole director and shareholder of Chilanga Maize Milling Company in Chilanga. The two decided to become partners.

## **Required:**

- (a) With reference to the above scenario and the liability that is likely to occur, explain the procedure that they need to employ to foster this business relationship, on them. (10 marks)
- (b) Differentiate between formal and informal control mechanisms of law. (10 marks)

#### [Total: 20 Marks]

## **QUESTION SIX**

(a) Muzo is a successful young upcoming business man. He is known by his business skills and eloquent grammar in selling things skills. Last week, Muzo offered to sell 140 traveling bags to his friend Chanda at ZMW 70.00 each. Since the offer was done on the phone, Chanda sent his young brother Mulenga to accept and purchase 140 pieces of the same bags. When Mulenga reached Muzo's shop, he was told that Muzo had changed his mind and was no longer selling the bags. Upon hearing this, Chanda was very furious especially that he had given Mulenga ZMW 250.00 for a taxi to reach quickly. Mulenga's anger also comes from the fact that he had already entered into a contract with Shoprite to supply them with the same bags he was getting from Muzo.

#### **Required:**

(i) Discuss whether there was an agreement between Muzo and Chanda.

(5 marks)

(ii) Explain any three (3) ways in which an offer can be terminated.

(6 marks)

(b) Misrepresentation is an untrue statement of fact which is made during negotiations by one party to another which induces that other party to enter into a contract.
 Explain the three (3) types of misrepresentation. (9 marks)

## [Total: 20 Marks]

#### **END OF PAPER**

## SUGGESTED SOLUTIONS

## SOLUTION ONE

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

## **SOLUTION TWO**

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

## SOLUTION THREE

(a) This question deals with two legal issues of **discharge of a contract by performance and frustration**.

## Performance

The common law position of discharge of a contract by performance is that the performance must be total and complete (Cutter v Powel, 1795). Failure to complete the task is interpreted as breach. Cutter had a contract to sail from Jamaica to Liverpool, but failed to complete the voyage when he died shortly before Liverpool. A claim for wages for work done by the widow could not succeed. This was unfair because he had done most of the contract but out of no fault of his, he was unable to complete the task. Subsequent judgments therefore corrected this injustice by adding equity by way of the doctrine of Quantum Meruit (payment for work done). But to ensure that this fairness is not abused, two conditions are attached to it: that part-performance must have been a term in the contract, and most of the work should have been if one is to seek this remedy. Thus the widow may claim a reasonable amount of the contract price since her husband had completed most of the contract, and if there was a term on part-performance in the contract.

## Frustration

This is the impossibility of performance out of no fault of either of the parties. Initially, common law did not recognise frustration and a party had to perform its obligations however difficult the circumstances were. This rule was stated in Paradine v Jane, 1647, where it was held that the tenant had to pay rent even if she did not take possession of the house because of war. This was unfair and subsequent rulings saw the intervention of fairness by the courts recognising Frustration as a defect that may discharge parties from their obligations under the contract. In *Krell v Henry, 1903*, it was held that the contract had become impossible to perform when the subject matter of the contract, the Hall that had been rented, was destroyed by fire. The tenant could thus recover part of the deposited rent minus expenses, and money pending ceased to be payable. This is codified in the Law Reform (Frustrated contracts) Act, Cap 73 of the Laws of Zambia. Thus the widow may recover a reasonable minus expenses under this heading.

- (b) An agency relationship may be stablished by express appointment; by consent; by estoppel; and by ratification.
- (c) The following are the implied terms under the Sale of Goods Act of 1893: Title; Risk; Quality or fitness
- (d) Redundancy is where employees are laid off from their employment due to several reasons such as the employer has ceased to operate the business under which the employees where in engaged in; the department under which they were employed has been closed or their position becomes non-operational and/or due to changes in the law such as increase of pay the employer feels is unable to pay all the employees and subsequently decides to lay off a few.

## SOLUTION FOUR

(a) The facts show that Kaluba was employed by One Muzo and at some point Kaluba was assisted with Muzo's private car and not the usual taxi to take his girl friend to the cinema. In the process Kaluba was negligent and caused an accident. Kaluba's girlfriend intends to sue Muzo vicariously. The facts of the scenario are quiet common to the case of **NEVIL V GAMOYE** and by virtue of that the decision will be followed of that case. It was indicated that vicarious liability simply entails indirect liability. The person sued is not the actual person who committed the offence but because of a special relationship which subsists between the wrong doer and the person sued. In other ways the person sued is standing in a better position to pay as opposed to the wrong doer and the wrong doers action are considered to be the extension of the hands of the person sued in

the eyes of the law. In application to the facts for the girl friend to sue Muzo she has to establish that Kaluba was working on behalf of Muza at that time and the car being driven was the usual taxi used by Kaluba. It matters not that Kaluba drove outside the hours of work and that he drove too fast or careless and the owner has prohibited that. What matters is the fact that he did the wrong act whilst working for the person sued. Based on what has been explained above Kaluba's girlfriend may not succeed as Kaluba drove a private vehicle for Muzo and it was not for purposes of work but leisure.

b) The contents of an employment contract are:

- The name of the employer and employee
- The name of the business in which the employee is to be employed
- The place of engagement
- The date of engagement
- The remuneration of the employment
- How the contract may be terminated
- The duration of the employment
- The age and sex of the employee (any three)
- c) A contract of sale, this is where ownership is transferred immediately from the seller to the buyer. For example, where Mutale buys 2500kgs of Boom detergent paste from Trade Kings Itd and is either given the goods immediately or not. The property in the goods transfers immediately upon payment by Mutale.

-while a contract to sell simple means a contract in which ownership in goods passes at a future time, due to the fulfillment of a subject matter. For example, Mutale orders 2500kgs of Boom detergent paste to be paid by a postdated cheque, it may be further agreed that ownership passes once the postdated cheque has matured.

d) (I) An agency relationship may be created in the following ways
- Express appointment, this happens where the principal appoints an agent through a written notice and or orally and gives him instructions. For example, Mwale appoints Mulenga as a taxi driver to work daily from 10 to 18hrs.
- By necessity, this happens when there is a genuine commercial emergency and on person acts on behalf of another. In other ways it is referred to as agency by operation of the law.
- By ratification, where an agent does an act not authorized by the principal but the principal later on approves it.
- Estopel, where a person holds out another as an agent the third parties will assume the authority of the person held out is apparent authority and the earlier cannot dispute at law.
- (e) A partnership is a relationship that subsists between two people or more but not more

than twenty who have come together to do business in common with a view of making profit.

## SOLUTION FIVE

- a. A partnership is created by agreement between two or more parties. Therefore Mainza and Mwiya have to sign a partnership deed. As partners, they likely to enjoy unlimited liability for debts, obligations, torts, crimes and misapplications committed while they are partners. S. 9 of the Partnership Act 1890 provides that every partner is jointly liable with other partners for all debts and obligations contracted while he is a partner. This means that the liability will extend to his estate if he dies, but will not be liable for obligations arising after his demise. As for torts, partners are jointly and severally liable for every tort committed whilst he is a partner. The difference between joint liability and several liability is that in the former, the plaintiff has only one cause of action against all the partners. In the latter he may sue all of them or select one of the partners.
- b. Formal and informal mechanisms refer to methods by which law brings about social control in society. Under **formal mechanisms**, the law creates structures which are called institutions and through these institutions social control is brought about as a result of the rules and regulations they may be imposed. These institutions may include the courts, the police and other institutions involved in upholding the law.

Whereas, informal mechanisms allow the creation of non-governmental organizations to support government institutional framework this may include organizations that promote children's and women's rights.

Informal control may include moral and ethical guidance these may be norms and behavioral expectations churches also form part of informal mechanisms as they are a creation of the law

# SOLUTION SIX

(a) (i) An offer is willingness to be bound by specific terms which can be made to a person, to a group or the entire world. It must be noted that an offer can be terminated by acceptance, withdraw, lapse of time to mention but a few.

In the case of Muzo, he withdraw the offer before Chanda could accept. Hence, there was no contract as the offer was not accepted by Chanda and it is irrelevant that Chanda sent his brother Mulenga via Taxi and that he further contracted with Shoprite.

(ii) **<u>Acceptance</u>**: An offer that has been accepted constitutes a contract. The offer is no longer available for acceptance. Thus, once accepted, an offer cannot be accepted.

**<u>Rejection</u>**: An offer is rejected if the offeree:

- Notifies the offeror that he does not wish to accept the offer
- Attempts to accept subject to certain conditions

**<u>Counter-offer:</u>** A counter-offer is an offer that varies or intends to change the terms of the offer. A counter- offer rejects the original offer, which cannot be subsequently accepted. A counter-offer terminates the original offer. **<u>Death-</u>** of the offeror can lead to termination of an offer.

**Failure of a condition-** upon which the offer is based may also lead to termination of an offer.

**Lapse of time**- if the period in which the offer was open has lapsed, then the offer is also terminated.

(b) Misrepresentation is an untrue statement of fact which is made during negotiations

by one party to another which induces that other party to enter into a contract. Explain the three (3) types of misrepresentation.

Once misrepresentation has been established it is necessary to consider what type of misrepresentation has been made. There are three types of misrepresentation: fraudulent, negligent and wholly innocent. The importance of the distinction lies in the remedies available for each type.

#### (i) Fraudulent misrepresentation

Fraudulent misrepresentation was defined by Lord Herschell in Derry v Peek (1889) as a false statement that is "made (i) knowingly, or (ii) without belief in its truth, or (iii) recklessly, careless as to whether it be true or false." Therefore, if someone makes a statement which they honestly believe is true, it cannot be fraudulent.

#### (ii) Negligent misrepresentation

This is a false statement made by a person who had no reasonable grounds for believing it to be true. There are two possible ways to claim: either under common law or statute.

#### (iii)Innocent misrepresentation

This is a false statement which the person makes honestly believing it to be true. An innocent misrepresentation is a false statement made by a person who had reasonable grounds to believe that it was true, not only when it was made, but also when the contract was entered into. The basic remedy is rescission of the contract.

#### **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL ONE

DA 7: PRINCIPLES OF MANAGEMENT

MONDAY 14 SEPTEMBER 2020

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

# **INSTRUCTIONS TO CANDIDATES**

- 1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
- 2. This paper is divided into TWO (2) sections:

Section A: One (1) Compulsory question. Section B: Five (5) Optional Questions. Attempt any four (4) questions.

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

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

# **SECTION A - MULTIPLE CHOICE**

Attempt **ALL** multiple choice questions in this section.

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

#### **QUESTION ONE**

- 1.1. Individuals or groups with legitimate interests in the organisation's activities are generally called.....
  - A. Shareholders
  - B. Government
  - C. Key people
  - D. Stakeholders

(2 marks)

- 1.2. Which of the following managerial skills will enable a manager influence subordinates to do things willingly towards attainment of organizational objectives?
  - A. Social skills
  - B. Leadership skills
  - C. Conceptual skills
  - D. Technical skills

(2 marks)

- 1.3. PESTEL analysis is an approach used to assess the macro environmental factors of an organization. The following are economic factors **EXCEPT** .....
  - A. Tax policy
  - B. Inflation rate
  - C. Foreign currency exchange rate
  - D. Rate of economic growth

(2 marks)

- 1.4. When an organization reaches a certain size, there is need for formal relationships. Which one of the following formal relationships exists between senior personnel in the organization and an individual appointed to provide assistance to the senior person?
  - A. Line relationship
  - B. Lateral relationship
  - C. Functional relationship
  - D. Staff relationship

(2 marks)

1.5. According to emotional intelligence, a person may be highly qualified, experienced, with exceptional skills and highly analytical but still fail to be a good leader. Which one (1)of following is **NOT** a component of emotional intelligence?

A. Empathy

- B. Social skills
- C. Self-awareness
- D. None of the above

(2 marks)

- 1.6. Reinforcement theory of motivation states that behaviour is driven by its consequences. From the following, identify the reinforcement which discourages repeat behaviour by delivering a negative consequence.
  - A. Punishment
  - B. Extinction
  - C. Positive reinforcement
  - D. All of the above

(2 marks)

1.7.	When change has to be implemented quickly, or as a last resort when other approaches have failed, the recommended approach is	
	A. Manipulation and co-option	
	B. Facilitation and support	
	C. Explicit or implicit coercion	
	D. Education and communication	
	(2 marks	)
1.8.	Which one (1) of the following is a criterion for evaluating appraisal schemes?	
	A. Relevance	
	B. Serious intent	
	C. Efficiency	
	D. All of the above	
	(2 marks	)
1.9.	The following are advantages of public sector organisations <b>EXCEPT</b>	
	A. Political interference	
	B. Promote fairness	
	C. Serve public interests	
	D. Provide services not provided by private sector	
	(2 marks	)
1.10	Which one (1) of the following is <b>NOT</b> an advantage of a Partnership?	
	A. Relatively easy to set up	
	B. Partners have unlimited liability	
	C. Combined skills and knowledge	

D. More capital can be raised from partners' contributions

(2 marks) [Total: 20 Marks]

## **SECTION B**

There are five (5) questions in this Section.

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

#### **QUESTION TWO**

(a) Henry Mintzberg, stated that the work of managers can best be described by looking at their roles, and he suggested interpersonal, informational and decisional roles.

#### **Required:**

Identify and briefly explain the three (3) informational roles managers fulfill.

(9 marks)

(b) A strategy is a course of action to achieve the specific objectives

#### **Required:**

Differentiate the following in relation strategic decisions

- (i) Mission and Vision (4 marks)
- (ii) Goal and objective (4 marks)
- (c) Organizational change may not only be inevitable but also necessary. List any three
   (3) external triggers for change.
   (3 marks)

#### [Total: 20 Marks]

#### **QUESTION THREE**

(a) Job analysis is used to investigate a job and its requirement

#### **Required:**

Describe the following outcomes of job analysis

- (i) Job description (4 marks)
- (ii) Job specification (4 marks)
- (b) Differentiate on the job from off the job training (4 marks)
- (c) Implementing change is practically difficult as expected benefits may not materialize especially for large –scale change.

List the eight (8) stages suggested by Kotter and Cohen for implementing large-scale change. (8 marks)

# [Total: 20 Marks]

# **QUESTION FOUR**

(a) Abraham Maslow suggested that five (5) needs of individuals can be arranged in a hierarchy. The need at a lower level dominates the behavior of an individual until it has been satisfied. This means realistically the need at the higher level is not important for that individual until the needs at the lower level are satisfied.

# **Required:**

Explain the Maslow's needs of hierarchy starting with the lower level to the higher level. (10 marks)

(b) The main purpose of training and development is to raise the competences and performance standards. It is concerned with personal development, helping and motivating employees to fulfill their potential.

#### **Required:**

(i) List four (4) skills that might be covered by training or education programme.

(8 marks)

(ii) Explain the importance of performance evaluation (2 marks)

# [Total: 20 Marks]

# **QUESTION FIVE**

In today's dynamic business environment, organizational changes and methods of addressing them are prevalent as we seek to stabilize and sustain transformation across locations. The way businesses manage change and how successful they are at it, depends largely on the nature of business, the change and the people involved.

# **Required:**

(a) Change can either be incremental or transformational. Differentiate the two.

(5 marks)

- (b) If organisational change is good for the organisation, then why do people resist change? Identify at least eight (8) reasons for this behaviour. (8 marks)
- (c) Explain Kanter's seven (7) 'classic' skills that are useful for organisational leaders in the change management process. (7 marks)

# [Total: 20 Marks]

# **QUESTION SIX**

(a) Peter & Company intends to divide it's business into autonomous regions but the managers are hesitant.

Explain to the managers the key requirements of successful divisionalisation to help them appreciate the decision.

(12 marks)

- (b) Define delayering and explain its advantages. (5 marks)
- (c) Explain any three (3) examples of culture manifestation in organisations. (3 marks)

# [Total: 20 Marks]

## **END OF PAPER**

# SUGGESTED SOLUTIONS

# SOLUTION ONE

1.1 D

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

# **SOLUTION TWO**

## a. Informational roles

1) Monitor role

A manager seeks and receives wide variety of external and internal information and maintains contacts and networks

2) Disseminator role

The manager should transmit information received from outsiders and from subordinates to members of the organisation, that is, a manager passes on information to others

3) Spokesperson role

Managers represent their section or organisation to the outsiders. They speak on behalf of a section or organisation.

b. i) Mission and Vision

A mission is the general purpose of the organisation. It is the reason for organisation's existence, while a vision is a desired future state. It is a strategic intent.

ii) Goal and objective

A goal is a broad aim or statement of performance which is normally not quantified, while an objective is a specific performance target which is quantified.

c) External triggers of organizational change

- Political
- Economic
- Social
- Technological
- Ecological
- Legal Choose any three (3), above.

# SOLUTION THREE

a) i) Job description

This is a full description of a job which sets out job requirements such as job purpose, responsibilities, accountabilities, tasks, position in the structure etc.

ii) Job specification

This describes personal qualities of an individual required to perform the job. It covers qualification, personality, interpersonal skills, motivation, commitment, intelligence, etc.

# b) On the job and off the job training

On the job training is one done within the context of the job such as instructions, demonstrations, temporary promotion, job rotation, etc. While off the job training is done away from the job context such day release, distance learning, etc.

c) Eight stage model of implementing change suggested by Kotter and Cohen

- 1. Increase urgency
- 2. Build the guiding team
- 3. Get the vision right
- 4. Communicate for buy in
- 5. Empower action
- 6. Create short term wins
- 7. Don't let up
- 8. Make change stick

# **SOLUTION FOUR**

- (a) Explain the Maslow's needs of hierarchy starting with the lower level to the higher level.
  - 1. Physiological needs: Food and shelter
  - 2. Safety needs: security, order, predictability, freedom from threats
  - 3. Love/social needs: affection and belonging
  - 4. Esteem needs: recognition, status and respect
  - 5. Self-actualization needs: fulfillment of personal potential
- (b) (i) List four (4) skills that might be covered by training or education programme.
  - (i) Basic literacy skills
  - (ii) Technical skills
  - (iii) Interpersonal skills
  - (iv) Problem solving skills
  - (ii) Explain the impotence of performance evaluation

Performance evaluation is used to identify the training needs. It can also be used to identify the potential and reward review

## SOLUTION FIVE

a)

**Incremental change** fairly small change: this type of change happens without the need for a major reorganisation or restructuring of the organisation. Incremental change should not be a serious problem for management.

**Transformational change** is a major change that requires a substantial reorganisation or restructuring of the organisation and its systems. Transformational has a big effect on the organisation and the people working in it, and exceptional management skills are need to implement the change successfully.

b)

- Misunderstanding about the need for change/when the reason for the change is unclear — if staff does not understand the need for change you can expect resistance. Especially from those who strongly believe the current way of doing things works well...and has done for twenty years!
- Fear of the unknown one of the most common reasons for resistance is fear of the unknown. People will only take active steps toward the unknown if they genuinely believe – and perhaps more importantly, feel – that the risks of standing still are greater than those of moving forward in a new direction
- Organisational Politics- Some resist change as a political strategy to "prove" that the decision is wrong. They may also resist to show that the person leading the change is not up to the task. Others may resist because they will lose some power in the organizational. In these instances, these individuals are committed to seeing the change effort fail.
- Lack of competence this is a fear people will seldom admit. But sometimes, change in organizations necessitates changes in skills, and some people will feel that they won't be able to make the transition very well
- Connected to the old way If you ask people in an organization to do things in a new way, as rational as that new way may seem to you, you will be setting yourself up against all that hard wiring, all those emotional connections to those who taught your audience the old way – and that's not trivial
- Low trust When people don't believe that they, or the company, can competently manage the change there is likely to be resistance
- Temporary fad When people belief that the change initiative is a temporary fad

- Not being consulted if people are allowed to be part of the change there is less resistance. People like to know what's going on, especially if their jobs may be affected. Informed employees tend to have higher levels of job satisfaction than uninformed employees
- **Poor communication** its self-evident isn't it? When it comes to change management there's no such thing as too much **communication**.
- Changes to routines when we talk about comfort zones we're really referring to routines. We love them. They make us secure. So there's bound to be resistance whenever change requires us to do things differently
- Exhaustion/Saturation don't mistake compliance for acceptance. People who
  are overwhelmed by continuous change resign themselves to it and go along with
  the flow. You have them in body, but you do not have their hearts. Motivation is low
- Change in the status quo Resistance can also stem from perceptions of the change that people hold. For example, people who feel they'll be worse off at the end of the change are unlikely to give it their full support. Similarly, if people believe the change favours another group/department/person there may be (unspoken) anger and resentment
- **Benefits and rewards** When the benefits and rewards for making the change are not seen as adequate for the trouble involved

c)

- **Tuning into the environment.** Creating a 'network of listening posts' such as listening to customers complaints so that they are aware of what is going on in the environment.
- Challenging the prevailing organisational wisdom: this means getting others in the organisation to accept that old ways of doing things are no longer necessarily the best ways
- **Building coalition:** Change leaders need the involvement of people who have resource, knowledge or political clout to make things happen. They need to build coalition with people who are prepared to support them.
- **Communicating a compelling aspiration:** you can't change thing successfully without a conviction. Change managers should have this conviction and should communicate it to others.
- **Transforming ownership to a working team.** Once a 'coalition' is in place, a change leader can enlist others to implement the change. They don't need to make change themselves. They can delegate responsibility to the team.

- Learning to persevere: change will not go smoothly and there will be setbacks. Change managers must be able to keep on trying until they succeed.
- **Make everyone a hero:** change managers should recognise, rewards and celebrate the accomplishment of everyone who has contributed to the change process.

# SOLUTION SIX

- a) The following are key requirements of a successful divisionalisation:
  - Each division must have properly delegated authority and must be accountable to the head office.
  - Each unit must be large enough to support the quantity and quality of management it needs.
  - The unit must rely on the head office for excessive management support
  - Each unit must have a potential for growth in its own area of operations
  - There should be scope and challenge in the job for the management of each unit
  - If units deal with each other, it should be as an arm's length transaction
  - b) Delayering is the reduction of levels in the management hierarchy so that the organization becomes more flat.

The following are the advantages of delayering

- Information technology reduces the need for middle managers to process information.
- Empowerment many organizations, especially service businesses, are keen to delegate authority down the line to the lowest possible level. Front line workers in the operating core are allowed to take decision. In order to increase responsiveness to customer demands. This perhaps removes the need for some middle management jobs.
- Reducing costs- reduction of managerial/supervisory costs.
- c) Explain any three (3) examples of culture manifestation in organizations.
- How formal the organization is
- Office lay out
- types of people employed

# **END OF SOLUTIONS**



DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

# LEVEL TWO

# DA 8: FINANCIAL REPORTING

MONDAY 14 SEPTEMBER 2020

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

# **INSTRUCTIONS TO CANDIDATES**

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

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

#### **SECTION A**

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

#### **QUESTION ONE**

Papaya, a Public listed company acquired 108,000 equity shares in Starfruit on 1 July 2019, through a share exchange of two shares in Papaya for every four shares in Starfruit plus cash consideration of K1.25 per acquired share. The retained earnings of Starfruit at the date of acquisition were K216,000. The market prices of Papaya and Starfruit's shares at the date of acquisition were K6.00 and K3.25 respectively.

Papaya acquired equity shares in Apricot on 1 July 2019, representing a 30% holding at a cost of K7.50 per share in cash. The retained earnings of Apricot at the same date were K396,000.

Further, Papaya has included issue costs relating to the acquisition of Starfruit of K18,000 in cost of investment. Only the cash consideration of the above investments has been recorded by Papaya.

The summarized draft statements of financial position of the three companies as at 31 December 2019 are as follows:

	Papaya `K′	<b>Starfruit</b> `K'	<b>Apricot</b> `K'
Non-current assets			
Property, Plant and equipment	662,400	374,400	648,000
Investment in Starfruit & Apricot	477,000		
Other Investments	<u>234,000</u>		
	<u>1,373,400</u>	<u>374,400</u>	<u>648,000</u>
Current assets			
Inventory	248,400	223,200	129,600
Receivables	<u>115,200</u>	54,000	<u>86,400</u>
Total current assets	<u>363,600</u>	<u>277,200</u>	<u>216,000</u>
Total Assets	<u>1,737,000</u>	<u>651,600</u>	<u>864,000</u>
Equity and liabilities			
Equity shares of K1 each	360,000	144,000	144,000
Retained earnings	909,000	<u>320,400</u>	<u>576,000</u>
Total equity	<u>1,269,000</u>	<u>464,400</u>	<u>720,000</u>
Non-current liabilities			
7% loan notes	180,000	36,000	36,000
Current liabilities	<u>288,000</u>	<u>151,200</u>	<u>108,000</u>
Total equity and liabilities	<u>1,737,000</u>	<u>651,600</u>	864,000

# The following additional information is relevant:

- (i) At the date of acquisition, Starfruit's assets had their fair value equal to carrying amount with an exception of an item of plant that had a fair value of K120,000 in excess of its carrying amount. The item of plant had a remaining life of four (4) years (straight line method of depreciation) at the date of acquisition.
- (ii) Starfruit had an internally generated brand name on the date Papaya acquired control over it which was not recognized in financial statements of Starfruit. The directors of Papaya estimated the fair value of this brand name to be K36,000. The brand has an indefinite useful economic life and that it has not suffered any impairment to date.
- (iii) In the post-acquisition period, Starfruit sold goods to Papaya for K97,200, having marked them up at 50%. Papaya had K32,400 of these goods still in inventory at 31 December 2019. As a result of these intra-group sales, Papaya owed Starfruit K25,500 at 31 December 2019. This agrees with the balance in Starfruit's books.
- (iv) The other investments are included in Papaya's statement of financial position above at their fair value on 1 July 2019. They had a fair value of K324,000 on 31 December 2019.
- (v) Papaya has a policy of valuing non-controlling interest at fair value at the date of acquisition. For this purpose, the share price of starfruit at the date of acquisition should be used.
- (vi) Both goodwill and investment in Apricot are not impaired.

# **Required:**

Prepare the consolidated statement of financial position for Papaya group as at 31 December 2019. [Total: 25 Marks]

## **QUESTION TWO**

Tamanga cleaning services Plc (Tamanga) provides cleaning services to different corporate customers across the country. You are the financial accountant of Tamanga Plc and you have been given the trial balance below by the chief financial officer to prepare draft financial statements.

The following extracted balances relate to Tamanga Plc at 31 December 2019:

	K′000	K′000
Equity shares of K1 each		50,000
Retained earnings at 1 January 2019		61,800
Revaluation reserve at 1 January 2019		18,500
Deferred tax provision at 1 January 2019 (note $(v)$ )		30,000
Trade pavables		35,300
Tax (note (y))		2 100
Property-land (20%) and building (80%) – at valuation (note (i))	150 000	2,100
Plant and equipment – cost (note (i))	98 600	
Right of Lise of Asset (ROUA) (note (ii)) 1 January 2019	80,000	
Investment property – valuation at 1 January 2019 (note (iii))	10,000	
Accumulated Dep 1 January 2019 – Jand and building	10,000	9 000
Accumulated Dep 1 January 2019 I and and building		24 600
Trade receivables	41 200	24,000
Induction 21 December 2010	71,200	
Inventory – 51 December 2019	20,000	
Balik Devenue (note (iv))	43,700	222.000
Revenue (note (IV))		323,000
Loan note at 1 January 2019 (note (vi))		40, 000
Income from investment property		1,200
Cost of sales	151,000	
Distribution expenses	26,400	
Administration expenses	26,600	
Lease liability at 1 January 2019 (note (ii))		58,000
	653,500	653,500

#### The following notes are relevant:

- (i) Tamanga has a policy of revaluing its property every three (3) years and on 1 January 2019 its land and building were revalued by a firm of independent professional surveyors at K25,000,000 and K92,500, 000 respectively. At that date the remaining useful life of the building was estimated to be 37 years. Plant and equipment (other than leased plant referred to in note (ii) below) is depreciated at 20% per annum on the reducing balance basis.
- (ii) Tamanga entered into an agreement on 1 January 2019 to lease the plant for five (5) years. Instalment payments of K22,000,000 per year are made in advance. The carrying amount of ROUA in the above trial balance is made up of the initial lease liability of K58,000,000 and the rental of K22,000,000 paid at the inception of the lease. The interest rate implicit in the lease is 10% per annum. The estimated useful life of the plant is six (6) years.

No depreciation or amortization has been charged on any non-current asset in the current year. (All depreciation is to be charged to cost of sales).

- (iii) The Investment Property has a fair value of K12,000,000 at 31 December 2019. Tamanga uses the fair value model of IAS 40 Investment Property.
- (iv) Revenue includes K60,000,000 received from a customer for services to be performed over a three (3) year period commencing 1 January 2019.
- (v) The balance on the taxation account in the trial balance represents under/over provision of the previous year's tax charge. The directors have estimated the provision for income tax for the year to 31 December 2019 at K9,200,000. The deferred tax liability at 31 December 2019 has been estimated at K31,000,000.
- (vi) K40,000,000 loan note was issued at par on 1 January 2019. No interest will be paid on the loan; however, it will be redeemed on 31 December 2021 at a premium of K13,240,000 which gives an effective finance cost of 10% per annum.

#### **Required:**

- (a) Prepare the statement of profit or loss and other comprehensive income for the year ended 31 December 2019. (12 marks)
- (b) Prepare the statement of financial position as at 31 December 2019.

(13 marks) [Total: 25 Marks]

#### **SECTION B**

# Attempt any TWO (2) questions.

# **QUESTION THREE**

The following accounting information relates to Sky-black manufacturing limited which specialises in production of soft drinks of various types.

Sky-Black Ltd. statement of profit or loss and other comprehensive income for the year ended 30 September, 2019.

	2019	2018
Povenue		
Cost of Solos	155,000	250,000
Cost of Sales	(175,000)	(110,000)
Gross Profit	(20,000)	140,000
Distribution costs	(10,000)	(15,000)
Administration costs	(5,000)	(8,000)
Operating (Loss)/Profit	(35,000)	117,000
Finance cost	(10,000)	(7,000)
	(45,000)	110 000
Taxation	(16,500)	(30.000)
Profit after tax	(61,500)	80,000
Other Comprehensive Income		
Revaluation Surplus	5,000	-
	(56,500)	80,000
Sky-Black Ltd. Statement of financial position as at 30 Ser	otember 2019	
	2019	2018
Assets	K′000	K′000
Non-current assets		
Tangible non-current assets	125,000	150,400
Current assets	4 4 9 9 9	
Inventory	14,000	9,000
Receivables	12,000	5,000
Cash and Bank		500
Total assets	151,000	164,900
Equity and liabilities		
Ordinary shares of K1 each	70,000	50,000
Share Premium	6,000	4,000
Revaluation surplus	5,000	3,000
Retained earnings	25,400	76,900
	106,400	133,900

Non-current liabilities		
8% Loan notes	20,000	15,000
Current liabilities		
Trade payables	4,600	3,000
Overdraft	5,000	-
Taxation	15,000	13,000
	151,000	164,900

Management of Sky-Black Ltd. is very concerned about the poor performance of the company as indicated by current year reported losses owing to operational and market factors. Consequently, they have engaged your firm of management consultants to help them analyse the performance and position of the company in an effort to turn around its fortunes.

#### The following information is relevant:

- (i) During the year ended 30 September, 2019, Sky-Black Ltd. Market saw a huge reduction in demand for its products because of the unprecedented increase in substitute products including a local drink popularly known as 'chibwantu' which low income consumers claim to be the real deal drink.
- (ii) Sky-Black Ltd. sources most of its inputs from abroad and management is concerned that the reduction in the value of the local currency which has remarkably increased the costs of sales is showing no signs of improvement.
- (iii) Due to climate change there has been a significant reduction in hydro-electricity power supply in the country and Sky-Black Ltd is currently spending huge sums of money to run its plant using alternative energy. As a consequence, management is considering laying off some workers in order to minimise operating costs.
- (iv) The company took out an additional loan during the year and negotiated for an overdraft facility in order to cover its operating costs. The bank made it clear that the overdraft facility would be reduced in the coming years as a way of managing credit risk in line with central bank legislation.

#### **Required:**

(a) Calculate the following 11 ratios in respect of Sky Black Ltd. For the two (2) years above:

1.	ROCE	4. Assets turnover	7. Receivable days	10. Total gearing
2.	Net profit margin	5. Current ratio	8. Payable days	11. Interest cover
3.	Gross profit margin	6. Quick ratio	9. Inventory days	

(11 marks)

(b) Write a report which analyses the performance and position of Sky-Black limited over the two-year period. (14 marks)

[Total: 25 Marks]

# **QUESTION FOUR**

Yanga Co has the following transactions.

(a) Yanga acquired K45,000,000 5% bonds at par on 1 January 2019. Yanga incurred K2,000,000 stockbroker transaction costs when acquiring the bonds. These bonds will mature in five years and are repayable at an effective premium rate of 8%. The interest is received on 31 December each year. The bonds must be measured at amortised cost.

# **Required:**

Explain how this financial instrument should be accounted for in the financial statements for the year ended 31 December 2019 according to IFRS 9. (Note: relevant calculations must be shown). (8 marks)

- (b) Yanga prepares financial statements to 31 December each year. Financial statements for the preceding year are normally approved by its directors for issue on 28 February each year. The following material events occurred.
  - (i) Fire damaged the inventory on 20 December 2019. The insurance claim was made on 25 December 2019 and the amount of the claim had not been recognised at the year-end as it was uncertain that any money would be paid. The insurance company settled the claim of K30,000,000 on 10 January 2020.
  - (ii) A reorganisation of the entity was proposed by management on 31 January 2020 and agreed by the board of directors on 15 February 2020. The reorganisation will cost K45,000,000.

# **Required:**

Explain the difference between adjusting event and non-adjusting event and discuss how the above events should be accounted for in the financial statements for the year ended 31 December 2019 according to IAS 10. (7 marks)

(c) Yanga is involved in the construction of houses and often has a number of major construction contracts whose reporting falls into two or more accounting periods. On 1 January 2019, Yanga entered into a construction contract which has the following details:

	K'000
Fixed contract price	10,000
Invoiced to customer	5,500
Payments on account	4,900
Costs incurred to date	4,500
Estimated costs to complete the contract	3,500
Estimated progress towards full satisfaction of	f performance oblig

Estimated progress towards full satisfaction of performance obligation is 55%. The customer controls the asset as construction progresses.

# **Required:**

Explain how the above contract should be accounted for in the financial statements for the year ended 31 December 2019 according to IFRS 15. (10 marks) (Note: relevant calculations must be shown). [Total: 25 Marks]

# **QUESTION FIVE**

(a) The International Financial Reporting Standards Foundation is a non-profit seeking organisation whose mission is to develop international financial reporting standards that bring transparency, accountability and efficiency to financial markets around the globe. Usage of international financial reporting standards by preparers of financial statements promotes consistent and uniform financial reporting. The foundation works through the international accounting standards board which is supported by two organs; the international financial reporting advisory council and the international financial reporting standards interpretations committee.

# **Required:**

- (i) Explain three (3) major functions of the International Financial Reporting Standards Foundation. (3 marks)
- (ii) Explain four (4) major objectives of the International Accounting Standards Board. (4 marks)
- (iii) Explain the four (4) steps involved in the formulation of an International Financial Reporting Standard. (8 marks)
- (b) IAS 37 provisions, contingent liabilities and contingent assets regulate the accounting treatment of provisions, contingent liabilities and assets.

#### **Required**:

- (i) Explain the difference in accounting treatment between a provision and a contingent liability. (2 marks)
- (ii) Explain the two (2) types of obligations which can give rise to provision.

(2 marks)

(c) IFRS 5 assets held for sale and discontinued operations sets out the principles to be followed when a non-current asset is earmarked to be sold and when operations for an identifiable business line are to be discontinued.

# **Required:**

List any three (3) conditions which should be met for an asset to be classified as held for. (6 marks)

[Total: 25 Marks]

#### **END OF PAPER**

# SUGGESTED SOLUTION

# SOLUTION ONE

Papaya group consolidated statement of financial position as at 31 Decen	nber 2019
	`Κ΄
Non-current Assets	
Goodwill (w2)	60,000
Brand name	36,000
Property, plant and equipment (662,400+374,400 +120,000-15,000 w4)	1,141,800
CA of Investment in Apricot (w6)	378,000
Investment in equity instruments	324,000
Total non-current assets	<u>1,939,800</u>
Current assets	
Inventories (248,400 + 223,200 – 10,800 (w5) )	460,800
Receivables (115,200 + 54,000 – 25,500)	<u>143,700</u>
Total current assets	604,500
Total assets	<u>2,544,300</u>
Equity and liabilities	
Equity shares of K1 ea (360,000 + 54,000 (w9))	414,000
Share premium (w9)	270,000
Retained earnings (w7)	1,093,950
Non-controlling Interest (w8)	136,650
	1,914,600
Non-current liabilities	
7% loan notes (180,000 +36,000)	216,000
Current liabilities (288,000 + 151,200 -25,500)	413,700
Total equity and liabilities	<u>2,544,300</u>
Workings	

1. group structure:

	Рарауа	30%	Apric	ot
	108,000/144,00 Acquired 6 mor	00 shares x 100 = 75% hths ago.	·	
Ň	Starfruit	2504		
_	Therefore NCI	= 25%		
2.	Goodwill			
	Consideration:			`K′
	Share exchange	e (108,000 /4 shares x 2	shares x K6)	324,000
	cash (108,000 s	shares x K1.25)		135,000
	FV of NCI (25%	ω x 144,000 x k3.25)		<u>117,000</u>
	-	· · · · · ·		576,000
	Less net assets	acquired (w3)		<u>(516,000)</u>
	Goodwill at acq	uisition		60,000

3. Net assets:

	At acquisition	At reporting	post acquisition
	`Κ′	`K′	`K′
share capital	144,000	144,000	0
retained earnings	216,000	320,400	104,400
brand	36,000	36,000	0
FV adjustment	120,000	105,000	(15,000)
PUP	0	(10,800)	(10,800)
	<u>516,000</u>	<u>594,600</u>	<u>78,600</u>

4. Fair value adjustments

at		at
acquisition	movement	reporting
<u>120,000</u>	<u>15,000</u>	<u>105,000</u>
36,000	<u>0</u>	<u>36,000</u>
	at acquisition <u>120,000</u> <u>36,000</u>	at       acquisition     movement       120,000     15,000       36,000     0

# 5. PUP

50/150 * 32,400 = 10,800
The second second for a second second

6.	Investment in apricot	`K′
	cost of investment (30% * 144,000) x k7.50	324,000
	Papaya's share of Apricot PARE (w7)	54,000

				<u>378,0</u>	<u>00</u>	
7.	Group Retained earnings			` <b>K</b> ′		
	100% of Papaya RE			909,000		
	Papaya's share of Starfruit (75% x 78,600)			58,950		
	Papaya's share of Apr	icot (30	0% x 180,000)	54	,000	
	gain on fair value of o	ther in	vestments (324	-234) 90	-234) 90,000	
	Issue costs			<u>(18,000)</u>		
	total			1,093,950		
	ALTERNATIVE WOR	RKING	IS AS FOLLO	WS:		
	<b>GROUP RETAINED</b>	EARN]	(NGS			
			Рарауа	Starfruit	Apricot	
	Per question balances	c/f	909,000	320,400	576,000	
	Less pre-acquisition R	.E		(216,000)	(396,000)	
	Post acquisition R.E			104,400	180,000	
	Gain on fair value of c	other				
	Investments		90,000			
	Issue costs		(18,000)			
	PUP			(10,800)		
	Additional depreciatio	n		(15,000)		
				78,600		
	Papaya share in starfr	uit:				
	(75% x 78,600)		58,950			
	Papaya share in Apric	ot:				
	(30% 180,000)		54,000			
			<u>1,093,950</u>			
8.	NCI at reporting date			`К	,	
	NCI @ acquisition (w2)			117,0	00	
	NCI share of PARE (25% x 78,600)			19,6	<u>50</u>	
				<u>136,6</u>	<u>50</u>	
9.	Proceeds from shar	Proceeds from share exchange:				
	Share capital	108,00	$00/4 \times 2 \times K1 =$	K54,	000	
	Share premium $108,000/4 \ge 2 \ge K5 =$		<u>K270,</u>	<u>000</u>		
				<u>K324,</u>	<u>000</u>	

# SOLUTION TWO

# A)

# Tamanga statement of comprehensive income for the year ended 31December2019K'000

Sales revenue Cost of sales [151,000 Gross profit Administrative exp Distribution costs Investment income Finance costs Profit before tax Tax w5 Profit for the year	[323,000–40,000w4] 0+2,500w1+14,800w1+16,000w2+5,000w1 [1,200+2000w3] [5,800w2+4,000w6]	283,( [ <u>(189,;</u> 93,; (26, (26, 34, 34, <u>(9,</u> 34, <u>(8,</u> 26)	000 300) 700 600) 400) 200 800) 100 100) ,000
<b>b) Tamanga statemen</b> Assets	t of financial position as at 31Decembe	er <b>2019</b> K′000	K′000
Non-current assets Property, plant and ed	quipment [25,000w1+90,000w1+59,200w1	228 200	
Investment property	w3	12,000	250 200
Current assets Inventory Trade receivables Bank		26,000 41,200 <u>43,700</u>	230,200
Total assets			<u>110,900</u> <u>361,100</u>
Equity Equity shares Retained earnings	61,800+26,000	50,000 <u>87,800</u>	127 900
Non-current liabilities Deferred tax w5 Lease liability w2 Loan notes w6 Deferred income w6		31,000 41,800 44,000 20,000	137,800
Current liabilities Trade payables Tax liability w2 Lease liability w2 Deferred income		35,300 9,200 22,000 <u>20,000</u>	86,500
Total equity and liabil	ities		361,100

#### Workings for Tamanga Co

Land: Rev loss = Revalued amount – Carrying amount = 25,000 - 30,000= (5,000)N.B.V = 25,000 (Carrying amount to report) Building: Rev loss = 92,500 - 111,000 [120,000 - 9,000] =(18,500)Total property revaluation loss = 23,500Rev loss reversal: Dr: Rev surplus 18,500 Excess rev loss Dr: SOPL 5,000 Buildina: N.B.V = 92,500 - 2,500 = 90,000Dep: 92,500/37 years = 2,500 Plant and equipment:  $[98,600 - 24,600] = 74,000 \times 20\% = 14,800$ N.B.V = 74,000 - 14,800 = 59,200Dep: Leased plant: 58,000/5years = 16,000 N.BV = 80,000 - 16,000 = 64,000Dep: Lease liability table: O/bal (payment) subtotal interest @10% C/bal 80,000 (22,000)58,000 5,800 63,800 C. Liability = 22,000 N. C. Liability = 41,800 [63,800 – 22,000] Investment property: Gain = 2,000 [12,000 - 10,000] N.B.V = 12,000Cr: Deferred income [C. Liability 20,000 N. C. Liability 20,000] Dr: Revenue 40,000 Taxes: Income tax expense = (2,100) + 9,200 + 1,000 = 8,100Non-current tax: Deferred tax = 31,000 [SOFP] Current liability: Tax payable = 9,200Loan note: O/bal Coupon rate Effective .I. Rate @10% C/bal 40,000 4,000 44,000 -

# SOLUTION THREE

Part (a) Calculation of ratios

Ratio		2019	2018
		K′000	K′000
ROCE	PBIT/CE*100%	35/126.4*100% =28%	117/148.9*100%=79
			%
Net profit margin	PBIT/Revenue*100%	35/155*100% =23%	117/250*100%=47%
Gross profit	GP/Revenue*100%	20/155*100% =13%	140/250*100%==56
margin			%
Assets turnover	Revenue/CE	155/126.6 =1.23 times	250/148.9=1.68 times
Current ratio	TCA/TCL	26/24.6 =1.06 times	14.5/16=0.9 times
Quick ratio	TCA-inventory /TCL	26-14/24.6 =0.49 times	14.5-9/16=0.34 times
Receivable days	Receivables/Rev*365	12/155*365 =28 days	5.5/250*365=7 days
Payable days	Payables/COS*365	4.6/175*365 =10 days	3/110*365=10 days
Inventory days	Inventory/COS*365	14/175*365 29 days	9/110*365=30 days
Total gearing	Debt/Equity+debt*100%	20/126.4*100% =16%	15/148.9*100%=10%
Interest cover	PBIT/Interest	35/10 =3.5 times	117/7=17 times

Part (b) Report

	two years ended 30 September 2018 and 2017		
SUBJECT:	Analysis of financial performance and position of Sky-Black Ltd for the		
DATE:	(date of exam)		
FROM:	Management Consultant		
TO:	Management of Sky-Black Ltd		

# Performance

The company's performance has declined over the two-year period with sales dropping by 38% [(250-155/250) \*100%] indicating reduction in the demand for the offerings of skyblack by its customers.

Return on capital employed has registered a decrease from 79 to 28% (79-51/79\*100). This implies that Sky-black is earnings less profits from its employed long-term capital. Reduced return on capital employed is driven by a decline in the net profit margin and asset turnover ratio which are not looking good in the current year.

The net profit margin has decreased from 47% in 2017 to 23% in 2018. Sky black Ltd. is incurring increased variable costs due to the reduction in the local currency value as well as the need to finance high cost alternative energy due to hydro power outages. The asset turnover ratio has also followed the pattern above recording a reduction from 1.69 times to only 1.22 times. 28% (169-122/169\*100%). This decline is indicative of inefficient usage of resources as well as increased competition in the market. Market saturation simply reduces the earnings of market suppliers in the long term. This problem is compounded by the

introduction of affordable but much appreciated alternative drinks such the chibwantu local drink. Sky-black should consider investing in a similar product if resources allow.

The current asset ratio of Sky- black Ltd. falls below the threshold of 2 times (2018; 1.06, 2017, 0.9). Could this indicate an aggressive approach of working capital management, were inventory levels is deliberately kept to a minimum? The quick ratio also falls below the preferable ratio of 1 time (2018;0.49, 2017, 0.34). With more information obtained, it could be concluded that Sky-black is not able to meet its current obligations easily out of the meagre current resources it has.

The receivables days has increased from 7 days in 2017 to 28 in 2018. This change could be indicative of more relaxed trade terms offered to the customers of the Sky-black in a bid to drive up sales. Increased receivable days normally pose a risk of irrecoverable debts. The payable days ratio is currently falling below 30 days. Both years recorded 10 days from our analysis. While an early policy payment can sustain supplier relations, it may prove to be good for liquidity management. The firm should consider negotiating for a longer payment period from suppliers. The inventory turnover days is at 29 for both years. It takes Sky-black close to a month to convert inventory into cost of sales.

# Position

As indicated in the calculations above the total gearing ratio has remained within expected range of 50% in the two year under consideration. This position is indicative of a conservative risk profile policy of Sky-black limited. The interest cover ratio also shows that Sky-black is still in a stronger position to offset its interest obligations. Interest cover adversely dropped from 17 times in 2017 to a negative 3.5 times in 2018.

# **SOLUTION FOUR**

# Yanga Co

# (a) Financial instruments

Initial measurement 1.1.2019

(i) Investment (financial asset) will be recognised at K47, 000,000 [45,000,000 + 2,000,000].

Subsequent measurement 31.12.2019

Amortised cost table

O/bal	Eff. I. Rate @8%	(payment)	C/bal
47,000,000	3,760,000	(2,250,000)	48,510,000

Financial statements 31.12.2019

- (i) K3, 760,000 will be reported in the statement of profit or loss as investment income.
- (ii) K2, 250,000 will be cash inflow.
- (iii) K2, 250,000 will be reported under investing activities in the statement of cash flows.
- (iv) K48, 510,000 will be the carrying amount of the financial asset at 31 December 2019 and hence amount to be reported in the statement of financial position.

# (b) Events after the reporting period

- (i) Adjusting event is the event that provides additional evidence of a condition that existed at the end of the reporting period.
- (ii) The event requires an adjustment in the financial statements.
- (iii) Non-adjusting event is the event that is indicative of condition that arose after the reporting period.
- (iv) The event does not require an adjustment in the financial statements, however, a disclosure by note is required if the event is material.
- (v) Inventory damaged by fire on 20 December 2019 is an adjusting event.
- (vi) There is evidence that the damage existed at the end of the reporting date (31 December 2019).
- (vii) An adjustment is needed in the financial statement for the year ended 31 December 2019.
- (viii) The reorganisation of an entity is a non-adjusting event.
- (ix) The reorganisation is indicative of conditions that arose after the reporting period (20 January 2020 and 15 February 2020).
- (x) An adjustment is not needed in the financial statement for the year ended 31 December 2019, but a disclosure by note is needed.

# (c) Construction contracts

Profitability of contract

(i)	Profitability of the contract	K′000		
	Fixed contract price	10,000		
	Costs incurred to date	(4,500)		
	Estimated costs to complete Expected profit	the contract		<u>(3,500)</u> <u>2,000</u>
-------	--	---	---------------------------------------	-------------------------------------
(ii)	Revenue of K5, 500 will be returned to the performance obligation s	eported in the sl atisfied (55% of	tatement of pr f 10 <i>.</i> 000).	ofit or loss. It is
(iii)	Cost of sales of K4, 400 will is the costs incurred for the	be reported in the performance obl	ne statement o igation satisfie	of profit or loss. It ed.
(iv)	Profit of K1,100 will be repor revenue less cost of sales. 5 Recognizable profit todate:	ted in the stater $5\% \times 2,000 = 1,$	ment of profit ,100	or loss. It is
	Revenue (55% x 10,000)	5,500		
	Cost of sales (55% x 8,000) Profit	<u>(4,400)</u> <u>1,100</u>		
(v)	A receivable of K600 will be is work certified and invoiced	reported in the s l less payment o	statement of fi	nancial position. It 500-4,900).
(vi)	A contract asset or liability w computed as: costs to date	ill be reported in	n statement of 4,500	financial position

It

: costs to date	4,500
Profit to date	1,100
Less amounts invoiced	<u>(5,500)</u>
Contract asset	100

# SOLUTION FIVE

Part (a)

- i) Functions of the foundation include:
- To appoint/recruit members of the IASB, IFRS advisory council and Interpretations committee.
- To fund the activities of the IASB
- To oversee the work of the IASB
- To promote the use and rigorous application of IFRSs
- To facilitate adoption of IFRS
- To approve of the strategy of IASB
- To promote transparency and efficiency in the application of IFRSs.
- To review the budgets of IASB
- To take account of financial reporting needs of SMEs
  - ii) The accounting standards board objectives:
- To develop high quality financial reporting standards
- To promote the rigorous application of IFRSs
- To promote harmonisation of local and IFRSs
- To address the accounting needs of emerging markets
  - iii) Steps in formulating an IFRS:

The development of a new standard involves widespread consultation but the major steps are as follow

- Advisory Committee this group is established to advise the IASB on a specific area of accounting which requires a new standard or modification of an existing standard.
- Discussion paper the advisory group produces a discussion paper which must be availed to the public for input.
- Exposure draft after reception of submissions from the public, the discussion paper incorporates the relevant comments of the public and is refined into an exposure draft. At this stage we are one step away from having a full IFRS.
- IFRSs Upon approval from the majority members of the IASB, a standard comes into force. Further work including guiding markets on how to apply a standard is a continuous process.

# Part (b)

i) A provision is a liability of uncertain timing and amount and a contingent liability is a possible obligation which may arise in future. A provision results from a past event but a contingent liability can only be confirmed through a future event. Provisions are thus recognised in the Financial Statements but contingent liabilities are only disclosed in the notes to the Financial Statements subject to materiality considerations.

- ii) A provision can arise on the following grounds:
- **Legal obligation**: arises from the requirements of the law. For example, a firm is legally required (because of existing environmental law) to restore the land which was used in its production activities.
- **Constructive obligation** : arises from an entity's established policies. For example, if a firm has a written policy (which is possibly aligned to expected conduct by the public) which requires it to restore the land which was used in its production activities.

# Part ( c )

Conditions for asset to be recognised as held for sale:

- The asset should be available for immediate sale in its current condition
- The sale should be highly probable (expected within 12 months)
- Management should be committed to plan to sale the asset
- An active program should be in place to locate the buyer and complete the sale
- The asset must be for sale and not an abandoned.
- Asset should be marketed at a reasonable price.

**END OF SOLUTIONS** 



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL TWO

# DA 9: MANAGEMENT ACCOUNTING

TUESDAY 15 SEPTEMBER 2020

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

# **INSTRUCTIONS TO CANDIDATES**

- 1. You have fifteen (15) minutes reading time. Use it to study the examination paper carefully so that you understand what to do in each question.
- 2. This paper is divided into TWO (2) sections:

Section A: There are two (2) compulsory questions. Section B: There are three (3) questions. Attempt any two (2) questions.

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

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

# SECTION A - TWO COMPULSORY QUESTIONS

#### Attempt both questions in this section.

#### **QUESTION ONE**

Mano Ltd produces a chemical used by farmers to destroy weed. The product is produced in 300ml sachets. Lisa, the managing director of Mano Ltd, having attended a meeting on budgetary control agreed to revise the way budgets were prepared in the company. Rather than imposing targets for managers, she encouraged participation by senior managers in the preparation of budgets.

After an initial budget was prepared, the sales director, Mapendo, felt that the budgeted sales volume was set too high. He explained that setting too high a budgeted sales volume would de-motivate his sales staff as they would not be able to achieve that sales volume. Lisa agreed to use the revised sales volume suggested by Mapendo.

Both the initial and revised budgets are reproduced below completed with the actual results for the year ended 31 December 2019.

Mano Ltd –	budgeted a	nd actual	costs for	the year	ended 31	December	2019

Production and sales (sachets	5)	Origina budgel 30,000	al : )	Revised budget 25,000	l A r 2	Actual esults 27,500
		K′000		K′000	k	(′000
Material		4,050		3,375	3	8,878
Labour		5,400		4,500	4	,785
Heat, light and power	581	.25	506.25		626.25	
Rent, rates and depreciation	<u>750</u>	750	71	l2.50		
Total	<u>10,781</u>	.259,13	<u>1.25_1</u>	0,001.75	5	

Asmanagement accountant at Mano Ltd, it is your duty to check that invoices have been coded properly. On checking the actual invoices for heat, light and power for the period under review, you find that one of the invoices for K141,000 has been incorrectly coded. The invoice should have been coded to materials.

#### **Required:**

- (a) Calculate the budget cost allowance for each of the above cost items. (8 marks)
- (b) Prepare the flexible budget, including variances for Mano Ltd for the year ending 31 December 2019 after correcting for the miscoding of the invoice. (7 marks)
- (c) Explain how a rolling budget works, the situations in which it is applicable and its advantages. (10 marks)

[Total: 25 Marks]

# **QUESTION TWO**

**KAKA Limited** manufactures high quality coffee biscuits that are sold to hotels and restaurants in Zambia. Two (2) months ago it had prepared a budget for the fourth coming financial year. Details of this are prepared below:

К	К
	6,000,000
2,080,000	
1,160,000	
840,000	
972,600	
	(5,052,600)
-	947,400
	<b>K</b> 2,080,000 1,160,000 840,000 972,600

The budget above was prepared on the assumption that unit forecast sales would be 800,000 packets of biscuit. However, due to changing economic conditions, the sales forecast for the year is now 720,000 packets of biscuit.

It is expected that selling price per unit, direct costs per unit and variable overhead cost per unit will not change from the budgeted. It is also expected that fixed overheads will be the same as those budgeted.

Management is now considering a number of options so as to improve profitability for the forth coming financial year:

# **Option 1:**

Decrease the selling price by 20%. It is anticipated that this would increase sales volume by 25% on the forecast sales for the budget year.

# Option 2:

Decrease all variable costs by 10% and decrease fixed costs by 10%. This is not expected to have any impact on the sales level.

# **Option 3:**

Decrease the selling price by 10% and decrease fixed costs by 5%. This is expected to improve sales volume by 25% on the forecast sales for the budget year.

### **Required:**

- Calculate the expected profit for the budget year. (3 marks) (a)
- Based on the forecast activity for the year, calculate; (b)
  - The breakeven point in packets of biscuits. (i)
  - (ii) The margin of safety in percentage terms.
  - (iii) The sales revenue required to earn a profit of K1,440,000.

(7 marks)

- (c) For each of the three options above, calculate;
  - (i) Profit
  - (ii) Breakeven packets of biscuit.

Recommend which option, if any, the company should adopt giving reasons for your answer. (10 marks)

(d) State the five (5) assumptions of breakeven analysis. (5 marks)

[Total: 25 Marks]

# **SECTION B**

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

# **QUESTION THREE**

Easy Communication (EC) Plc makes two types of Phones (X and Y). EC Plc operates within a highly competitive market and hence under immense pressure to reduce prices. A standard marginal costing system is in operation and detailed analysis of variance is performed monthly for both products.

The company's operating data for the previous month is as follows:

1. Budget

2.

	Х	Y
Production and Sales volume	649	649
Sales price	K1,400	K1,200
Special component (@ K240 per unit)	K240	K240
Labour (@ K56 per hour)	K112	K84
Variable overheads (@ K236 per hour)	K472	K354
Actual		
	Х	Y
Production and Sales volume	825	715
Sales price	K1 320	K1 160

	023	
Sales price	K1,320	k
Special component (@ K240 per unit)	K320	
Labour (@ K56 per hour)	K112	
Variable overheads (@ K236 per hour)	K472	

3. Special Component

Due to a shortage of this component in the market place, the market price for last month increased to K340 per unit.

K320 K84 K354

# **Required:**

- (a) Calculate for the last month, showing all workings clearly:
  - (i) Sales price and sales volume contribution variances (5 marks)
  - (ii) Sales mix and quantity contribution variances (8 marks)
  - (iii) Material price planning and operational variances (4 marks)
- (b) The Managing Director of EC Plc has queried the reasons for material price planning variance and material price operational variance. She is also concerned about the use of marginal costing instead of the traditional absorption costing.
  - (i) Explain the reasons why EC Plc would be interested in the material price planning and material price operational variances. (4 marks)
  - (ii) Explain any two arguments for the use of traditional absorption costing rather than marginal costing for profit reporting and inventory valuation. (4 marks)

#### **QUESTION FOUR**

An association of chamber of commerce based in a border town near a country called Kamuchele, recently organised a one-day investment forum where there were many credible speakers and financial experts invited to give talks. The company you work for as an accountant had received an invitation to attend this investment forum. Your company intends to expand its operation due to conducive investment environment in the country. Your boss attended this forum and due to the high number of participants to the forum, your boss could not find an opportunity to ask the presenters on some of the key terms used at the conference as he is an engineer by profession.

He is keen to brief the board on certain topics that were discussed at the conference and he requests you as an accountant to prepare him notes on the issues below for inclusion in his report to the board.

- (a) Explain briefly the term overtrading and state its possible causes. (6 marks)
- (b) Explain the relevance of the product life cycle in considering alternative pricing policies. (6 marks)
- (c) Describe target costing process and how it can impact your company if adopted at an early stage in the product development process.
   (8 marks)
- (d) Explain how "backflush accounting" differs from a traditional absorption costing system. (5 marks)

#### [Total 25 Marks]

# **QUESTION FIVE**

(a) BMK Ltd is a manufacturing Company based Mansa Town. It produces product KUMO which is sold to the customers at price of K90,000. A unit of KUMO uses 5kg of materials and 6 hours of direct labour. A kg of material costs K4,000 while each hour of direct labour is paid at the rate of K5,500.

A annual demand for product KUMO is 50,000 units. The ordering cost per order of materials is K102,400 and the storage cost per kg of material held in stock is K50.

Currently, BMK Ltd places four orders for its material requirement. The company now intends to change the policy and start using the economic order quantity model (EOQ).

# **Required:**

- (i) Calculate the annual cost of ordering and holding inventory based on the current ordering policy for materials. (4 marks)
- (ii) Calculate the revised annual cost of ordering and holding inventory if the economic order quantity (EOQ) model were used and recommend whether the company should change the ordering policy. (6 marks)
- (iii) Discuss five (5) assumptions of economic order quantity mode (EOQ).

(5 marks)

- (b) You have been asked by your manager to assist with the induction of a new member of the management team. After a number of days, the new person approached you with a number of queries about the following terms which they have heard being used, but which they don't understand:
  - 1. Throughput accounting
  - 2. Kaizen Costing
  - 3. Just in time System
  - 4. Market skimming pricing strategy
  - 5. Sunk costs

#### **Required:**

Briefly explain the above terms.

(10 marks) [Total: 25 Marks]

# **END OF PAPER**

#### SUGGESTED SOLUTIONS

# SOLUTION ONE

(a) Budget cost allowance calculations

Budgeted fixed cost

- + (budgeted variable cost per unit X actual units)
- = Budget cost allowance
- 1. Material

	Output	cost
	(units)	К
High output	30,000	4,050,000
Low output	<u>25,000</u>	<u>3,375,000</u>
	<u> </u>	<u>    675,000</u>

Budgeted variable cost per unit (K675,000/5,000 units) =  $\underline{K135}$ 

	К
Total cost for 30,000 units	4,050,000
Less Variable cost for 30,000 units (X K135/unit)	4,050,000
Budgeted material fixed cost	Nil

Budget cost allowance = Nil + (K135/unit x 27,500 units) =  $\underline{K3,712,500}$ 

2. Labour

	Output	Cost
	(units)	K
High output	30,000	5,400,000
Low output	<u>25,000</u>	<u>4,500,000</u>
	<u>5,000</u>	900,000

Budgeted variable cost per unit (K900,000/5,000) =  $\underline{K180}$ 

	K
Total cost for 25,000 units	4,500,000
Variable cost for 25,000 units (x K180/unit)	<u>4,500,000</u>
Budgeted fixed labour cost	Nil

Budget cost allowance = Nil + (K180/unit x 27,500 units) =  $\underline{K4,950,000}$  3. Heat, Light & Power

	Output	Cost
	(units)	K
High output	30,000	581,250
Low output	25,000	506,250
	5,000	75,000

Budgeted variable cost per unit (K75,000/5,000 units) =  $\underline{K15}$ 

	N
Total cost for 30,000 units	581,250
Variable cost for 30,000 units (x K15/unit)	450,000
Budgeted fixed cost	131,250

17

Budget cost allowance =  $K131,250 + (K15/unit \times 27,500 \text{ units})$ =  $\underline{K543,750}$ 

4. Rent, Rates & Depreciation

It is a fixed cost, hence budget cost allowance is still K750,000

# (b) Mano Ltd – Budgetary Control Statement

	Flexible budget K	Actual results K	Variances K
Material	3,712,500	4,019,000	306,500 (A)
Labour	4,950,000	4,785,000	165,000 (F)
Heat, Light & Power	543,750	485,250	58,500 (F)
Rent, Rates & Depreciation	750,000	<u>712,500</u>	<u>37,500 (F)</u>
Total cost`	<u>9,956,250</u>	<u>10,001,750</u>	<u>45,500 (A)</u>

Adjustment on actual material cost and heat, light and power:

Increase material cost by K141,000 and reduce heat, light and power by K141,000 in the budgetary control statement.

(c) A rolling budget is one that is continuously updated to reflect current conditions. It is an attempt to prepare targets and plans which are more realistic and certain in a changing environment, particularly with regard to price levels, by shortening the period between preparing budgets.

Rolling budgets are most applicable where future events are very uncertain so that it is not possible to forecast the future with any degree of certainty.

Advantages of a rolling budget include:

A rolling budget provides a more realistic and up to date basis of comparison. Budgets prepared annually may be more than a year out of date when used for control purposes for months later in the period.

Managers are continually forced to plan a year ahead instead of doing this only once a year in the annual budgeting exercise.

Focusing on preparing detailed short-term forecasts reduces uncertainty.

#### SOLUTION TWO

#### a) KAKA Ltd: Expected profit for the year.

	Total	per unit
	720,000	-
	К	к
Sales	<u>5,400,000</u>	7.50
Less; variable costs		
Direct materials	1,872,000	2.60
Direct labour	1,044,000	1.45
Variable overheads	756,000	<u>1.05</u>
Total variable costs	<u>3,672,000</u>	<u>5.10</u>
Contribution	1,728,000	2.40
Less; fixed overheads	<u>972,600</u>	
	<u>755,400</u>	

# b) i) Breakeven point in packets in packets of biscuits

BEP (Packets) = <u>To</u>	<u>tal fixed costs</u>	= <u>K972,600</u>	
Сог	ntribution per unit	K2.4	= <u>K405,200</u>

#### ii) Margin of safety (MOS)

MOS (%) = <u>Actual sales – BEP sales</u> X 100

Actual sales

<u>720,000 – 405, 250</u> X 100

720,000

#### = <u>43.7%</u>

#### iii) Revenue required to earn target profit

Revenue required (value) = <u>Total fixed cost + Target profit</u>

C/S Ratio

#### = <u>K972,600 + K1,440,000</u>

0.32

#### = <u>K7,539,375</u>

\*\* C/S ratio = C/S

= <u>K2.40</u>

K7.50

= <u>0.32</u>

### c) Evaluation of 3 options.

	Option 1	Option 2	Option 3	current situation
	SP – 20%	VC-10%;FC-10%	SP-10%;FC-59	%
	Volume +25%		volume + 25%	6
Units	900,000	720,000	900,000	720,000
	К	к	К	к
Sales	5,400,000	5,400,000	6,075,000	5,400,000
Less: variable costs	<u>(4,590,000)</u>	(3,304,800)	<u>(4,590,000)</u>	<u>(3,672,000)</u>
<b>Contribution</b> 1,728,000	810,000	2,095,200	1,485,000	
Fixed costs	<u>(972,600)</u>	<u>(875,340)</u>	<u>(923,970)</u>	<u>972,600</u>
Profit	<u>-162,600</u>	<u>1,219,860</u>	<u>561,030</u>	<u>755,400</u>
BEP =	<u>K972,600</u>	<u>K875,340</u>	<u>K923,970</u>	<u>K972,600</u>
	K0.90	K2.91	K1.65	K2.40
BEP(packets of = biscuits)	<u>1,080,667</u>	<u>300,804</u>	<u>559,982</u>	<u>405,250</u>

# **Recommendation**

The company should consider adopting option 2 as this yields a higher profit and has a lower breakeven point.

#### d) Assumptions of breakeven analysis.

- A breakeven chart may be time consuming to prepare.
- It assumes fixed costs are constant at all levels of output
- It assumes that variable costs are the same per unit at all levels of output.
- It assumes that sales prices are constant at all levels output.
- It assumes production and sales are the same.
- It ignores the uncertainty in the estimates of fixed costs and variable cost per unit

# **SOLUTION THREE**

- (a) Variance calculations.
  - Sales price and sales volume contribution variances: (i)

Sales price contribution variance		K
Actual sales should have been:		K
Product X (825 units x K1,400/unit)		1,155,000
Product Y (715 units x K1,200/unit)		<u>858,000</u>
	( ( ( ( ) ) ) )	2,013,000
But was [(825 @ K1,320) + (/15 @ K	(1,160) ]	<u>1,918,400</u>
Sales price contribution variance		<u> </u>
Sales volume contribution variance		
	Х	Y
Actual sales units	825	715
Budgeted sales units	<u>649</u>	<u>649</u>
Sales volume variance	176 (F)	66 (F)
X standard contribution (W1)	<u>K496</u>	<u>K442</u>
	<u>K87,296 (F)</u>	<u>K29,172 (F)</u>

Sales volume contribution variance

K116,468(F)

v

Working for the standard contribution per unit

5	. х	Y
	К	К
Sales price	<u>1,400</u>	<u>1,200</u>
Less variable cost:		
Special component	320	320
Labour	112	84
Variable overhead	<u>472</u>	<u>354</u>
Standard contribution	<u>496</u>	<u>442</u>

#### (ii) Sales mix and quantity contribution variance

Sales mix contribution variance

	Actual in	Actual in		Standard	Mix
	std mix	actual mix	Difference	contribution	variance
	(units)	(units)	(units)	К	К
Х	770	825	-55	496	27,280 (F)
Y	<u>770</u>	<u>715</u>	<u>55</u>	<u>442</u>	<u>24,310</u> (A)
Total	<u>1,540</u>	<u>1,540</u>			<u>2,970</u> (F)

#### Sales quantity contribution variance

x	Actual i Std mix (units) 770	n	Budget std mix (units) 649	in	Differer (units) 121	nce	Standar contribu K 496	rd ution	Mix variance K 60,016 (F)
<u>53,482</u> (F) <u>113,498</u> (F)	Y	<u>770</u>	Total	<u>649</u> 1,540		121 <u>1,298</u>		442	, , ,

(iii) Material price planning and operation variance

Material price planning variance

Standard cost of special component (1,540 x K240) Market price of special component (1,540 x K340) Material price planning variance	K 369,600 <u>523,600</u> <u>154,000</u> (A)
Material price operation variance	
Market price at purchase time (1,540 x K340)	K 523 600
Actual price paid (1,540 x K320)	492,800
Material price operation variance	<u>30,000</u> (F)

- (b) Reasons for materials price planning and operation variances:
  - (i) Planning variances arise when original standard is not equal to the revised standard. Purchasing department can do nothing to alter the planning variance since it is not controlled by operational function but senior management. It shows how skilled management are in estimating future prices.

Operational variances on the other hand compare actual results with a more realistic standard. The material price operational variance measures the purchasing department's efficiency given the market price at the time materials were purchased. It does not take into account factors that the purchasing department cannot control making it more acceptable as a performance measure by staff in the department since they know will not be held responsible for poor planning and faulty standards.

(ii) Arguments in favour of the use of absorption costing instead of marginal costing:

Fixed production costs are incurred in order to make output making it fair to charge all output with a share of these costs.

Absorption costing is consistent with accruals concept as a proportion of the production costs are carried forward in closing inventory to be charged against future sales.

The problem with calculating the contribution of various products made by an enterprise is that they may not be able to cover the fixed costs whereas by charging the fixed overhead to a product, it is possible to ascertain whether it is profitable or not. This particularly important where fixed production overheads are a large proportion of total production costs.

# SOLUTION FOUR

a) Overtrading is excessive trading by a business with less long-term capital at its disposal, raising the risk of liquidity problems.

Symptoms of overtrading

- a. Increased sales revenue
- b. Increased investment in current & non-current assets
- c. Increased inventory & receivables than sales
- d. Reduced current and quick ratios
- e. Increased current liabilities than current assets
- f. Increased assets financed by credit and not proprietors' capital.
- b) A product's life cycle is its progress from when it is created to when it is discontinued. There are four stages in the cycle, which are development, growth, maturity, and decline. The product life cycle helps business owners manage sales, determine prices, predict profitability, and compete with other businesses.

Product life cycle management, or PLM, is the process of observing a product throughout its life cycle. Track each product's activities and successes to keep profits high and avoid steep losses.

Understanding how to deal with each new product is important. And, the different stages of the product life cycle help you with strategic pricing. Strategic pricing is when a business decides how to price products or services based on what will attract buyers.

c) Target costing can be viewed as a proactive cost management tool used to reduce the total cost of the product, over its complete lifecycle, through production, engineering, research and design. It helps the firm in managing the business in reaping profits in the extremely competitive market. Simply put, target costing is a process of ascertaining and attaining full stream cost, at which the intended product with specific requirements, must be produced so as to realise the desired profits, at an anticipated selling price over a specified period. It involves the discernment of maximum cost to be incurred on a new product, followed by the development of sample that can be profitably created for that target cost figure.

#### **Target Costing Process**

The following are the main steps or stages involved in the target costing process.

1. **Conducting Market Research**: The company should determine the customer wants precisely through conducting marketing research. A new product can be designed or make changes in the existing product on the basis of the customers expectations and perceptions.

2. **Identify the Nature of Market**: The market information can be collected in such a way that what type of products are available in the market, the level of competition prevailing, the number of competitors and the price at which the existing products are available. Besides, the company should find out the affordable price of the customers. If so, the target costing is followed.

3. <u>Translation of Customers Requirements into Product Features</u>: The preference of one customer differs from another. These preferences are collectively called as customers requirements. Now, the bundle of preferences are bringing into a tangible thing i.e. product.

4. **Development of a Product Design**: By considering the engineering analysis of market forces, customer needs, relevant technology, competitors models, product configuration and performance features, design alternatives, process capabilities, maintenance and service requirements etc., a suitable product design is to be determined by the company. Such a product design assures a targeted profit and target cost for each component in total.

5. **Determine the Price, Margin and Cost**: Target selling price is determined on the basis of market survey, at which the product can be sold. The standard margin is also included in the target selling price. If so, it is possible to determine the target cost

### **Target Cost = Target Selling Price – Target Profit**

6. <u>Conducting Value Engineering Process</u>: The company can conduct value engineering process to reach target cost. It is a well known fact that the difference between target selling price and the target profit is target cost. The target selling price cannot be changed at any cost; Hence, it is a duty on the part of company is that takes necessary steps to reach the target cost.

7. **Improve the Design to Reach Target Cost**: The company starts a minor trial production. Such a production ensures all product performances, target cost and target profit margin also. The trial production comes to an end whenever the product design matches the target cost.

8. <u>Approval of Top Management</u>: A detail report is presented before the top management for getting approval. The report contains the production process, elements of cost involved with the level of costs to be incurred and design of the specified product. A formal approval is given for starting commercial production.

9. <u>Maintenance of Accounts</u>: A separate accounting records are to be maintained for each product design. It is possible to verify whether the total expenses exceed the target cost. If the expenses are not controllable at any time, the product design will be changed. Hence, the maintenance of separate set of books are highly required under target costing process.

10. **Implement the Target Costing**: The company can get the information regarding the expenses incurred for each design separately. A continuous watching is essential to bring the total cost within the target cost.

d) Backflush accounting is when one wait until the manufacture of a product has been completed and then record all of the related issuances of inventory from stock that were required to create the product, while as traditional absorption costing assumes that certain direct cost include in calculation as product cost but it no work in performed the activities. Traditional absorption costing assigns overhead cost to each department first then just assigns overhead cost to product or service.

### SOLUTION FIVE

# a) i) <u>Annual cost of ordering and holding inventory based on the current ordering</u> <u>policy.</u>

Annual demand for the materials =  $5 \text{kg} \times 50,000$  units



# ii) <u>Total annual cost of ordering and holding inventory based on Economic</u> <u>order quantity (EOQ) Model</u>



Recommendation:

The company should change to Economic order quantity and save K372,100.

iii) Assumptions of Economic order quantity model in the management of inventory:

- It assumes demand is constant.
- It assumes lead time is constant.
- It assumes purchase price is constant.
- It assumes no butter inventory held (not need).

- It assumes ordering cost is constant.
- b)

# 6. <u>Throughput accounting</u>

This is a management accounting technique used as the performance measure in the theory of constraints. The measure is known as the throughput accounting ratio. When the measure is 1 and above, it means that the product or service is profitable. Throughput is calculated as sales less material cost.

# 7. Kaizen Costing

Kaizen costing focuses on obtaining small incremental cost reductions during the production stage of the product life cycle.

Kaizen costing aims to reduce current costs by using tools such as value analysis and functional analysis.

# 8. Just in time system

This is a series of manufacturing and supply chain techniques that aim to minimise inventory levels and improve customer service by manufacturing not only at the exact time customers require, but also in the exact quantities the need and at competitive prices.

# 9. Market skimming pricing strategy

This is a strategy by which a firm charges the highest initial price that customers will pay and then lowers it over time. The aim is gain market share hence grow the revenues.

# 10.Sunk costs

This is an expenditure already incurred and cannot be recovered. It does not influence decision making.

**END OF SOLUTIONS** 



DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL TWO

# DA: 10 TAXATION

THURSDAY 17 SEPTEMBER 2020

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.

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

# Taxation table

# Income Tax

# Standard personal income tax rates

Income band		Taxable	Rate
		amount	00/
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 ind	ividuals		
K1 to K39,600		first K39,600	0%
Over K39,600		,	10%
Company Income Tax rates			
On income from manufacturing a	and other		35%
On income from farming			10%
On income of Banks and other F	inancial Institutions		35%
On income from mineral process	ing		30%
On income from mining operatio	ns		30%
On income from manufacture of	products made out of copper		15%
cathodes	Capital Allowances		
	Capital Allowances		
Implements, plant and mach	inery and commercial vehicles:		
Wear and Tear Allowance –	Plant used normally		25%
	Used in Manufacturing and Leasing		50%
	Used in farming and agro-processin	g	100%
	Used in mining operations		20%
Non- commercial vehicles			200/
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%
<b>Commercial Buildings</b>			
Wear and Tear Allowance			2%
Farming Allowances Development Allowance			10%

Farm Works Allowance	100%
Farm Improvement Allowance	100%

# **Presumptive Taxes**

4%

# Turnover Tax Presumptive Tax for Transporters

Seating capacity	Tax per annum	Tax per day	
	К	К	
From 64 passengers and over	10,800	29.60	
From 50 to 63 passengers	9,000	24.70	
From 36 to 49 passengers	7,200	19.70	
From 22 to 35 passengers	5,400	14.80	
From 18 to 21 passengers	3,600	9.90	
From 12 to 17 passengers	1,800	4.90	
Less than 12 passengers and taxis	900	2.40	

# **Property Transfer Tax**

Rate of Tax on Realised Value of Land, Land and Buildings and shares	5%
Rate of Tax on Realised Value on a transfer or sale of a mining right	10%
Rate of Tax on Realised Value on a transfer of Intellectual Property	5%

# Value Added Tax

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

# Customs and Excise duties on used motor vehicles

	Aged be yea	elow 5 Irs	Aged 5 ye ove	ars and r
Motor vehicles for the transport of ten or more persons, including the driver	Customs duty K	Excise duty K	Customs duty K	Excise duty K
Sitting capacity of 10 but not exceeding 14 persons including the driver	17,778	22,223	8,889	11,112
Sitting capacity exceeding 14 but not exceeding 32 persons	38,924	0	13,840	0
Sitting capacity of 33 but not exceeding 44 persons	86,497	0	19,462	0
Sitting capacity exceeding 44 persons	108,121	0	43,248	0
Motor cars and other motor vehicles	Aged be yea	elow 5 Irs	Aged 5 ye ove	ars and r
principally designed for the transport of	Customs	Excise	Customs	Excise

persons including station wagons and	duty	duty	duty	duty
	К	К	К	К
Sedans cylinder capacity not exceeding 1000 cc Cylinder capacity exceeding 1000 cc but not	12,490 16,058	10,824 13,917	7,136 8,564	6,185 7,422
Cylinder capacity exceeding 1500 cc but not	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 Cylinder capacity exceeding 1000 cc but not exceeding 1500 cc Cylinder capacity exceeding 1500 cc but not exceeding 2500 cc Cylinder capacity exceeding 2500 cc but not exceeding 3000 cc Cylinder capacity exceeding 3000 cc Station wagons cylinder capacity not exceeding 2500 cc Cylinder capacity exceeding 2500 cc Cylinder capacity exceeding 2500 cc Cylinder capacity exceeding 3000 cc but not exceeding 3000 cc Sulves Cylinder capacity not exceeding 2500 cc Cylinder capacity not exceeding 2500 cc Cylinder capacity not exceeding 2500 cc	10,705 14,274 15,041 16,545 19,553 16,545 18,049 22,561 21,057 24 065	9,278 12,371 19,553 21,508 25,419 21,508 23,463 29,329 27,374 31,284	7,136 8,564 8,423 10,523 12,032 9,024 13,357 18,049 9,024 13,357	6,185 7,422 10,950 13,687 15,642 11,731 17,598 23,463 11,732 17,598
exceeding 3000 cc Cylinder capacity exceeding 3000 cc	24,065	37,150	18,049	23,463
	Aged b yea	elow 5 ars	Aged 5 years and over	
Motor vehicles for the transport of goods -with compression-ignition internal combustion piston engine (diesel or semi-	Customs duty	Excise duty	Customs duty	Excise duty
diesel):	ĸ	ĸ	ĸ	ĸ
<b>Single cab</b> GVW exceeding 1.0 tonne but not exceeding	21,926	9,501	8,770	3,801
1.5 tonnes GVW exceeding 1.5 tonnes but not exceeding	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</b>	30,697	13,302	24,119	10,452

# ignition internal combustion piston engine

# **Panel Vans**

GVW exceeding 1.0 tonne but not exceeding 1.5 tonnes	15,348	6,651	8,770	3,801
GVW exceeding 1.5 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, with spark ignition internal combustion piston engine	37,086	28,432	13,907	10,662

# Surtax

On all motor vehicles aged more than five (5) years from year of manufacture  $$\rm K2,000$$ 

#### **Customs and Excise on New Motor vehicles**

### Duty rates on:

1.	Motor cars and other motor vehicles (including station wagons) principally designed for the transport of less than ten persons, including the driver: Customs Duty: Percentage of Value for Duty Purposes Minimum Specific Customs Duty	30% K6,000
	<b>Excise Duty:</b> Percentage of Value for Duty Purposes for Excise Duty Purposes Cylinder capacity of 1500 cc and less Cylinder Capacity of more than 1500 cc	20% 30%
2.	Pick-ups and trucks/lorries with gross weight not exceeding 20 tones: Customs Duty Percentage of Value for Duty Purposes	15%
	Minimum specific Customs Duty Excise Duty:	K6,000
	Percentage of Value for Duty Purposes for Excise Duty Purposes	10%

#### 3. Buses/coaches for the transport of more than ten persons

	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Minimum Specific Customs Duty	K6,000
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	
	Seating Capacity of 16 persons and less	25%
	Seating Capacity of 16 persons and more	0%
4.	Trucks/lorries with gross weight exceeding 20 tonnes	
	Customs Duty:	
	Percentage of Value for Duty Purposes	15%
	Excise Duty:	
	Percentage of Value for Duty Purposes for Excise Duty Purposes	0%

### **SECTION A**

#### **Attempt BOTH questions in this section**

### **QUESTION ONE**

Tileshine Plc is a Zambian company that produces quality tiles. The company prepares accounts to 31 December each year. On 1 January 2020, the company listed its shares on the Lusaka Stock Exchange and one third of the Company's shares were offered to the indigenous Zambians in the same period. For the year ended 31 December 2020, the company's summarised statement of profit or loss was as below:

		ĸ
Revenue		480,145
Cost of sales		<u>(221,297)</u>
Gross profit		258,848
Operating expenses	Note 1	<u>(90,250)</u>
Operating profit		168,598
Finance cost	Note 2	(12,250)
Royalties received		17,850
Bank interest received		10,370
Dividends received		<u>8,205</u>
Profit before tax		192,773
Income tax expense	Note 3	<u>(17,893)</u>
Profit for the period		<u>174,881</u>

The following information is relevant: Note 1: Operating expenses Κ Late submission of tax returns penalty 2,500 Donation to the political party 11,250 Depreciation on non-current assets 4,277 Profit on disposal of Toyata Hilux delivery van (4,000) Fees in connection with issue of share capital 7,500 18,375 Wages and salaries 9,250 Motor car expenses General expenses (Allowable) 41,098 90,250

K5,000 of the motor car expenses relates to private motoring by the Managing Director.

**Note 2**. The figure for finance costs constitutes the bank interest on the bank loan borrowed by Tileshine Plc Company.

#### **Note 3**. Provisional tax

The income tax expense in the income statement represents the provisional income tax paid for the tax year 2020.

**Note 4**. The company's Finance Director, Commercial Manager and Human Resources Manager are accommodated in company houses which were acquired by the company at a cost of K500,000 each. The emoluments of each of the Directors are K200,000, K170,000

and K160,000 respectively. If the houses were let out on a commercial basis the gross monthly rentals payable on each house would have been K9,000.

**Note 5**. Royalties, bank Interest and dividends received shown in the statement of profit or loss above were the actual amounts received by the company.

#### **Note 6**.Industrial building

The company constructed a building in the tax year 2018 at a cost of K598,000 comprising of the following elements:

v

	N
Land	29,000
Staff canteen	85,550
General office	58,750
Shop	66,950
Factory	<u>357,750</u>
	<u>598,000</u>

The building was brought into use on 1 January, 2018.

### Note 7.Implements, plant and machinery

The company has been registered for value added tax purposes for many years. The following capital expenditure on implements plant and machinery was incurred in the year ended 31 December 2020:

	K
Purchase of Toyota Prado	58,232
Purchase of Old Ford Ranger	28,124
Purchase of manufacturing plant	23,200
<b>Note*</b> : The above purchase figures are VAT inclusive.	

At 1 March 2020, all the implements, plant and machinery qualifying

At 1 March 2020, all the implements, plant and machinery qualifying for capital allowances had been completely written down to zero. Toyota Prado motor car bought during the year has a cylinder capacity of 2,100 cc and was used by the managing director on a personal to holder basis.

In the year 2020, an old Toyota Hilux delivery van that had been acquired for K15, 000 (VAT exclusive) was sold for K18,000 (VAT exclusive), resulting in a profit on disposal of K4,000 shown under operating expenses in the income statement.

There were no other purchases or disposals of implements, plant and machinery during the year.

#### **Note 8**.Differently abled persons

The company has employed one (1) differently abled person who is accommodated in a medium cost company owned house which was bought by the company at a cost of K75,000. The employee has worked for the company for two years and his emoluments are K44,000 annum.

# **Required:**

- (a) Calculate the maximum capital allowances that Tileshine Plc Company can claim for the tax year 2020. (10 marks)
- (b) Compute the tax adjusted business profits for Tileshine Plc Company for the tax year 2020. (9 marks)
- (c) Calculate the amount of company income tax payable by Tileshine Plc Company for the tax year 2020. (6 marks)

[Total: 25 Marks]

### **QUESTION TWO**

#### Assume that today is the 31 December 2020

**On 1 Of February 2020** Yonah D K Wosauka woke up feeling big and somewhat perplexed having been pronounced a winner of the Lotto of a cool K2,320,100 after tax amount. His first day reaction was that of going on a drinking spree spending some of the money with friends. However after a month of merry go round, that is on 1 March 2020, he deposited K1,980,000 in a 15% fixed deposit account with his bankers for a ten month period. And as a gesture of goodwill he empowered his wife Mpingo Wosauka with K120,000 so that she could as from 1 March 2020 go into an aggressive "Sal aula" trading business in partnership with him. On his part, he decided to venture into a business of buying and selling fish with a startup capital of K150,000.

Their partnership agreement was that profits were to be shared between them as to 2:1 and no interest was to be paid on capital or charged on drawings. However they agreed that each of them would be entitled to a salary of K15,000 per month.

As of 30 June 2020, the results of the two business ventures were as follows:

Details	Fish Business Yonah DK Wosauka K	Salaula business Mpingo Wosauka K
Purchases	850,000	560,000
Sales	1,239,000	1,645,000
Expenses	140,000	250,000

On 1 of July 2020, the two parents decided to admit their eldest son Twalumba into the partnership so that he could assist with the logistics in the business. The father empowered him with a startup capital of K50, 000 and due to his presence in the business, the business grew from strength to strength and the outstanding results of the business for the period of 1 July 2020 to 31 December 2020 were as follows:

Fish Business Yonah DK Wosauka	Salaula business Mpingo Wosauka
Κ	κ
3,200,000	2,800,000
6,150,000	3,100.000
320,000	369,000
	Fish Business Yonah DK Wosauka K 3,200,000 6,150,000 320,000

Upon the admission of Twalumba into the business, it was agreed that the profit sharing ratio was now going to be 3:2:1. However it was now also agreed that any drawings made from the company would attract interest at 4%. And during this period the partners made the following cash drawings:

Mpingo Wosauka	K79,000
Twalumba	K45,000

It was agreed that Yonah and his wife were to continue being entitled to the salaries which were earlier agreed on.

#### **Required:**

- (a) Explain the tax implications of interest earnings on the fixed deposit account of Yonah DK Wosauka. (3 marks)
- (b) Calculate the taxable profits for each of the partners for charge year 2020 clearly showing your workings of the profits for each of the two partnership period and the sharing of these profits (22 marks)

[Total: 25 Marks]

# **SECTION B**

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

#### **QUESTION THREE**

- (a) Mr. Chichi Mwanza has been in business for many years as a sole trader preparing his accounts annually to 31 December each year. The net profit as per statement of profit or loss for the year ended 31 December 2020 was K213,250. This figure was arrived at after the following expenses:
  - (1) Depreciation of non-current assets amounting to K11,750.
  - (2) Motor vehicle expenses amounting to K15,000. The motor vehicle expenses were incurred in respect of Mr. Mwanza's privately owned motor van which is used for both business and private purposes. It has been agreed with the Commissioner General that the business use of the motor van is 40%.
  - (3) General expenses amounting to K157,000 includes increase in general provision for irrecoverable debts amounting to K17,000. The balance constitutes revenue expenses which are allowable for tax purposes.
  - (4) Salaries and wages amounting to K74,000 includes the nominal salary for Mr. Mwanza of K28,600 and his niece's salary amounting to K25,000. Other employees on the same position as his niece are paid a salary of K18,000 each. The balance of the salaries and wages are all employees' salaries.
  - (5) Repairs on an existing factory building that was bought on 1 July 2015 amounted to K28,800.
  - (6) Entertaining expenses which include K16,300 spent on entertaining employees on a new year party and entertaining important customers of K32,000.
  - (7) He had the following implements, plant & machinery on 1 January 2020:

ITV	Original cost
К	K
20,000	80,000
6,100	24,400
144,000	180,000
	ITV K 20,000 6,100 144,000

#### **Required:**

- (i) Calculate the maximum capital allowances that Mr. Mwanza can claim in the tax year 2020. (3 marks)
- (ii) Calculate the income tax payable by Mr. Mwanza for the tax year 2020.

(7 marks)

(b) Zambian Income Tax is chargeable on the income of all persons that are resident in Zambia.

#### **Required:**

- (i) Explain the circumstances under which a company is held to be resident in Zambia for income tax purposes. (3 marks)
- (ii) Explain the circumstances under which an individual is held to be resident and ordinarily resident in Zambia for income tax purposes. (4 marks)

(c) Taxes in Zambia are administered by the Zambia Revenue Authority (ZRA) The ZRA was established by an Act of Parliament to collect tax on behalf of the Government of the Republic of Zambia. In addition to tax revenue, there are other sources of revenue for the government.

# **Required:**

Explain any four (4) sources of revenue for the central government apart from taxation. (8 marks)

[Total: 25 Marks]

# **QUESTION FOUR**

(a) Property Transfer tax Act, CAP 340 of the laws of Zambia requires that whenever property is transferred in the republic of Zambia, Property Transfer Tax should be charged.

### **Required:**

Define the term 'property' for property transfer tax purposes in accordance with Property Transfer tax Act, CAP 340 and explain how the realised value of property is determined. (5 marks)

- (b) Explain how the five (5) fundamental principles of the code of ethics apply in the provision of tax services. (10 marks)
- (c) Pastor Chimfwembe who is a bread of life member has returned to Zambia from South Africa where he was ministering for a period of one month. Upon reaching the Kazungula border post, he declares six new brand 42 inch TVs and eight new HP Laptops. The total value of these are items are amounting to K35,500. The Zambia Revenue Authority officers on duty demand that Pastor Chimfwembe should pay customs duty for the items being imported, however, the Pastor argues that the items were given to him by the members of the church at the end of the church function in appreciation for the work of God rendered. The prevailing exchange rate in the local commercial banks was K15.30 to one US dollar. However, the Commissioner General's exchange rate was K15.10 to one US dollar.

#### **Required:**

Explain five (5) relevant factors that may help the ZRA to determine whether Pastor Chimfwembe is carrying on a trade and therefore liable to pay income tax. (10 marks) [Total: 25 Marks]

# **QUESTION FIVE**

(a) Janet Mukubonda imported a Toyota Mark-X car (2400cc) on 20 March 2020 at a cost of \$4,320. The insurance costs and freight charges amounted to \$600 and \$1,400 respectively up to the port of Durban (South Africa). The incidental costs incurred by Janet to transport the vehicle from Durban to Chirundu border post amounted to \$1,130. Costs incurred to transport the vehicle from Chirundu border post to Solwezi amounted to K8,300 and the vehicle registration amounted to K5,600. The Toyota Mark-X car was manufactured in 2017 and it is classified as a Sedan for the purposes of taxation.

Janet had arranged with a FOREX dealer to pay for the vehicle in US\$ at an exchange rate of K10,10 per US\$1. The Bank of Zambia exchange rate was K14.40 per US\$1 which the Commissioner General approved at the date the motor vehicle was imported. The exchange rate quoted by a bureau de change at that date was K14.80 per US\$1.

#### **Required:**

- (i) Calculate the Value for Duty Purposes of the vehicle and the total import taxes paid by Janet on the importation of the Toyota Mark-X car. (6 marks)
- (ii) Explain the role of the customs services division of the Zambia Revenue Authority. (4 marks)
- (b) GLP Limited is a Zambian resident company engaged in manufacturing. The company is registered for Value Added Tax (VAT). During the month of August 2020, the company entered into the following transactions:

(1) The sales for the month were:

	IX IX
Standard-rated sales	221,000
Exempt sales	<u> </u>
Total sales	<u>260,000</u>

The company offered a trade discount of 2% and 50% of customers were given this discount.

...

v

(2) Purchases for the month amounted to:

	ĸ
Standard-rated purchases	85,000
Exempt purchases	<u>15,000</u>
	<u>100,000</u>

20% of the standard-rated purchases were made from traders who are not registered for VAT purposes.

- (3) Operating expenses, which are all VAT inclusive, amounted to: Entertainment expenses 19,140 Petrol 6,496 Diesel 12,760 General expenses 34,800 Utility bills for directors' accommodation 4,756 \_77,952
- (4) The company bought a motor car and computers at a cost of K63,800 (VAT inclusive) and K30,160 (VAT inclusive) respectively.

Unless stated otherwise, all the figures above are exclusive of VAT.

### **Required:**

- (i) Calculate the amount of VAT payable by GLP Limited for the month of August 2020. (10 marks)
- (ii) Explain three (3) advantages and two (2) disadvantages of voluntary registration for VAT purposes. (5 marks)

# [Total: 25 Marks]

#### **END OF PAPER**
## SUGGESTED SOLUTIONS

#### SOLUTION ONE

a) Computation of capital allowances on implements plant and machinery for Tileshine Plc Company for the tax year 2020.

, , ,	К	К
<u>Old Toyota Hilux Van</u>		
Income tax value b/f	Nil	
Disposal Proceeds (Limited to cost)	(15,000)	
Balancing charge	<u>(15,000)</u>	(15,000)
<u>Toyota Prado</u>		
Purchase cost (58,232 x 25/29)	50,200	
Wear and tear allowance @ 20%	<u>(10,040)</u>	10,040
Income tax value c/f	40,160	
Old Ford Ranger		
Purchase cost (28,124 X 25/29)	24,245	
Wear and tear allowance @ 20%	<u>(4,849)</u>	4,849
Income tax value c/f	14,548	
Manufacturing Plant		
Purchase cost (23,200 x 25/29)	20,000	
Wear and tear allowance @ 50%	<u>(10,000)</u>	10,000
Income tax value c/f	10,000	
Total Capital allowances		<u>9,889</u>
Industrial Building		
Total cost	598,000	
Less cost land	<u>(29,000)</u>	
Qualifying expenditure	569,000	
Commercial building	<u>125,700</u> X	
(58,750+66,950) =	100%	
	569,000	
	= 22% Test	

General offices and the shop will therefore not qualify as industrial buildings

#### Computation of Capital allowances For Tileshine Plc Company Asset

ASSEL		
	Cost	Allowance
	К	К
General Offices		
Cost	58,750	
Wear and tear @ 2%	<u>(1,175)</u>	1,175
Income tax value c/d	57,575	
Shop		
Cost	66,950	
Wear and tear allowance @ 2%	(1,339)	1,339
	65,611	

Industrial building	443,300	
Wear and tear @ 5%	<u>(22,165)</u>	22,165
Income tax value c/d	<u>421,135</u>	
Total capital allowance		<u>24,679</u>
Total allowances (9889 +24,679)		<u>34,568</u>
(b) Computation of the tax adjusted business profits		
	<u>K</u>	<u>K</u>
Profit before tax as per accounts	2 500	192,//3
Add: Late submission returns penalty	2,500	
Depreciation	4,277	
Donation to political party	11,250	
Pees in connection with issue of share capital	7,500	
(2.100cc Toyota Drado motor car)	15,000	
Accommodation benefit:		
Finance Director (30% x K200, 000)	60 000	
Commercial Manager (30% x K170, 000)	51 000	
Human Resource Manager (30% x 160,000)	48,000	
	<u> </u>	199.527
		392,300
Less: Capital allowances	34,568	,
Profit on disposal	4,000	
Royalties received	17,850	
Bank Interest received	10,370	
Dividends received	8,205	
Differently abled person allowance	<u>1,000</u>	
Taxable business profit		<u>(75,993)</u> <u>316,307</u>
(c) Tileshine Plc company		
Company Income tax Computation for the tax year 2018/19		
Tavable business profit	K	7
Taxable business pront Devaltion received (17.950, x 100/95)	210,207	,
$ \begin{array}{l} \text{Royallies received (17,000 \times 100/05)} \\ \text{Ronk Interest (10,370x,100/85)} \end{array} $	12 200	
Total taxable Income	<u>12,200</u> 349 50	7
Tax rate =	35%	<u>/</u>
Listing shares=	(2%)	
Offering shares to indigenous Zambian	(5%)	
Applicable tax rate	28%	
Income tax:		
K349,507 x 28%	97862	
Less WHT on:		
- Royalties received 21,000x 15%	(3,150)	
-Interest received 12,200 x 15%	(1,830)	
Provisional tax	<u>(17,893)</u>	
Company Income tax payable	<u>74,988.96</u>	<u>5</u>

## SOLUTION TWO

# (a) Fixed deposit account interest

In tax year 2020, all bank interest receivable by individual is not subjected to tax. Therefore the interest earning on the deposit account of Yonah is exempt from tax

#### (b) Taxable profits for each of the partners Partnership profits:

	•		Sa	les	Pur	chases	s Exp	oenses	Profit
1.3.20-	-Fish		1,239,000	)	850,000	140	,000	249,000	
30.6.20	-Sala	iula	1,645,000	)	560,000	250	,000	835,000	
1 7 20	<b>F</b> iele			<b>`</b>	2 200 0	220	000	1,084,0	00
1./.20-	-FISN	u la	6,150,000	J	3,200,0	320	,000	2,630,00	
51.12.20	-2010	luia	5,100,000	J		209	,000	3 561 0	00
					1,000,0			3,301,0	00
					00				
Sharing of p	orofits:								
(1.3.20-30.6	5.20)								
Appropriatio	ns	Total		Yor	nah	Mpin	igo	Twalumb	a
Profits		1,084	,000						
Salaries	<b>a</b> .	(120,0	000)	60,	000	60,0	00		
Residual pro	ofit	(964,0	)00)	642	2,667	321,	333		
(1 7 20-31 1	2 201								
Appropriatio	ns	Total		Yor	hah	Mnir	nao	Twalun	nba
Profits		3,561	,000	101	lan	, ibii	190	i Walan	ibu
Salaries		(180,0	)00)	90,	000	90,0	00		
Interest on		ζ,	,						
drawing		4,960				(3,1	60)	(1,800)	)
Residual pro	ofit	(3,385	5,960)	<u>1,6</u>	<u>92,980</u>	<u>1,12</u>	<u>8,653</u>	<u>564,32</u>	<u>7</u>
Tatal									
1 Otal Appropriatio	nc			74	05617	1 E(	16076	567 F'	77
Appropriatio	115			24	0304/	т,э:	70020	30Z,34	<b>L/</b>

# **SOLUTION THREE**

i) Capital allo	wances for the tax year 2020	Coct/IT\/	Capital alle	wanco
	Implements, plant & Machir Isuzu car	nery K		K
	ITV b/f W & T @20% of 180,000 ITV c/f	144,000 <u>(36,000)</u> <u>108,000</u>	36,	000
	Office equipment ITV b/f W & T @25% of 80,000 ITV c/f	20,000 <u>(20,000)</u> <u>Nil</u>	20,	000
	Computer ITV b/f W & T @25% of 24,400	6.100 (6,100) Nil	6,1	00
	Total		<u>62,</u>	<u>100</u>
ii) <u>Incom</u> Net pr Add: Depre Motor Entert Increa Mrs. N Excess (25,00 Less: Capita Taxab	Mr. Chichi Mwanza <u>he tax payable for the tax yea</u> rofit as per accounts eciation expenses: 15,000 x 60% caining customers ase in general provision Awanza's salary s salary paid to the niece 00 – 18,000) al allowances ble business profit utation	<u>ır 2020</u>	K	K 213,250 11,750 9,000 32,000 17,000 28,600 7,000 105,350 318,600 <u>(62,100)</u> 256,500
Comp First k Next k Next k Baland Incom	utation (39,600 @0% (9,600 @25% (25,200 @30% ce K182,100 @37.5% ne tax payable		0 2,4 7,5 <u>68,</u> <u>78,</u>	00 60 <u>288</u> <u>248</u>

b) i) A company is held to be resident in Zambia for Income Tax purposes if:
That company is incorporated or formed in Zambia, or
The company's business is effectively controlled in Zambia.

A company is effectively controlled in Zambia if the Board of Directors for that company meets in Zambia for the purposes of decision making affecting the company.

ii) An individual is held to be resident in Zambia if he or she is physically present in Zambia for a period of not less than one hundred and three days (183 days) in a charge year.

Individuals who normally live in Zambia are resident and ordinarily resident in Zambia.

Individuals who come to Zambia with the intention of remaining here for more than 12 months are deemed to be resident and ordinarily resident in Zambia from the date of arrival. Individuals may be resident in Zambia for only one tax year if they do not show any intentions of remaining here for a relatively long period of time.

c)The other sources of revenue for the central government are as follows:

- **I.** Privatization of state owned enterprises: This is the process of transferring state owned enterprises to the private sector. Huge amounts of revenue can be raised where there is state owned enterprises to sell. Once all the state owned enterprises are sold, it would mean there would be no source of revenue for the Government. Privatization cannot therefore be relied upon as the sole source of revenue for the Government.
- **II.** Borrowing from the International Financial Institutions: The government can borrow from the International Monetary Fund (IMF), the World Bank and the International Bank for Reconstruction and Development (IBRD) to finance certain projects only. Amounts borrowed from these two institutions will normally have conditions attached to them and in addition, the amounts have to be serviced, normally at high interest rates. The government may not have funds to repay these amounts borrowed when they fall due.

As such, it is not possible to rely only on borrowing from the international financial institutions for the purpose of meeting all the recurring public expenditure

- **III.** Through issuing government securities/Domestic borrowing: Instead of borrowing from the international financial institutions, the government can be able to borrow locally through the issue of government bonds and treasury bills. This method is costly. It leads to high interest rates and normally also causes inflation. Government can use this as a means to raise short term finance for a specific purpose.
- **IV.** Donor funding: Various donor agencies have been set up that provide funding to poor countries. However, these donors provide funds for clearly defined projects and cannot provide the funds for the government to meet all the recurring public expenditure. In addition, donors can only be able to provide the funds if funds are available.

# SOLUTION FOUR

(a) The term 'property' for property transfer tax purposes according to the CAP 340 of Property Transfer Tax Act is taken to mean,

- > Any Land in the Republic of Zambia (including any building on the land)
- > Buildings, structures, or other improvements thereon; and
- Any shares issued by a company incorporated in Zambia that is not listed on the Lusaka Stock Exchange.

## **Realised Value of Land and Buildings**

The realised value of property is the price at which it could, at the time of its transfer, reasonably have been sold on the Open Market as determined by the Commissioner General and is generally taken as the higher of:

- > contract price agreed by the transferor and transferee and
- > The open market value

#### **Realised Value of shares**

The realised value of shares is the higher of:

- the open market value of those shares as determined by the Commissioner General and
- > The nominal value of those shares

# (b) Fundamental principles

(i) **Integrity** 

This principle imposes an obligation on the practitioner to ensure straightforwardness, fair dealing, a commitment not to mislead or deceive and truthfulness. This entails that the member shall be straightforward and honest in all his/her dealings.

A member providing taxation services must not knowingly be associated with reports, returns, communications or other information which might contain materially false, misleading statement or calculation

#### (ii) **Objectivity**

This principle means that members shall not allow bias, conflict of interest or undue influence of others to override professional or business judgements.

Members providing tax services shall be impartial and not allow prejudice or bias, conflict of interest or influence of others to override their objective judgement in relation to tax matters.

#### (iii) **Professional behaviour**

Members shall comply with relevant laws and regulations to avoid any action that discredits the profession.

Members shall act in a manner consistent with the good reputation of the institute and the tax profession, refraining from any conducts that might bring the institute and/or tax profession into disrepute.

# (iv) **Confidentiality**

Confidentiality means that a member must respect the confidentiality of information that they when performing tax work and not to disclose the information to third parties without proper or specific authority or a legal or professional duty to do so.

# (v) **PROFESSIONAL COMPETENCE AND DUE CARE**

This means that a tax practitioner must maintain professional knowledge and skill at a level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and shall act diligently and in accordance with applicable technical and professional standards when providing professional services.

To achieve this, ZiCA members offering taxation services must remain continuously aware of developments in the tax profession and tax legislation to ensure that they have the requisite knowledge related to such developments, including an awareness of relevant national pronouncements and other relevant statutory requirements and regulations

Furthermore, ZiCA members must ensure that tax laws are applied correctly and lawfully to the circumstances of the particular client. Members shall not knowingly obstruct the proper administration of tax law. Members must exercise due diligence and care in accordance with applicable technical and professional standards in their interaction with the Zambia Revenue Authority on behalf of their clients.

(c) <u>Five (5)</u> relevant factors that may help the officer at the ZRA to determine whether <u>Pastor Chimfwembe is liable to pay income tax.</u>

The officer should apply any of the relevant badges of trade that speak to Pastor Chimfwembe's case as follows:

-**The frequency of similar transactions**: This means that the officer should verify Pastor Chimfwembe' s passport, confirm the occupation and check how often he has dealt with the same transactions.

-**Pastor Chimfwmbe's intention**: The officer should carefully examine the taxpayer's motive for the assets before making a final decision.

-**Pastor Chimfwembe' s other circumstances/activities**: If the officer upon examination of Pastor Chimfwmbe finds out the existence of other business activities, chances of him liable for paying taxes will be high.

-**The way the assets were acquired**: In most cases if the assets were acquired by inheritance or by way of gift, the transaction may not be considered to be trading transactions and hence no tax should be paid.

-**The subject matter of realisation:** Some assets are normally held as trading stock while others are not. Therefore if the assets in possession by Pastor Chimfwembe are ones which are held as trading stock the assumption that trade is taking place is higher.

# SOLUTION FIVE

#### (a) Janet Mukubonda

(i) Value for duty purposes

	\$	
Cost	4,320	
Insurance costs	600	
Freight charges	1,400	
Incidental costs	<u>1,130</u>	
VDP in US\$	7,450	
Exchange rate	<u>K14.40</u>	
VDP in ZMW	<u>107,280</u>	
	Value of the	Import
	Vehicle	Taxes
	К	Κ
VDP for customs duty	107,280	
Customs duty	<u>16,545</u>	16,545
	123,825	
Excise duty	<u>21,508</u>	21,508
	145,333	
Import VAT @16%	<u>23,253</u>	23,253
Total value of the vehicle	<u>168,586</u>	
Total import taxes		<u>61,306</u>

(ii) The following are the roles of the customs service division of ZRA:

- 1. Collection and management of customs and excise duties, licensing and control of warehouses and premises for the manufacturing of certain goods
- 2. Regulation and control of imports and exports
- 3. facilitation of trade, travel and movement of goods
- 4. Providing statistical data to the government on imports and exports

#### (b) GLP Limited

(i) VAT payable for the month of August 2020 Output VAT

	Κ	Κ
Marks		
Exempt sales		-
Standard-rated sales:		
(K221,000 – (221,000 x 2% x 50%) x 16%		<u>35,006</u>
		35,006
Input VAT		
Exempt purchases	-	
Standard-rated purchases:		
(K85,000 x 80% x 16%)	10,800	
Entertainment expenses	-	
Petrol	-	

Diesel: K12,760 x 4/29 x 90%	1,584	
General expenses: K34,800 x 4/29 x 221,000	4,800	
Utility bills for directors' accommodation	-	
Motor car	-	
Computers: K30,160 x 4/29	<u>4,160</u>	
		<u>(21,344)</u>
VAT payable		<u>13,662</u>

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

Disadvantages

- 1. VAT registration results in increased administration costs
- 2. Non-registered customers who get supplies from the trader will have an increased cost
- 3. Penalties will be charged if the trader fails to pay VAT or submit the VAT returns.

# **END OF SOLUTIONS**



# DIPLOMA IN ACCOUNTING PROGRAMME EXAMINATIONS

# LEVEL TWO

DA 11: PRINCIPLES OF AUDITING

THURSDAY 17 SEPTEMBER 2020

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

# INSTRUCTIONS TO CANDIDATES

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

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

# SECTION A-TWO COMPULSORY QUESTIONS

Attempt **BOTH** questions in this section.

# **QUESTION ONE**

(a) Kafue Clothing Factory Ltd is a specialized manufacturer of ladies fashion dresses that it sells locally and abroad. The company has a significant influence in another company in which it has invested. It was formed when the country's economy was performing well. Due to the recent global financial meltdown, most of the sales from its export trade have greatly reduced which impacted negatively on its cash flow and annual profits. In order to improve its operations, the company acquired an advanced Accounting Information System (AIS) in order to improve product quality and efficiency.

The company lost key accounting staff who knew how to operate the new system. This put management under pressure to present financial statements that would show a true and fair view to its shareholders. In order to improve its financial position, the company's shareholders asked management to prepare financial statements that would help it secure a loan from the bank. The bank had demanded that the financial statements should be audited before it could consider granting a loan to Kafue Clothing Factory Ltd.

A search for external auditors begun in order to continue providing assurance services because the previous auditors resigned due to a dispute relating to overdue audit fees. Shareholders proposed the setting up of committees on the board such as audit committee in order to enhance principles of good corporate governance such as accountability, effectiveness and leadership in the organization. Some shareholders wondered what the duties and rights of external auditors were and whether the establishment of an audit committee would improve the worsening financial situation of the company.

Your firm has been appointed as auditor and you have been assigned as an engagement partner. Among other duties, you are expected to plan and ascertain the internal controls that exist in the operations of Kafue Clothing Factory Ltd.

During one of the interim audit, you came across the working papers on inventory and sales systems that were prepared by audit assistants.

The sales manager of Kafco Ltd is responsible for taking customer orders, recording credit sales and receiving payments. The management at Kafco Ltd, has a credit system in which goods are only supplied to customers with good credit ratings. The sales team uses authorized price lists and approved credit terms. In order to improve the liquidity position of the company, customers are encouraged to make payments on time. Thereafter all goods and services sold are correctly invoiced and all sales adjustments are correctly journalised, summarized and posed to the correct accounts in the general ledger.

All import and export transactions are recorded in the correct accounting period and that accounts are properly classified.

## **Required:**

(i`	) Explain the objectives of an assurance engagement (	3 marks)	
(L)	) Explain the objectives of an assurance engagement.	5 marks)	

- (ii) Explain the importance of auditors communicating with those charged with governance matters arising from the financial statements. (3 marks)
- (b) In relation to corporate governance, explain the following concepts:

(i)	Leadership.	(2 marks)
(ii)	Effectiveness .	(2 marks)
(iii)	Accountability.	(2 marks)

(c) Define a significant risk and explain four (4) factors that indicate that there are significant risks in Kafco Ltd.'s audit. (4 marks)

(d) Explain six (6) internal controls you would expect to find in the inventory and sales system of Kafco Ltd. (9 marks)

[Total: 25 Marks]

## **QUESTION TWO**

(a) ISA 450 *Evaluation of Misstatements Identified During the Audit* requires the auditor to accumulate misstatements identified during the audit other than those that are clearly trivial.

#### **Required:**

Explain the auditor's responsibilities regarding uncorrected misstatements as part of an overall evaluation and finalization of an audit. (4 marks)

(b) Zambezi Ltd is a company that was formed a few years ago. The company manufactures components that are used in the assembly of motor vehicles. The major concern is suspected fraudulent activities due to weak internal controls. In order to strengthen internal controls, it was suggested by board members that the management either sets up an internal audit department or outsources the internal audit function from an audit firm. However, there could be challenges in terms of how outsourced internal audit is managed.

Your firm has been appointed as audit manager of Zambezi Ltd and the first task is to analyze the quality of evidence that was obtained by audit assistants from the company's books of accounts. You advised the audit senior that sampling techniques should be used in sample selection and testing because it will not be possible to examine all documents from the accounting system of Zambezi Ltd. You also emphasized to the audit senior that the use of directional testing may reduce the amount of work that will be done.

# **Required:**

- (i) State advantages of outsourcing internal audit services. (6 marks)
- (ii) Explain four (4) generalizations that will help the auditor assess the reliability and quality of audit evidence. (9 marks)
- (iii) Explain directional testing and how it can be applied during the audit of Zambezi Ltd. (6 marks)

# [Total: 25 Marks]

# SECTION B

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

## **QUESTION THREE**

(a) ISA 505 *External confirmations* give guidance to the auditor on the use of external confirmations as a means of obtaining evidence.

#### **Required:**

- (i) Using two examples, explain any two (2) types of external confirmations that can be used to obtain audit evidence on receivables. (2 marks)
- (b) Lunsemfwa Ltd is a manufacturing company with operations throughout the country. In the last two years, the company has been planning to expand its operations and this requires extra financing. The board of directors resolved that the company lists its share on the Lusaka Stock Exchange (LuSE) which has listing requirements which must be complied with by listed companies.

One of the requirements for a listed company is the establishment of board committees such the remuneration, nominations and risk committees. In addition the same code makes recommendations that the board of directors makes an assessment on its review of the company's internal controls systems and should consider all significant aspects of internal controls of an entity. In order to realize its expansion, the company has acquired an electronic manufacturing systems although a large part of the company's operations are still capital intensive.

The production manager is responsible for the general maintenance of the company's plant and machinery. All requisitions for repairs are first approved by the director of production in consultation with the board of directors, which is the final authority. Thereafter a, full repair report is held in a computerised file which is secured using the card number for repairs to be undertaken.

When the repairs are concluded, a pre-numbered invoice from the company that repaired the plant and machinery is raised in three copies, with one sent to the accounts department. Thereafter, a certificate is issued that proves that repairs had been done in accordance to an agreed service level which is issued by an independent engineering consulting firm , before any payment is made by the accounts department. Access to the non-current asset register is restricted to personnel that are working in the accounting department.

Your firm has been appointed as auditor for Lunsemfwa Ltd and you will be in charge of both interim and final audits as a senior auditor.

#### **Required:**

- (i) Identify any seven (7) strengths in the internal controls of the services and repair systems of Lunsemfwa Ltd. (7 marks)
- (ii) Explain importance of having the nomination, remuneration and risk committees on the board of directors of Lunsemfwa Ltd. (6 marks)

- (iii) Explain five (5) factors that external auditors consider when concluding that financial statements are free from material misstatements. (5 marks)
- (iv) Explain the difference between an interim and a final audit, giving one audit procedure that can take place at each audit stage. (5 marks)

# [Total: 25 Marks]

## **QUESTION FOUR**

North Western Oil Ltd is a large company that processes cashew nuts into oils which it sells to manufacturers of soaps and body lotions.

Its products are sold on credit and customers are allowed a credit period of four months. For the client to qualify for credit, it is required to submit a copy of its bank statement for the previous month and a verbal reference from at last three previous suppliers that it had dealt with in the last two months.

A credit manager has been appointed and is in charge of making an assessment whether the client meets the credit criteria. In addition to assessing credit rating of the clients, the credit manager is also in charge of maintaining the receivables ledger while the receivables age analysis is maintained by a newly recruited ZICA graduate with no previous experience of working in a similar position. A provision for receivables of 15% is being considered on outstanding receivables at the end of each year. The receivables balance at the end of the year amounted to K13 million.

The Company depends on out-grower schemes from several cashew nut farmers who have formed cooperatives to supply cashew nuts in bulk to North Western Ltd. When payments to the farmers are due, the cooperative managers submit an invoice to the credit manager who later makes a requisition for payment to the accounts department.

Your firm has been appointed as audit senior for the audit of North Western Ltd and this will be the first time your firm will audit a company in the agro-processing industry. The engagement partner will be required to prepare an overall review of the company's financial statements in relation to compliance with regulations.

#### **Required:**

- (a) Identify and explain the three (3) components of audit risk using information from North Western Ltd. (5 marks)
- (b) Explain three (3) weaknesses in the receivables system of North Western Ltd.

(6 marks)

(c) State three (3) methods of obtaining audit evidence from North Western Ltd.

(3 marks)

- (d) Suggest three (3) audit procedures to be undertaken on the receivables balance of K13 million in the financial statements of North Western Ltd. (6 marks)
- (e) Explain five (5) matters that you should consider during an overall review of compliance with regulations. (5 marks)

[Total: 25 Marks]

# **QUESTION FIVE**

(a) ISA 320 *Materiality in planning and performing an audit* provides guidance to auditors in this area. In order to identify material misstatements, auditors will use professional judgment in determining the materiality level and this will depend on the assessed level of risk.

In general the higher the anticipated risk, the lower the level of materiality will be. However, external auditors should take into account certain factors that can affect the identification of an appropriate benchmark of materiality.

# Required:

Explain five (5) factors that external auditors consider to determine an appropriate benchmark of materiality. (5 marks)

(b) *ISA 315 (Revised) Identifying and assessing the risk of material misstatements through understanding the entity and its environment*, points out that there is a direct relationship between an entity's objectives and internal controls it implements in order to provide a reasonable assurance about the achievement of the company's objectives. One of the components of internal controls is the control environment. The control environment is the framework in which controls operate.

# **Required:**

Explain any five (5) elements of a control environment. (5 marks)

(c) ISA 501 *Audit evidence-specific considerations for selected items* provides guidance to auditors on attending the physical inventory count in order to obtain evidence regarding the existence and condition of inventory. One of the critical assertions to the accurate recording of inventory is cut-off.

# **Required:**

- (i) Explain the importance of cut-off in relation to inventory valuation.
- (ii) Suggest the audit procedures on cut off of inventory. (2 marks)
- (iii) Explain five (5) audit procedures to be used in cases where the client maintains perpetual inventory count. (5 marks)
- (d) When finalizing an audit report, external auditors are expected to conduct a review of financial statements for consistency and reasonableness. During the review, the auditor should also consider whether the financial statements are consistent with their knowledge of the entity and with the results of other audit procedures. This can be done by applying analytical procedures.

# **Required:**

List any four (4) examples of items that can be reviewed using analytical procedures during the review and final stages of the audit. (4 marks)

[Total: 25marks]

(4 marks)

#### END OF PAPER

# SUGGESTED SOLUTIONS

## SOLUTION ONE

(a) (i) The objective of the audit is to enable the auditor express an opinion whether the financial statements are prepared, all in material respect, in accordance with an acceptable financial reporting framework. Therefore an audit of financial statement is an assurance engagement.
 An assurance engagement- is an engagement in which a practitioner aims to obtain sufficient appropriate evidence in order to express a conclusion that is designed to enhance the degree of confidence of the intended users than the responsible party

evaluation of an underlying subject matter against criteria) (ii) It is important for external auditors to communicate with those charged with

about the subject matter information (that is the outcome of the measurement or

- governance for the following reasons:
  - it assist both auditors and those charged with governance to understand audit related matters in the context of audit and allows the audit team to develop a constructive working relationship.
  - it allows the auditor to obtain information relevant to the audit.
  - it assists those charged with governance to fulfil their responsibility to oversee the financial reporting process, thereby reducing material risks in the financial statements.
- (b) Corporate governance concepts
- (i) Leadership-every company should be headed by an effective board, which is collectively responsible for the long-term success of the company. There should be a clear division of responsibilities at the head of the company between the running of the board and the executive responsibility from running the business. No one decision should have fettered power of decision making. The chairman provides leadership of the board and ensuring that it is effective on all aspects of its role.
  - (ii) Effectiveness-the board and its committee should have the appropriate balance of skills, experience, independence and knowledge of the company to enable them to discharge their respective duties and responsibilities. There should also be a format and rigorous and transparent procedure for the appointment of new directors to the board. In addition, all directors should be able to allocate sufficient time to the company to discharge their responsibilities effectively.
  - (iii) Accountability-the board should present a balanced and under stable assessment of the company's position and prospects. The board is responsible for determining the nature and extent of the principal risk it is willing to take in achieving its strategic objectives.
- (c) A significant risk is an identified and assessed risk of material misstatement that in the auditor's judgment requires special audit consideration. As part of the risk assessment, the auditor shall determine whether any of the risks are significant. The following factors indicate that there are significant risks in the Kafco Ltd:
  - **There is a risk of fraud**: Kafco Ltd is a company that is specialized in ladies fashion dresses. These are likely to be targeted by dishonest sales staff and can be easily stolen. Therefore, there is a likelihood of inventory being misstated because it is recorded at a value in excess of the NRV or actual quantities are below those recorded.

- Economic developments (Global economic meltdown): when there is an economic meltdown, it means that the export customers will not be able to buy in bulk as they used to. This can cause inventory to pile up and can be recorded at a value higher than the market value.
- **Related party** can pose a risk as management does not usually disclose such related party transactions.
- **Subjectivity in the financial information**: Since accounting staff who knew how to operate the advanced accounting information had resigned, there is a high degree of subjectivity in the manner management selects information that is used when preparing financial information.
- (d) The following are internal controls in the sales system of Kafco Ltd.
  - Segregation of duties-in order to ensure that there is completeness and occurrence of a transaction, it is important that not one person is charge of taking orders, recording sales and recording payments.
  - Only approved sales should be recorded (both for imports and exports)
  - All invoices should be accounted for in numerical sequences and that monthly statements are sent to customers and that queries are viewed independently
  - Authority of credit terms and changes to customer accounts should be made by senior staff after reviewing credit worthiness of customers.
  - The sales team should not accept orders unless credit limits are reviewed.
  - The company should have a proper payment and credit policy in place and an open order file is maintained and reviewed regularly.
  - All shipping documents should be forwarded to the invoicing section regularly.

# SOLUTION TWO

(a) ISA 450 requires auditor to:

- Communicate all misstatements accumulated during the audit with appropriate level of management to correct those misstatements
- Auditors have a duty to request management to correct uncorrected misstatements.
- If management refuses, the auditor must establish the reasons why and consider this when evaluating whether the financial statements as a whole are free from material misstatements.
- When determining whether uncorrected misstatements are material (individually or in aggregate), the auditor shall consider the size and nature of the misstatements and the effect of uncorrected misstatements related to prior periods on the financial statements as whole.

## (b) (i) Advantages of outsourcing internal audit services.

- The outsourced staff does not have to be recruited as the service provider has good quality staff.
- The service provider has different specialist skills and can assess management requirements at a given time.
- Outsourcing can provide an immediate internal audit department.
- Associated costs such as training costs are eliminated.
- The service department can be contacted at an appropriate time.
- Because the time scale is flexible, a team of staff can be provided as and when required.
- It can be used on a short time basis.

# (ii)Assessing the reliability and quality of audit evidence.

	Source of audit evidence	Degree of reliability
1	External	Audit evidence from external sources is more reliable than that obtained from entity's records because it is from an independent source
2	Auditor	Evidence obtained directly by auditors is more reliable than that obtained indirectly or by inferences
3	Entity	Evidence obtained from the entity's records is more reliable when the related control system operates effectively
4	Written evidence	Evidence in form of documents (paper or electronic) or written representations are more reliable than oral representations as oral can be retrieved.
5	Original	Original documents are more reliable Than photo copies or facsimiles, which can be easily be altered by clients.

(iii)The concept of directional testing is derived from the principle of double-entry bookkeeping. In that for every debit, there should be a corresponding credit entry. Therefore any misstatement of a debit entry will result in a misstatement of a credit entry. Directional testing can be used in the following situations:

- Test debit items (expenditure or assets) for overstatements by selecting debit entries recorded in the nominal ledger and checking value, existence and ownership.
- Test credit items (incomes or liabilities) for understatements by selecting items from appropriate source independent of the nominal ledger and ensuring that they result in a correct norminal ledger entry.

A test for the overstatement of an asset simultaneously gives comfort overstatement of income and understatement of expenses.

# SOLUTION THREE

(a) (i)

- External confirmations provide collaborative evidence about an account balance such as receivable balance. The aim is to obtain evidence about the authenticity and whether there is a disagreement or not, directly from the debtor or creditor of the client. Auditors are expected to get permission from the client when sending confirmations to third parties. The following are common confirmations:
  - A standard bank letter for bank balances: this is sent to the bank in order for it to confirm whether they agree or disagree with the existing balances for the client with the bank. It provides audit evidence regarding existence but does not confirm completeness.
  - Accounts receivables confirmations: it is sent to the debtor in order to confirm that the balance actually exist, but does not provide evidence of completeness.
  - Accounts payables: this provides evidence to confirm the balance at the year-end. However it does not provide evidence in terms of completeness as there could be some payables that have not been included in the outstanding balance.
- (b) (ii) The following are the strengths in the service and repairs system of Lunsenfwa Ltd:
  - **The establishment of audit committee** will strengthen the independence of both internal and external auditors.
  - **Assessment of board reviews** will enable the board to provide with its own quality assurance level of their own work.
  - Acquisition of an electronic manufacturing system will enhance quality of products, reduce wastage and produce timely reports that will help detect any inefficiency.
  - **Approval of requisition for repairs** will reduce fraudulent and wastage of company resources as no repairs will be done without approvals.
  - **Computerized repairs report** will reduce fraud and unauthorized entry.
  - **Triplicate copies of repairs invoices** will ensure accountability and prove existence of the transactions.
  - **Independent certification of repairs** will reduce fraudulent activities such as certifying work to be paid for but work has not yet been done.
  - **Restricted access to non-current asset register** can prevent unauthorized amendments to the register and any false alterations about details of assets held on the register by fraudster.

# (iii) The importance of having committees on the board:

- Nominations committee: this will ensure that only qualified directors are appointed to key positions. This will ensure quality decision making at board level
- **Remunerations committee**: the director's payments will have to be approved independently so that they are paid according to the work being done and at an appropriate market rate.
- **Risk committee**: it is a committee that will be tasked with the roles of identifying, profiling and recommending actions to be taken for any possible risks that can threaten the going concern of Lunsenfwa Ltd.

(iv) The following are factors that could be considered when forming an opinion on the financial statements

- Whether sufficient appropriate audit evidence has been obtained.
- Whether uncorrected misstatements are material.
- Consider qualitative aspects of the entity's accounting practices such as accounting policies described are relevant to the entity and whether they have been presented in an understandable manner.
- Whether financial statements adequately disclose the significant accounting policies selected and applied.
- Whether accounting estimates made by management are reasonable

(v) **Interim audits** are those audits that are conducted each time an external auditor visits the client during the period under review and work focuses on planning and risk assessment and tests of controls and systems, although substantive audit procedures may also be carried out. An example of an audit procedure at interim stage could be recording the entity's system of internal controls or assessing inherent risk and gaining an understanding of the entity.

**The final audit** visit is carried out at the end of or shortly after and work focuses on the audit of financial statements. An example of an audit procedure at this level could be carrying out substantive procedures involving verification of statements of financial position balances and amounts in the statement of profit and loss account.

## SOLUTION FOUR

- (a) Audit risk is the risk that an auditor will express an inappropriate audit opinion when financial statements are materially misstated. It is made up of detection, control and inherent risks.
  - **Detection risk** (New client): since this is a new client, the auditor may design audit procedures that may fail to detect material misstatements in the financial statements of the client. This may lead to what is known as detection risk.
  - **Control risk** (lack of segregation of duties)-the credit manager performs the roles of assessing and reviewing credit worthiness of clients and is also in charge of maintaining a receivables ledger. This may result in control risk as the credit manager is likely to override controls.
  - **Inherent risk**: the company estimates an allowance for receivables to be 15% of the amount of receivables outstanding at the end of the year. This is an accounting measure and can be manipulated by those in management for selfish interest or gain. The can also create a provision for bad debts so as to misstate receivables and provisions for bad debts in the income statements and statement of financial position.

(b) The following are the weaknesses in the receivables system of North Western Ltd:

- A credit period of four months-this is a long period for a product like oil which has a short shelf life and is a consumable product. There is a possibility of the client defaulting and the company incurs bad debts.
- **Copy of previous bank statement**-the bank details could have been changed overtime even the details altered as well.it is important that the company uses updated bank statements after confirmations have been received from client's receivables.
- Credit manager is in charge of reviewing and assessing credit worthiness of customers. This shows that there is lack of segregation of duties .There is a likelihood of him/her favoring clients who may not even have existed in the first place.
- **Verbal credit references**-this maybe prone to abuse. It will therefore be difficult to verify whether any references being given are from a credit worthy customer. The company may end up extending credits to uncredit-worthy client.

(c) The following are the methods of obtaining from North Western Ltd:

- Inspections of tangible assets-by by seeking tangible assets that are recorded in the accounting system, auditors can confirm existence, although it doesn't necessary confirms right and obligations.
- Inspections of documents or records-it involves the examinations of both internal and external, in paper, electronic or other forms documents from North Western Ltd. It also provides evidence of varying reliability, depending on the nature, source and effectiveness of controls over production (if internal)
- Observations-it involves watching a procedure such as during the counting of inventory on the premises of North Western Ltd.
- Inquiry-auditors can seek information and explanations from the management of North western Ltd for instance regarding the outstanding and composition of K13, 398,500 and clarification on the allowance for bad debts made at 15% of outstanding debtors.

- Confirmation-this is a process of obtaining a representation of information on an existing condition directly from a third party e.g. confirmation from bankers of the client.
- (d) Audit procedures, receivable balances of K13, 389,500.
  - **Confirmation**-auditors can send direct standard letter after getting permission from the client to confirm with the debtors if indeed they agree or disagree with a stated balance.
  - Agree the balance from the individual sales ledger accounts to the aged receivable listing and vice versa.
  - Match the total of the aged trial balance before selecting any sample to test.
  - Complete the disclosure checklist to ensure that all the disclosures relevant to receivables have been made
  - Perform a receivable confirmation on a sample of year end trade receivables.
  - Follow up all balance disagreements and non replies to account balances.
  - Review bank confirmation for any liens on receivables
  - Make enquiries of management, review loan agreement if any and review board minutes for any evidence of receivables being sold(e.g. to a factor)
  - For a sample of sales invoices around the year end, inspect the dates and compare with the dates recorded in the ledger for application of correct cutoff.
- (e) The following are matters to consider during a final review of compliance with regulations:
  - The information that is presented in the financial statements is in accordance with local/national statutory requirements.
  - The accounting policies employed are in accordance with accounting standards, properly disclosed, consistently applied and appropriate to the entity. When examining accounting policies, auditors should consider:
  - Policies that are commonly applied in industries.
  - $\circ$   $\;$  Policies for which there is substantial authoritative support.
  - Whether any departure from applicable accounting standards is necessary for the financial statements to give a true and fair view.
  - $\circ$  Whether financial statements reflect the underlying transactions and not merely their form.

# SOLUTION FIVE

- (a) The following are factors to consider when determining the appropriate benchmarks of materiality:
  - (i) Elements of financial statements (e.g. assets, liabilities, equity revenue and expenses)
  - (ii) Whether there items on which users tend to focus
  - (iii) Nature of the entity, industry and economic environment
  - (iv) Entity's ownership structure and financing
  - (v) Relative volatility of the benchmarks
- (b) The five elements of internal controls are:
  - (i) **Control environment**-this includes the governance, and management functions and the attitudes, assurances and actions of these charged with governance and management concerning the entity's internal controls and its importance in the entity.
  - (ii) Entity's risk assessment process-an organisation should have the process that:
     -identifies business risks relevant to the financial reporting objective's
     -eliminating the significance of the risks
     -assessing the likelihood of their occurrence

-deciding upon actions to address these risks

## (iii) Information system relevant to financial reporting

This is the component of internal controls that includes the financial reporting system, consist of procedures and records established to initiate record and process and report entity's transactions (as well as events and conditions) and to maintain accountability for the related assets, liabilities and equity.

- (iv) **Controls activities**-are those policies and policies and procedures that can help to ensure that management directives are carried out. These include, activities designed to prevent or to detect and correct errors. For example activities relating to authorisation, performance reviews, information processing, physical controls and segregation of duties.
- (v) Monitoring activities-this is the process to assess the effectiveness of internal control performance overtime. This includes assessing the design and operation of controls on a timely basis and taking necessary corrective actions modified for changes in conditions.
- (c) (i) Importance of cut-off

The following are the reasons why cut-offs are important in relation to inventory; -Cut-off will help to avoid overstating/understating inventory around the year end -It also helps to identify amounts and batches of inventory that belong or do not belong to the current accounting year.

-Helps to identify any outstanding issues pertaining to inventories at year end. -It can help auditors to use the values agree with management as to the day when inventory counts can take place.

(ii) Audit procedures relating to cut-off

-examine purchases and sales invoices around the year

-Compare the goods received notes and goods dispatch note around the year.

(iii) Audit procedure when client maintains perpetual inventory system

-attend one of the inventory counts (to observe and confirm that instructions are being adhered to)

-follow up the inventory count attended to compare quantities counted by auditors with inventory records , obtaining and verifying explanations for any differences , and checking that the client has reconciled count records with book inventory records)

-review the year's end inventory counts to confirm that the extent of counting, the treatment of discrepancies and the overall accuracy of records (if matters are not satisfactory, auditors will only be able to gain sufficient assurance by a full count at the year-end)

-assuming a full count is not necessary at the end of the year, compare the listing of the inventory records, and carry out other procedures (cut-offs, analytical procedures to gain further comfort.

-perform substantive audit work on completeness and existence at the year end.

- (d) The following are the four (4) items that can be reviewed using analytical procedures;
  - (i) Important accounting ratios
  - (ii) Related items for receivables and sales
  - (iii) Changes in products/customers
  - (iv) Price and mix changes
  - (v) Wages changes
  - (vi) Variances
  - (vii) Trends in production and sales

# END OF SOLUTIONS



# DIPLOMA IN ACCOUNTANCY PROGRAMME EXAMINATIONS

# LEVEL TWO

# DA: 12 GOVERNANCE AND COMPANY LAW

FRIDAY 18 SEPTEMBER 2020

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

# **INSTRUCTIONS TO CANDIDATES**

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

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

## SECTION A - TWO COMPULSORY QUESTIONS

#### **Attempt both questions**

#### **QUESTION ONE**

(a) Corporate Governance is a set of relationships between a company's directors, its shareholders and other stakeholders. It also provides the structure through which the objectives of the company are set, and the means of achieving those objectives and monitoring performance, are determined. For Corporate Governance to be effective, there are certain core elements that must be upheld.

#### **Required:**

With reference to the above scenario, explain any (5) five elements of corporate governance. (10 marks)

(b) Explain any five (5) distinctions between an unlimited company and a partnership.

(10 marks)

(c) Explain dissolution by stroking off the register. (5 marks)

[Total: 25 Marks]

#### **QUESTION TWO**

(a) Banda is a director at DELTA Company Ltd and is assisted by two other Directors, Mr. John and Mr. Davies. Banda is the Managing Director while the other two are departmental directors. Banda was appointed when the company was formed, and is therefore, known as the initial Director; while Davies and John are subsequent Directors.

At the time Banda was being appointed, he had no shares in DELTA Company although, due to his legal background he was given a contract to draft the Articles of DELTA Company and to act as solicitor. As he was drafting the articles of associations, he put a clause unknown to the other members of the company to always appoint him as solicitor.

The company expanded due to good management and a merger was made between DELTA and MALTA Company, changing the name of the company to DELAMA. DELAMA has since appointed a new solicitor. Banda is unhappy with this decision and decides to sue DELAMA Company Ltd.

# **Required:**

With reference to the above scenario, advise Mr. Banda on his chances of succeeding under his actions. (15 marks)

(b)	Explain the role of the remuneration committee.	(10 marks)
(~)		(=•

[Total: 25 Marks]

## SECTION B

# There are three (3) questions in this Section. Attempt any two (2) questions.

# **QUESTION THREE**

(a) One of the key features of a company once incorporated was explained in the popular case of *Macaura v. Northern Assurance Co. Ltd (1925).* 

Explain the feature of a company that was highlighted in this case. (6 marks)

- (b) With the aid of examples, explain the statement, 'the company's constitution (articles) binds the members to the company'. (9 marks)
- (c) Explain any five (5) the concepts of good corporate governance. (10 marks)

[Total: 25 Marks]

#### **QUESTION FOUR**

- (a) Explain the five (5) different business associations through which business would be conducted in Zambia. (15 marks)
- (b) Making reference to examples, explain the effect of incorporating a company.
- (4 marks) (c) Explain two (2) reasons that would lead to the lifting of the veil of incorporation. (6 marks)

# [Total: 25 Marks]

#### **QUESTION FIVE**

Explain the meanings of the following:

(i)	Capital	(3 marks)
(ii)	Nominal capital	(3 marks)
(iii)	Subscribed capital	(3 marks)
(iv)	Issued and unissued capital	(4 marks)
(v)	Share	(2 marks)
(vi)	Charge	(4 marks)
(vii)	Preference shares	(6 marks)
		[Total: 25 Marks]

# **END OF PAPER**

# SUGGESTED SOLUTIONS

# SOLUTION ONE

(a)Corporate governance is a system by which organizations are directed and controlled. There are a number of elements that underpin corporate governance. The following are some of the principles.

- (i) To ensure **adherence to and satisfaction of the strategic objectives** of the organization, thus aiding effective management.
- (ii) To promote **integrity**, that is straight **forward dealing** and completeness.
- (iii) Management, awareness, evaluation and **mitigation of risk.**
- (iv) Good supervision and management within set best practices guidelines.
- (v) Providing a framework for an organization to pursue its strategy in an ethical and effective way and offers safeguards against misuse of resources.

(b) Corporate governance is a set of relationships between a company's directors, its shareholders and other stakeholders. It also provides the structure through which the objectives of the company are set and the means of achieving those objectives and monitoring performance are determined. Below are the concepts;

• Fairness

The board of directors should treat all stakeholders fairly and equitably.

• Independence

Each director should independent. There should be no conflict of interest. For example, it would not be good for a director to get involved in the sale of an asset to another company, if he/she was a director of that other company too.

Honesty

The directors must protect the shareholders' interests in the organization, and should give confidence to the shareholders that their interests are being protected.

• Transparency

The directors should disclose material information in a timely and accurate manner.

# • Accountability

Those who control the business (i.e. directors) should be accountable to those who own the business (i.e. shareholders)

• Integrity

Moral and ethical issues should be considered when making decisions relevant to the organization.

• Responsibility

The board of directors should ensure the organization complies with the relevant laws where it operates.

(c) The law provides under the Companies Act that companies can be dissolved and struck off the register of companies. In the event the registrar has reasonable ground to believe that a company is not carrying on business or is not in operation, s/he may send to the company by registered post a letter requesting for confirmation. If no satisfactory response is given by the company, the registrar will publish in the Zambian gazette a notice that three months from the date of the publication the company shall stand dissolved unless the contrary.

#### **SOLUTION TWO**

- (a) The Articles of Association is a document that contains rules and regulations setting out how the company is to be managed and administered.
- (b) The Articles of Association is a document which normally regulates the internal relationships of a company. The Articles of Association can further be looked at as a contract between, the company and the members; members and company and members and members.

The situation in this scenario symbolizes the relation between the company and members. This entails that the company owes a member of a company certain obligations. In the case of **Eley v Positive Government Security Life Co Ltd [1876],** E, a solicitor, drafted the original articles and included a provision that the company must always employ him as its solicitor. E became a member of the company some months after its incorporation. He later sued the company for breach of contract in not employing him as solicitor. Held: E could not rely on the articles since it was a contract between the company and its members and he was not asserting a claim as member.

In the same way, since Mr. Banda, was not yet a member the time he inserted the clause in the articles of DELAMA, he cannot succeed in his cation even if he sues the company.

(c) The role of the remuneration committee is to play the key role in establishing remuneration arrangements. In order to be effective, the committee needs both to determine the organization's general policy on the remuneration of executive directors and specific remuneration packages for each director. This committee is mainly staffed by non-executive directors.

The committee is responsible for advised in on executive director remuneration policy and specific package for each director. Measures to ensure independence include stating that the committee should have no personal interests other than as shareholders, no conflict of interest and no day to day involvement in running the business.

#### SOULTION THREE

(a) The key feature of a company explained in *Macaura v. Northern Assurance Co. Ltd (1925)* is Separate Legal Personality. This means that a company is regarded as a legal entity or artificial person distinct from its shareholders or members. Thus, the implication of this is that, the company will be able to buy and sale assets using its own name, own such property separately from the owners.

(b) The statement, 'the company's constitution (articles) binds the members to the company' means that the company can compel the members to obey its articles as seen in *Hickman v Kent or Romney Marsh Sheepbreeders Association 1905* where it was held that members must comply with the company articles, which in that case, provided for arbitration, therefore, members had to follow the company articles.

Further in *Eley v. Positive Government Security Life Assurance Co. Ltd 1895*, it was held that outsiders cannot enforce rights due to members in the articles as it is a contract between the company and its members.

Thus the articles bind the company to its members.

- (c) The distinctions between an unlimited company and partnership is that:
  - (i) An unlimited company is a company, i.e. separate from owners, whilst a partnership is not.
  - (ii) An unlimited company can own assets in its own name, whilst a partnership cannot.
  - (iii) Shareholders in an unlimited company are only liable when the company assets are not enough, whilst in a partnership, liability is from the onset, whether the firm has enough resources to settle its debts or not.
  - (iv) A partnership does not have perpetual succession whilst an unlimited company does.
  - (v) An unlimited company will have 'LTD' as part of its name, whilst a partnership will not.
  - (vi) Partnerships have a limit as to how many members can be in it, i.e. 20, whilst an unlimited company has a limit of up to 50 shareholders like any other private limited company.

#### **SOLUTION FOUR**

(a)The business associations through which business may be conducted are:

- (i) Sole proprietorship which is a business owned and run by one person. It has no perpetual succession, and the owner and the business are one; meaning it has no separate legal existence. It also does not have limited liability. The good features are that the owner retains all the profits and makes all decisions, but when the owner dies, the business also dies.
- (ii) Partnership is a business formed between two or more people with the view of making a profit. It has no perpetual succession, it has joint and several liability for debts, contracts and torts. The maximum number of members under an ordinary partnership is 20. It dissolves with any change in membership. It is formed by a partnership deed and profits and losses are distributed as per partnership agreement.
- (iii) A cooperative is business association formed by 10 members or more which consists of democratic decision making as each member is entitled to one vote as opposed to companies. Cooperatives are formed by by-laws and can generate profits through various activities such as farming. they may also offer incentives to members through education and funeral grants. They are usually community based.
- (iv) Company limited by share or guarantee is a business entity registered under the companies act which acquires an existence separate from its owners. It has perpetual succession and limited liability. This is the biggest form of business association that a person may venture into.
- (v) Statutory corporations are corporation formed by an act of parliament. They perform functions that cannot be left to the private sector. They make profits by offering different kinds of services to the public.
- (b) This is the process by which a company is registered at the Companies Registrations office (PACRA) to become a legal entity separate from its owners and having perpetual succession and capable of suing and being sued in its own name.

Making reference to examples, if a company is incorporated with PACRA, it becomes a person at law. For example, ZICA is a person at law or Shoprite as a store is a person at law because of the effects of incorporation.
Further, the court in *Salomon v Salomon* (1897) gave effect to the concept of separate legal personality where a company is separated from its founders and has perpetual succession. In *Associated Chemicals Limited v Hill and Delamain Zambia Limited and Ellis and Company* (as a law firm) 1998, the court held that: "A principle of law which is now entrenched is that a company is a distinct legal person different from its members or shareholders. The other effects are that the company can sue and be sued; it can own property in its name; can enter into contracts and perpetual succession and limited liability.

(c)Among the reasons why the veil of incorporation may be lifted are:

- (i) Public interest the court may lift the veil if it is suspected that the company for instance, is controlled by enemy forces. In *Daimler Co Ltd v Continental Tyre and Rubber Co (GB) Ltd 1917*. The court ordered the lifting of the veil to establish the true ownership of the company at time of the First World War.
- (ii) Evasion of Liabilities Re H and Others 1996, the court ruled that various companies within a group, together with the minority shareholders should be treated as one entity in order to restrain assets from being transferred before the trial. The court thought there was evidence that the companies had been used for the fraudulent evasion of excise duty.
- (iii) Evasion of tax the veil may be lifted where it is being used to conceal the nationality of the company for tax purposes. In *Unit Construction Co Ltd v Bullock 1960,* the court held that the companies were resident in the UK and liable to UK tax. The Kenyan connection was a sham, the question for the court was to answer was where they were being managed.
- (iv) Quasi-partnership the court may lift the veil where the company has a few members all of whom are actively involved in its affairs. Where they individuals fall out and one of them seek to remove the others from membership of the company, the court may consider the central relationship between the directors as being that of partners and rule that it would be unfair to allow the company to continue with only one of its original members. This principle was applied in *Ebrahimi v Westbourne Galleries Ltd* (1973).

(v) Counter fraud – where a company is involved in fraudulent acts the court may lift the veil where the directors of the company may then be held personally liable for the debts of the company.

## SOLUTION FIVE

- (i) capital
  - This is the net worth or value of assets of a company minus the liabilities. That is, the total amount which the shareholders of the company have contributed or are liable to contribute for their shares.
- (ii) nominal capital
  - This is the amount of capital registered with the company's registration office as being the maximum amount up to which the company may issue shares or stock.
- (iii) subscribed capital
  - This is the amount of issued capital that has been taken up or that is subscribed for by the members/shareholders.
- (iv) issued and unissued capital
  - Issued capital is the portion of the nominal capital that has been issued which may be less or equal to the nominal capital.
  - Unissued capital is the balance of nominal capital issued.
- (v) share
  - A share is the worth of an investment a shareholder holds in a company from which a dividend may be paid by the company from the profits of the company.
- (vi) charge
  - A charge is a security charged over the assets of a company which gives the creditors a prior claim over other creditors to payment of their debt out of the charged assets. There are two kinds of charges that is, a fixed and a floating charge.
- (vii) Preference share these may be said to be a safe class of shares in comparison to ordinary shares in that, they have the right to payment of the fixed dividend before the ordinary shares are paid. The disadvantage to preference shares is that they have no right to receive a dividend unless the company has sufficient distributable profits to pay. Equally, once the preference dividend is fully paid, the preference shareholder has not right to share in the surplus profit.

## END OF SOLUTIONS